

<http://researchspace.auckland.ac.nz>

ResearchSpace@Auckland

Copyright Statement

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

This thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author's right to be identified as the author of this thesis, and due acknowledgement will be made to the author where appropriate.
- You will obtain the author's permission before publishing any material from their thesis.

To request permissions please use the Feedback form on our webpage.

<http://researchspace.auckland.ac.nz/feedback>

General copyright and disclaimer

In addition to the above conditions, authors give their consent for the digital copy of their work to be used subject to the conditions specified on the [Library Thesis Consent Form](#) and [Deposit Licence](#).

Variation in the use of mental health legislation in New Zealand

A thesis submitted in fulfilment of the regulations for the degree of

Doctor of Philosophy

in Psychiatry

Anthony O'Brien

University of Auckland

2014

They called me mad, and I called them mad, and damn them, they outvoted me.

(Attributed to Nathaniel Lee, English dramatist, 1653-1692, by Porter (1988)).

ABSTRACT

Background

Variation has been a feature of the use of mental health legislation (civil commitment) in New Zealand since at least the 1980s. In recent years rates per 100,000 have shown an up to fivefold difference between District Health Boards in use of community treatment orders, and a threefold difference in use of provisions for acute admission. Variation raises the question of what drives committal decisions, and whether the criteria of legislation are being interpreted consistently across districts. The relatively low rates of committal in some districts offers the possibility of reduced use of legislation in districts whose rates are currently high. Another question is whether certain social groups might be more at risk than others of committal.

Aims

This doctoral thesis with publications explores factors associated with use of legislation in New Zealand and develops a theoretical account of use of community treatment orders. As a doctorate with publications, the thesis presents: a contextual framework consisting of background, literature reviews, and historical analysis; a theoretical framework; a range of analytical and empirical work; and an integrating discussion of the main findings.

Theoretical framework

The thesis uses the ecosocial theory of Nancy Krieger and the theories of Michel Foucault to develop a theoretical framework that understands civil commitment within a historical context and at multiple levels of organisation.

Methods

The methods used to explore mental health legislation include historical analysis, and epidemiological methods including surveys and analysis of administrative data.

Results

Civil commitment is a medical and legal procedure that serves different social policy objectives at different historical moments. Contradicting the perception of

compulsory community care as a new phenomenon, New Zealand legislation since 1846 has always made provision for compulsory community care. New Zealand rates of compulsory community treatment are high by international standards. Rates of civil commitment are associated with area level social deprivation, and availability of inpatient beds, with differences in associations for acute committal and compulsory community treatment. District Health Board rates of civil commitment are not related to individual clinicians' perceptions of civil commitment, but are associated with clinician perceptions of the necessity for and benefits of committal. Nurses and psychiatrists have different views of necessity and benefits.

Conclusions

In addition to individual level factors such as diagnosis, civil commitment is related to societal, social, and institutional level variables. Theoretically informed multiple level analysis is necessary to understand variation in civil commitment. Compulsory community treatment can be understood using the concept of “the production of the committed subject”. Any reform of legislation in response to emerging human rights concerns needs also to address variation in rates of committal, the clinical and social outcomes of committal, and alternatives to committal.

ACKNOWLEDGEMENTS

Although doctoral candidates are required to declare the originality of their research, this originality is only possible with the support, advice, guidance and critique of a large number of people. My academic supervisors have supported and encouraged my research over the period of this thesis. Professor Rob Kydd, thank you for your enthusiasm, counsel, wisdom and critique. At several critical points your observations kept my project focused and on topic. Most importantly you supported my own developing ideas of how the topic of variation could be explored. I am extremely grateful to have had the freedom to pursue my research and I can fairly say that any errors of fact or interpretation in this thesis are fully my own. Professor Brian McKenna, thank you also for your unflagging support and responsiveness during your time as supervisor. Associate Professor Nathan Consedine, thank you for stepping in on Brian's departure for Australia. Thanks also for your invaluable advice and critique on analysis of the clinician perceptions instrument, and for your close attention to the "big picture" towards the conclusion of the research. Associate Professor Chris Frampton provided important statistical advice in the early years of the research. Thanks to Debbie Raphael who helped with data entry and management, and Sarah Dayal for managing the final formatting.

I would like to acknowledge the support of my academic colleagues in the School of Nursing, who over many years have shared their experience and wisdom from their own doctoral studies. In particular I would like to acknowledge the support of Dr Katey Thom who has provided unflagging enthusiasm for my study. Our many 'Wingroad' and other discussions helped shape my thinking and sustain my belief that something valuable would emerge from the years of reading, writing and analysis. I would like to acknowledge the support of Head of the School of Nursing, Associate Professor Judy Kilpatrick who has supported my continued, rather prolonged, study as part of my employment at the School of Nursing.

My clinical colleagues at Liaison Psychiatry have also been an invaluable source of support and encouragement. Thanks to Jim, Lynne, Owen, Ron and Toni for your interest, and the allowances made for the demands on my time and attention. I have appreciated and benefitted from your clinical wisdom in all aspects of nursing. Our shared

commitment to a humanistic model of nursing, and especially our discussions of legislative processes has helped inform my study at every stage, from conceptualisation to analysis and conclusions.

Many other individuals and organisations have assisted in this project. I thank Associate Professor Keith Petrie, Jane Perrot and other staff of the Ministry of Health, Dr Papaarangi Reid, Nikolai Minko, Gareth Edwards, Andrew Cullen, Dr Warwick Brunton, and Professor John Dawson, all of whom at some point offered commentary or advice on ideas, analysis or some aspect of this project. Acknowledgements are also due to the many District Health Board staff who provided advice and information on service provision and who assisted in recruitment of survey participants. In particular I thank my many nursing and medical colleagues who at various times showed interest in the project and its findings. In this latter group I include the many mental health nursing students who have taken various courses at the School of Nursing during the period of this study. Your practice wisdom has helped shaped my study and its findings. For those not been named individually named please know that every conversation and comment has made a contribution.

Finally I must first acknowledge the enduring love and support of Joan O'Brien, over many years of academic study, beginning so long ago. To my children, Clare, Gabrielle and Timothy, thank you too, for your love and tolerance of your father's academic preoccupations. To my grandchildren Matilda and Florence, thank you for showing me your unspoiled love of life, something too easily lost in the absorption in research.

TABLE OF CONTENTS

Abstract	iii
Acknowledgements	v
Table of contents	vii
Abbreviations	xiii
Co-Authorship forms	xiv
SECTION ONE: INTRODUCTION AND BACKGROUND	1
CHAPTER ONE: Introduction to thesis	2
Introduction	2
Personal interest in mental health legislation and statement of reflexivity	3
Positioning of the author	5
Mental health legislation	5
Decision to use epidemiological methods	8
Theoretical framework	9
Methodology	10
Language	10
Format, organisation and presentation of the thesis	12
Publications	13
Contextual background	13
Literature review	14
Theoretical and methodological framework	15
Empirical reports	15
Discussion	15
Appendices	16
Conclusion	16
CHAPTER TWO: Origins of mental health legislation	17

Introduction.....	17
Legal provisions prior to formal certification.....	18
The Madhouses Act (1774) and the beginnings of formal certification	20
Madhouses abuses, limitations of the Madhouses Act and calls for reform.....	21
One legislative regime; two standards of certification	22
Mental health legislation in France.....	23
The need for a new explanatory model of madness.....	25
Madness and the paradigm of medical science.....	25
The challenge of moral treatment	27
The lever of legislation	28
Psychiatric medicine and its relationship to the law	28
Medical ascendancy and its costs	29
The legislative legacy of the nineteenth century asylum.....	30
Conclusion	31
CHAPTER THREE: New Zealand legislation	32
Introduction.....	32
New Zealand legislation	32
Early New Zealand legislation.....	33
Legislation and deinstitutionalisation	37
Current New Zealand legislation: The Mental Health (Compulsory Assessment and Treatment) Act (1992)	39
Criteria for invoking mental health legislation	39
Acute mental health care (section 11).....	40
Community treatment orders (section 29)	41
Statutory roles in New Zealand legislation.....	43
Responsible clinician	43
Duly authorised officer	44

Mental health legislation and mental health policy	45
Summary	47
CHAPTER FOUR: compulsory mental health care in New Zealand mental health legislation 1846-1992 (Publication).....	48
SECTION TWO: LITERATURE REVIEW	57
CHAPTER FIVE: Literature review - variation	58
Search strategy and inclusion criteria	58
Measures of compulsion	59
European comparative studies of rates of civil commitment.....	62
Norway.....	65
Finland	67
England	68
Sweden.....	70
Switzerland	71
New Zealand research on variation.....	72
Conclusion	73
CHAPTER SIX: Potential explanatory variables	75
Legislation.....	75
Service configuration and service provision.....	79
Clinician decision making.....	82
Clinician variables	85
Gender.....	87
Ethnicity.....	89
Age.....	93
Diagnosis.....	94
Substance use	97
History of compulsory admissions.....	98

Social deprivation	100
Geography.....	104
Risk to self and others.....	108
Miscellaneous variables	110
Conclusion	111
CHAPTER SEVEN: Compulsory community mental health treatment – literature review (Publication).....	113
Commentary on published literature review.....	125
Introduction.....	125
International growth in compulsory community mental health care	126
The New York State assisted outpatient treatment programme.....	126
Rehospitalisation and medication possession	127
Reductions in arrest.....	127
Violence, suicide risk and social functioning	128
Effect of AOT on provision of voluntary services.....	128
AOT and ethnic minorities.....	129
Randomised controlled trial of community treatment orders (OCTET study)	130
Other recent studies on compulsory community treatment	131
Summary of recent literature	133
Conclusion	133
SECTION THREE: THEORETICAL FRAMEWORK	135
CHAPTER EIGHT: Theoretical and methodological framework.....	136
Introduction.....	136
Foucault’s analysis of psychiatry	138
Theory of social epidemiology	148
Integrating social epidemiology within a Foucauldian framework	151
Methodological strategies	152

Conclusion	153
SECTION FOUR: EMPIRICAL REPORTS.....	155
Introduction to Section Four	156
CHAPTER NINE: Community treatment orders in New Zealand: regional variability and international comparisons (Publication 3)	159
CHAPTER TEN: Social deprivation and use of mental health legislation in New Zealand (Publication 4).....	165
CHAPTER ELEVEN: Health service availability and use of mental health legislation (Publication 5).....	172
Methods.....	173
Data collection	174
Analysis.....	174
Results.....	175
Discussion.....	175
Conclusion	178
CHAPTER TWELVE: Are clinician perceptions of civil commitment related to regional variation in rates of civil commitment? (Publication 6)	183
Abstract.....	183
Introduction.....	185
Methods.....	188
Design	188
Data sources	188
Sample.....	189
Instruments.....	190
Procedure	192
Analytic strategy	192
Results.....	192
Predictive validity of the CPoCCS	198

Discussion	200
Limitations	203
Conclusions.....	203
SECTION FIVE: DISCUSSION AND CONCLUSIONS	207
CHAPTER THIRTEEN: Mental health legislation and social deprivation (Publication 7).....	208
CHAPTER FOURTEEN: Concluding discussion.....	226
Introduction.....	226
Significant findings.....	228
The production of the committed subject	230
Ecosocial and Foucauldian theoretical framework.....	234
Compulsory treatment and public accountability	234
Limitations	235
Further research	236
Mental health legislation and mental health policy	237
Reflections on the research process	238
Conclusion	239
Appendices.....	241
References.....	261

ABBREVIATIONS

AOT	Assisted outpatient treatment
CPoCCS	Clinician Perception of Civil Commitment Scale
CTO	Community treatment order
DAO	Duly Authorised Officer
DAMHS	Director of Area Mental Health Services
DHB	District Health Board
IOT	Involuntary outpatient treatment
NZDep	New Zealand Deprivation Index
OR	Odds ratio
SPI	Severity of Psychiatric Illness Scale
RC	Responsible Clinician
The Act	The Mental Health (Compulsory Assessment and Treatment) Act (1992)
UK	United Kingdom
US	United States

CO-AUTHORSHIP FORMS

This form is to accompany the submission of any PhD that contains research reported in published or unpublished co-authored work. **Please include one copy of this form for each co-authored work.** Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Acknowledgements.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

Published paper: O'Brien, A. J., Consedine, N. & Kydd, R. R. Are clinician perceptions of civil commitment related to regional variation in rates of civil commitment? *Social Science and Psychiatric Epidemiology* (in review).

This publication is included as Chapter Twelve of the thesis, pp. 183-203

Nature of contribution by PhD candidate	Conceptualisation of the study, design and testing of instruments, data collection and management, analysis, writing up the publication
Extent of contribution by PhD candidate (%)	75



CO-AUTHORS

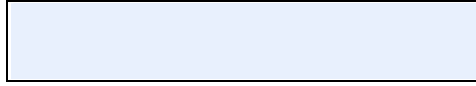
Name	Nature of Contribution
Consedine, N.	Advice on analytic strategy, review and critique of methods, review of analysis and reporting of results, review and critique of written report.
Kydd, R. R.	Advice on conceptualisation of the study and on study design, advice on analysis, review of analysis, , review and critique of written report.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
Consedine, N		Click here
Kydd, R.R.		Click here
		Click here
		Click here
		Click here



Click here

This form is to accompany the submission of any PhD that contains research reported in published or unpublished co-authored work. **Please include one copy of this form for each co-authored work.** Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Acknowledgements.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

Published paper: O'Brien, A. J., McKenna, B. G. & Kydd, R.R. (2009). Compulsory community mental health treatment: Literature review. International Journal of Nursing Studies 46(9), 1245–1255.

This publication is included as Chapter Seven of the thesis, pp. 113-124

Nature of contribution by PhD candidate	Conceptualisation and design of the literature review, electronic searches, applying inclusion and exclusion criteria, analysing papers, synthesising findings, writing publication.
---	--

Extent of contribution by PhD candidate (%)	80%
---	-----

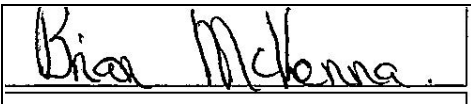
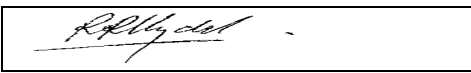
CO-AUTHORS

Name	Nature of Contribution
McKenna, B. G.	Contribution to design of literature review, critique of successive drafts and contribution to rewriting.
Kydd, RR.	Contribution to design of literature review, critique of successive drafts and contribution to rewriting.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
McKenna, B. G.		27/11/2013
Kydd, RR.		27/11/2013
		Click here
		Click here
		Click here
		Click here

Co-Authorship Form

This form is to accompany the submission of any PhD that contains research reported in published or unpublished co-authored work. **Please include one copy of this form for each co-authored work.** Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Acknowledgements.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

Published paper: O'Brien, A. J. R. & Kydd, R. (2014). Health service availability and use of mental health legislation. New Zealand Medical Journal (in review).

This publication is included as Chapter Eleven of the thesis, pp. 172-182.

Nature of contribution by PhD candidate	Conceptualisation of the study, design and development of survey instruments, data collection and analysis, writing the publication.
---	--

Extent of contribution by PhD candidate (%)	90
---	----

CO-AUTHORS

Name	Nature of Contribution
Kydd, R.R.	Advice on design and analysis, reading and reviewing initial draft, contributoin to writing.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
Kydd, R.R.		Click here
		Click here
		Click here
		Click here
		Click here
		Click here

Co-Authorship Form

This form is to accompany the submission of any PhD that contains research reported in published or unpublished co-authored work. **Please include one copy of this form for each co-authored work.** Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Acknowledgements.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

O'Brien, A. J., & Kydd, R. R. (2013). Compulsory community care in New Zealand mental health legislation 1846-1992 Sage Open. April – June 1-8. doi 10.1177/2158244013490175

This publication is included as Chapter Four of the thesis, pp. 48-56

Nature of contribution by PhD candidate	Conceptualisation and design of the study, analysis of text of legislation, synthesis of findings, writing of publication.
---	--

Extent of contribution by PhD candidate (%)	90%
---	-----

CO-AUTHORS

Name	Nature of Contribution
Kydd, R.R.	Discussion of analysis and conclusions, contribution to writing up.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
Kydd, R. R.		27/11/2013
		Click here
		Click here
		Click here
		Click here
		Click here

Co-Authorship Form

This form is to accompany the submission of any PhD that contains research reported in published or unpublished co-authored work. **Please include one copy of this form for each co-authored work.** Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Acknowledgements.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

Published paper: O'Brien, A. J., Kydd, R.R. & Frampton, C. (2011). Social deprivation and use of mental health legislation in New Zealand International Journal of Social Psychiatry, 58 (6) 581-586.

This publication is included as Chapter Ten of the thesis, pp. 165-171.

Nature of contribution by PhD candidate	Conceptualisation and design of study, data collection, cleaning, and management, analysis and writing publication
---	--

Extent of contribution by PhD candidate (%)	80%
---	-----

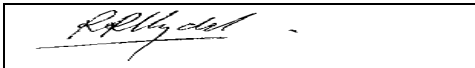

CO-AUTHORS

Name	Nature of Contribution
Kydd, RR	Contribution to conceptualisation and design, review and discussion of findings; contribution to written publication.
Frampton, C.	Statistical advice at design stage, design of statistical models, interpretation of results, contribution to written publication.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
Kydd, RR		26/11/2013
Frampton, C		16/05/2014
		Click here
		Click here
		Click here
		Click here

SECTION ONE: INTRODUCTION AND BACKGROUND

CHAPTER ONE: INTRODUCTION TO THESIS

Introduction

Mental health legislation is an integral component of mental health care internationally and constitutes a point of tension where the medical perspectives of psychiatry, with their emphasis on paternalism and beneficence, encounter the legal perspectives of civil law with their emphasis on personal autonomy and individual rights. How this encounter plays out in specific social contexts is a matter of great significance for people who use the mental health service system, for mental health clinicians, for legal advocates including the judiciary, for those who formulate and manage social policy, and for the wider society. All developed countries make some provision for compulsory mental health care and treatment, although the nature of these provisions differs between jurisdictions.

The subject of this thesis is variation in use of mental health legislation, something that is a feature of mental health legislation internationally. The focus is on civil commitment rather than criminal insanity. The 2010 annual report of the Office of the Director of Mental Health (Ministry of Health 2010a) acknowledged variation to be an issue in New Zealand, noting that the causes of this variation are not understood. This chapter provides an introduction to the thesis and an overview of its presentation and organisation.

The research presented in this thesis uses an integration of the ecosocial theory of Nancy Krieger (1994; 2001) with the theoretical work of Michel Foucault (1965/1988; 2006). Within this framework a range of research methods are used, including historical analysis, social epidemiology and survey research. The methods of social epidemiology are used to identify factors associated with variation in use of mental health legislation across New Zealand's 20 District Health Boards (DHBs). The thesis includes a substantial historical background to the topic of mental health legislation because the theoretical frameworks of Krieger and Foucault are historically grounded, and conceptualise both medical and social phenomena as historically embedded. The results of the analysis are aimed at informing debate about use of mental health legislation in

New Zealand, recommending areas for review and change, informing broader discussions about mental health policy, and identifying issues for further research.

Variation in the use of legislation cannot be fully understood within either a wholly medical or wholly legal framework. And yet much of the literature attempts to do just that: provide a medical or legal rationale for use of mental health legislation. Social factors such as poverty are often accorded secondary importance. Frequently, the literature appeals for greater medical or legal emphasis as a solution to the problems of paternalism on the one hand, or excessive individualism on the other. Models such as therapeutic jurisprudence (Wexler, 1995) address this problem by attempting to blend medical and legal influences, in so doing blurring (intentionally) the traditional boundaries of medicine and the law. Other literature (i.e. Weisstub, 1978) focuses on the “conflict” between the disciplines of psychiatry and the law, but to the exclusion of a social perspective. The methods of social epidemiology enable an analysis of use of mental health legislation that incorporates individual, service and social variables. The ecosocial and Foucauldian theoretical framework allows for a broad social and philosophical analysis of the research findings, and generates recommendations that address factors at multiple levels.

Personal interest in mental health legislation and statement of reflexivity

My interest in mental health legislation as a research topic arises from my unpublished masters research (O’Brien, 2000) which examined mental health nurses’ understanding of expertise in their nursing practice. In that research, one group of participants discussed using mental health legislation with a service user who they knew as community mental health nurses. The participants reported that although this situation was emotionally and ethically challenging, they felt on reflection that they had done the right thing. They reported that the service user also felt that use of mental health legislation was an appropriate measure, and had been helpful in addressing his mental health issues. This appears to be a neat and tidy scenario, suggesting that although use of legislation is experienced as ethically problematic, health professionals are able, on reflection, to justify their actions, and even to have them validated by the person subject

to coercion. A wealth of literature attests to and reinforces this set of perceptions, and a wealth of literature on the ethics of coercion provides justificatory frameworks for its use. However my reflection on the issues of coercion problematised a straightforward individualistic justification and suggested the need for a wider lens of analysis.

To further explore these issues I undertook a conceptual analysis of coercion in which I explored the circumstances in which coercion might be ethically justifiable (O'Brien & Golding, 2003). Despite my research findings and subsequent analysis I was left with questions. Why had the nurse participants chosen to report the scenario involving use of mental health legislation if it was "settled" and they felt no further conflict about it? Is an ethical justification for the use of coercion sufficient, given that the ethical model I had used was primarily individualistic? Use of coercion, whether legal or the informal "subtle coercion" described by Lutzen (1998), is clearly problematic.

These questions were heightened by my role as a Duly Authorised Officer under the Mental Health (Compulsory Assessment and Treatment) Act (1992). In that role I am charged with, among other functions, the responsibility of informing patients that an application has been made for assessment, and that they must now attend an assessment examination (Thom, O'Brien & McKenna, 2008). On reviewing the literature on mental health legislation I became aware that variation was an unexplained problem (Riechler-Rossler & Rossler, 1993; Salize & Dressing, 2004), and one which led to speculation about its causes. Social factors such as deprivation, ethnicity, and access to health services, are sometimes cited as contributing to variation (e.g. Lorant, Depuydt, Gillain, Guillet & Dubois, 2007) although often there is limited analysis of those factors. Few New Zealand studies addressed variation or included social factors in research into use of mental health legislation. I set out to research mental health legislation with the initial premise that that variation might provide a window of understanding of the ethical and professional questions that had stimulated my interest. Before introducing the research I will briefly outline my position as a researcher and discuss some general issues relating to mental health legislation.

Positioning of the author

I position myself within this study as a mental health nurse. The discipline of mental health nursing arose in the nineteenth century in response to the acceptance of the psychiatric model of madness (Nolan, 1993; O'Brien, 2001). As a discipline, mental health nursing continues to practise in close collaboration with medicine and psychiatry. When I refer to “psychiatry” I mean psychiatric medicine and the other health disciplines that work within the administrative and clinical model of psychiatry. Nurses, of course, practise within a variety of theoretical models of mental health and mental health care. But in relation to the topic of this thesis – mental health legislation – nursing is firmly aligned with psychiatric medicine in operationalising the medico-legal system of psychiatry.

Mental health legislation

Mental health legislation is an integral aspect of what is sometimes called the “mental health system”, a term that can be applied to the network of specialist mental health services, as well as to mental health care provided within primary care services, to addiction services, and to a range of mental health promotion and prevention activities (Minister of Health, 2005). Broader definitions include the range of social services provided to people with mental illness, and to public policy in areas such as housing and welfare that have the potential to impact on the lives of people with mental illness (Bell & Brookbanks, 2005; Kaiser, 2009). Throughout the western world, mental health law occupies the mixed role of applying legal sanctions (civil commitment) to people whose behaviour transgresses social norms but does not constitute an infraction of criminal law (Unsworth, 1993). It is important to note, however, that mental health legislation should not be applied to people because they transgress social norms. Section 4 of the New Zealand legislation specifically addresses this concern by excluding a range of personal beliefs and social practices from the criteria of legislation, for example political, religious, or cultural beliefs, criminal and delinquent behaviour, and sexual preferences.

Mental health legislation is formally concerned with people with severe mental illness although the existence of a coercive legal framework has the potential to contribute to a perception of mental health services as coercive (Eastman, 1990). Given the coercive nature of mental health legislation it is imperative that such measures are applied fairly, and that their employment is based on criteria which, if not fully objective, are at least not arbitrary or in conflict with legal criteria. This is not, as is frequently suggested in clinical and legal literature, a matter merely of consistent judicial or clinical decision making. It is also a matter of how the state enacts its role, codified in legislation, of mediating the relationship between itself and the individual with mental illness (Fennel, 1993). The role of the state includes ensuring equitable availability of mental health services based on need. It also includes providing access to advocacy and representation in legal procedures where the state intrudes, through legislation, into what is otherwise a matter of private contract: the relationship between patients and health professionals. Variation in use of mental health legislation is problematic because it suggests the possibility of extra-legal or non-clinical factors such as bias or inequitable social conditions impacting disproportionately on some groups. Variation implicates the state as failing in its role as the arbiter of power.

Mental health legislation directly involves a relatively small number of people. Approximately 4000 New Zealanders are subject to some provision of mental health legislation in any year (Ministry of Health, 2006). However the implications of civil commitment extend beyond those individuals subject to legislation and are not without controversy. Noting that powers of compulsory intervention are available in general health care, where a capacity standard is applied, some authors have questioned the place of separate mental health legislation, arguing that a common standard of capacity could be provided across the health sector (Dawson & Szmukler, 2006; O'Brien, 2010). The issue of compulsory powers in mental health care has been compounded in recent years by the extension of those powers into the community, in the form of community treatment orders (Lawton-Smith, 2005). Compulsory treatment in the community was initiated in the United States as early as the 1960s in the form of involuntary outpatient treatment (Zanni & Stavis, 2007) and has been extended to many countries, including New Zealand (Dawson & Romans, 2001). Most recently, community treatment orders have been adopted in Scotland (Lawton-Smith, 2006), Sweden (Sjöström, Zetterberg & Markström,

2011) and England (Lawton-Smith, Dawson & Burns, 2008). They are currently being debated in Ireland (Walsh, 2010) and Spain (Cañete-Nicolás et al., 2012).

Civil commitment has implications for resource allocation and service provision (Abas, Vanderpyl, Robinson & Crampton, 2003; Bindman, Tighe, Thornicroft & Leese, 2002). Researchers examining the use of community treatment orders have noted that for both service providers and users of mental health services, community treatment orders represent a claim on services, and therefore an entitlement to a share of a scarce resource (Dawson & Romans, 2001; Gibbs, 2010). One United States researcher (Lincoln, 2006) has even suggested that as the availability of inpatient beds has diminished, civil commitment has functioned as a rationing device, with black and working class people less likely to be found to meet criteria for compulsory admission. Lincoln's argument is a reversal of those made towards the end of the institutional era when civil commitment was seen by its critics as a straightforward abrogation of human rights, and adoption of a more legally defined dangerousness standard was advocated as a check on the numbers of people committed to institutional care (Hiday, 2003). It is interesting to note that in the nineteenth century when all asylum admissions in England occurred under compulsion, legislation was used as a means of rationing the scarce resource of asylum beds in favour of the wealthy and to the exclusion of paupers (Unsworth, 1993). Compulsion in mental health care can be regarded as both an abridgment of individual rights, and as supporting a claim to limited social goods.

Concerns about compulsory mental health care cover a range of issues. These include human rights, the philosophical direction of services, clinical effectiveness, resource allocation, consistency in decision making, and variation in use of legislation across and within jurisdictions. Although these concerns are interrelated, it is this last issue – variation in use of legislation across New Zealand's 20 District Health Boards - that is the focus of this thesis. Variation can be both spatial and temporal and may reflect service or social variables other than those stipulated in legislation (Bindman et al., 2002; Siphoned, Valimaka, Kaivosoja, Marttunen & Kaltiala-Heino, 2010). The effect of this may be that some groups are more likely to be subjected to compulsory intervention than others. Variation may also reflect patterns of interaction with health and social services, and so provide a window of understanding of issues that extend beyond health care (Lindsey, Joe, Muroff & Ford, 2010). Annual reports of the Director of Mental Health

(Ministry of Health 2006, 2007, 2008, 2009, 2010a, 2011, 2012, 2013a) show consistent regional variation in use of mental health legislation. There is also evidence that in New Zealand ethnicity is associated with use of legislation, with Maori being more likely to be subject to legislation (Elder & Tapsell, 2013; Wheeler, Robinson & Robinson, 2005). At the time of commencing this study there had been limited systematic research into factors associated with variation in use of mental health legislation in New Zealand.

The aim of the current work was to explore factors associated with variation in the use of two sections of New Zealand's mental health legislation, section 11 (acute assessment and treatment, usually involving hospital admission) and section 29 (community treatment order). Variation offers an opportunity to better understand the committal process, and to identify factors which may help to reduce the use of legislation, particularly in regions where rates of committal are high.

Decision to use epidemiological methods

Having explored the literature on use of mental health legislation I identified a number of studies that used epidemiological methods. These included New Zealand and overseas studies. Epidemiology seemed to offer the potential to consider a diverse range of explanatory factors. My initial reading of the literature reinforced my perception that mental health legislation, while remaining both a clinical and legal procedure, needs to be understood using a model of analysis that incorporates a range of individual, system, and social level variables. The Ministry of Health maintains an administrative database, the Programme for the Integration of Mental Health Data (PRIMHD) (Ministry of Health, 2010b) covering the mental health service sector. The PRIMHD database includes data on mental health legislation, affording an opportunity to undertake an epidemiological study of mental health legislation. This thesis attempts to address the issue of variation empirically by elucidating factors associated with application of mental health legislation, theoretically by suggesting how social theory can contribute to an understanding of variation, and methodologically by applying the methods of social epidemiology to civil commitment.

Theoretical framework

The theoretical framework used in this study is an integration of the ecosocial theory of Nancy Krieger (Krieger, 1994; 2001) with the theoretical analysis of philosopher and historian Michel Foucault (1965/1988; 2006). Krieger's ecosocial theoretical framework calls for health issues to be examined in their historical and social context, with social factors such as poverty and racism considered as possible contributors to health inequalities. Ecosocial theory provides a multi-level framework that attempts to integrate influences at different levels of organisation, from the biological through to the social. Within ecosocial theory, population distributions of health outcomes are seen in their historical and social context, while also considering individual level variables (Krieger, 2001). Ecosocial theory provides a useful framework for studying use of mental health legislation because it addresses an issue which is often addressed only obliquely and superficially, that of social disparities in the use of legislation. In keeping with the commitments of ecosocial theory, the current work is historicised through a review of history of mental health legislation and related social policy. Epidemiological methods allow demographic and clinical variables, clinician variables, social variables, and provision of mental health services to be understood as operating together in the use of mental health legislation. Ecosocial theory enables findings to be interpreted within an explanatory framework of legislation, social policy, and medical and legal conceptual frameworks.

The second major theoretical influence is the work of philosopher and historian Michel Foucault. Foucault's body of critical and theoretical work is used selectively to give greater theoretical depth to Krieger's ecosocial theory. Within psychiatry Foucault is more commonly known for his historical (1965/1988; 2006) and philosophical analysis of the origins of asylums and for his archaeological method (Foucault, 1994) of understanding how this history animates the current practice and social role of psychiatry. For Foucault, contemporary psychiatry is best understood as a cultural practice which arose in a particular historical context, inaugurating a new regime of management of madness: psychiatric medicine. As a cultural practice psychiatry did not so much "medicalise" madness for the first time: – medical models of madness existed for hundreds of years before psychiatry. Rather, psychiatry institutionalised the authority of the medical discipline of psychiatry to speak about madness. In the nineteenth century,

Foucault argued, psychiatry came to be the dominant voice on matters of madness, and that dominance has persisted into the twenty-first century. Foucault's body of work adds a dimension to Krieger's ecosocial theory that gives expression to a tradition of philosophical and social critique of psychiatry and allows for a response to that critique.

Methodology

The methodological approach of the current work includes a range of original historical, analytical and empirical work. Empirically, the thesis uses the methods of historical analysis, social epidemiology, and survey research to explore different levels of variables. Social epidemiology examines health issues at a population level and seeks to identify population and individual factors that are associated with health outcomes (Berkman & Kawachi, 2000). Data is drawn from several sources. Official data is drawn from the PRIMHD mental health dataset (as reported in the annual reports of the Director of Mental Health) and reports of Statistics New Zealand, including socioeconomic status as measured by the New Zealand Deprivation Index (NZDep) (Salmond, Crampton & Atkinson, 2007). Further data were generated by three surveys. Data on mental health services were collected by survey of District Health Boards (DHBs), and data on clinician decision making were collected by two surveys of clinicians in selected DHBs. Data from the three surveys were separately analysed and are reported individually.

Language

The terms "mental illness", "madness", "lunacy", and "insanity" are used throughout this thesis to refer to the patterns of thinking, behaviour, emotional responses, and participation in the social world that have at various times and places been described using one or more of those terms. There is no single term that will suffice to cover all situations without imposing meanings that may be quite alien to the specific context. In most instances the term "mental illness" is used as the context is contemporary and this is the term which has greatest social currency. The term "madness" or one of its variants is used in two senses which I hope will be obvious in the text. The first sense is historical,

for example in reference to documents such as the English Madhouses Act (1774) and in discussions of that period. The second sense is in an attempt to find a term that is not rooted in a particular era, but which refers to an experience with commonality across time. This usage immediately raises the objection that there is no such term; every descriptor is embedded in its own historical context, and to that extent refers to a particular worldview and experience. To this objection my response is to agree, but to insist that using a term that holds across time is a necessary artifice, objections notwithstanding. This latter usage allows reference to “madness” in a way which I want to suggest requires suspension of commitment to a specific interpretive framework, especially the dominant medical model. No criticism of the medical model is implied by this usage. It is simply a matter of recognizing that “the medical model”, itself a problematic concept that is frequently oversimplified and reified in literature critical of that model (see Schwartz & Wiggins, 2005), entails epistemological and ontological commitments that must be bracketed for the purposes of analysis. At times the term “psychiatry” or a variant is used to describe the response of (usually medical) social agents to madness at a time when psychiatry was not yet named. In these cases I am referring to earlier forms of the system that became psychiatry, in recognition of the origins of modern psychiatry in earlier madhouse and asylum medicine.

The terms “patient”, “consumer”, “service user” and others are used to refer to people receiving mental health care. In some cases usage is determined by documents under discussion, and in some cases by legal usage. For example, because the term “patient” is used within New Zealand mental health legislation, that term is used in discussion referring to those subject to legislation, while the term “service user” is used in general discussion and when referring to New Zealand mental health policy to reflect the use of that term in contemporary policy documents. My intention is that the use of a particular term should reflect the specific aspect of discussion.

A variety of terms are used currently and historically to refer to use of formal legal mechanisms to compel treatment or to enforce detention for psychiatric care. For the sake of variety I use “compulsion”, “committal” and “civil commitment” interchangeably to refer to enforced detention and/or treatment under mental health legislation, whether in a hospital or community setting. Other legal terms such as “community treatment order” and “inpatient order” are either defined when introduced or should be clear from the

context of the discussion. The following section of the introduction outlines the format, organisation and presentation of the work.

Format, organisation and presentation of the thesis

This thesis presents and integrates an original body of analytical and empirical work conducted over a period of seven years, during which the author has been enrolled as a doctoral candidate. The format of the thesis is that of a combination of background chapters, the candidate's publications, theoretical framework and integrating discussion, a format described in the University of Auckland *Statute and Guidelines for the Degree of Doctor of Philosophy* (University of Auckland, 2013) as a thesis comprising published or unpublished papers. The academic requirement for a thesis including publications is the same as that for a traditional doctoral thesis; the thesis must be a "systematic exposition of a coherent programme of advanced research work" (p. 6), should make an "original contribution to knowledge or understanding in its field" (p. 6), and "meet internationally required standards for such work" (p. 6). Statements declaring the authorship of the publications and the candidate's contribution can be found after the abbreviations at the front of the thesis.

The current work contains the traditional content of a doctoral thesis: introduction, contextual background, literature review, theoretical framework, empirical reports and a concluding discussion. However, a doctoral thesis with publication differs from the traditional format by its inclusion of the candidate's selected publications. There are seven such chapters in this thesis. In all cases the contribution of publications is explained, and where necessary additional commentary is provided to bring published work up to date with more recent research and analysis. The thesis is presented in five sections: three chapters providing a contextual overview; three chapters of literature review; the theoretical and methodological framework; a section comprising four empirical reports; and a final section containing two discussion chapters. In the second of the two final chapters the total body of work is brought together in an integrating discussion which clarifies the contribution of each of the preceding sections.

Some additional comment is necessary to explain the placement of chapters within the overall work. The decision to use Krieger's ecosocial theory, and in particular the use of Foucault's theoretical work, meant that the total body of work needed to be grounded in historical analysis. For that reason there is considerable historical discussion in the early chapters, and a discrete piece of historical analysis in chapter four. This historical work forms part of the original contribution to the understanding of use of mental health legislation.

Publications

Seven publications for which the candidate is the sole or first author are included. Five papers have been published, one is under review, and the seventh is about to be submitted. The seven included publications are: *Compulsory community care in New Zealand mental health legislation 1846 – 1992* (O'Brien & Kydd, 2013); *Compulsory community mental health treatment: Literature review* (O'Brien, McKenna & Kydd, 2009); *Community treatment orders in New Zealand. Regional variability and international comparisons* (O'Brien, 2014); *Social deprivation and use of mental health legislation in New Zealand* (O'Brien, Kydd and Frampton, 2011); *Health service availability and use of mental health legislation* (O'Brien & Kydd, 2014, in review), *Are clinicians' perceptions of civil commitment related to regional variation in rates of civil commitment?* (O'Brien, Consedine & Kydd, 2014 –in review); and *Social deprivation and use of the Mental Health Act* (O'Brien, 2013). The seven publications are included in the background, literature review, results or discussion sections of the thesis, depending on their contribution to the overall work. Publications are included in their published format, and in the case of the two unpublished papers, in their format for submission.

Contextual background

Section One provides a contextual background to the thesis, presented in Chapters Two to Four. These chapters provide a historical overview of mental health legislation from its origins in eighteenth century England to the current New Zealand legislation.

Chapter Two outlines the historical development of mental health legislation showing how legislation and the practice of committal enabled and necessitated development of the first medical specialty, psychiatry (Butler, Corboy & Filley, 2009). The discussion covers the first legislation specific to mental illness, the Madhouses Act (1774), and shows how legislation of the time reflected and influenced social policy, and embodied the growing acceptance of a medical/scientific model of madness. Chapter three describes the development of legislation in New Zealand, from the Lunatics Ordinance of 1846 to the current New Zealand Mental Health (Compulsory Assessment and Treatment) Act (1992). New Zealand legislation is shown to have evolved from the English models, especially after 1868. To augment this historical overview the following chapter, Chapter Four, presents an analysis of the text of New Zealand's five iterations of mental health legislation, beginning in 1846, to show the continuity within the legislation of provisions for compulsory mental health care out of hospital. There is some overlap between Chapters Three and Four. Chapter Four represents the development of one of the themes of Chapter Three as it was written up for publication. Chapter Four is the first of the six publications included in the thesis.

Literature review

Section Two includes three chapters which explore literature on mental health legislation. Chapter Five reviews the literature on variation in use of legislation and summarises the arguments and evidence for different explanations of variation. Chapter Six explores the literature evidence related to the variables most frequently suggested in the literature as contributing to variation. Chapter Seven, the second publication, is a published literature review of compulsory community mental health care. The review was published in 2009 and the chapter includes a brief discussion summarising more recent research and commentary.

Theoretical and methodological framework

Following the first two sections, the theoretical and methodological framework of the thesis is presented in Section Three (Chapter Eight). Chapter Eight explores integration of Krieger's ecosocial theory with theoretical constructs drawn from Foucault. Chapter Eight also explores how the theoretical framework recognises the different individual and social variables associated with use of mental health legislation, and how that framework underpins the different methodological strategies of the thesis.

Empirical reports

The theoretical and methodological framework is applied to the New Zealand context through four empirical reports which comprise Section Four. Firstly, Chapter Nine explores variation in use of community mental health legislation across New Zealand health districts. New Zealand's use of mental health legislation is also compared with overseas, mainly Commonwealth jurisdictions. This chapter is the fourth publication of the thesis. Chapter Ten is a study using an ecological design to explore two suggested variables, ethnicity and social deprivation. The study examines both compulsory community treatment and compulsory inpatient treatment, and is the fifth of the seven publications. Service provision is explored in Chapter Eleven. This publication, the sixth of the thesis, reports a survey of mental health services and the relationship between level of service provision and use of legislation. Chapter Twelve, a study of clinician decision making, is the seventh publication of the thesis. This study used two new instruments developed for the purposes of the thesis to explore the relationship between DHB rates of use of legislation and clinician perceptions of use of civil commitment. Chapter Twelve completes the empirical work of the thesis.

Discussion

In Section Five, the final section of the thesis, two chapters provide discussion of the issues arising from the thesis. The first of these chapters, Chapter Thirteen, is a

discussion of social deprivation and use of mental health legislation, drawing on and extending the empirical work presented in Chapter Ten. Chapter Thirteen is the seventh and final publication. The final chapter of the thesis, Chapter Fourteen, provides an integrating discussion drawing together the preceding analytical and empirical work, and stating the conclusions that emerge from the thesis. Drawing on the ecosocial and Foucauldian theoretical framework, Chapter Fourteen outlines an original theoretical contribution to the study of compulsion, the concept of “the production of the committee subject”. This chapter reflects on the contribution of the thesis to the issue of variation in use of mental health legislation, and makes recommendations for clinical practice, research, mental health policy, and legislative reform.

Appendices

A number of appendices are included following the discussion. These include ethics consent, invitations to participate in the study, a demographic data collection form, survey instruments, and an incentive form for survey participants.

Conclusion

This chapter has introduced the topic of variation in use of mental health legislation. The chapter has also identified my interest in the topic and my position within the research, and has outlined the background to the thesis. The theoretical framework, and the research methods of historical analysis, social epidemiology and survey research have been explained. The nature of the thesis, a doctoral thesis with publication, has been explained, with reference to the University of Auckland statute and guideline for the degree of Doctor of Philosophy (University of Auckland, 2013). The format, organisation and structure of the thesis have been outlined. The following chapter begins the development of the contextual framework of the thesis with an outline of the origins of mental health legislation.

CHAPTER TWO: ORIGINS OF MENTAL HEALTH LEGISLATION

Introduction

This chapter is the first of three that together provide the contextual background to the thesis. The focus in this chapter is on the origins of mental health legislation, beginning with early legislative references to madness then covering the development of the first specific mental health legislation, the English Madhouses Act of 1774. Discussion then moves to the parallel development of mental health legislation and the new the science of psychiatry. The subsequent two chapters cover the development of legislation in New Zealand, and the place of compulsory community mental health care in New Zealand legislation.

Mental health legislation can be considered part of a State response to the social problem of madness. Two historical periods can be discerned (Porter, 1992); the early modern period roughly 1500 to 1800 (Karmen, 2000) and the era of asylum expansion (1800 to 1900, (Smith, 1999)). The early modern period saw the development of a range of places of confinement, although without a specific legislative framework. In the nineteenth century legislation developed in lock-step with provision of public asylums, and reflected the growing influence of the emerging psychiatric model of medicine. My intention in this chapter is to show the parallel development of the asylum and mental health legislation, a development whose legacy is seen today in the close relationship between psychiatry and the law.

Although the major focus of this chapter is on early English legislation, reference is also made to developments in France to provide a context for the discussion of Foucault's *Madness and Civilisation* (Foucault, 1965/1988) because that work has long provided a critical framework for the analysis of psychiatry. The discussion is confined to civil commitment although it is noted that legislation covering criminal insanity also evolved during this period (Philo, 2004).

Legal provisions prior to formal certification

The earliest known English reference to formal interaction of mental health and the law is given by Walker (1968) as a 1292 case which refers to a “lunatic” (sic) convicted of burning a man’s house down, and then being released on the authority of the justices. Referring to codified law, Suzuki (2006) notes that mental health legislation has existed in some form since at least the fourteenth century. It is likely that Walker and Suzuki are referring to the prerogative powers of the state in cases of madness rather than to legislation aimed specifically at regulating madness. Parry-Jones (1972) cites the *Statute de Prerogativa Regis* of 1324 as providing the earliest statutory protection for the estates of lunatics. This and similar powers appear to have provided the sole legal basis for the confinement of the insane in the late medieval period. It is also probable that many confinements of this period were extrajudicial, on the informal authority of families, the church, or local officials (D. Wright, personal communication). In the absence of specific legislation the coercion applied by families was likely as effective as today’s committal, meaning that admissions were “informal, but far from voluntary” (Allderidge, 1979, p. 327).

Current New Zealand legislation specifically excludes political beliefs as a reason for committal, and the roots of this concern can be found in sixteenth century English asylum practice. Using the case of Bethlem Hospital, Andrews, Briggs, Porter, Tucker and Waddington (1997) argue that in a minority of cases committal occurred for political reasons. A variety of statutory bodies could order committal, including the House of Lords, the Privy Council, the High Commission, the Board of Green Cloth and various civic authorities. The absence of a standard legal procedure provided the opportunity for politically-directed committal and Andrews et al. (1997) describe several such cases. Notwithstanding these politically motivated committals, Andrews et al. (1997) also argue that the extent of politically motivated committal in the early modern period has been overstated. They refer to a degree of wariness on the part of political bodies. Bethlem provided a treatment function rather than merely acting as a receptacle for politically motivated detention. Committing authorities in these cases believed the individuals concerned to be “truly mad” (p. 359), although the madness may have been tolerated if

the person had not posed a nuisance or threat, especially to members of the Court. These early committals were not arbitrary acts of political oppression, but rested on a shared concept of madness, without which they were not necessarily successful (Andrews et al., 1997). Thus although there may have been a political motivation in some cases, this was not a sufficient criterion for committal.

In the early modern period insane individuals were included, without necessarily being labelled as such, with vagrants and others under legislation such as the poor laws dating from Tudor times (Blaug, 1963) and recodified in the Elizabethan Poor Law of 1601 (Allderidge, 1979; Bartlett, 2000). Rather than specific legislation, published guidance, including reference to precedents, gave legal weight to detention of mad people. One such document from 1581 advised that “every man also may take his kinsman that is mad, and may put him in a house, and bind him and beat him with rods, without breach of the Peace.” (Lambard, cited by Allderidge, 1979, p. 325). A common law right existed for a private person to detain someone of disordered mind and likely to harm himself or another, a right that received limited codification under the eighteenth century poor law (Bartlett, 2000). Guidance to Justices published in 1618 referred to “idiots” and “lunaticks” as one category of the poor, legalising their disposition under the poor law (Allderidge, 1979).

There is some evidence of differentiation for those charged with crimes and found insane: insanity could be a mitigating circumstance that led to incarceration rather than the death penalty (Philo, 2004), but for most of the eighteenth century there was no general legislative measure for the management of madness. English legislation made only limited reference to the mentally ill. According to Hamilton (1983) there was “no clear recognition of what constituted insanity” (p. 1720). Hamilton is no doubt referring to the absence of a legal definition of insanity, but the existence of a significant number of places for confinement of the insane (Philo, 2004), most with at least a modicum of medical supervision, suggests a degree of consensus as to what constituted a case of insanity and about the role of medicine in insanity.

A small but significant shift occurred when the Vagrancy Act of 1714 was replaced with new legislation in 1744. Where the 1714 Act covered “mad people” among the numerous categories of individuals who should be removed from public space, the

1744 act for the first time mentioned “curing” as one of the reasons for detention (Philo, 2004). Unsworth (1993) gives the 1744 Vagrancy Act as the first legislative reference to madness, as does Hamilton (1983, p. 1720) who argues that the 1744 Act gave the first legal recognition of the insane with the provision for the detention of “dangerous “furiously mad” lunatics” (sic). Bartlett (2000) considers that the primary purpose of the vagrancy legislation was the management of paupers, and that the insane, although often paupers, were a secondary consideration. This is reflected in the absence of any process of formal certification. Notwithstanding Bartlett’s argument, Allderidge (1979) has noted that vagrancy legislation of 1714 and 1744 did recognize lunacy as distinct from vagrancy, and allowed lunacy to exempt individuals from the harsh treatments reserved for vagrants. It seems clear however, as Unsworth (1993) argues, that the 1744 Vagrancy Act, although providing some authority for detention of the insane did not amount to formal statutory regulation.

The Madhouses Act (1774) and the beginnings of formal certification

The Madhouses Act was introduced in 1774 in recognition of the growing number of private establishments providing accommodation and containment (Scull, 1993). This legislation was primarily concerned with institutions (the “madhouses”) rather than with the insane themselves. The madhouses varied in size from those accommodating just one insane person to facilities catering for over a hundred (Philo, 2004). They included the homes of individuals who offered board for the insane and purpose-built premises which, along with the charitable lunatic hospitals such as Bethlem and St Lukes (Allderidge, 1979) were the prototypical public asylums. Many madhouses were owned by physicians who were also employed in the public sector, and it was not uncommon for patients to be moved between one type of facility and the other. There was also recognition of the frequently poor conditions that prevailed within the private madhouses (Parry-Jones, 1972), and of the need to extend protections to those detained.

The Madhouses Act made certification by a medical practitioner mandatory for private patients, thus constituting the first formalised model of legal documentation of insanity (Parry-Jones, 1972). Certification was perfunctory, requiring only that a doctor

complete a certificate stating that the person was a “proper person to be detained” (Wright, 1998, p. 271). There was no requirement to furnish evidence to that effect. For paupers, common law remained as the basis for detention until an 1819 amendment of the County Asylums Act (1808) imposed a requirement for a medical certificate on admission (Wright, 1998). This measure was extended to charitable hospitals by an 1828 amendment to the Madhouses Act (Unsworth, 1993).

Madhouses abuses, limitations of the Madhouses Act and calls for reform

Public dissatisfaction with madhouses in the early nineteenth century led to parliamentary inquiries in 1815-16, 1827, and 1842-44 (Parry-Jones, 1972). These inquiries gave voice to public disquiet about reports of abuse and to dissenting views within psychiatry, voices that found common cause in calls for reform. The Madhouses Act had little influence in limiting abuses and was itself the subject of dissatisfaction. Reformers called for changes to the legal process of certification, the statutory regulation of institutions, and for the construction of asylums by the counties, illustrating the close connection between mental health legislation and the broader social policy relating to mental health care. The relationship between policy and legislation would be even more apparent in the reforms of 1845.

The Madhouses Act did not anticipate the age of the public asylum which, in legislative terms, was inaugurated with the 1808 County Asylums Act (Smith, 1999). Where the Madhouses Act was concerned with conditions in private institutions, the County Asylums Act enabled (but did not compel) the construction and regulation of public asylums. Public asylums were specifically charged with the detention and care of pauper and criminal lunatics, rather than the wealthy. They were in effect an alternative institution for paupers, although they were also empowered to accept “chargeable lunatics” (Unsworth, 1993, p. 484). The County Asylums Act was a direct challenge to the madhouse system and its medical sponsors, but as it was permissive rather than binding it had limited effect. The Madhouses Act continued during the period of the County Asylums Act, maintaining broadly parallel systems of confinement based on

social or financial status. These parallel systems were matched by separate processes of certification, also based on social class.

One legislative regime; two standards of certification

The year 1845 saw a significant shift in English mental health policy and marks a crucial moment in the development of English mental health legislation. Where the 1808 County Asylums Act empowered counties to construct asylums, its successor, the Lunatic Asylums and Pauper Lunatics Act (Lunatic Asylums Act) of 1845 made such provision compulsory (Fennell, 1986). An additional Lunatics Act (1845) was introduced simultaneously with the specific role of monitoring the asylums through the role of the Lunacy Commissioners. Established class differences in processes of certification were consolidated within the Lunatics Act. Certification continued to require one medical certificate in the case of paupers and two in the case of private patients (Parry-Jones, 1972). The twin acts of 1845 ushered in a massive expansion in asylum provision that lasted over a century, and whose legacy can still be seen in derelict, restored, or partially used buildings and campuses throughout the western world, and in many former colonial countries. Mental health legislation can be seen as supporting and authorising the reach of the nascent profession of psychiatry, and in leading its expansion by compelling counties to provide services in the form of asylums. In this period of rapid expansion the relationship between legislation and mental health policy is writ large. The extension of the asylum regime necessitated a legislative framework which came to define the character of nineteenth century psychiatry and was arguably the critical characteristic differentiating psychiatry from other branches of medicine. The growth in asylum provision extended the reach of legislation to more of the population even although there was no significant change in the legal definition of insanity. In a study of certification documents from the 1860s, Wright (1998) noted that these documents made little reference to extant theoretical concepts of madness, suggesting that expansion of compulsory provision was authorised on the basis of something more akin to a lay than a fully medical model of madness.

To achieve the goal of the 1845 legislation, of mandatory public asylum provision, reformers needed to be assured that confinement was not arbitrary and profit-driven in the way it had been with the madhouse system. Thus provisions for certification were

necessary to achieve the goal of broader public asylum provision. Another factor driving the reform agenda, the optimism engendered by the philosophy of moral treatment (Scull, 1993), posed challenges to psychiatry because it suggested that the proposed expansion of the asylums should be underpinned by a moral rather than a medical model. These challenges, and how they were played out within the legislative framework of the asylum, will be explored in the next section of this chapter. With legislative reforms in place asylums were able to expand to meet reformers' ideals of more humane care, and the policy ideal of expanded provision of public asylums. Numbers of asylums grew significantly between 1845 and 1860, as did numbers of patients in each institution (Philo, 2004).

Mental health legislation in France

In many respects, the problem of madness in the twenty-first century is little different to that described by Castel (1988) in his analysis of the origins of the asylum in postrevolutionary France. Castel describes how in 1790 the Constituent Assembly of the new republic abolished the *lettres de cachet*, the mechanism previously used by the monarch to arbitrarily incarcerate the insane as well as others considered inconvenient to the powerful. As in England, the insane were at this time not a fully differentiated group, but shared characteristics with vagrants and others of providing a visible challenge to the social order. This is the period following what Foucault (1965/1988) has labelled the "Great Confinement". Undifferentiated detention of "unreasonable" individuals brought together under the same carcereal regime: vagrants, the poor, the mentally and physically disabled, the infirm and others. They shared a common characteristic of unwillingness or inability to work. Foucault argued that once this diverse group was confined within a common physical space, insanity was seen in a new light, as presenting a unique challenge to the imperative of labour. Legislation played a crucial role in this process.

In abolishing the means of arbitrary detention the Constituent Assembly came face to face with a new problem, one that also challenged policy makers in England. This was the problem of madness. Who was to have authority over madness? Who were to be the state's agents in the control of madness? What was to be the legal and social status of

the insane person? Castel (1988) argues that medicine had as yet no specific techniques for dealing with insanity; moreover there were no specific places of incarceration of the insane, nor were there adequate laws to regulate the control of madness.

A similar story is told by Rothman (1971) in the United States. The modern problem of madness had not yet arisen in early nineteenth century America, and such asylums and technologies of intervention as existed tell us almost nothing of what was to follow. As western societies organised their response to the problem of madness they developed the legislative frameworks that continue to underpin contemporary social policy on mental health. Just as legislation confined individuals within institutions, it bound psychiatry to the asylum, forging an enduring connection between an emerging medical speciality and a coercive system of mental health services (Rose, 1996).

Foucault's analysis has been broadly accepted by some historians (e.g. Scull, (1993) and Philo (2004)) although it has been rejected by others, especially psychiatrists (e.g. Paris, 2010; Shorter, 1997). However even those such as Philo who accept Foucault's analysis object that it gives little consideration to the extensive network of private madhouses and charitable lunatic hospitals in early modern England. Such objections must also apply to Castel's account. It also needs to be noted that England's madhouses and charitable hospitals were administered under medical authority. In England, it is unlikely that the insane were "discovered" as an artefact of a "great confinement" in the way Foucault argues. They already occupied a significant, if marginalised social identity before the development of large scale institutions of confinement. Despite these reservations I will argue later in this chapter, and more in support of this aspect of Foucault's thesis, that the increasing rate of confinement of the insane, especially in the public asylums, necessitated and was assisted by a reinvigorated medical model and the emergent medical specialty of psychiatry. Crucial to this thesis is the role played by legislation in authorising confinement of insane individuals through the process of certification. Under the auspices of medicine, certification is ostensibly a medical procedure underpinned by psychiatric science. However in the context of the new State policy of large scale confinement asylum medicine assumes a juridical nature:

From the end of the eighteenth century, the medical certificate becomes almost obligatory for the confinement of madmen. But within the asylum itself, the

doctor takes a preponderant place, insofar as he converts it into a medical space. However, and this is the essential point, the doctor's intervention is not by virtue of a medical skill or power that he possesses in himself and that would be justified by an objective body of knowledge. It is not as a scientist that homo medicus has authority in the asylum, but as a wise man. If the medical profession is required, it is as a juridical and moral guarantee, not in the name of science (Foucault, 1965/1988, p. 270).

The need for a new explanatory model of madness

So far this chapter has explored the development of legislation necessary to authorise the confinement of the insane and the concomitant expansion in asylum provision in the nineteenth century. The reform agenda, stimulated by public and professional criticisms of the madhouses and early asylums, was characterised by the paradoxical situation in which asylums were seen as both the cause of a major humanitarian problem, and the source of its solution. For psychiatry, critical to reform was the development of a body of theory that would inspire confidence in its practices and secure the role of medicine in the process of certification. Reform required not only a programme of social policy supported by legislation, but also an explanatory framework that could rationalise the radical innovation of the public asylum.

Madness and the paradigm of medical science

Despite the wide use of medicine as a means of understanding insanity, in the late eighteenth century medicine was not yet ready to assume a dominant role in the administration of madness. The medical profession resisted initial attempts at regulation and the Royal College of Physicians even declined, in 1754, an official invitation that they should provide a regulatory body for this purpose (Parry-Jones, 1972). The ambiguous stance of the medical profession, deeply engaged in the madhouse enterprise through private ownership and profit taking, but professionally distant in terms of regulation, reflects an ambivalence consistent with medicine's impoverished theoretical

position in the late eighteenth century. At a time when English society was developing a range of institutional responses to problems of social order, administrative control of madness was a matter more of social authority than of a superior explanatory framework.

The asylum was one of a range of institutions, and stood in need of a system of authority of its own. As Scull (1993, p. 40) describes it, the asylum required “the establishment of a new organized profession, claiming to possess a specific expertise in the management of insanity.” To Foucault’s (1965/1988) argument that the psychiatric understanding of madness was a result, rather than a cause of confinement, Scull (1993, p. 41) adds that “the existence of the institutions formed the breeding ground for this emerging ‘professionalism’”. The inquiries of 1807 and 1815-16 exposed medicine’s theoretical weakness, especially in competition with moral treatment. When in 1827 the opportunity arose to cement the position of medicine by legal positioning, the Royal College of Physicians was less reluctant to assume a regulatory role than it had been in 1754. What could not be achieved in theoretical debate could be achieved by accepting a statutory role, especially one with considerable power to influence asylum practice.

The position of medicine was assisted by the ascendancy of science in the nineteenth century. Of the various competing models of madness, the claim to science, if it could be made convincingly, provided medicine with a voice that was at once modern and authoritative (Scull, 1993). It helped that medicine was an established profession of considerable prestige, even if, as in contemporary times, psychiatry did not share that prestige equally with other medical specialties. With the public asylum the stage was set for the triumph of science over the unreason of the lunatic. However, before that triumph could be complete the science of psychiatry needed to respond decisively to the challenge of moral treatment.

The challenge of moral treatment

The efforts of reformers received official recognition at the Select Committee of 1815-16 to which medical witnesses testified that “in cases of mental derangement....very little can be done [by way of medical treatment].” One prominent medical witness, Dr Thomas Monro, openly conceded that medicine did not offer a cure, but a form of management. When this form of management (chains, manacles, bleeding, purging, blistering) were seen alongside the humane model of moral treatment, medicine’s aim of securing its authority was by no means assured. Lay and legal witnesses were not just sceptical, they were overtly hostile, with Edward Wakefield testifying that medical practitioners were “the most unfit of any class of persons [to be the Inspectors and Controllers of the Madhouses]” (Scull, 1993, p. 196). There was a very real risk that the social mandate to control the asylums would fall from the hands of medicine, and with it the power to define what counted as knowledge about madness.

The contest for authority in the asylum enterprise was at once an epistemological and political struggle. In such a struggle medicine possessed a key advantage over its lay competitors. If the profession could no longer rationalise its outdated somatic treatments, it could at least cast moral treatment in the abstract language that characterises professional groups such as medicine (Scull, 1993). Another advantage lay in the language used by moral treatment. Despite arguing against the medical model, the moral theorists continued to use the language of medicine, including terms such as “cure”, “treatment” and “patient” (Scull, 1993). The Retreat at York, one of the earliest of the modern asylums, provided at least a visiting and possibly a resident physician, resulting in some tensions between the doctor and his lay employers (Charland, 2007). This is consistent with the system of moral treatment practised by Pinel (1806) who appealed to the notion of insanity as disease. As Scull (1993, p. 200) argues: “Given the critical role of language in shaping the social construction of reality, to employ terms which imply that something is a medical problem, and yet deny that doctors are those most competent to deal with it, seems perverse.” Moral treatment presented a problem, but one for which psychiatry had a ready response: co-option of the lay moral view of into a medicalised model of moral treatment.

The lever of legislation

Legislation provided another site of contested knowledge. As noted above, the Royal College of Physicians had in 1754 rejected a proposal that they form an inspectorate to monitor the madhouses (Parry-Jones, 1972). At this time medicine had nothing to gain from assuming an inspectorate role as doctors already controlled the madhouses, in many cases drawing substantial income from them. The inspectorate role could only lessen medical control of the madhouses as the profession would have needed to police standards, something that might place individual doctors in conflict not only with their own financial interests but with those of their colleagues who profited from the free market in lunacy (Parry-Jones, 1972). However, by 1827, something more was at stake: who was authorised to judge the adequacy of asylum care? At the 1827 select committee medicine lobbied, successfully, to be named as Metropolitan Commissioners in Lunacy, and to authorise admissions by signing medical certificates (Wright, 1998). In both instances the claim to legal authority rested on a claim to knowledge. It also displaced other knowledge claimants, especially the advocates of moral treatment. Moral treatment remained the preferred treatment model, but when it came to judging who required such treatment, when its goals had been achieved, and whether the institutions providing moral treatment were doing this to an acceptable standard, medicine would be the main arbiter. Thus medicine assumed responsibility for a lay workforce, a non-medical model of treatment, and the right to determine whether or not the asylum was functioning according to its mandate. The problem caused by a theoretical vacuum in medical knowledge had been solved not epistemologically, but politico-legally. This was achieved by appropriating the technology of the moral asylum within the medical discipline of psychiatry. Most importantly for this thesis, gaining ascendancy to legally authorise admission by the process of certification placed medicine firmly in control not only of the asylum, but madness itself.

Psychiatric medicine and its relationship to the law

The emergence of psychiatric science with its rationalistic explanation for madness occurred at a time when the law was becoming deeply influenced by positivist

principles, and was moving away from its roots in the irrational (Weisstub, 1978). Consistent with the nineteenth century shift towards rationalism, the law sought rational models of legal adjudication. By espousing a science of psychiatry, medicine was able to respond to this development in jurisprudence by providing a rational model of decision making in certification and supplying a profession of experts in its practice. Psychiatry offered the additional advantage of responding to the legal problem of individuation: that the law should not be blindly and mechanically applied without concern for the circumstances of individuals. Although it laid claim to an objective body of knowledge, psychiatry was an interpersonal practice and therefore concerned with the interests of individuals.

By asserting epistemological jurisdiction over insanity, one of many medical models, the psychiatric model, supported by a legislative framework, came to be the authoritative voice in the legal process of committal. Having won this right to speak, legitimised in the structure of committal documents, the epistemological position of professional psychiatry became so institutionalised that it became common sense. Moral treatment played an important role in the success of psychiatric theorising, providing both a critique of the medically administered madhouse, and alternative model of treatment that allowed some optimism that successful treatments, even cures, were possible (Scull, 1993). Under the influence of medical professionalism moral treatment became the practice of the medical specialty of psychiatry.

Medical ascendancy and its costs

On the administrative front, securing exclusivity in the role of asylum superintendent also helped cement the authority of medicine. It was only a matter of time before the initial appropriation of moral treatment became a comprehensive medical hegemony. The rapid expansion in asylum numbers after 1845 precluded the deployment of moral treatment in the form that had supported calls for reform, and it was soon replaced with moral management underpinned by a growing commitment to biological theories of degeneracy and genetics, rather than psychological theories (Schirmann, 2013). The following claim published in the *Journal of Mental Science* in 1858 shows that

by mid-century, with a national programme of asylum construction in full swing, the struggle for ascendancy in authority over madness was declared won by medicine on the basis of a biological model: “Insanity is a disease of the brain. The physician is now the responsible guardian of the lunatic and must ever remain so.” (Cited by Scull, 1993, p. 230).

If medicine had won out in the struggle to define madness and control the insane this was at best a partial triumph. With the locus of treatment tied to the asylum, the enabling legal framework gave the law, and the legal profession, a pivotal role in the management of madness. The professionally shared nature of the psychiatric enterprise was brought home to English psychiatry in the legislative reform of 1890. In a reversal of discretion extended to medicine by lawmakers in 1845, the 1890 English parliament introduced a legalistic Lunacy Act which severely curtailed doctors’ discretion in committal decisions (Parry-Jones, 1972). Even although the new science of psychiatry had established its authority to speak about madness, in the matter of decisions to admit patients to the asylum, psychiatric decisions needed legal assent. But first it is necessary to observe, that the legalistic Act of 1890 was only necessary because medicine had already secured its epistemological authority over madness. What remained was to manage this authority, to constrain its excesses, and to ensure that its exercise through legislation did not threaten its legitimacy. Psychiatry in the nineteenth century was a medical science whose practitioners were tethered to an institutional setting, whose practices were subject to political scrutiny, and whose key decisions could be legally abrogated. Mental health legislation would prove to be a critical source of authority and a site of conflict. Legislation would also deeply implicate the new discipline in enacting social policy.

The legislative legacy of the nineteenth century asylum

Internationally, the middle decades of the 19th century saw a burgeoning industry of asylum construction and New Zealand was no exception. By the late nineteenth century western nations had constructed large asylums near almost every major population centre, and demand was unabated. By this time, the ferment of utopian

theorising and asylum construction had almost run its course, and the dream of asylum pioneers was beginning to crumble beneath the weight of its own inflated claims (Philo, 2004). The extent of asylum provision is staggering in financial terms, in the grandeur of many of the early institutions, and in the numbers of people incarcerated. Such an achievement required a legal structure that legitimised incarceration, agents who could operationalise the new laws, and a population which accepted the sequestration of the insane.

By the time it was realised that asylums could not fulfil their promise of curing insanity a network of laws existed, new professions had emerged, and existing professions had aligned themselves in the management of madness. Although the nineteenth century asylums were depopulated in the middle decades of the twentieth century, the legal structures, professional roles, and epistemological assumptions that were an inherent in the process of certification remain. In many respects the “mentally ill” continue to occupy the problematic social position they were assigned in the heyday of the asylum. Today, police, doctors, nurses, the judiciary and administrators participate in what, despite the occasional untidy rupture in the form of an inquiry or legal challenge, is a comprehensive system of legal controls over people with mental illness.

Conclusion

This chapter has described the development of the psychiatric model of madness and the central role of legislation in that development. So far, the focus has been mainly on England. The following chapter continues the outline of the contextual framework by examining the New Zealand context. The discussion explores how psychiatry, the asylum and their legislative framework were exported to the new colony, and how legislation was adapted to changing social policy throughout the past 170 years.

CHAPTER THREE: NEW ZEALAND LEGISLATION

Introduction

New Zealand mental health legislation, like the constitutional framework of the country itself, owes much to the traditions of England, although from its earliest forms, significant divergence from those traditions can also be observed. Chapter Three continues the contextual background with an exploration of the development of New Zealand legislation, concluding with the provisions of the current Act.

The first New Zealand mental health legislation was introduced in 1846, a year after the English reforms described in Chapter Two. Since that time, New Zealand has seen five different mental health enactments. Mental health legislation has supported a broader social and health policy agenda. Since 1992 mental health legislation has supported the social policy agenda of deinstitutionalisation, in some respects ahead of the international trend in its emphasis on community care, and towards the use of community treatment orders.

New Zealand legislation

Each of New Zealand's five iterations of mental health legislation reflects its historical period. The legislation also shows a dialectic between legal and medical reasoning, and the constant tension between a utilitarian social agenda and individual rights. In addition, and notwithstanding the modern innovation of community care, New Zealand legislation has always provided for an out-of-hospital alternative to institutional care (O'Brien & Kydd, 2013, see following chapter). Although the current (1992) legislation contains greater procedural protections than any of its predecessors, and is explicit in mandating compulsory community care, its provisions resonate with concerns reflected in earlier legislation, especially in concepts such as risk to self and others. Like earlier Acts, the 1992 legislation binds medicine and law together in enacting social policy towards the mentally ill.

Early New Zealand legislation

The nineteenth century problem of madness was resolved by the creation of a new axis of authority between police, public officials, judicial authorities, and the medical profession. The need for such an alliance would have seemed obvious to English colonial administrators when New Zealand became a colony in 1840, and so is unlikely to have been seriously debated. At their inception our official legal and medical notions of madness had no history of their own, but were transplanted, more or less complete, from England (Brunton, 2003). Nevertheless, the young colony introduced mental health legislation into its early constitutional framework, and soon began a vigorous programme of asylum construction.

In June 1840, a month after British sovereignty was declared over New Zealand, the Legislative Council of New South Wales passed an Act extending the laws of that Australian colony to New Zealand, in so doing creating this country's first legislative framework, including, from 1843, the New South Wales Dangerous Lunatics Act (1843) (Cummins, 2003). Three years later the Lunatics Ordinance of 1846 was passed by the New Zealand Legislative Council, providing the country's first locally developed mental health legislation (Brunton, 1996). No doubt early English colonial legislators were well aware of the debates in the English parliament in the early 1840s and brought with them something of the utopianism of the early asylum period, as well as the sobering awareness of the abuses that had been reported to the House of Commons.

The Lunatics Ordinance provided the basis for compulsory detention in prisons or public hospitals. The preamble to the legislation, identical to that of the New South Wales legislation, reflected the conflation of insanity with criminality, something Ernst (1991) attributes to settler concern with law and order in the colonies:

“Whereas it is expedient to make provision for the safe custody of *and prevention of crime* being committed by persons insane...” (my emphasis) (10 Victoriae, 21).

Although there were no asylums in New Zealand at that time, this early legislation appears to have anticipated their provision, as committal to prison or hospital was envisaged within the legislation as a prelude to reception into an asylum. Section 3 of the Lunatics Ordinance provided that anyone held in custody and certified insane “shall be removed to such public colonial lunatic asylum as the said Governor shall appoint”. There are some notable features of his legislation. Firstly, recalling English legislation of the period (Wright (1998)), the process of committal was initiated by the judiciary who “call[ed] to their assistance” medical practitioners to provide “proof on oath” as to the person’s insanity. The Act did not provide for a direct application by a family member or member of the public, although that perhaps begs the question of how individuals came to be brought before the Justices. Release from committal was also the final prerogative of the committing Justices, not the patient’s medical practitioner. The legislation allowed relatives or friends to take the person “under [their] own care and protection” (section 2) provided they guaranteed the person’s “peaceable behaviour”.

The Lunatics Ordinance required medical practitioners to provide oaths (section 1) and certificates (section 9) but gave no direction as to the form of this documentation. The legislation set no criteria of insanity, although it did allow medical practitioners to provide “further proof” (section 1), presumably in the form of statements from family members and others. In the absence of a formal statement of certification, the Lunatics Ordinance differed from its nearest English counterpart the 1808 County Asylums Act which in an 1819 amendment introduced a requirement for such a statement (Wright, 1998). Lastly, section 14 allowed that independently of the Lunatics Ordinance, a writ de lunatico inquirendo could be sought in relation to persons considered insane. The Lunatics Ordinance was a brief document of only 15 sections, and appears to have been a legislative stopgap as New Zealand developed its initial health and social policy infrastructure. While it bore some resemblance to English legislation of 1845, it also contained some important differences. Primarily, the Lunatics Ordinance did not require formal certification, and provided for persons certified insane to be cared for by friends or relatives.

The New Zealand Constitution Act in 1852 introduced the possibility of indigenous New Zealand legislation. In fulfilment of the recommendations of the 1858 Select Committee, the Lunatics Ordinance was replaced by the more comprehensive

Lunatics Act (1868) (32 Victoriae 16). The 1868 Act reflected the growth of asylums and included provisions for the protection of patients, including a formalised process of certification. The preamble to the Act again conflated criminality and insanity, if anything accentuating that association by referring to the “dangerously insane”. The preamble also referenced concern for the care and maintenance of “persons of unsound mind” and the management of their estates. The Act can be seen as attempting to balance concerns of social order with concern for the welfare of individuals in terms of their safe custody and protection of their assets. Such a balance of concerns is similar to that described in England, reflected in the title of Smith’s (1999) “Cure, comfort and safe custody”.

The 1868 Act recognised the role played by colonial gaols and other institutions of confinement in the management of insanity. It referred in several places to the proper disposition of confined persons considered insane. These provisions were included prior to references to a person in the community being brought before a magistrate. The order of these provisions perhaps reflected the latter circumstance being less common than the former, and that insanity first came to notice following a criminal investigation. This interpretation is supported by the next inclusion in the Act being persons arraigned before a court for a criminal offence but considered to be insane. This was followed by insane persons found by a constable to wandering at large, and then lunatics of whom a constable has knowledge. In all cases the procedure was judicial, with the magistrate or justices calling medical officers to their assistance. The Act did not allow a private individual to initiate a committal process other than, presumably, by first notifying a constable.

As the name indicates, the Act applied to “lunatics” who were defined as “any person idiot lunatic or of unsound mind and incapable of managing himself or his affairs and whether found lunatic by inquisition or not” (Section 87). The reference to “inquisition” related to Part V of the Act which replaced the provisions of section 14 of the Lunatics Ordinance. The Act contained no further criteria to define lunatics, but in section 11 allowed judicial discretion, with language echoing that of the 1774 English Madhouses Act: “a proper person to be taken charge of and detained under care and treatment”. Certification required the use of documents prescribed in the schedules of the Act. While certification was somewhat more formal than the process under the Lunatics

Ordinance, the prescribed forms did not ask for anything more than a written declaration. There was no requirement for supporting reasons.

The 1868 Act made two provisions for care of committed patients outside institutions. The first was the section 5 provision for a relation or friend to take “such lunatic under his care and protection” provided peaceable behaviour and proper treatment were guaranteed. As with the preamble this provision demonstrates the dual functions of the act in maintaining public order and extending paternalistic protection to the individual. The second provision was for “single lunatics” who could be boarded with private individuals or with their families. In the case of single lunatics, sections 49 and 50 made explicit provisions for medical oversight and for reporting of any need for restraint. Thus the procedures of committal usually meant loss of liberties through confinement to an asylum, but also contained protective measures. Such measures, and allowance for a form of community care in a domestic setting, complicate any simple model of official coercion. Overall the 1868 legislation was marked by the primary role of the judiciary in committal, with medicine playing a crucial, but arguably a secondary role. The next major reforms would see the balance of decision making authority tip a little, but not decisively, to medicine.

The Lunatics Act of 1868 was repealed in favour of the Mental Defectives Act (1911) (2 Geo V). The Act’s title reflected the prevalent theory of degeneracy. The Mental Defectives Act provided a broad definition of a “mentally defective person” that included six “classes”, each of which met the broad criteria of requiring “oversight, care or control for his own good or in the public interest” (Section 2). The committal procedure was judicial in the first instance, with an application by any person (subject to exceptions) to a Magistrate, stating the grounds for the applicant’s belief that the person was mentally defective. An accompanying medical certificate was discretionary, but the Act required the magistrate to subsequently “call to his assistance” two medical practitioners to examine the person. The medical practitioners were required to provide a certificate “in the prescribed form”.

Perhaps anticipating the era of voluntary treatment, the sections 39 and 40 of 1911 legislation provided for “voluntary boarders”. Voluntary status was constrained, however, as voluntary patients, once admitted, could be detained for seven days after their written

application to leave. A procedure for judicial commitment could also be undertaken once a person was admitted as a voluntary boarder, and the patient could be detained at medical discretion until the case was heard. This procedure was wholly medical, marking the first time a person could be detained under medical authority without judicial approval. The provision for single lunatics was retained from the 1868 legislation and constituted the second of two provisions for out-of-hospital compulsory care.

The Mental Health Amendment Act 1954 extended the concept of voluntary boarders (Brunton, 2003), representing a relaxation of the legislated relationship between patients and institutions. Although the policy of deinstitutionalization is not associated with the 1950s, it is notable that numbers of inpatients in psychiatric hospitals peaked in the 1940s (National Health Statistics Centre, 1973) declining steadily until the last hospital was closed in 1999.

Legislation and deinstitutionalisation

The Mental Health Act of 1969, while primarily focused on detention, replaced the criteria of concern with the person's good or public interest with the single standard of the need for treatment. The Act differed significantly from its predecessors by providing a definition of mental disorder as substantially impairing mental health. The phrase from the 1911 Act "the person's good or public interest" appeared in section 24, the point at which the Magistrate made the final determination of whether the application for a reception order was granted. The six classes of 1911 were reduced to three.

The Act specified two committal procedures, and their differences highlight changing thinking about the balance between medical and legal authority in the committal process. Section 19 involved direct application to the superintendent, who in this legislation was defined solely as medical. An application was to be accompanied by two medical certificates (in some circumstances only one was required) and empowered the superintendent to detain the person. The section 19 procedure was without judicial involvement at the initial stage, granting to medicine for the first time an unencumbered power of committal. Section 19 admissions were notified to the Magistrate's Court, from

which point they were subject to judicial determination of whether or not a reception order would be issued. Notification could occur up to twenty-one days after admission, meaning that there was potentially a twenty-one day period of detention solely at medical discretion. A section 21 admission was more in keeping with the 1911 provision for direct application to a magistrate with accompanying medical certificates, a process that would trigger the magistrate's determination of need for a committal. Once issued, a reception order remained in force until the patient was discharged. Certification under the 1969 Act was formally documented with a greater requirement for additional detail required by section 31. Details included any treatment provided and a statement about the physical health of the patient.

Of particular interest in the 1969 Act are the twin procedures of committal, especially the degree of medical discretion provided by section 19. This could be seen as representing greater confidence in doctors to meet the public interest served by mental health legislation, and as the high point of medical autonomy in civil commitment. This degree of medical autonomy was somewhat in contradiction to the approaching programme of deinstitutionalisation, and to the more general challenge to the authority of medicine, especially the specialty of psychiatry, which by that time was becoming prevalent (e.g. Dubos, 1959; Szasz, 1961/1974). It may be also be argued that the section 19 procedure disarticulated the process of committal from the stigma of court involvement, as section 21 applications were heard in court, and might occur at the same time as criminal proceedings. Overall the wholly medical procedure of section 19 exposed the patient to unrestrained medical discretion, with legal redress significantly delayed by modern standards. The process of deinstitutionalisation was largely effected during the life of the 1969 Act, with a movement towards treatment in a less restrictive environment in the community.

A provision for single lunatics was retained in the 1969 Act with a wording change to "single patients" although the provision was much reduced from that of 1911. The Act provided for both "committed" and "informal" (voluntary) patients. The 1911 provision that a voluntary boarder (patient) could be detained was removed, and any committal initiated in respect of a voluntary patient followed procedures under section 21 involving application to a magistrate. A significant innovation in the 1969 Act was the introduction of "inpatient on leave status" (section 66 (1)), a measure that challenged the

dominant position of the hospital as the locus of care. Although this measure further reduced the relationship between committed status and institutional care, it maintained a legislative relationship between patients and their psychiatric caregivers. Services delivered in the community to patients on leave were provided from a hospital base (Robinson, 1972). Inpatient on leave status was reviewed annually, but could be renewed as many times as considered necessary. Where hospital discharge had previously severed the legislative relationship, under inpatient on leave status this was no longer the case. The extension of legal powers into community care was one of the concerns raised by early critics of involuntary outpatient treatment in the United States (Hiday, 2003) and remains an issue for some commentators (e.g. Kaiser, 2009; Lawton-Smith et al., 2008).

Current New Zealand legislation: The Mental Health (Compulsory Assessment and Treatment) Act (1992)

The Mental Health (Compulsory Assessment and Treatment) Act (the Act) was introduced in 1992 and attempted to give effect to the concept of the least restrictive alternative in mental health care (Bell & Brookbanks, 2005). A key component of this legislation is the community treatment order. The Act involves a staged process of invoking involuntary status with opportunities for scrutiny of decisions by District Courts and review tribunals. In this section, the Act is briefly summarised, and this summary is followed by a discussion of the specific sections, 11 and 29, that are the focus of this thesis. A full guide to the Act has been provided Mackenzie and Shirlaw (2002) and extended discussions are provided by Bell and Brookbanks (2005) and Dawson and Gledhill (2013).

Criteria for invoking mental health legislation

Within the 1992 Act, criteria for invoking mental health legislation moved away from the medically oriented classifications of the 1969 Act towards a phenomenological set of criteria based on the concept of mental disorder. The same broad criteria are used

for acute crises and for community treatment orders. The definition of mental disorder is given in section 2 of the Act as:

an abnormal state of mind (whether of a continuous or intermittent nature), characterised by delusions, or by disorders of mood or perception or volition or cognition, of such a degree that it –

- a) Poses a serious danger to the health and safety of that person or of others; or
- b) Seriously diminishes the capacity of that person to take care of himself or herself.

The introduction of the criterion of dangerousness was an attempt to move away from the need for treatment standard of the 1969 legislation (Bell & Brookbanks, 2005). However, in his international review of legislation, Appelbaum (1997) characterised the New Zealand Act as containing a need for treatment standard because part 2(a) includes serious danger to health. A feature of the current legislation is the provision for compulsory assessment and treatment to be provided under civil commitment in settings other than inpatient units. This applies to both acute and community care.

Acute mental health care (section 11)

Section 11 of the Act provides for a compulsory period of up to five days assessment and treatment. This section is designed for acute crises, and usually, but not always, involves a hospital admission. Following the initial five day period, two additional 14 day periods can be recommended by the patient's responsible clinician. The most recent data from the Ministry of Health (Ministry of Health, 2013a) show that on average 90% of section 11 committals progress to an additional 14 day period of compulsory assessment and treatment under section 13. Of those under section 13, two thirds progress to a second 14 day period. A period of acute treatment under compulsion can lead to a compulsory treatment (inpatient) order under section 30. An inpatient order is for a six month period, although it can be stopped at any time by the patient's responsible clinician. Admission under compulsion may also lead to discharge under a

CTO (section 29). Ministry reports do not state what proportion of those subject to section 11 is later made subject to either section 29 or section 30.

Community treatment orders (section 29)

A compulsory treatment order may be either a community or inpatient order. The placing, in the wording of the legislation, of the community order ahead of the inpatient order can be seen as a reflection of the policy shift towards care in the community. This view is supported by the contemporaneous closure of psychiatric hospitals and the dramatic reductions in bed numbers in the successor general hospital mental health units (Brunton, 2013). The community treatment order provision of section 29 allows for a patient to be treated outside of hospital, at home if there is adequate support for this. This provision is consistent with the principle of least restrictive alternative standard that underpins the New Zealand legislation. It has similarities to section 2 of the 1846 Lunatics Ordinance in providing for individuals subject to legal compulsion to be cared for by family or friends.

Section 28(4) of the Act provides that:

Before making a community treatment order, the Court shall satisfy itself that-

- a) The [District Health] Board provides through the institution or service named in the order care and treatment on an outpatient basis that is appropriate to the needs of the patient; and
- b) The social circumstances of the patient are adequate for his or her care within the community.

The CTO did not represent a clean break with the past, as at the time of their introduction increasing numbers of people had been discharged from hospitals under the inpatient on leave provisions of the 1969 legislation. In their study of the first five years of operation of the 1992 legislation, Dawson and Romans (2001) reported that in 1993 6.9% of patients under CTOs were individuals deemed to be under such an order as they

were committed patients on leave at the time the new legislation was passed. The community treatment order represents a new formalisation of this arrangement as part of a more general shift to a new community focused model of mental health care. Taking a broader perspective, the CTO can be seen as continuous with an out-of-hospital strand running through all five iterations of New Zealand's mental health legislation, beginning with the 1846 provision for relatives or friends to take the person under their care and protection (O'Brien & Kydd, 2013).

Treatment under a CTO is usually provided by a community mental health team. The community treatment order involves a power of compulsion (Bell & Brookbanks, 2005) and includes a police power to ensure attendance for treatment. The meaning of "social circumstances" is not defined in the Act. This is problematic because people with severe mental illness are often unemployed and face discrimination in the housing market (Bell & Brookbanks, 2005). In 2013 there were 4328 applications for community treatment orders, of which 2428 were successful (Ministry of Health, 2013a).

With the 1992 legislation the procedure of committal is constructed as medical in the first instance, in direct contrast to the models of the nineteenth century or under the 1911 legislation. The medical discretion of the current legislation is constrained however, especially by comparison with the section 19 provision of 1969. The current legislation contains a raft of discretionary and non-discretionary procedural protections, such as the section 16 review (O'Brien & Kar, 2006), the obligation to provide information (Thom, O'Brien, & McKenna, 2008) the section 76 review and others (Bell & Brookbanks, 2005). While commentators, especially those with a clinical interest, must be careful to avoid the assumption that legislation has progressively improved, it does not seem unreasonable to conclude that current New Zealand legislation does as much as legislation can do to address arbitrary detention. Currently it appears to achieve a reasonable balance of protection of rights, restraint on judicial and medical discretion, and a legitimate power of the state to enact its police and *parens patriae* power (Carney, 2007). What cannot be determined from analysis of the provisions of legislation is how it is enacted in practice, and how its application might impact on different social groups. These issues are the focus of empirical work presented later in this thesis.

Statutory roles in New Zealand legislation

The 1992 Mental Health (Compulsory Assessment and Treatment) Act established a number of statutory roles, including clinical and administrative roles. A notable feature of these roles is that most are generic, rather than assigned to medical practitioners. Two statutory roles are of particular interest to this thesis, those of responsible clinician (RC) and duly authorised officer (DAO). Clinicians acting in these roles are key to the decision making process in relation to both section 11 and section 29. The role of RC can be assumed by a psychiatrist or “some other registered health professional” (section 7), and that of DAO by a “health professional” (section 93). The role of director of area mental health services (DAMHS) carries no disciplinary or health professional requirement at all. In practice most RCs and DAMHS are doctors (although not necessarily vocational psychiatrists), and most DAOs and second health professionals are nurses (McKenna & O’Brien, 2013). A small number of responsible clinicians and DAMHS are nurses or other health professionals (McKenna, O’Brien, Dal Din & Thom, 2006).

Responsible clinician

The statutory definition of RC given in section 2(1) is: “Responsible clinician, in relation to a patient, means the clinician in charge of the treatment of that patient”. A person (a “proposed patient”) becomes a “patient” within the Act on completion of the section 10 assessment, if the medical practitioner completing that assessment determines that there is a need for an initial (five day) period of assessment and treatment under section 11. Persons made patients under section 11 and those made subject to a CTO (section 29) are assigned a responsible clinician. Although there is no requirement for the RC to be of any specific professional background, a Ministry of Health outline the competencies limited the role to doctors, nurses and psychologists (Ministry of Health, 2002). It should be noted here that the RC is not the clinician who makes the decision to place the proposed patient under compulsory status. He or she is the clinician who becomes responsible for the patient’s care after the section 10 certificate of assessment is completed. Doctors who are assigned RC status are also extensively experienced in conducting assessments under section 10.

Duly authorised officer

The definition of duly authorised officer given in section 2 (1) is:

Duly authorised officer means a person who, under section 93 of this Act, is authorised by the Director of Area Mental Health Services to perform the functions and exercise the powers conferred on duly authorised officers by or under this Act.

The legislation does not require the DAO to hold a specific health professional registration, but in practice, almost all of the approximately 500 DAOs are mental health nurses (N. Farley, personal communication). The role of the DAO is further defined in section 38 as providing “advice and assistance” to health professionals and members of the public about the operation of the Act. This includes notifying the proposed patient of the application and medical certificate leading to assessment under section 10, a function achieved by the presentation of a written notice, along with a verbal explanation of the process. The DAO has no formal decision making power, but functions in a facilitatory role. Thus although the roles of RC and DAO are professionally generic, they parallel the historic division of labour between doctors and nurses in psychiatry. Doctors are empowered to make formal decisions with statutory effect, while nurses “assist” and facilitate that process and act in an intermediary role vis a vis the proposed patient or patient. The DAO role is crucial to the operation of the Act not only because of the requirement for formal notification of the process of assessment under section 10, but because of the role of the DAO in providing “assistance”. Most DAOs are nurses employed on community crisis teams or in other mental health services, where “assistance” involves prior discussion of cases where compulsory care may be a consideration and discussion of the practical arrangements necessary to give effect to committal. Thus DAOs, whether within the formal ambit of that role in or in their more general role of mental health nurses, are influential in the process of civil commitment.

Mental health legislation and mental health policy

In this section I will draw on historical and recent examples to develop the argument, introduced earlier in this chapter, that mental health legislation can be considered as part of the response of the State to the problem of mental illness. Understanding the role of legislation in mental health policy is important because “legislation is the driving force through which the modern state defines the structures of health care systems” (Bertolote et al. 2002, p. 79). These authors go on to state that legislation “embodies the binding reference standards, systemic and normative, to which health care providers are accountable” (p. 79). Bauer et al. (2007) have argued that mental health legislation is influenced by socio-political factors in each country, and this is confirmed by the protracted debate that attended the most recent reform of legislation in England and Wales (Carpenter, 2009). As Brunton (2005, p. 12 of 20) notes “policy is complex and it can be controversial because numbers of mentally disordered people are subject to involuntary detention, assessment, and treatment – the most commonplace use of such powers in health legislation”. Brunton (2003) has also observed that the intent of policy is not always realized in practice as a variety of constraints may interpose. I will introduce the issue of variation to the analysis, and argue that if such a controversial area of policy is disproportionately applied it is doubly problematic.

In the New Zealand colonial context, Ernst (1993) has argued that asylums served the policy function of preserving order among the settler population. Admission to asylums in both countries required certification, introduced in New Zealand with the legislation of 1868. Certification required that each individual admitted was individually scrutinised by medical and legal practitioners, meaning that the professions of medicine and the law were the instrument of the social policy of asylum care. Throughout the nineteenth century and into the twentieth changes to mental health and social policy were accompanied by changes to legislation.

Asylum numbers remained high in the era of the welfare state, consistent with the prevailing view that society had a protective responsibility to people with mental illness. As state responsibility was rolled back in the second half of the twenty-first century (Kelsey, 1993), numbers of inpatients declined. Between 1987 and 2005 the number of people under mental health legislation remained the same, but with a large proportion

under community treatment orders (O'Brien et al., 2011). The community treatment order, while meeting the legislation's aim of providing care in the least restrictive environment, does little to ensure rights to the social goods this group is known to lack (Bell & Brookbanks, 2005). As Kaiser (2009) has argued, mental health legislation is primarily focused on providing criteria for coercion, without a reciprocal focus on ensuring access to social goods. This focus on coercion dislocates legal compulsion from the State's protective responsibility.

The relationship between social policy and legislation is less visible as western mental health systems are now community rather than hospital orientated. The greater individual freedoms accorded under policies of community care come at the cost of a more opaque relationship between the mentally ill and the State, something that has mixed effects. Positively, there is less overt abridgment of individual liberties, but negatively it is less obvious how, and through which agencies, the State should discharge its responsibilities to those with severe mental illness. At its extreme, it is argued (for example by libertarians such as Szasz (1961/1974)) that the State has no responsibilities to use legislative powers, but such a view is clearly contradicted in practice by the use of community treatment orders. Any such responsibility is also compounded by the evident geographical variation in use of compulsion, and its relationship to social factors (Bindman et al., 2002; Siphoned, 2010).

In his analysis of current mental health legislation in Canada, Kaiser (2009) argued that a legislative regime that is exclusively coercive effectively constructs madness as a medical matter but without any enforceable provision for the needs of the mentally ill when out of hospital. This is especially problematic when those discharged from hospital or, as may occur in New Zealand, some of those never admitted, are subject to legally coercive regimes which significantly abridge their autonomy. While the treatment and care provided to inpatients in the asylum and hospital eras was at times woefully deficient, as long as those individuals were subject to the authority of the institutional regime they could make not only a moral claim to reciprocal positive rights, but a legal claim.

Summary

New Zealand mental health legislation has its origins in English legislative models of the nineteenth century, and was inaugurated during a period of asylum expansion in which jurisdictions developed social policies, supported by a legislative framework, that allowed for separate confinement of the insane. The initial 1846 statute and has been replaced four times over its 168 year history. Early legislation followed the English model of directing care and treatment to an asylum but it is notable that legislation always contained some provision for compulsory out-of-hospital care. Unlike England, which saw mentally ill people housed in a range of institutions such as workhouses, private madhouses, charitable and public asylums, New Zealand had no comparable institutional network, and so relied almost exclusively on public asylums. As in other countries New Zealand mental health legislation is embedded in and driven by social policy. The most notable recent examples of this are the provisions of the 1969 legislation which allowed for implementation of the policy of deinstitutionalisation, and the community treatment order provisions of the current legislation.

This chapter has explored the evolution of New Zealand's mental health legislation, noting that the current Act instantiates psychiatry as a medical discipline uniquely charged with operationalising, through legal compulsion, social policy towards mental illness. At the same time, psychiatry shares the commitments of other medical disciplines, of providing care and treatment to individuals defined as ill, creating a tension between psychiatry's involvement in social control and its humanistic mandate. The relationship between psychiatry and the law, noted in Chapter Two to be a feature of the earliest mental health legislation remains a feature of contemporary practice. The following chapter, Chapter Four, concludes the contextual background with a publication discussing compulsory community care in New Zealand mental health legislation from 1846 to 1992. Chapter Four is the first publication of the thesis and has been published as: O'Brien, A. J., & Kydd, R. R. (2013). Compulsory community care in New Zealand mental health legislation 1846-1992 Sage Open. April – June 1-8. doi:10.1177/2158244013490175. Following Chapter Four, Section Two of the thesis (Chapters Five to Seven) explores the literature on variation in use of legislation.

**CHAPTER FOUR: COMPULSORY MENTAL HEALTH CARE IN
NEW ZEALAND MENTAL HEALTH LEGISLATION 1846-1992
(PUBLICATION)**

Compulsory Community Care in New Zealand Mental Health Legislation 1846-1992

SAGE Open
April-June 2013: 1-8
© The Author(s) 2013
DOI: 10.1177/2158244013490175
sgo.sagepub.com


Anthony John O'Brien¹ and Robert Kydd¹

Abstract

Community treatment orders are considered a new development in mental health care and are consistent with current New Zealand mental health policy of care in the community. However, since its first adoption in 1846, New Zealand mental health legislation has always made provision for compulsory mental health care out of hospital. Analysis of the text of each of the five iterations of mental health legislation shows that an initial (1846) provision for a friend or relative to take a committed patient into his or her care, as an alternative to committal to hospital, continued through various revisions until its current expression as a community treatment order. Using Rochefort's model of change in mental health policy, we argue that a long static period until 1911 was followed by progressive change throughout the 20th century, although provision for compulsory out-of-hospital care has been continuous over the life of New Zealand's legislation. In the late-20th century, compulsory mental health care is tied to medical treatment and mental health service surveillance of the patient's social circumstances. We conclude with recommendations for how reformed legislation may contribute to future mental health policy by giving effect to agendas of positive rights and social inclusion.

Keywords

compulsory care, community care, social policy, mental health legislation, community treatment order

What is known about this topic?

- Community treatment orders have been introduced in many jurisdictions
- Community treatment orders are considered to be a new innovation
- Mental health legislation reflects social policy

What this article adds

- Since 1846, New Zealand mental health legislation has made provision for compulsory out-of-hospital care
- Most people under New Zealand mental health legislation are subject to community treatment orders
- Compulsory community care involves mental health service surveillance of patients' social circumstances, but without a reciprocal responsibility to improve those circumstances

Introduction

Community treatment orders are generally considered a new approach to mental health care and have been subject to intense debate internationally (Lawton-Smith, Dawson, &

Burns, 2008; Walsh, 2010). New Zealand and many other jurisdictions have introduced community treatment orders as part of mental health policy commitments to less restrictive care, and to a wider social policy agenda of reduced state intervention. In this article, we argue that notwithstanding the novelty of community treatment orders, they also embody significant historical continuities in social responses to mental illness, and to provision of mental health care. We discuss New Zealand mental health legislation as a component of mental health policy, arguing that the community treatment order is the most recent expression of a long-standing legislative recognition of the place of family and community in mental health care. Understanding the role of legislation in mental health policy is important because "legislation is the driving force through which the modern state defines the structures of health care systems" (Bertolote, Taborda, Arboleda-Florez, & Torres-Gonzales, 2002, p. 79).

¹University of Auckland, New Zealand

Corresponding Author:

Anthony John O'Brien, University of Auckland, Private Bag 92019, Auckland, 1000, New Zealand.
Email: a.obrien@auckland.ac.nz

Bartlett (2001) observed that legal sources are underexploited in the history of madness. We found no studies in which the text of mental health legislation served as the primary source of interpretive material. This article therefore takes the text of New Zealand mental health legislation as its data source and uses that material as a window to mental health policy. The focus of our analysis is the text of New Zealand mental health legislation from its first introduction in 1846 to the current 1992 Mental Health (Compulsory Assessment and Treatment) Act (1992). Our aim is to show that current provisions for compulsory treatment orders share significant features with past legislation. In particular, we argue that New Zealand mental health legislation, rather than exclusively directing the mentally ill toward institutions, has always implied a role for family in compulsory mental health care out of hospital. Increasingly, the role of families is enacted alongside that of psychiatry as compulsory care out of hospital. Under current legislation, compulsory community care extends psychiatric surveillance into the private sphere of the home and to the social circumstances of the patient. The almost exclusive focus of current legislation on criteria for committal and procedural protections does little to recognize the positive rights of people subject to compulsion or to promote their social inclusion. In this respect, the 1992 legislation is out of step with contemporary thinking about societal responses to people with mental illness.

Community Treatment Orders

Like many other jurisdictions, New Zealand mental health legislation makes provision for compulsory community-based care (Dawson, 2005). Community treatment orders (and similar legal procedures in non-Commonwealth jurisdictions such as the United States (see O'Brien, McKenna, & Kydd, 2009) generally mandate that the patient receive treatment (usually medication and some form of case management) while living out of hospital or face sanctions such as return to hospital where medication may be given involuntarily. Although there is continuing debate about their effectiveness (Kisely & Campbell, 2007; Molodynski, Rugkasa, & Burns, 2010), in recent years, community treatment orders have been widely adopted internationally. Community treatment orders are used in all Australian states and territories and in most Canadian provinces, although their exact criteria vary between jurisdictions (Gray, McSherry, O'Reilly, & Weller, 2011). Community treatment orders have recently been introduced in Scotland (Lawton-Smith, 2005) and England (Woolley, 2010) and are under consideration in Ireland (Walsh, 2010). Like other aspects of mental health legislation, community treatment orders can be understood as an expression of mental health policy (Kaiser, 2009). In the New Zealand context, community treatment orders were introduced toward the end of the period of deinstitutionalization and form part of the broad policy initiative of community-based care.

New Zealand Mental Health Legislation

Beginning in 1846, New Zealand has seen five iterations of mental health legislation, with each providing out-of-hospital alternatives to institutional care for certified (committed) patients. Although the current 1992 legislation is explicit in mandating compulsory community treatment, rather than simply living out of hospital, its provisions for compulsory out-of-hospital care resonate with those of earlier periods. A summary of the provisions of legislation relevant to out-of-hospital compulsory care is provided in Table 1.

Lunatics Ordinance (1846)

The Lunatics Ordinance of 1846 (10 Victoriae, 21) was New Zealand's first mental health legislation. This was a brief document of only 15 parts, 1 of which (Section 2) provided for relatives or friends to take a person certified insane "under his own care and protection" provided they guaranteed to two Justices of the Peace or a Judge, the person's peaceable behavior. The Section 2 provision may have been intended as a limitation on the powers of the state to detain, but it also recognized, while maintaining the person's legal status as lunatic, a role for compulsory care out of hospital. There was no doubt an additional pragmatic imperative to the New Zealand Section 2 provision, the available hospital resources being very limited in 1846 (Brunton, 2003). A further provision for care outside the hospital setting was contained in Section 4 of the Lunatics Ordinance. Section 4 provided that relatives, guardians, or friends could remove an insane person from an asylum subject to their guarantee, to Justices of the Peace or a Judge, of the security and safe custody of the insane person. It is notable that removal of a patient by relatives did not require that the patient was cured or recovered, suggesting that in 1846, safe containment was paramount over treatment. The required guarantee addressed both public safety and the protection of the individual. The New Zealand provisions for out-of-hospital placement reflected the situation in England and Scotland where out-of-hospital alternatives were seen as a means of reducing demand for asylum beds (Sturdy & Parry-Jones, 1999). Although the Lunatics Ordinance made mention of asylums as a means of disposition, there were no asylums in New Zealand in 1846. Anyone certified insane was detained in a gaol or public hospital (Brunton, 2003). This early legislation set in place a precedent for out-of-hospital compulsory care for certified patients. In this regard, it was different from English legislation which made no provision, at the point of committal, for regulated care out of hospital. There is some similarity to the Scottish legislation, not adopted until 1857, which diverted potential asylum admissions while extending regulatory controls in the form of boarding out (Sturdy & Parry-Jones, 1999). However, the Scottish system was extensive and programmatic, where the New Zealand provision was ad hoc.

Table 1. Legislative Provisions for Compulsory Out-of-Hospital Care in New Zealand Mental Health Legislation 1846-1992.

	Provisions for out-of-hospital care	Legislated responsibility for people subject to committal living in the community	Recognition of families and lay caregivers	Medical role in out-of-hospital compulsory care
Lunatics Ordinance, 1846	Relatives or friends could take a person certified insane "under his own care and protection" provided they guaranteed to a Justice of the Peace or Judge, the person's peaceable behavior (s2) Relatives or friends could remove an insane person from a hospital subject to their guarantee to Justices of the Peace or a Judge of the security and safe custody of the insane person (s4)	Justice of the Peace or Judge Justice of the Peace or Judge	Relatives or friends were legal custodians of people subject to committal living in the community	No medical role
Lunatics Act, 1868	Relatives or friends could take a person certified insane "under his own care and protection" provided they guaranteed to Two Justices or a Resident Magistrate, the person's peaceable behavior, safe custody, and proper treatment (s5) A "single lunatic" could be accommodated in a licensed house (s48-s50) Trial absence (s64) Relative or friend could make application to take custody of a committed patient (s66)	Two Justices or a Resident Magistrate Licensed houses were subject to medical oversight Houses of more than 100 required a resident keeper who was a medical practitioner	Relatives or friends were legal custodians of people subject to committal living in the community Patient assumed to be living with family	There was effectively no medical role apart from in the one Licensed House established under the 1868 Act
Mental Defectives Act, 1911	A "single patient" could be placed in the care of a householder (s19) Provision for licensed houses retained (s45-s63) Leave of absence allowed for up to 12 months (s80)	Placement of single patient subject to medical approval. The householder and their premises were subject to Magisterial review as to their suitability Medical superintendent or Inspector General could revoke leave	Householder could be a family member Leave assumed to be with family	Householder must arrange visits by a medical practitioner. The frequency of visits was at the discretion of the Inspector General Licensed houses subject to medical oversight No medical role in day-to-day supervision or care, but leave could be revoked by a medical superintendent
Mental Health Act, 1969	Provision for "single patient" to be placed with a householder (s38-s40) Leave of absence provision maintained. Included provision for readmission (s66)	Placement of single patients subject to medical approval Leave at the discretion of medical practitioner and could be revoked and the patient returned to hospital	Householder could be a family member; reference to medical practitioner as householder removed Leave assumed to be with family	Medical role exercised through home visits, usually by psychiatric nurses, from the hospital base
Mental Health Act, 1992	Inpatient on leave replaced leave of absence (s31). Community treatment order introduced (s29).	Leave at the discretion of medical practitioner and could be revoked and the patient returned to hospital. Community treatment order at the discretion of "responsible clinician" who in most cases is a medical practitioner.	Consultation with family or whanau ^a mandatory Leave assumed to be with family	Attendance for treatment is a requirement of a community treatment order

^aWhanau is the Maori word for "family." Both words are used in the 1999 amendment that provides for family or whanau consultation.

Lunatics Act (1868)

Following a period of rapid development of regional asylums (Brunton, 2005), more comprehensive mental health legislation was adopted in 1868. The new legislation followed the establishment in 1852 of an elected system of self-government and fulfilled a recommendation of the 1858 Select Committee for revision of lunacy law (Brunton, 2005). The 1868 Lunatics Act (32 Victoriae, 16) made four provisions for care of certified patients outside institutions. Section 5 followed the earlier Lunatics Ordinance with the provision for a relation or friend to take “such lunatic under his care and protection” provided a Magistrate was satisfied that peaceable behavior, safe custody, and proper treatment were provided. The second provision was for “single lunatics” (Sections 48-50) who could be accommodated in a “licensed house” (Sections 28-47). The licensed house was a new measure that could provide for anything from 1 to more than 100 patients.¹ Section 29 detailed the medical oversight required of licensed houses, including a provision for a resident keeper (a medical practitioner) for houses of more than 100 patients. In the case of single lunatics, Section 50 made explicit provisions for medical oversight and for reporting of any need for restraint. The extensive requirements for reporting, inspection, and record keeping reflected English concerns of the time, when numerous private houses (formerly “madhouses”) comprised a significant component of overall provision for care of the insane (Parry-Jones, 1972). A third provision, contained in Section 64 of the Act, was for trial leave. Under this provision, patients could be absent from an asylum or licensed house if they were under “proper control.” Leave was for a “definite time” but the length of time was not fixed. A final provision that might lead to out-of-hospital care for a committed patient was contained in Section 66. This section allowed a friend or relative to make application to take custody of the patient on condition that the patient was properly cared for and was prevented from harming himself or others. The Act did not specify who would exercise authority over patients discharged under Section 66 and it seems safe to assume care was provided by families. The regulatory control extended to single lunatics reflects similar measures in place in Scotland under boarding out provisions and the 1845 English practice of trial discharge (Bartlett & Wright, 1999). In the New Zealand case, perhaps representing the less developed health infrastructure of a young country, the out-of-hospital regime involved legal rather than medical oversight, although revocation of leave took place under medical authority. While for many patients the 1868 procedures of committal would have meant loss of liberties through confinement to an asylum, the legislation also extended the range of options for compulsory out-of-hospital care and created obligations on caregivers to adhere to minimum standards, to maintain records, and to report to statutory authorities. Most notably, the 1868 Act retained provisions for a relative or friend to provide care for a certified person without medical supervision.

Mental Defectives Act (1911)

The Lunatics Act of 1868 was repealed in favor of the Mental Defectives Act (1911) (2 Geo V) and while the new legislation retained provisions for out-of-hospital compulsory care, it also positioned medicine to assume a greater role in those provisions. The option for a Magistrate to authorize a relative or friend to take responsibility for a certified patient, a feature of the 1846 and 1868 legislation, was dropped in 1911. The provision for single lunatics (renamed “single patients”) was retained with the option that a single patient could be placed in the care of a “householder” (Section 19). The Act anticipated that the householder could be a medical practitioner (Section 20), a practice that had been common in England in the 19th century (Parry-Jones, 1972). Placement with a householder was subject to medical approval (Section 19), meaning that for the first time, Magistrates had no independent power to decide disposition. Single patients were also to be visited by a medical practitioner. These provisions extended medical authority beyond the asylum into the community, although Magistrates retained the power to scrutinize householders and their premises for suitability as a place of care for single patients. The 1911 Act introduced the concept of “voluntary boarders” (Sections 39 and 40) suggesting that as early as 1911, the notion of the asylum as exclusively a place of compulsory confinement was already under review. The 1868 provision for trial leave was further defined under Section 80 of the 1911 Act. Patients could be absent for up to 12 months, renewable for 12 months, on the condition that they were “under proper control.” As in 1868, the Act did not specify who would exercise authority over a patient absent on leave, but in the absence of any community-based system of psychiatric care, it must be assumed that this role fell to family members. The leave of absence provision also applied to single patients in the care of a householder. Single patients were permitted up to 28 days leave from their accommodation. Leave could be revoked by medical superintendent or inspector general who, it must be assumed, would be alerted to the need to revoke leave by the householder or family member. The 1911 Act contained no provision for a friend or family member to initiate discharge as the legislation for 1846 and 1868 had done. From 1911, leave and discharge were initiated by and at the discretion of medical practitioners. When the 1911 Act was replaced by the 1969 Mental Health Act, the era of deinstitutionalization had commenced and the notion of “community care” had assumed a prominent place in debate about mental health service provision.

Mental Health Act (1969)

The Mental Health Act (1969) was introduced during a period of rapid change in mental health care internationally, and New Zealand was no exception to this process. A Board

of Health Committee inquiry (1957-1960) had foreshadowed deinstitutionalization by recommending an increase in psychiatric services provided by general hospitals, an initiative that reduced reliance on the network of institutions in the provision of mental health care (Brunton, 2005). It could be argued that New Zealand carried deinstitutionalization further than most Western countries, as by the late 1990s, all stand-alone psychiatric hospitals had been closed in favor of small inpatient facilities attached to general hospitals (Brunton, 2013). Although numbers of patients resident in hospitals had been declining since the late 1940s (National Health Statistics Centre, 1973), deinstitutionalization was further advanced by the 1969 Act. The 1969 Act continued existing provisions for compulsory out-of-hospital care, including those for single patients and leave of absence.

A provision for single patients was retained in the 1969 Act (Sections 38-40), although the extent of the provision was much reduced from that of 1911, occupying only a brief, almost perfunctory section. Single patients were placed with a "householder," but unlike the 1911 legislation, there is no reference to the householder being a medical practitioner. The single small section of the 1969 Act suggests that by 1969, the notion of the "single patient" was becoming anachronistic (Brunton, 1985) especially in light of other changes introduced in the new Act. Schedule I of the Act maintained the provisions for licensed houses (now "licensed institutions") under medical supervision.

As in the 1911 Act, a patient could be granted "leave of absence" for up to 12 months (Section 66), renewable at the end of that time for a further 12 months. Mental health policy was beginning to focus on community care, and the 1969 legislation gave cautious support to that policy. Services delivered in the community to patients on leave were provided from a hospital base (Ministry of Health, 2006). For many patients, leave of absence consisted of living in a regulated boarding house, many of which had an institutional ambience. It is likely, given the policy of deinstitutionalization, that many more patients were subject to the 1969 leave provisions than had been granted leave under the 1868 or 1911 Acts. Although leave of absence reduced the relationship between committed status and institutional care, it maintained a legislative relationship between patients and their psychiatric caregivers. This relationship was supported by the newly developing psychiatric home visiting services which began in the late 1960s (Robinson, 1972). Where hospital discharge severed the legislative relationship, under leave of absence status, this relationship was maintained and carried the possibility of rehospitalization. Leave of absence facilitated community living, albeit under psychiatric supervision. Patients on leave could more readily be returned to the hospital by a simple revocation of their leave status (Section 66), a process made easier by the availability of community psychiatric services, further underscoring the role of medical authority over committed patients living outside the hospital.

The Mental Health (Compulsory Assessment and Treatment) Act (1992)

The 1969 legislation provided a template for the community treatment order which was to come with the next (and current) iteration of mental health legislation, the Mental Health (Compulsory Assessment and Treatment) Act (1992). The introduction of the 1992 Act saw provisions for single patients and licensed institutions repealed, so that provisions for compulsory out-of-hospital care were consolidated within the provisions for community treatment orders (Section 29) or inpatient on leave status (Section 31). For the first time, mental health legislation referred directly to medical treatment of the person subject to compulsory out-of-hospital care. Section 28 requires that the mental health service provides "care and treatment" and Section 29 requires that the person subject to a community treatment order attends a specified place for that treatment. The Act requires that appropriate services are available and that the social circumstances of the patient permit provision of mental health care. Vestiges of the institutional era remain with the 1992 Act, in the Section 29 provision that patients under community treatment orders are required to attend for treatment by "employees of the specified institution or service."

The position of inpatients on leave under the 1969 legislation changed little with the introduction of the 1992 Act, which contained a provision (Section 144) for inpatient on leave status to be converted to either a new inpatient on leave status or a community treatment order. In practice, the former provision is little used in most regions, whereas the latter is used in every region (Ministry of Health, 2012a).

Another feature of the 1992 legislation is of interest. Unlike some Australian and Canadian jurisdictions (Gray et al., 2011), New Zealand legislation does not require an inpatient admission prior to the issuing of a community treatment order. A community treatment order can be invoked following a period of compulsory community care which might be provided in the person's home or some other non-hospital facility. Thus, the 1992 Act allows the entire apparatus of mental health legislation to be operationalized without recourse to a hospital admission.

Following the passage of the 1992 Act and to some extent facilitated by it, reduction in psychiatric hospital beds and the closure of the stand-alone psychiatric hospitals meant that options for long-term inpatient care became scarcer, and shorter periods of inpatient admission became the norm. For those considered to need a longer period of compulsory care, the community treatment order created the means of providing compulsory care in the community thus meeting the policy and legislative requirement for care in the least restrictive environment (Bell & Brookbanks, 2005). As hospital numbers reduced under the new legislation, numbers of people under compulsory provisions remained much the same. Community treatment orders now form an integral part of New Zealand's mental health services. Inpatient admissions

are usually brief (Abas, Vanderpyl, Robinson, Le Prou, & Crampton, 2006) with community follow-up, in some cases under compulsion, also playing an important role. In 2005, approximately 4,000 people were subject to mental health legislation (Ministry of Health, 2006), compared with the 3,081 reported for 1984 by Dawson, Abbott, and Henning (1987). Allowing for population changes, this represents a comparable overall rate of committal although many of those subject to the current legislation are under compulsion for relatively short periods under the acute care provisions of Sections 11, 13, and 14. Current rates of committal are further discussed in the following section.

Discussion

In his analysis of changes in public policy, Rochefort (1988) identified four models of change: static (little change), progressive (consistent improvement), discontinuous (irregular change, shifting objectives), and cyclical (repetitive alternation). To the extent that an out-of-hospital provision for committed patients has formed part of each iteration of mental health legislation in New Zealand, this instrument of mental health policy conforms to Rochefort's notion of static policy, that is, of no change. However, as the above analysis shows, within this continuity, beginning in 1868, and greatly strengthened in 1911 and 1969, the reach of compulsory psychiatric surveillance has extended from the enclosed hospital to the home of the patient. This gradual change toward a greater medical role in compulsory out-of-hospital care began with the 1868 requirement for medical approval of the placement of single patients in the care of a householder. The medical role was further emphasized through provision for leave of absence initially in 1911 and continued in 1969. Finally, with the community treatment order of 1992, the reach of compulsory psychiatric surveillance, including medical treatment, has extended from the enclosed hospital to the home of the patient. This aspect of change in legislation is more consistent with Rochefort's progressive model of change, in which policy is consistently improved. The claim to "improvement" could be seen as controversial, given debate about the effectiveness of community treatment orders (Kisely & Campbell, 2007) and about their place in mental health care (Lawton-Smith et al., 2008). One would need to agree that an increasing formal role for psychiatry in compulsory out-of-hospital care and a correspondingly reduced formal role for lay people represent improvement, rather than a displacement of informal support systems.

By 1992, provisions for compulsory out-of-hospital care created a legal requirement for medical treatment and statutory monitoring of the patient's social circumstances. The expansion of psychiatric treatment into the community resulted in an almost complete displacement of the family from the position it held in the 19th century as the legal custodian of the committed family member living out of hospital. In the 21st century, notwithstanding that many people

subject to compulsory community treatment live apart from their families, families still remain the most likely guarantors of adequate social circumstances, although this is not given legislative recognition. The current requirement that "treatment" is provided, rather than simply a relative's or friend's "care and protection," is an indication that in the 21st century, the psychiatric service system has a greater stake in the lives of people receiving compulsory out-of-hospital care than it did during the institutional era.

The analysis presented in this article does not support a romanticized view that lay people in the 19th century exercised a high degree of autonomy which has been lost within the increased medicalization of the 20th century. The role afforded friends, relatives, and householders in earlier legislation could be abrogated by judicial or medical authority; it has never been entirely autonomous, and there was no legal obligation for family consultation as the 1992 Act requires. Nevertheless, the community treatment order does represent a greater degree of psychiatric surveillance than the provisions for disposition to the care of a friend or relative of the 20th century. The most recent data (Ministry of Health, 2012a) show an increasing use of community treatment orders but no comparable increase in inpatient committals, suggesting the community has become the primary site of psychiatric authority, in contrast to the secondary role it occupied in the institutional era.

The extent and patterns of community mental health care under previous legal regimes has not been a subject of investigation in New Zealand. Given the findings of this study, that legislation has always provided for compulsory out-of-hospital care, this is a topic worthy of research. Brunton (1985) has argued that it is doubtful that extensive use was ever made of provisions for single patients. The extent of use of the 19th-century provision for magistrates' discretion to authorize a friend or relative to provide care and the use of trial leave are also unknown. Nevertheless, if one assumes that the provisions of legislation reflect both the intent of parliament and the practice of social actors, then it is reasonable to expect that the provisions for out-of-hospital compulsory care bear some relationship to how the mentally ill were actually treated. The 1911 provision for trial leave does appear to have been used to a considerable extent, enough to have generated a number of specific registers of such leave, currently held by Archives New Zealand (<http://archives.govt.nz/>).

Conclusion

The community treatment order can be seen as continuous with a theme of compulsory out-of-hospital care running through all five iterations of New Zealand's mental health legislation. This theme is consistent with the role identified by social historians for family and community in the provision of mental health care throughout and following the asylum era. Although not entirely new, the community treatment

order represents a new formalization of an historical arrangement for friends and family to take an active role in the compulsory out-of-hospital care for people subject to mental health legislation, a role that has formed part of New Zealand mental health legislation since its first introduction in 1846.

Rocheffort's (1988) model of change in mental health policy provides a helpful heuristic in examining change over time, in this case in mental health legislation. Where authors such as Allderidge (1979) and Scull (1975) have noted similarities in mental health care from one period to another, their analysis is limited by examining models of care that were prominent at particular points in time, rather than considering how those models might have continued, without overt emphasis, over periods where their influence was less obvious. As this analysis shows, Rocheffort's concept of progressive change as "consistent improvement" may be more applicable if "progressive" is interpreted to mean "consistent change" toward a particular policy direction. In the case of compulsory out-of-hospital care, this direction is toward increased medical authority.

In a comparison with other Commonwealth countries, current New Zealand legislation has been favorably assessed by Fistein, Holland, Clare, and Gunn (2009) and it does not seem unreasonable to suggest that care in the community, albeit under the legal auspices of a community treatment order, really is an improvement over confinement in an institution. However, that conclusion must be tempered with a recognition that the community treatment order is an intrusive measure, as it extends psychiatric authority into the private sphere of the home. What is more, the exclusively medical model of mental health care implicit in the community treatment order provides no specified entitlement to services, social support, general health care, accommodation, or any of the other resources that might reduce the impact of mental illness. In the institutional era, these services and resources were guaranteed, implicitly if not in their actual provision, by committal to hospital.

Current mental health policy continues to emphasize community-based care and services "closer to home" (Mental Health Commission, 2012), for example, through a greater role for the primary health sector in providing care for people with enduring mental illness (Ministry of Health, 2012b). To the extent that the current Act is compatible with that policy direction, it is unlikely to be revised in the foreseeable future. However, as in the institutional era, when legislation came to be seen as out of step with contemporary thinking about mental health care, the current legislation does not seem equal to the purpose of promoting social inclusion for people with mental illness or of promoting positive rights. Where the response of the institutional era was to persist with a long-standing pattern of continuous change toward increased medical authority to facilitate community care, the current period may need what Rocheffort (1988) termed *discontinuous change* to reduce medical authority, recognize positive rights, and promote social inclusion.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research and/or authorship of this article.

Note

1. New Zealand's mental health services have historically relied on public rather than private provision, and Brunton (1985) has argued that only one license for a "private house" was ever issued following the 1868 legislation. That establishment, Ashburn Hall, remains as a private provider of mental health services (Duder, 2007).

References

- Abas, M. A., Vanderpyl, J., Robinson, E., Le Prou, T., & Crampton, P. (2006). Socio-economic deprivation and duration of hospital stay in severe mental disorder. *British Journal of Psychiatry*, *188*, 581-582.
- Allderidge, P. (1979). Hospitals, madhouses and asylums: Cycles in the care of the insane. *British Journal of Psychiatry*, *134*, 321-334.
- Bartlett, P. (2001). Documents and sources. Legal madness in the nineteenth century. *Social History of Medicine*, *14*, 107-131.
- Bartlett, P., & Wright, D. (1999). Community care and its antecedents. In P. Bartlett & D. Wright (Eds.), *Outside the walls of the asylum. The history of care in the community, 1750-2000* (pp. 1-18). London, England: Athlone Press.
- Bell, S., & Brookbanks, W. J. (2005). *Mental health law in New Zealand* (2nd ed.). Wellington, New Zealand: Brookers.
- Bertolote, J., Taborda, J. G. V., Arboleda-Florez, J., & Torres-Gonzales, F. (2002). The impact of legislation on mental health policy. In N. Sartorius, W. Gaebel, L. L. Lopez-Ibor & M. Maj (Eds.), *Psychiatry in society* (pp. 79-100). West Sussex, UK: John Wiley.
- Brunton, W. (1985). Mental health law in New Zealand. Some sources and traditions. *Community Mental Health in New Zealand*, *2*, 70-83.
- Brunton, W. (2003). The origins of deinstitutionalisation in New Zealand. *Health and History*, *5*, 75-103.
- Brunton, W. (2005). The place of public inquiries in shaping New Zealand's national mental health policy 1858-1996. *Australian and New Zealand Health Policy*, *10*, 24. doi:10.1186/1743-8462-2-24
- Brunton, W. (2013). *Mental health services*. Retrieved from <http://www.teara.govt.nz/en/mental-health-services>
- Dawson, J. (2005). *Community treatment orders: International comparisons*. Dunedin, New Zealand: Otago University Print.
- Dawson, J., Abbott, M., & Henning, M. (1987). Who gets committed: Demographic and diagnostic data. *New Zealand Medical Journal*, *100*, 142-145.
- Duder, C. (2007). *The Ashburn Clinic: The place and the people*. Dunedin, New Zealand: The Ashburn Clinic.
- Fistein, E. C., Holland, A. J., Clare, I. C. H., & Gunn, M. J. (2009). A comparison of mental health legislation from diverse Commonwealth countries. *International Journal of Law and Psychiatry*, *32*, 147-152.

- Gray, J. E., McSherry, B. M., O'Reilly, R. L., & Weller, P. J. (2011). Australian and Canadian mental health acts compared. *Australian & New Zealand Journal of Psychiatry, 44*, 1126-1131.
- Kaiser, H. A. (2009). Canadian mental health law: The slow process of redirecting the ship of state. *Health Law Journal, 17*, 139-194.
- Kisely, S., & Campbell, L. A. (2007). Does compulsory or supervised community treatment reduce "revolving door" care? Legislation is inconsistent with recent evidence. *British Journal of Psychiatry, 191*, 373-374.
- Lawton-Smith, S. (2005). *A question of numbers. The potential impact of community-based treatment orders in England and Wales*. London, England: King's Fund.
- Lawton-Smith, S., Dawson, J., & Burns, T. (2008). Community treatment orders are not a good thing. *British Journal of Psychiatry, 193*, 96-100.
- Mental Health Commission. (2012). *Blueprint II: How things need to be*. Wellington, New Zealand: Author.
- Ministry of Health. (2006). *Office of the Director of Mental Health. Annual Report 2005*. Wellington, New Zealand: Author.
- Ministry of Health. (2012a). *Office of the Director of Mental Health. Annual Report 2011*. Wellington, New Zealand: Author.
- Ministry of Health. (2012b). *Rising to the challenge. The Mental Health and Addiction Service Development Plan 2012-2017*. Wellington, New Zealand: Author.
- Molodynski, A., Rugkasa, J., & Burns, T. (2010). Coercion and compulsion in community mental health care. *British Medical Bulletin, 95*, 95-119.
- National Health Statistics Centre. (1973). *Mental health data*. Wellington, New Zealand: Author.
- O'Brien, A. J., McKenna, B. G., & Kydd, R. R. (2009). Compulsory community mental health treatment: Literature review. *International Journal of Nursing Studies, 46*, 1245-1255.
- Parry-Jones, W. L. (1972). *The trade in lunacy. A study of private madhouses in England in the eighteenth and nineteenth centuries*. London, England: Routledge.
- Robinson, I. D. (1972). Description and evaluation of a psychiatric home visiting service. *New Zealand Medical Journal, 75*, 15-19.
- Rochefort, D. A. (1988). Policymaking cycles in mental health: Critical examination of a conceptual model. *Journal of Health Politics, Policy and Law, 13*, 129-152.
- Scull, A. T. (1975). Cyclical trends in psychiatric practice: The case of Bettelheim and Tuke. *Social Science & Medicine, 9*, 633-640.
- Sturdy, H., & Parry-Jones, W. (1999). Boarding out of insane patients. The significance of the Scottish system, 1857-1913. In P. Bartlett & D. Wright (Eds.), *Outside the walls of the asylum. The history of care in the community, 1750-2000* (pp. 86-114). London, England: Athlone Press.
- Walsh, D. (2010). Do we need community treatment orders in Ireland? *Irish Journal of Psychiatric Medicine, 27*, 90-96.
- Woolley, S. (2010). Involuntary treatment in the community: Role of community treatment orders. *Psychiatrist, 34*, 441-446.

SECTION TWO: LITERATURE REVIEW

CHAPTER FIVE: LITERATURE REVIEW - VARIATION

The contextual background to the thesis, outlined in the previous three chapters, traced the historical origins and development of mental health legislation and considered its role in supporting social and health policy. The historical analysis showed how current New Zealand policy of mental health care in the community is continuous with previous legislation while also extending the influence of legislation in community settings. The next three chapters review the international and New Zealand literature on variation in use of legislation and on use of compulsion in the community.

The current chapter reviews the literature on rates of use of legislation. Explanatory variables are noted, and are fully explored in Chapter Six. Literature on compulsory treatment in the community is reviewed in Chapter Seven, which consists of a published literature review (O'Brien et al., 2009) with additional commentary. There is a small overlap between the groups of studies which will be apparent within each chapter, especially between the current chapter on variation and the following chapter on explanatory variables. The chapter begins with an outline of the search strategy and inclusion criteria followed by a discussion of measures of compulsion. European studies are presented first, followed by New Zealand studies.

Search strategy and inclusion criteria

To locate literature for this review, the electronic databases Medline, PsychINFO, Sociofile, and Embase were searched using terms derived from the MESH headings of a group of papers focussing on the study question. Google Scholar was also used to locate additional publications. An auto alert system was established to detect new publications as they became available following the initial search. For those journals which had such a facility, the system of sending an email alert notifying new citations of key papers was used. All publications notified using either of these systems were accessed. In addition, the search included databases of unpublished dissertations and theses, review of reference lists, search of websites, and communication with researchers active in the area of civil

commitment. A final literature search was undertaken in August 2013. The review is limited to English language publications.

The search for relevant literature yielded a large number of potentially informative publications. There is considerable overlap between reports. For example, some provided both patient demographic data and analysis of clinical decision making; others reported on demographic, clinical and sociodemographic data and regional differences. Papers were included if they reported either quotas or rates¹ of civil commitment. The literature on rates of civil commitment is limited enough to permit all major studies to be included. Those excluded were small local studies with multiple limitations including low numbers, lack of a comparison group and unclear or unreliable methods of data collection. The literature review aimed to cover the range of research in this area since interest began in the 1990s.

This chapter covers studies of rates of committal within and across countries. A Table of Studies (Table 5-1, page 60) lists the studies discussed and highlights major findings. The chapter concludes with a summary of the major issues raised by the literature. In particular, the intertwined nature of demographic, social and clinical variables is highlighted. These influences are played out in a policy context which exerts its own influence on rates of committal.

Measures of compulsion

Two measures of compulsion are found in the literature; quotas and rates. Riecher-Rossler and Rossler (1993) note that studies which report quotas (proportion of admissions occurring under involuntary status) are limited by their dependence on total admission frequency, whereas those that report population rates of compulsion (usually rates per 100,000)² provide internationally comparable data.

¹ An explanation of the difference between 'quotas' and 'rates' is provided below.

² In this literature review rates of compulsion are reported per 100,000, with conversions from rates per 10,000 or 1000 calculated where necessary.

However, Salize and Dressing (2004) recommend that quotas are the most appropriate measure for purposes of international comparison. The advantage of measuring quotas is that they are not affected by the overall level of service provision. Against that advantage it should be noted that a region could show a high quota, but the population rate of compulsion could still be quite low.

Table 5-1 Studies of variation in use of mental health legislation

Authors	Region	Variation Quota % ³ Rates per 100,000	Suggested explanatory variables
Bindman et al., 2002	England	0-196.8	Social deprivation, service model
Hansson et al., 1999	7 Nordic countries	6-58% 16-118	Service factors; diagnosis
Hatling et al., 2002	Norway	33-60% 147 (range not given)	Diagnosis of psychosis
Hotopf et al., 2000	England and Wales	3.7-5.4% 1-4.3% ⁴	Bed availability; professionals' views of safety
Kaltiala-Heino et al., 2004	Finland (minors)	2.6-31.9% ¹	Policy and legislative focus on minors
Kjellin et al., 2008	Sweden	18.2-70	Service leadership; care traditions; clinical practice
Kydd et a., 1991	New Zealand	45-144	Sociodemographic factors
Lay et al., 2011	Switzerland	10.6-34.1%	Psychotic or organic disorder; service factors
Malcolm, 1989	New Zealand	287-787	Proximity to psychiatric hospital
Riecher-Rossler & Rossler, 1993	Europe and US	1-93% 9.4-248	Legislation
Salize & Dressing, 2004	All European Union states	4.6-30% 6-218	Legislation
Sipponen et al., 2010	Finland (minors)	18.7-26	Indicators of socio-economic disadvantage Inverse relationship with outpatient service use
Zinkler & Priebe, 2002	5 European countries	12.2-232	Mental health professionals' beliefs

³Figures relate to proportion of minors (under 20) admitted under compulsion, so while the variation is important the figures are not comparable with others in this Table

⁴ ²These figures relate to change over time (1984-96) and are quotas of admissions under different sections of the 1983 Mental Health Act.

Conversely, a low quota may not translate into a low population rate of compulsion if the level of service provision is high. New Zealand reports of compulsion are in the form of rates per 100,000 per month (Ministry of Health, 2006-12).

European comparative studies of rates of civil commitment

The first comprehensive review of rates of committal was that of Riecher-Rossler and Rossler (1993) who reviewed 16 studies reporting rates of compulsory admission in 21 European states and the United States of America. The authors found considerable variation between and within countries. Comparability of the studies reviewed was limited by a number of factors including differing legislation, inclusion of forensic detentions with civil commitment, varying definitions of “emergency detention” (which does not always lead to formal involuntary status), and the uncertain status of patients placed under guardianship. The authors reported that even after allowing for these differences, “clear national and international differences remain” (p. 233). Quotas ranged from 1% (Spain) to 93% (Switzerland), while rates varied from 9.4 per 100,000 (Germany)⁵ to 248 per 100,000 (Sweden). There was also significant variation within jurisdictions. Switzerland, the country showing the highest quota of compulsory admissions, and Sweden the country with the highest rate, had, at the time of the study, need for treatment standards of compulsory admission. By contrast Germany, a country with a dangerousness standard, showed the lowest rate of compulsory admission. In commenting on differences within jurisdictions, Riecher-Rossler and Rossler ascribed this variation to differences in legal measures and service provision, arguing that in better served areas rates of compulsory admission are significantly lower. No empirical data were provided to support that argument. Richer-Rossler and Rossler’s review provides a useful description of compulsion in Europe from 1978 to 1990. Since that time several of the countries studied have introduced new legislation (Hansson et al., 1999), replacing need for treatment with standards which including dangerousness and increased procedural safeguards (Kjellin, 1997). Dangerousness criteria were suggested by Richler-Rossler and Rossler (1993) as contributing to lower rates of civil commitment.

⁵ The rate of 9.4 applied in only one region of Germany. Variation across the German *lands* was between 9.4 and 108.8. These data were reported in 1989 and apply only to the former state of West Germany.

Rates of compulsion across seven catchments covering four Nordic countries were the subject of a study conducted by Hansson et al. (1999). This was a one year prospective cohort study. Hansson et al. (1999) collected data on both rates and quotas, calculating each as a proportion of both numbers of admissions, and all admissions, to give a total of four measures of compulsion. Like Richer-Rossler and Rossler (1993), Hansson et al. (1999) found significant variation in the use of compulsion across all four measures of compulsory care. Compulsory admission quotas ranged from 6% to 58%, and rates between 16 and 118 per 100,000. While the upper limit of both quotas and rates is lower than that found by Richer-Rossler and Rossler (1993), a change coincident with the introduction of new legislation, the extent of variation remains significant. Unlike Richer-Rossler and Rossler (1993), Hansson et al. (1999) did not attribute variation to differences in legislation. In regression analysis, the strongest predictor of compulsion was found to be the particular service used, with diagnosis of psychosis also a strong predictor. Hansson et al. (1999) noted that the region showing the highest use of compulsion, in terms of both quotas and rates, had a low level of access to inpatient beds and a formal referral procedure. They concluded that these factors may have had the effect of delaying provision of care, with a consequent deterioration in service users' clinical state, leading to a greater likelihood of meeting legal criteria for compulsion. The influence of access to inpatient beds raises questions of the service delivery model. Inpatient beds have long provided a measure of service delivery but such a model may not be appropriate if a service is committed to community based alternatives to inpatient admission (Keown, Welch, Bhui & Scott, 2011).

Zinkler and Priebe (2002) reviewed European reports and studies published since 1993. Their study used electronic databases and Government publications to report on the use of compulsion in five European countries, all of which were subject of studies reviewed by Riecher-Rossler and Rossler. The results showed that the international variation described by Riecher-Rossler and Rossler has been maintained. The lowest rate was shown in Italy (12.4 per 100,000) and the highest in Finland (232 per 100,000). Included in the review were two studies that collected data from different countries using the same methods. These two studies reported 10-fold differences in rates of compulsion, indicating that overall variation reported is unlikely to be due to different methods of data

collection. Zinkler and Priebe concluded that although differences in legislation exist, these are unlikely to explain different rates of compulsion. Instead, they argued that differences are likely “determined more by mental health professionals’ beliefs and values than by legal requirements” (2002, p. 7). This conclusion is based on the authors’ reading of additional literature rather than their own data. Their review is limited by the lack of routine data on compulsion, and by varying definitions of detention.

Salize and Dressing (2004) reported data collected by means of a questionnaire distributed to all European Union states between 2000 and 2002. The survey covered many aspects of compulsion, including criteria for compulsory admission, decision-making processes, sociodemographic data and other factors. Data for the period 1998 to 2000 covered quotas and rates of compulsion in 14 countries. The results are consistent with those of Richler-Rossler and Rossler (1993) and Zinkler and Priebe (2002) in showing significant variation in the use of compulsion. Quotas varied between 4.6% and 30% of all inpatient admissions, while rates varied between 6 and 218 per 100,000. Additional data showed that differences between countries were stable over the 10 year period 1990 to 2000. Salize and Dressing attribute variation in rates of compulsion to “differences in definitions, legal backgrounds, or procedures” (p. 163), an explanation similar to that advanced by Riechler-Rossler and Rossler (1993).

Of interest in Salize and Dressing’s study is the relationship between legal advocacy and rates of compulsion. The authors concluded that “member states with obligatory inclusion of a legal representative showed significantly lower compulsory admission quotas and a trend towards lower compulsory admission rates.” (p. 165). Zinkler and Priebe (2002) provide limited support for the notion that availability of legal protections is associated with lower rates of compulsion. The correlation is not reflected in every country. Some countries with legal advocacy continued to show high rates of compulsion, while some without such advocacy showed relatively low rates. Indeed, consistent with population patterns noted by Riecher-Rossler and Rossler (1993) heterogeneity within jurisdictions with legal advocacy was greater than heterogeneity between those with and without such measures. The rates of compulsion in Germany, where final decisions are made by courts, varied between 12.9 and 127 for different regions, whereas in England, which operates a “need for treatment” standard in which mental health professionals make final decisions, the reported variation was between 45

and 154. Against this, Zinkler and Priebe (2002) also note that in both Austria and the Netherlands, legislation aimed at ensuring service users' legal rights has been followed by increases in rates of compulsion. It is possible that this latter increase is a reflection of changing patterns of service provision rather than legislation. Zinkler and Priebe's data relate to hospital admissions at a time when Western European countries were moving towards community focused services. Under this policy, hospital admission is more likely to be at a time of high acuity when the patient is likely to meet criteria for compulsory admission.

Norway

Hatling, Krogen and Ulleberg (2002) reported use of compulsion in Norway in 1996. The authors used routinely collected administrative data on admissions to psychiatric hospitals and psychiatric units of general hospitals, recording rates and quotas of compulsion. The data for 1996 is reported as having undergone "special control for diagnosis and legal status." (Hatling et al., 2002, p. 625). Nine out of 34 institutions were eliminated from the study because of poor data quality, with the result that four out of 19 Norwegian counties were excluded. Chi square and multiple regression analyses were used to examine differences between groups and regions, and to determine the association between availability of treatment, prevalence of severe psychosis, and compulsory admissions in the counties. The study found that 47% of admissions occurred under compulsion, with a population rate of 147 per 100,000. These are high rates by international standards. Quotas of compulsion varied from 33% to 60% between the lowest and highest regions, a variation that was highly correlated ($r=0.77$) with diagnosis of psychosis. Those under 20 were less likely to be admitted under compulsion, but there was no other association with age. There was no overall association of compulsion with gender, with the higher rate among younger men counterbalanced by a higher rate among older women. Those classified as disabled or receiving social care showed a higher likelihood of compulsory admission and single people were more likely to be admitted under compulsion than their married or cohabiting peers. Multiple regression analysis tested for correlations with beds occupied and beds provided, and diagnosis. Only diagnosis of psychotic disorder showed a significant positive relationship. The authors

concluded that regional variation was due to unexplained “differences in the patient population in the counties” (p. 631), although these differences are not described. They also raised the possibility that the observed differences were due to different diagnostic and case finding practices.

Norwegian legislation in 1996 contained a provision to admit under compulsion for observation (rather than treatment) and Hatling, Krogen and Ulleberg (2002) reported that 45% of all compulsory admissions occurred under the observation section. Of this group, about two thirds were either discharged or changed to a voluntary section within three weeks. The authors further stated, with reference to Sweden, that social reasons for compulsion may contribute to high rates of compulsion. An additional contributor to Norway’s high rate of compulsion is the legislative provision that prohibits conversion from voluntary to involuntary status after admission. Hatling, Krogen and Ulleberg (2002, p. 629) reported that this provision may lead clinicians to “...admit patients compulsorily so as to have the necessary means available”; in other words compulsion is invoked pre-emptively. Lack of judicial involvement in the committal process is another factor cited as increasing compulsion in Norway.

A reason advanced by Hatling et al. (2002) for the relatively high rates of compulsion in Norway and Finland is that both countries required admissions to be regarded as compulsory if the patient was judged unable to consent to voluntary admission. This issue is also discussed by Nilstun and Syse (2000). The requirement to assess capacity to consent might result in a higher rate of compulsion than would be observed in jurisdictions without such a requirement. As noted above, compulsion obviates the need for consent and may be invoked pre-emptively. A similar phenomenon has been reported in Croatia by Kozumplik, Jukic and Goreta (2003). Hatling et al. (2002) reject the explanation put forward by Wall et al. (1999) and Engberg (1991) that limited bed availability explains higher rates of compulsion, noting the positive association with diagnosis of psychosis. However the authors acknowledge that regional variations in quotas of compulsion may reflect underlying variations in diagnostic practice. According to Hatling et al. (2002) a second reason for Norway’s relatively high rates lies in the broad legal criteria that in 1996 contained a criterion of need for treatment. The authors note that Sweden, the only European country with a comparable rate, also had such a criterion, and that Sweden’s rate of compulsion declined when that criterion was

removed. The authors also acknowledge that the need for treatment criterion would not explain regional variation of 33% – 60% within Norway.

Like previous studies of rates of compulsion, the study by Hatling et al. (2002) is valuable in providing data on compulsion in a single country. Limitations are that the data refers to legislation that is not now in force, and, as noted above, the exclusion of some regions from the study. In addition, diagnosis is as vulnerable to clinician bias as the decision to commit, and in any case regional variation in diagnosis requires an explanation of its own. At the time of Hansson et al.'s study there was no judicial involvement in committal decisions, although the authors note that the evidence of the influence of judicial involvement is equivocal.

Finland

An issue seldom studied in the mental health literature is the use of compulsion with minors. Kaltiala-Heino (2004) reported that over the period 1996 to 2000 in Finland, involuntary admissions of minors (under 18) contributed a substantially increased proportion to all psychiatric admissions. The overall proportion of involuntary admissions amongst minors increased from 10.9% to 19.7% between 1996 and 2000, with the increase unevenly distributed between the two groups of minors studied. The proportion of children (under 12) involuntarily admitted increased from 0.4% to 6.8%, and the proportion of adolescents (over 12) from 17% to 26%. There was substantial regional variation, from 2.6% to 31.9%. In eight of the 21 districts compulsion was not used at all in children. Kaltiala-Heino advances several reasons for the increase. Increased public focus on the health and welfare of minors, together with a widening of criteria for compulsion to include this group, may have combined to produce an increase in compulsion. The authors note that the increase cannot be explained by the known distribution of mental disorder in this group. Finland consistently shows the highest rate of compulsion of European countries (Riecher-Rossler & Rossler, 1993; Zinkler & Priebe, 2002). Kaltialo-Heino's study shows that policy that focuses on a specific group within the population may influence overall committal rates. Previous studies have been

limited to the adult population, so comparisons with the Finnish study need to be made with caution.

A further Finnish study of compulsion in minors used national registers to explore the influence of social factors on rates of compulsion (Siponen et al., 2010). In this study two out of 22 Finnish hospital districts were sampled, representing above and below average use of compulsion (18.7 vs 26.1/1000). Significant differences were found in a range on socio-economic indicators, including parental employment, education, migration, and income, as well as on adult crime rate, and adults in detoxification centres. Despite having a higher level of mental health and social resources, individuals in the above average district made less use of available outpatient services. Siponen et al. concluded that more positive socio-economic indicators suggested a more favourable and stable social environment for minors, in turn contributing to less use of compulsion. In the absence of epidemiological evidence of different rates of mental disorder the authors suggested that social factors were responsible for the different rates of compulsion. They also suggested “treatment culture” as contributing to the higher use of compulsion in the above average district (p. 669).

England

In a study utilizing data routinely collected by the English Department of Health, Hotopf et al. (2000) reported increases in use of compulsion between 1984 and 1996⁶, ⁷. Data included all admissions and all uses of compulsion occurring under different sections of the English Mental Health Act (1983). The data included forensic admissions, although they account for only 10% of all admissions. The study showed a marked increase in the absolute number of formal (involuntary) admissions, and in the proportion of all admissions occurring under involuntary status. Most of the increase occurred under Part II of the Mental Health Act, which does not apply to forensic admissions. The proportion of all admissions for assessment under section 2 rose from 3.7% to 5.4%, and the proportion of all admissions for treatment under section 3, from 1% to 4.3%.

⁶ Data from 1986 – 1989 were excluded as they were thought to be of poor quality.

⁷ Analysis was limited to England as only limited data were available for Wales.

Population rates are not reported. Because there had been no new legislation introduced over the study period, the authors concluded that the most plausible explanation for the changes was “alterations in the delivery of psychiatric services, and changes in professional views regarding coercion and safety” (p. 478). As noted above in relation to the study by Zinkler and Priebe (2002) the period of Hotopf’s study coincided with greater policy and service emphasis on community care (Shepherd, Muijen, Dean & Cooney, 1996). Changes including the introduction of the policy of care in the community and the reduction in psychiatric beds by 43,000 (Wall et al., 1999) might have had the indirect effect of increasing the acuity of patients admitted to hospital, increasing the rate of committal.

The latter aspect of this view is supported by Szmukler and Holloway (2000), and is similar to the conclusion of Hansson et al. (1999). Szmukler and Holloway (2000) argue that pressure on beds obliges clinicians to reserve admission for those with the most severe illness, who are more likely to require formal admission. Shorter admission may also mean that the same person has more than one admission in a year, each under compulsory status. A further reason for the increase in compulsion suggested by Hotopf et al. (2000) is clinicians’ defensive practice in the face of the public perception of risk. Together these factors may have contributed to “a steady increase in the use of coercion, but increasingly fewer resources for this purpose” (p. 484).

In their later review of compulsion in European states covering the years 1992 to 2000, Salize and Dressing (2004, p. 163) report “more or less stable quotas in most member states”, indicating little change in England during this period. This may support the view of Hotopf et al. (2000) that the earlier increases were caused by bed reductions and adoption of the “care in the community” strategy. It might also indicate that the increase was temporary and limited to the period of change in service model. Not accounted for in Hotopf et al.’s study is any increase in provision of community services which may represent a reallocation of resources from inpatient to community care. Although noting that reliability of the results may be limited by changes in reporting over the study period, the authors concluded that the increases are not an artefact of methods of returning data to the Department of Health. The English data are not internationally comparable, as it provides quotas rather than rates, however the study provides a useful overview of changes in the use of compulsion that cannot be attributed to legislation.

While Hotopf et al. (2000) provided a national overview of compulsion, a further study by Bindman et al. (2002) investigated variation in rates of compulsion between English mental health Trusts that provide secondary services. Regional variation in involuntary admissions within England had previously been noted by Soothill, Kapituksa, Badiani and Macmillan (1990). Bindman investigated compulsory admissions in a 12 month period over 1998 – 1999, under sections 2 and 3 of the English MHA. These were the most commonly used sections of the English legislation at the time of the study. Data were collected from 34 regions covered by eight Trusts, and separate rates for both females and males were calculated. The range of rates varied from zero to 196.8/100,000 with mean rates varying between 28.2 and 62.5. Rates for males and females were highly or moderately correlated with overall admission rates. Further analysis explored the relationship between rates of compulsion, deprivation, and service function. Deprivation was the strongest predictor of compulsion, although there was variation between regions which was not correlated with variation in resource allocation. The results show that a national measure of compulsion such as that provided by Hotopf et al. (2000) can conceal significant heterogeneity expressed as regional variation. Analysis of service provision at a local level is therefore necessary to fully understand variation in rates of compulsion (Keown et al., 2011).

Sweden

Compulsion in Sweden is of considerable interest from a New Zealand perspective because Sweden, like New Zealand, has a single mental health law, and is divided into 23 administrative regions, comparable to New Zealand's 20 DHBs. In another similarity to New Zealand, Sweden went through a deinstitutionalisation process in the late twentieth century, with inpatient beds reducing from 28000 to 5000 between 1979 and 2002. In a study of regional variation, Kjellin et al. (2008) grouped seven of the 23 regions into those with high and low rates of compulsion. Despite there being no differences between the high and low regions in service structure, or resources and processes of psychiatric services, rates of compulsory care episodes in 2001 varied from 18 to 71 per 100,000. The extent of this variation is the more remarkable given that rates

were comparable in 1979 prior to two changes in legislation aimed at strengthening legal protections for patients, and reducing use of compulsion. Kjellin et al. reported that there were no demographic differences in the populations of the high and low regions, although they did not report population demographics. Variation was attributed to differences in clinical practice, leading to the new legislation being applied differently in different regions. Service leadership was also suggested as an explanation, with the implication that service leadership is instrumental in realising the intent of the legislation.

Switzerland

Variation in the use of three coercive measures (compulsory admission, seclusion and restraint, and coercive psychopharmacology) was the subject of a Swiss study by Lay, Nordt and Rossler (2011). This study used register data on all inpatients in 2007 ($n=9698$) to analyse variation in rates of the three measures between six psychiatric hospitals. Explanatory variables tested included clinical, service and sociodemographic factors. The researchers found a threefold variation in admission quotas (10.6% vs 34.1%) and marked variation in the other coercive measures between the six hospitals, although the three different measures were not associated within individual hospitals. Univariate analysis showed associations with clinical diagnosis of psychosis, organic mental disorder and mental retardation, gender, living situation (home, institution or homeless), citizenship, age and social class. In regression analysis, clinical diagnosis showed the biggest effect size for all three measures. An additional measure of clinical severity added to the risk. A related finding was that even after individual level factors were controlled for, differences between hospitals remained as a source of variation. Differences between hospitals were not explained by occupancy rates or bed numbers, leaving the researchers to conclude that other service factors were important. The researchers called for integration of different levels of analysis in exploring variation in rates of compulsion. The fact that high use of compulsory admission is not correlated with high use of other forms of compulsion suggests that the factors driving use of legislation are at least partly specific to use of legislation rather than being general drivers of coercive practice.

People's Republic of China

The People's Republic of China adopted its first mental health legislation in 2012 and it came into effect in 2013 (Phillips et al., 2013). As yet there is not data available on how frequently that legislation is used. While the legislation does not contain a community treatment order provision of the type provided in Commonwealth countries such as New Zealand, it does make extensive provision for the care and treatment in the community of people with mental disorder. How this legislation is applied and interpreted in the coming years will be of interest, given the large proportion of the world's population residing in China.

New Zealand research on variation

A small number of studies have investigated variation in use of mental health legislation in New Zealand. Malcolm (1989) investigated regional variation in use of mental health legislation, finding that rates of compulsory admission under the 1969 legislation were higher in regions where psychiatric hospitals were located. Variation ranged between 270 and 883 admissions per 100,000 across regions. The study did not distinguish between the two different forms of civil commitment available at the time. Malcolm reasoned the observed variation implied that clinicians in areas with high use of legislation were more likely to invoke committal independently of the clinical presentation. Availability of beds was the explanation advanced, an explanation that is at odds with English research (e.g. Wall et al., (1999) and Hotopf et al., (2000)) citing *lack* of beds as explaining increases in rates of committal. One possible reason for this difference is that factors such as bed availability operate differently as the overall policy framework and service philosophy change. Malcolm's observations predate the full implementation of community care, whereas Hotopf et al.'s data relate to the community care era. Malcolm's conclusion is lent some support by research that shows patient history of committal is a predictor of future committal (Fennig, Rabonwitz & Fennig (1999); Kallert, Glockner & Schutzwohl, 2008) and by Swedish research (Kjellin, 1997) that showed that hospital location was associated with higher rates of compulsion. Malcolm's study is of interest as it shows regional variation long before the period of the

current study. However a limitation is the restricted range of variables and explanatory frameworks considered.

In a second New Zealand study (Kydd et al., 1991), variation in compulsion was one of a number of dependent variables considered as an outcome of a measure of underprivilege, the Jarman index. Five year data were collected in four urban areas that formed a single geographical region. Committal rates varied between 44 and 149 per 100,000 across the four areas, significantly less than the rates reported by Malcolm two years earlier. This is a considerable variation for contiguous geographical areas, and indicates the regionality of rates of compulsion. The Jarman index, a combined measure of eight sociodemographic variables, was calculated as a mean for each area and correlated with rates of compulsory hospital admission⁸. The study found that compulsory admissions were higher in areas with greater underprivilege. Individual components of poverty, living without adult company and transient residence independently contributed to the overall Jarman score.

Ministry of Health reports over the past seven years have demonstrated wide and consistent variation the most commonly used sections of New Zealand legislation. The rate for section 11 (acute assessment) shows a threefold variation over six years, and the rate for section 29 (community care) shows a fivefold variation (Ministry of Health, 2006, 2007, 2008, 2009, 2010, 2011, 2012). Clearly the variation first noted by Malcolm (1989) and Kydd et al. (1991) has persisted. However reasons for variation remain poorly understood, with the Director of Mental Health observing in his 2010 report that “the report does not attempt to interpret data variations among District Health Boards, as any such differences could be due to a number of variables, including practice, size, location, population demographics and configuration.” (Ministry of Health, 2010, p. iii).

Conclusion

⁸ This study was conducted during the period of the 1969 mental health legislation when civil commitment equated to hospital admission.

Variation in use of mental health legislation is a consistent finding across a range of settings. Every comparative study reviewed in this chapter found showed marked variation. While some correlates of rates of committal are consistently evident, such as psychosis and male gender, these do not explain regional variation and so are unlikely to explain variation across different jurisdictions. Different factors may explain variation over time within single jurisdictions, such as the increase in quotas observed in England by Hotopf et al. (2000) and the increase in committal of minors observed in Finland by Kaltiala-Heino (2004). European literature suggests that rates are less variable within than across jurisdictions. However variation within jurisdictions is also marked, as shown by the studies of Hansson et al. (1999) and Lay et al. (2011) and in the literature available from New Zealand.

This chapter has shown the extent of variation within and across jurisdictions and has considered some of the suggested contributing factors. In the following chapter the most commonly suggested contributors to variation are each discussed in detail.

CHAPTER SIX: POTENTIAL EXPLANATORY VARIABLES

Numerous factors have been suggested as explaining the variation in use of mental health legislation that is evident in the both the international literature and in the New Zealand context. Potential explanatory variables can be characterised as those to do with the committal process (legislation, decision making, clinician variables, and service configuration), patient variables (gender, ethnicity, age, clinical characteristics) and wider social factors (social deprivation and geography). Literature examining each of these variables is summarised in this chapter.

Legislation

Mental health legislation is highly variable internationally although in almost all jurisdictions there is some form of dangerousness criterion. Jurisdictions have varying levels of need for treatment criteria for compulsion, different procedures for enacting committal decisions, and different levels of procedural protections. Some of the studies reviewed here report rates of compulsion before and after changes in legislation while others report variation in rates under a single legislative framework or between countries with different frameworks. A potential confounder in studies of legislation is mental health policy, especially deinstitutionalisation, which has the specific objective of reducing hospitalisation under committal.

The criteria of legislation was proposed by Riecher-Rossler and Rossler (1993) as explaining the variation noted in their meta-analysis of compulsion in European countries and has been suggested by other authors as influencing variation between countries (e.g. Hatling et al., 2002; Salize & Dressing, 2004). Against this, Lepping, Steinert, Gebhardt, and Rottgers (2004) compared committal rates in England and Germany and found no difference despite significant differences in legal criteria.

In an international comparison Segal (1989) reported a divergence in the populations served by the mental health systems of the US under the relatively new dangerousness standard compared to England/Wales which retained a need for treatment

standard. Differing committal standards provided the opportunity to study the impact of those standards on the rates and pattern of committal in each jurisdiction, and on the demographic profile of patients involuntarily detained. First admission rates (a proxy for rates of civil commitment) were comparable across age groups in each country in 1955, but following widespread adoption of legislation with a dangerousness standard, the age profile of first admission changed markedly in the US by 1980. The rates of first admission for young people, especially males, rose dramatically, while admissions for older people and females dropped. Rates of first admissions and the age and gender profile of those admitted in England/Wales were relatively unchanged during that time. Dangerousness is significantly associated with males and with youth, as shown in rates of suicide and violence (Möller-Leimkühler, 2003). Segal (1989) suggested that the US dangerousness standard left clinicians with little discretion, whereas the England/Wales legislation allowed clinicians to exclude people with psychopathic disorders if they were considered unlikely to respond to treatment.

In a study of the impact of legislation in Washington State, Durham and Pierce (1986) reported rates of detention before and after introduction of broadened criteria for involuntary detention. Washington introduced restrictive legislation in 1973, limiting involuntary admissions to those meeting a dangerousness standard. In the face of dissatisfaction with the new law, and in response to a double homicide attributed to it, the State amended the legislation in 1979 to introduce broadened criteria. In a four year period beginning two years before the change and ending two years following, there was an increase not only in the proportion of admissions under involuntary status (from 27% to 62% of all admissions), but also in all admissions (from 1174 to 1819). Perhaps most notable was an increase in the proportion of patients with previous voluntary admissions who were readmitted as involuntary patients subsequent to the amendment (from 25% to 42%). Changes in rates of involuntary admission preceded the amendments, indicating that clinicians responded to public pressure in anticipation of changes in the law, rather than to the change once it was implemented. There was no change in either the demographic profile or diagnostic casemix of service users detained, leading Durham and Pierce to conclude that the revised law resulted in more coercive practice with the same group. The authors further concluded that legislation may be used as a fiscally and politically acceptable alternative to greater service provision. This study also illustrates

that rates of committal are sensitive to wider public issues such as responses to adverse events.

In a review of civil commitment following the 1990 revision of legislation in Belgium, Lecompte (1995) reported an increase of over 30% in admissions occurring under involuntary status. The new law was aimed at protecting procedural rights, and included a criterion involving likely “harm to himself or others” (Lecompte, 1995, p. 53). However, no baseline data were presented, and no analysis of the demographic or clinical profile of those subject to compulsion was provided. Neither rates nor quotas were reported by Lecompte, although data from Salize and Dressing’s (2004) review of compulsion in 14 European Union countries placed Belgium at the lower end of the table in use of compulsion, with a rate of 47 per 100,000. Zinkler and Priebe (2000) reported a similar “paradoxical increase” in rates of compulsion in Austria and the Netherlands following introduction of legislation emphasising users’ rights and legal protections. These studies indicate that changes in legislation can have diverse and unintended effects on rates.

Swedish legislation was amended in 1983 and 1992, introducing measures aimed at increasing procedural safeguards and protecting the rights of service users⁹. Over the same period a policy of deinstitutionalisation was enacted, resulting in a reduction in the number of psychiatric beds, and closure of hospitals. Kjellin (1997) analysed data collected by the Swedish National Board of Health and Welfare to describe the effects of these reforms on the use of compulsion. Kjellin’s study found a decrease in the rate of all (voluntary and committed) patients in psychiatric care from 340.7 to 169.7 per 100,000 between 1979 and 1991. Prevalence of compulsion reduced from 116 per 100, 000 in 1979, to 19.7 in 1993, a decrease of 80%. The proportion of patients under compulsion declined from 34% in 1979 to 15% in 1985, although it rose to 19% by 1991. Kjellin attributes that increase to a faster rate of reduction in numbers of committed patients in the first period of reform.

⁹ A further revision in 2006 is not discussed here as by 2014 there had been no studies on rates associated with the most recent legislation.

In a study of committals to a psychiatric hospital in Vrapce, Croatia, Kozumplik et al. (2005) described the impact of a change in the law on the rate of compulsion. The authors reported compulsion as a rate of hospital admissions rather than as a population rate, limiting the usefulness of comparisons with studies of population rates. However the study does illustrate that the framing of the law can have a direct effect on the rate of compulsion. Data were reported over a five year period following the introduction of new legislation. The study period included the introduction of a significant amendment to the new legislation abolishing the need for signed consent for all voluntary admissions. Under the original legislation, if written consent was not obtained, a legal procedure was initiated that amounted to civil commitment. According to the researchers, this practice had led to large numbers of committals. Following the amendment of the legislation to repeal the consent requirement, the rate of committals reduced from 39.6% of all admissions, to 5.6% in 2000. There was no change in the diagnostic profile of those committed. As with the Belgian study of Lecompte (1995), the Croatian study showed that changes in legislation may have unforeseen effects on rates of compulsion.

Nahon Pugachova, Yoffe and Levav (2006) studied rates of compulsory admission in Israel following a period of legislative reform in the 1990s. The study covered the period from 1993 to 2003. Reforms included the introduction of legislation in keeping with Israel's endorsement of the United Nations Declaration of Rights for People with Mental Illness, administrative provisions aimed at increasing service user involvement in monitoring service quality, and a reduction in inpatient beds in favour of development of community based mental health services. The authors hypothesised that this series of reforms would reduce the rate of civil commitment. The data showed that over the study period inpatient beds decreased from 1.91 to 1.14 per 1000 persons aged 15 or over. The rate of compulsory admissions increased from 3.77 per 1000 in 1993 to 3.96 in 2003. At the same time the rate of voluntary admissions decreased from 3.10 to 2.90 per 1000. While concluding that the reforms were not, as expected, associated with a decrease in the rates of compulsory admission, the authors were unable to identify factors leading to these increases. Substance use and increased violence in Israeli society were cited as possible contributing factors, but no data were collected to test this proposition. A limitation of the study is that it did not report population rates of civil commitment or access to mental health services, so it is not known whether the observed increase in the rate of involuntary admission reflects a more coercive pattern of mental health service

provision overall. Israel also introduced compulsory community treatment in 1991 (Bar El et al., 1998) with a rate estimated at 4.76 per 100,000 (Durst et al., 1999¹⁰) but no data on compulsory community orders were reported by Nahon et al. (2006).

In their comparison of European countries, Zinkler and Priebe (2002) found that countries with dissimilar legislation had similar rates of compulsion apparently contradicting views expressed by Riecher-Rossler and Rossler (1993) that differences in legislation accounted for differences in rates of committal. In addition, two countries, Austria and the Netherlands, reported increased rates of detention following introduction of legislation which included new procedural safeguards. The authors concluded that rather than the criteria of legislation determining rates of committal, “detention practice appears to be more determined by mental health professionals’ beliefs and values than by legal requirements” (Zinkler & Priebe, 2002, p. 7). Hansson et al. (1999) reported twofold variation within a single jurisdiction, supporting Zinkler and Priebe’s (2002) conclusion that the criteria of legislation are not the critical variable.

The studies of committal rates in relation to changes in legislation show that legislation in itself has a limited effect on rates, and that changes to address issues such as rights to advocacy can have unintended effects on rates. Studies of rates must also consider contemporaneous policy changes such as deinstitutionalisation.

Service configuration and service provision

Service availability, especially bed availability, service structure and delivery, and decision making within teams have all been examined for their potential contribution to rates of civil commitment. In developed countries, deinstitutionalisation has been the most notable change in the model of service provision over the latter half of the twentieth century.

Service availability is known to vary within and across jurisdictions and was suggested in several studies of rates of compulsion as a possible explanatory factor

¹⁰ The rate of 4.76 per 100,000 is my estimation based on Durst et al.’s data.

(Bindman et al., 2002; Kjellin et al., 1997; Hotopf, 2000). Factors such as availability of emergency mental health services, inpatient and community respite beds¹¹, numbers of health professionals and support workers and access to continuing care are all possible contributors to rates of committal. The nature and extent of mental health services receives considerable comment in the literature on compulsion, with authors frequently commenting on lack of services as a factor contributing to use of compulsion. Riecher-Rossler and Rossler (1993) argued that better served areas showed lower use of compulsion, although there were no data presented in support of that claim. Wall et al. (1999) reported a trend towards increases in compulsory admissions in Britain suggesting a lack of available beds may be a factor in that increase. In their study of European countries, Hansson et al. (1999) noted that the region showing the highest use of compulsion, in terms of both quotas and rates, had a low level of access to inpatient beds. The authors concluded that this factor may have the effect of delaying provision of care, with a consequent deterioration in service users' clinical state, leading to a greater likelihood of meeting legal criteria for compulsion. In commenting on a rise in compulsory admissions in England, Hotopf et al. (2000) concluded that the most plausible explanation for the changes is "alterations in the delivery of psychiatric services, and changes in professional views regarding coercion and safety" (p. 478). These changes included the introduction of the policy of care in the community and a massive reduction in psychiatric beds.

Another study (Bindman et al., 2002) found that variation in committal was associated with service function, independently of social deprivation. Bindman et al. (2002) noted that their measure of service function was problematic as "no standardized measure of mental health service structure and function [has] so far been produced" (p. 344). Wall et al. (1999) found a correlation between occupied beds and use of compulsion although Engberg (1991) found the opposite, that low bed availability was related to a low rate of committal. Engberg's findings are similar to those of Hatling (2002) in Norway, that there was no correlation between accessibility of services in various regions of Norway and rates of compulsion. In a more recent study of the relationship between service integration and compulsory admissions Wierdsma and Mulder (2009) compared

¹¹ In New Zealand a respite bed is a bed in a non-hospital community facility. A respite bed can be anything between a bed in a small dedicated respite facility or private hospital to a rented room in a motel where the patient is cared for by a nurse.

regions of the Netherlands with well integrated mental health systems with regions where services were less integrated. Data were collected over a ten year period. Against a background of an overall 47% increase in involuntary admissions there was a modest difference of 14.7% between the two regions. The difference was confounded by differences in length of stay and availability of aftercare.

A limited number of qualitative studies have researched service function by examining decision making in relation to civil commitment. One such study (Quirk, Lelliott, Audini & Buston, 2003) used grounded theory methods to study a succession of decisions under the 1983 UK Mental Health Act. Twenty cases were selected from inner and outer London community mental health teams. Case selection was made in response to initial data analysis so as to develop an emergent theory of decision making. The authors described six influences on decision making. In some cases these influences were described by comparing decisions made by one team with those of another, in others the influences were supported by interview data from staff on one or both teams. Organisation of assessments was influenced by the numbers of requests for assessments received with teams from areas with widely divergent numbers of requests utilising different models of response. The team with the higher number of requests was argued to use a “fire-fighting” model that resulted in a higher rate of civil commitment, a finding that is consistent with the observation of Huxley and Kerfoot (1993) that poor service coordination may lead to a crisis-based model of service response. Support of the team enabled clinicians to avoid civil commitment by managing risk with the person at home rather than in hospital. Peer review of cases was cited as helping clinicians generate alternatives to civil commitment. The perceived failings of inpatient services acted as a deterrent to admission for the inner city team. Finally, the authors argued that decision making in civil commitment is influenced by chance, citing examples of unanticipated events that impeded decision making, usually by preventing committal. This study is limited by its small sample, and the lack of clarity in describing the process of data analysis. The findings must be treated as suggestive only. Nevertheless the study does identify the complexity of decision making in civil commitment, and some possible sources of the regional variation in committal rates reported by other UK researchers (e.g. Bindman et al., 2002).

A retrospective study based on review of 346 clinical files was conducted in Belgium and attempted to map a range of clinical and non-clinical factors associated with committal (Lorant et al., 2007). Decisions to commit were related to unavailability of a less restrictive option, psychosis, foreign nationality and not living in private accommodation. The authors concluded that committal in most cases occurred because of “the inability of the mental health care system to provide more demanding patients with an alternative form of care.” (p. 360). The study illustrates the role of non-clinical factors, especially the immediate social context of the patient, in committal decision making.

Clinician decision making

Literature on clinician decision making in civil commitment falls into two categories. In the first category are comparative studies that have found differences in rates of committal across different countries or health districts and in the absence of any obvious explanatory variable have concluded that clinician decision making is a possible explanation. In the second category are studies that have, in effect, tested the hypotheses generated by the comparative studies. This latter group includes empirical studies that have examined clinicians’ decisions in response to fictional case studies, or series of decisions in actual cases against which to determine concordance with legislative criteria or the influence of other factors such as service provision. This section of the literature review considers two types of study; those in which the clinical decision making process was an independent variable, with committal decisions the dependent variable, and qualitative studies which focussed on clinical decision making in relation to civil commitment.

In a study designed to test the validity of clinicians’ committal decisions, Lidz Mulvey, Appelbaum and Cleveland (1989) studied 411 decisions made by 96 nurses and psychiatrists. The researchers developed a 12 item Likert tool that rated patients on clinical and legal criteria, as well as the global construct “committable”. In addition, independent analysis of clinical files was undertaken to gain corroborative evidence. The researchers found that clinicians’ decisions were generally in line with the legislative criteria of risk to self or others, or inability to provide self care ($r = .68$). There were 17

cases of wide variation from the legislative criteria. These involved committal of 13 patients who did not meet criteria, and four cases of committal of patients who met criteria, but who expressed willingness for voluntary admission. Lidz et al. undertook a closer analysis of these cases, and found several explanations for this variance. One explanation was that clinicians' concerns about potential liability prevented them from reversing previous recommendations for committal even where their assessments were that legal criteria were not met. Another explanation was that where committal carried an entitlement to free admission, clinicians sometimes let that influence their decision making. In some cases clinicians were influenced by anticipation that a patient accepting voluntary admission might leave prior to receiving an appropriate period of treatment. In such cases committal was pre-emptive, and based on a future development that may or may not take place. Overall, the results of this study showed good reliability in clinicians' decision making. In the overwhelming majority of cases decisions were in accordance with legal criteria. However as Lidz et al. noted, the small number of discrepant cases raises concerns of potential breaches of rights. The discrepant cases also indicate that factors other than clinical and legal criteria can influence clinicians' committal decisions.

Engleman et al. (1998) studied clinical decisions made by twelve psychologists and eight social workers in assessing service users considered to present some degree of risk. While finding that the clinicians made decisions consistently in terms of legal criteria, Engelman et al. also found that decisions were predicted by clinicians' previous history of invoking compulsion, the availability of detention beds in the community, and by the setting in which the assessment took place. The findings suggest that clinicians' perceived need for compulsory admission, was driven by availability of beds, but was expressed in terms of patients' clinical state. The sample size (20) was too small to provide a basis for generalization, but the data suggest that decisions on compulsion were influenced by factors other than the clinical presentation of service users and the provisions of legislation.

Mulder Koopmans and Lyons (2005) studied influences on level of care provided in psychiatric emergency services. The authors reported two influences on decision-making: patients' clinical variables, and contextual factors such as bed availability, time of referral, or factors to do with patients' relatives. Clinical variables (lack of motivation, severity of symptoms, danger to others) influenced determinations of the indicated level

of care, whereas contextual factors (contact after working hours, family and friends wanting patients' admission) influenced decisions to admit. In discussing these influences Mulder Koopmans and Lyons commented that "If friends or relatives no longer want to or are unable to care for the patient—for example, because of exhaustion—the clinician may opt for hospitalization independently of the patient's clinical condition, judging the family environment unstable and counterproductive to the patient's immediate health" (2005, p. 456).

In a Norwegian study which compared casualty clinic general practitioner and hospital specialist (clinical psychologist or psychiatrist) decisions to invoke mental health legislation the researchers found a high level of agreement between the general practitioners and the hospital specialists (Deraas, Hansen, Giæver & Olstad, 2006). The study was undertaken in a casualty clinic staffed by general practitioners who had the option of referring to the single psychiatric hospital serving the region, or referring patients back to their home general practitioner. Referral decisions were reviewed by the hospital specialists. Of the 101 referrals studied, all but one were accepted for admission; 50 out of 59 (85%) referred with a recommendation for compulsory status were admitted under mental health legislation. The casualty clinic general practitioners were slightly more conservative in their decision making than the specialists. Nine patients assessed by general practitioners as needing compulsory status were admitted voluntarily, but no patients recommended for voluntary admission were subsequently admitted under compulsory status.

A second Norwegian study used three different case scenarios to identify factors influencing decisions to use compulsion and decisions for involuntary treatment with neuroleptics (Wynn, Myklebust & Bratlind, 2008). Norwegian legislation allows psychologists to make committal and treatment decisions. A total of 1094 participants, representing 10% of active Norwegian psychologists responded to letters asking them to complete an online survey giving their decisions in three hypothetical cases. The cases involved a man with symptoms of paranoid schizophrenia but with no thoughts of harming himself or others (Case 1); a woman with a three year history of schizophrenia described as currently in relapse and with recent violence to her mother (who she lives with) (Case 2), and a man with a seven year history of schizophrenia and three hospital admissions. He is described as non-adherent with medication for three years, self-

neglecting, incoherent and abusing alcohol (Case 3). Respondents were asked two questions in relation to each case: one, if they would admit to hospital involuntarily, and two if they would treat involuntarily with neuroleptics. Responses indicated that: in Case 1, 39% would admit, and 30% would treat; in Case 2, 80% would admit and 70% would treat; and in Case 3, 44% would admit and 37% would treat. As each case study contained a diagnosis of schizophrenia with current symptoms there was no opportunity to discriminate on the basis of diagnosis or level of symptoms. However recent violence was associated with the highest rate of decisions to admit (80% vs 39% and 44%). Violence was also associated with a higher degree of willingness to treat involuntarily (70% vs 30% and 37%).

In a discussion paper on influences on the use of community treatment orders in New Zealand (Dawson, 2007) suggested that the rate of use of such orders depends on how clinicians exercise discretion in decision making, with the overriding consideration of the balance of advantages over disadvantages for the patient. Five influencing factors were suggested; the threat of clinician liability for actions of patients; availability and quality of the mental health services; clinicians' perception of the impact of coercion on therapeutic relationships; families' and others' expectations; and patients' history of use of community treatment orders. Overseas research lends some supports to these suggestions. For example, Bindman et al. (2002) found that availability of services influenced committal decisions (although the direction of influence was not consistent) and Mulder, Koopmans and Lyons (2005) found family expectations to be influential. Concerns about liability were identified by the Lidz et al. (1989) as influencing clinicians' decisions. The extent to which these factors operate in the New Zealand context remains to be determined.

Clinician variables

A number of studies have investigated the influence of clinician variables on rates of civil commitment. In their studies of rates of committal Riecher-Rossler and Rossler (1993) and Zinkler and Priebe (2002) referred to interpretation of legislation as possibly contributing to variation in rates. One reason for difference in interpretation may be that

interpretations are influenced by factors such as years of experience, gender, training in clinical decision making and previous experience with committal decisions. It should also be noted that these differences may also be reflected in diagnosis, leading to clinician variables functioning as a confounder in studies of associations between diagnosis and rates of civil commitment.

Several studies have considered clinicians' training as a possible factor influencing committal decisions. In a study of the influence of gender, Mihai et al. (2009) compared 251 decisions made by three female and three male third year residents in an emergency psychiatry setting in the Netherlands. After controlling for clinical diagnosis, adherence to local guidelines, recommendations for psychological and pharmacotherapy, and decisions to hospitalise, the authors found that female residents were less likely to admit under compulsion than their male counterparts.

In a complex United States study that included psychiatric residents' age, gender, ethnicity, location of training programme (local vs international), length of training and a standardised measure of risk-taking Sittar, Pinlas, Din and Appelbaum (2006) asked 88 respondents for their decisions on five clinical vignettes. Associations with committal decisions were found for both level of training and risk-taking. Junior residents were more likely to commit. Sitter et al.'s findings were contrary to those of the Canadian study of George, Durbin, Sheldon and Goering (2002). In the latter study decisions relating to 205 patients presenting to two Toronto emergency departments were studied. Neither physicians' training level nor bed availability was associated with committal decisions, but dangerousness, symptom severity and difficulty with self-care were associated.

Support for Sittar et al.'s findings comes from a recent Swiss study by Eyton, Chatton, Safran and Khazaal (2012). This study investigated the committal decisions related to 1584 patients who had 2227 hospital admissions for four months before and after adoption of a policy that only qualified psychiatrists (rather than fully qualified residents and psychiatrists) were authorized to require a compulsory admission. The proportion of patients admitted changed significantly following adoption of the new policy, from 67.1% to 60.3% (OR=0.745, 95% CI: 0.596–0.930, $p=.0005$). Although the reduction in the committal rate is statistically significant it is modest considering the

likely confounder that psychiatrists would have been aware that the reason for the new policy was to reduce the rate of compulsory admissions. There was no comparison between qualified psychiatrists and residents, and the authors did not report the proportion of committal decisions made by residents in the period prior to the new policy.

The Norwegian study discussed in the previous section (Wynn, Myklebust & Bratland, 2008) showed that clinicians' prior experience with coercion was associated with a higher willingness to use involuntary treatment (35% for those with, compared to 21% for those with no prior experience of committal). The researchers speculated that changes in the legislation in 2001 authorising psychologists to use coercive power led to attitudinal shifts towards greater acceptance of coercion in people with schizophrenia, although they provided no evidence of the attitudes of psychologists prior to 2001.

In the only New Zealand reference to the influence of clinician variables Wheeler et al. (2005) suggested that observed differences in committal rates across the four northern DHBs could be related to the varied training and practice of a large number of clinicians. Although this was a speculative suggestion that was not empirically investigated, the international literature does support the possibility that clinician factors may account for variation in committal rates.

Gender

Male gender as a risk factor for compulsion is a consistent finding across numerous studies. An increased risk for males has been consistently reported since the adoption of a dangerousness standard for mental health legislation, as originally noted by Segal (1989) and the separation of aged care from mental health service provision. Segal also noted that the predominance of males in committal statistics was not observed in Northern Italy where a need for treatment standard was maintained. Overall, the level of increased risk for males is modest with differences in most studies reporting proportions of around 60% for males. A smaller number of studies have shown equal or almost equal male and female proportions. Few studies specifically investigate the role of gender, but when gender is included in patient characteristics the finding is invariably that males are

more likely to be committed. Of the studies reviewed here only one, Folnegovic´-Smalc, Uzun and Lbujin (2000) reported diagnosis by gender.

Of the eight European Union countries for which data on gender were available in Salize and Dressing's (2004) study, all reported males as more likely to experience committal (range 50.9% - 69%). This is consistent with the 61.9% for males reported in Belgium by Lorant et al. (2007). In Norway, Hatling et al. (2002) found no overall gender difference but that the gender mix was different in different age bands. Males predominated in younger age groups while older females were more likely to be committed. Australian studies have reported higher proportions of males under community treatment orders. In Victoria the rate for males has been reported as 59.2% (Segal & Burgess, 2006a) and 62.7% (Burgess, Bindman, Leese, Henderson & Szmukler, 2006), while the rate in Western Australia was 66% (Segal, Preston, Kisely & Xiao, 2009) and in New South Wales 70.2% (Muirhead et al., 2006). A ten year survey of assisted outpatient treatment in New York showed that 67% of recipients were male (Swartz et al., 2009) although in the North Carolina involuntary outpatient commitment study (Swartz et al., 1999) gender representation was equal. Following the passage of legislation allowing for compulsory outpatient treatment in Arizona the proportion of males subject to the legislation ranged between 54% and 70% (Van Putten, Santiago & Berren, 1988), while in a Massachusetts study of involuntary outpatient treatment a male proportion of 63% was reported (Geller et al., 1998). Hiday and Scheid-Cook (1989) reported a male proportion of 58% in their North Carolina study. Males in England were reported by Bindman et al. (2002) as more likely to be admitted under compulsion, with 37.1% of males vs 28.2% of females admitted under section 2 of the Mental Health Act (1989), and proportions of 62.5% and 46.8% respectively admitted under section 3. The randomised controlled trial of CTOs in England (Burns et al., 2013) reported men as comprising 66% of the treatment arm and 67% of the control arm. A Scottish study reported 53% of those compulsorily admitted to a Glasgow hospital under as male (Taylor & Idris, 2003).

In a review of New Zealand data on committal based on 1984 data, Dawson, Abbott and Henning (1987) found that males were admitted under compulsion more than females (56% vs 44%) difference described as "considerably greater" (p. 143) compared to the gender representation in overall admissions (53% vs 47%). Data from the initial

years of CTOs in New Zealand showed that 60% of orders were applied to males (Dawson & Romans, 2001). Later studies of inpatient admissions showed male proportions of 56% (Abas, Vanderpyl & Robinson et al., 2003) and 56% (Wheeler et al., 2005).

Two studies have reported higher percentages for committal of women. Folnegovic´-Smalc, Uzun and Lbujin (2000) investigated sex-specific characteristics associated with involuntary admission in a sample of 48 men and 125 women in Croatia. Data were collected on all patients admitted over a six month period. The proportion of male and female patients committed (28% vs 72%) reversed the most frequently reported pattern for more men to be admitted under compulsion. Psychosis was the most common diagnosis for each group (43% for men; 39% for women), but the second most common diagnosis was mood disorder for women (31%) and alcoholism for men (24%). This study shows that the influence of gender on committal is in part dependent on the legal and service context of the specific jurisdiction. Contrary to most studies Eyton et al. (2012) found that men were significantly less likely to be admitted under compulsion in Geneva (OR .67). The proportion of committals to the hospital that was the site of this study was around 60%, significantly higher than the overall range of 10.6-34.1% for Switzerland reported by Lay et al. (2011), suggesting that as committal is more freely used the commonly observed bias towards males diminishes.

Ethnicity

Ethnicity is frequently associated with higher rates of civil commitment, particularly compulsory admission to hospital. In some studies the association between ethnicity and compulsory status has been explained by a higher prevalence of psychosis in ethnic minorities; other studies suggest that high prevalence of psychosis only partly explains higher rates of committal.

A study conducted in Nottingham, England, by Singh, Croudace, Beck and Harrison (1998) noted the apparent contradiction in findings in studies of ethnicity and committal, with a variety of factors implicated in the higher admission rates of Black-

Caribbean patients in England. Singh et al. noted that some researchers have found ethnicity to have a low independent relationship with the rate of compulsory admission of Black-Caribbean patients, while others have found a relatively high association. Singh et al. noted that factors such as absence of a “help-seeker” for the patient, lack of general practitioner involvement, and challenging behaviour have been cited as influential. To resolve this question, Singh and colleagues conducted a prospective study of all acute psychiatric admissions over a 6 -month period for which complete data were available (n=417) to compare rates of compulsory admission of different ethnic groups. After controlling for confounding variables such as age, gender, diagnosis, risk, socio-economic support and level of social support, the investigators used forced entry multiple regression analysis to calculate an odds ratio for compulsory admission of 2.16 ((5% CI 1.03 – 4.52) for Black-Caribbean patients. They concluded that perceived ethnicity may influence perception of dangerousness and level of social support, thus influencing the likelihood of compulsory admission. The study was restricted to hospital admissions. The authors noted that to measure the true relative risk of compulsory admission would require a population based study rather than one based only on hospital admissions. A further limitation was that risk and social support were not measured by an objective standard. The authors also suggested that the results may be influenced by the particular nature of service provision in the Nottingham area. The area has a relatively low ratio of acute beds (21 per 100,000) and well-established community teams which strive to keep people at home longer. These factors may contribute to admission occurring at a later stage of illness, with a higher likelihood of compulsory admission. This observation is given some support by the comparison of Nottingham’s compulsory admission rates (21.8%) with national rates (7.2%).

A more recent English study found that amongst Black teenagers the rate of diagnosis with psychosis was 5.7 times that of white teenagers (Corrigall & Bhugra, 2013). Although that difference was consistent with a previous population study that showed a similar difference in the prevalence of psychosis, amongst those diagnosed with psychosis Blacks were more three times likely than whites to be admitted under compulsion. The authors concluded that this difference suggested the possibility of bias in assessment of risk of Blacks.

Perhaps the most comprehensive analysis of the relationship between ethnicity and compulsory admission is that carried out by Bhui et al. (2003). This systematic review of UK research compared mental health service utilisation by different ethnic groups. A total of 38 reports were located, of which 23 provided data on compulsory admission. Of those 23 reports, 18 found a higher rate for Black compared with White inpatients under compulsory status. The reports adjusted for a variety of potential confounders, such as age, gender, socioeconomic status, past admission, legal status, risk of violence and others. By combining odds ratios across the 12 studies that reported exact proportions of Black and White patients as well as sample sizes, the authors found a pooled odds ratio of 4.31 (CI 3.33-5.58) for Black compared to White patients. The authors reported variations across the papers reviewed, suggesting that the overall findings might mask important regional variations. Nevertheless, the evidence of greater risk of compulsory admission by minority ethnic group patients is compelling.

Ethnicity was one of three factors studied by Audini and Lelliott (2002) in relation to committal under English mental health legislation. Data were collected from 26 districts, and covered 31,702 instances of committal. The results challenged the accepted view that Blacks were twice as likely to be committed as whites, finding a ratio of 6:1, rising to 8:1 for males. Although not as high as the rate for Blacks, Asians were 65% more likely to be committed. In a study of all admissions to a specialist medium secure unit for adolescents in the United Kingdom over a seven year period, Chowdhury, Whittle, McCarthy, Bailey and Harrington (2005) found that adolescents from ethnic minorities, in this case Black African and Black Caribbean, were over-represented, accounting for 36% of admissions against a National Census population of 7.9%. Admissions to this facility were most frequently through a forensic route, supporting the view that ethnic minorities disproportionately follow a pathway to mental health care that sees them more likely to be treated under compulsion. The study was limited by a relatively small sample size (n=61) and the lack of a comparison group.

A Netherlands study showed that ethnic differences in rates of compulsion need careful analysis to identify any independent effect of ethnicity. To determine the contribution of ethnicity to compulsory admission, Mulder, Koopmans and Seltjen (2006) studied the characteristics of 720 referrals to emergency services over a single year in the Greater Rotterdam region. The researchers collected data on patient demographics,

clinical variables, and country of origin. Using Poisson regression analyses the researchers measured associations between non-Western ethnicity and compulsory admission, firstly without controlling for confounders, then by entering demographic variables into the model, and finally by entering both demographic and clinical variables. Non-Westerners were found to be at higher risk for compulsory admission by 1.4 – 3.6 times using the first model of analysis. When demographic and clinical variables were controlled for, the higher risk was explained by a higher incidence of psychotic disorder. In a further analysis of the psychotic group only (n=276), danger to others, lack of motivation for treatment, and Global Assessment of Functioning score, rather than ethnicity, were found to predict compulsory admission. The study had several limitations. Only 30% of clinicians in the region studied referred cases to the study, the remaining clinicians opting out for reasons such as lack of time or reluctance to apply the standard instruments required by the study. Psychiatric diagnosis was made on the basis of a clinical interview rather than a standardised assessment. Finally, the smaller numbers in the psychotic subgroup weakened the power of that analysis. The authors commented that because the decision for compulsory admission was made by the same clinician who completed the assessment tool used to measure need for services there was a possibility of observation bias. Ninety percent of the clinicians were Dutch nationals.

African American males were the most commonly committed patients in Sanguineti, Samuel, Schwartz and Robeson's (1996) study of compulsory admissions in Philadelphia, with a rate of 66.4% compared to 28.7% for European Americans. The African American rate was not compared to the population rate, but on at face value the proportion is very high. The proportion increased to 74% for second admissions, while the proportion for European Americans decreased to 22.3% indicating that the initial disproportion is compounded following first compulsory admission.

Several New Zealand studies have reported ethnicity in relation to compulsory status. A study of 1984 data by Dawson et al. (1987) found that Maori were overrepresented with 18% committals compared their 7.3% of the population. The authors urged caution because the means of identifying ethnicity at that time were not considered fully reliable. For similar reasons comparisons with recent figures need to be treated cautiously. However even allowing for some discrepancies in recording in 1984, Maori overrepresentation is so high that it cannot be regarded as purely an artefact. Abas

Vanderpyl, Le Prou, Kydd, Emery, & Foliaki (2003) collected data on 255 consecutive cases and found that 68% (n=154) were admitted involuntarily. Maori patients made up 34% (n=77) of admissions, although Maori comprised only 18% of the catchment population. Of the 90 Maori admissions whose legal status was known, 22 (24%) were voluntary, and the other 68 (76%) involuntary (Vanderpyl, personal communication). Thus Maori were not only over-represented as a proportion of all admissions, they were even more over-represented amongst committed patients. Although the study did not control for variables such as diagnosis, social deprivation, or the age structure of the population, the proportion of Maori under compulsion is likely to remain high even after adjustment for potential confounders.

Age

Age has consistently been associated with rates of committal with younger age being associated with a higher risk. Segal (1989) showed that this trend became marked with the adoption of legislation with a dangerousness standard in the United States and England, but was less evident in Italy where need for treatment provided the criteria for legislation. Most studies reporting age do so as part of their sample description rather than as an independent variable of primary interest, in some cases making comparisons with voluntary comparison groups.

The mean age of 7368 individuals subject to assisted outpatient treatment in New York between 1999 and 2009 was 38 (Swartz et al., 2009), close to the mean of 39.8 years reported in North Carolina in 1999 (Swartz et al., 1999). Other North American studies have reported similar mean ages, including 41.4 in Ohio (Munetz, Grande & Kleist et al., 1996) and 38.5 in Massachusetts (Geller et al., 1998). Studies from Ontario have reported means of 45 (O'Brien & Farrell, 2005) and 31-40 (Hunt, da Silva & Luri, 2007). An earlier North Carolina study (Hiday & Scheid-Cook, 1989) reported 68% of involuntary outpatients as aged between 30 and 60 years, a proportion identical to their voluntary comparison group. European studies have reported average or modal ages of 39 (Lorant et al., 2007, Belgium), 30-39 (Hatling et al., 2002, Norway). The recently reported OCTET study, a randomised controlled trial of CTOs in England (Burns et al,

2013) reported a mean age of 39.8 for those in the treatment arm of that study, with a comparable age of 39.5 for those in the control arm. In Australia mean ages have been reported as 34.01 (Segal & Burgess, 2006a), 36.90 ((Burgess, 2006) 33.48 (Segal, Preston, Kisely & Xiao, 2009) and 39.4 (Muirhead, Harvey & Ingram, 2006).

New Zealand data from 1984 show that younger men (29-39) were more at risk of committal at that time with 58% of all committals being of men in that age group, compared to their population rate of 41% (Dawson et al., 1987). A mean age of 37 was reported in the Otago CTO study (Dawson & Romans, 2001) while Abas, Vanderpyl and Robinson (2008) reported a mean age of 34 in their study cohort of 660 inpatients under compulsory status.

Diagnosis

Civil commitment is simultaneously legal and clinical decision (Fennell, 1986) and many jurisdictions give mental illness as one criterion that must be satisfied if an application for committal is to succeed. In jurisdictions such as New Zealand the phenomenologically defined construct “mental disorder” fairly straightforwardly maps on to “mental illness” even if there is no requirement for a diagnosis. In addition, either illness or symptom severity is frequently used to qualify civil commitment criteria. Civil commitment typically occurs in situations in which the level of symptomatology is severe, temporarily or intermittently, so it is reasonable to assume that clinical variables, especially those indicating severe illness, would be associated with rates of committal. This conclusion is complicated by data having been drawn from studies in different countries and from inpatient and outpatient samples. A wider range of diagnoses is used in inpatient than outpatient committal reflecting the targeting of outpatient committal towards those with long term, usually psychotic illness.

To determine whether emergency admission decisions were made on the basis of clinical rather than contextual factors, George et al. (2002) conducted a pilot study to examine characteristics of a convenience sample of 205 patients presenting to two emergency psychiatric services in Toronto. The Severity of Psychiatric Illness (SPI) scale

was used to assess clinical variables, and the study used multivariate logistic regression to control for the contextual variables of bed availability, service site and the admitting physicians' level of training. In addition to axis I and II symptoms, the SPI measures related factors such as residential instability and vocational impairment. In the multivariate analysis clinical severity on axis I (OR = 3.48) and self care (OR = 1.87) were found to be associated with the decision to admit, with clinical severity the most sensitive indicator. Bed availability (OR = 1.03) and physicians' level of training (OR = 1.34) were found to show no significant association. The study demonstrated the role of symptom severity in committal decisions. Limitations of this study were the convenience sample, the lack of a comparison group, and a low rate of completion of survey forms.

In their survey of 14 European countries Salize and Dressing (2004) reported that the largest group by diagnosis was those with severe chronic illness such as schizophrenia and psychosis, accounting for 30-40% of those committed. Eight of the 14 countries did not report diagnosis. The data were also compromised by the use of non-standardised diagnoses in some countries but the authors argued that the overall trend towards diagnoses of psychosis was a true indication. Another European study showed psychosis to be the most common diagnosis associated with committal. Hansson et al. (1999) sampled six Nordic regions and reported 40.5% of the sample diagnosed with functional or affective psychosis, with a further 18.9% diagnosed with organic psychosis. A Norwegian study reported a rate of 63% of committed inpatients diagnosed with psychosis (Hatling Krogen & Ulleberg, 2002). The comparable figure for voluntary patients was 42.2%.

United States studies show psychosis to be the most common diagnosis associated with involuntary outpatient treatment. In Massachusetts Geller (1998) reported 58% of those under involuntary outpatient treatment were assigned a diagnosis of schizophrenia, similar to the 72% reported by Swartz et al., (1999) in North Carolina. The latter figure was derived by combining all categories of psychosis reported (schizophrenia, schizoaffective, bipolar, "other psychotic"). The first New York study of involuntary outpatient commitment (Steadman et al., 2001) also reported a rate of 72% of patients diagnosed with psychosis and the more recent evaluation of the New York programme (Swartz et al., 2009) reported a rate of 73% of patients diagnosed with schizophrenia. All

20 patients in the Ohio study of Munetz et al. (1996) were diagnosed with a psychotic disorder.

New Zealand studies are consistent with international research in showing psychosis to be associated with involuntary treatment. Using the categories from the International Classification of Diseases (9th revision) Dawson et al. (1987) reported schizophrenic psychoses to be the most prevalent diagnosis (38.6%) among committed inpatients in 1984. Psychosis was also more common in the Otago CTO study in which 85.2% of the sample of 259 were assigned a diagnosis of psychosis (Dawson & Romans, 2001). A study of inpatients, Wheeler et al. (2005) reported 73% diagnosed with psychosis. However in the inpatient sample reported by Abas et al., (2008) 49% were diagnosed with a psychotic disorder and 37% with an affective disorder.

Even when clinical variables are strongly associated with decisions to use compulsion there may be additional factors influencing decisions. In a study of the relationship between clinically indicated need for admission and actual admission rates, Mulder, Koopmans and Lyons (2005) found that contextual variables mediated admission decisions although symptom severity was a significant factor. The researchers used a convenience sample of 720 presentations to emergency services. Clinicians volunteered for the study and referred consecutive cases. As part of the multivariate stepwise regression analysis factors associated with involuntary status were identified. These were: lack of motivation (OR = 5.7); severity of symptoms (OR = 3.7); contact after working hours (OR = 3.5); danger to others (OR = 2.7), and family and friends wanting the patient's admission (OR = 2.6) (Mulder, personal communication). The convenience sample and lack of comparison group limit the generalisability of this study, as does the voluntary nature of clinician participation which saw only 30% of eligible clinicians referring cases.

Overall, diagnosis, especially of psychosis, is strongly associated with committal. While Hatling et al. (2002) has noted that comparisons based on diagnosis are limited by studies not reporting diagnostic codes, this is probably not a limitation when broad terms such as "psychosis" rather than specific diagnostic terms are used.

Substance use

Substance use can contribute to committal by exacerbating existing mental illness, precipitating mental illness in vulnerable individuals, or by inducing acute psychosis. The first of these factors is likely to contribute to use of compulsory community treatment, the second could contribute to either inpatient or outpatient committal, while the third is likely to be associated only with inpatient committal. None of the studies cited below reporting substance use give the population prevalence of substance use disorders. The role of substance use is confounded by variation in whether legislation, as in the case of New Zealand, excludes presentations that are solely related to substance use, and whether compulsory services are provided for substance users.

In a study notable for its rigour in attempting to test the hypothesis that comorbid substance use contributed to civil commitment, Sanguineti et al. (1996) conducted qualitative urine toxicology screens on 1755 patients admitted under civil commitment statutes. The researchers screened for barbiturates, ethanol, cannabis, cocaine, methadone, opiates, phencyclidine and sympathomimetics. Of those with a single admission (n=1441), 18.9% showed positive toxicology. For the group with multiple admissions (n=314), this rate dropped to 16.9%. Although noting that improved screening may have led to a higher rate of detection of psychoactive substances, the authors concluded that comorbid substance misuse did not constitute a risk factor for compulsory admission, either for the group admitted once only, or for the group with multiple admissions. Sanguineti et al. reported that acute disturbance precipitated by substance use frequently resolves in 6 to 12 hours, which would combine to reduce the incidence of committal, especially among the comorbid group.

The North Carolina study of involuntary outpatient treatment (Swartz et al., 1999) reported a 59.7% rate of comorbid substance use in the treatment group, but this was not significantly different to the rate of 55.6% in controls, suggesting that substance use may contribute to illness, but not directly to outpatient committal. The initial New York involuntary outpatient treatment study (Steadman et al., 2001) reported figures of 56% in the treatment group and 39% in controls however as assignment to study conditions was randomised this difference does not represent an increased risk of committal. The later review of the New York programme reported 47% of patients having a comorbid

substance use disorder (Swartz et al., 2009). The rate of substance use in the Otago CTO study cohort was reported as a combined rate of 28.2% for alcohol or drug abuse (Dawson & Romans, 2001). Abas et al. (2008) reported 2% of their inpatient sample having a diagnosis of substance-related disorder, but this number only included those with substance use as a primary diagnosis, not the rate of substance use comorbidity.

History of compulsory admissions

Patient history of civil commitment has been suggested as contributing to likelihood of subsequent committal and has been the subject of several studies. A systematic review of studies investigating the outcome of involuntary hospitalisation identified four studies that had investigated legal status on readmission for patients first admitted under involuntary status (Kallert et al. 2008). According to Kallert et al. these four studies each reported a higher risk of involuntary readmission for patients whose index admission occurred under involuntary status. Three of the four cited studies are discussed below (Fennig et al., 1999; McEvoy, Appelbaum, Apperson, Geller & Freter, 1989; Szmukler, Bird & Button, 1981). A fourth study (Munk-Jorgensen, 1999) did not report increased risk of involuntary readmission following an index involuntary admission.

An Israeli case registry study (Fennig et al. 1999) investigated the relationship between legal status on first admission, and legal status on subsequent admissions. The study also examined the relationship between legal status on first admission and the number of subsequent admissions. Using separate logistic regression models for males and females, data on 9081 patients were analysed, representing all patients with a non-forensic first admission with a diagnosis of schizophrenia between 1978 and 1992. Of the total number of first admissions, 12.9% (n=1172) were involuntary. There were no significant differences in demographic variables between this group and the 7909 patients whose first admission was voluntary. For both males (OR 3.4) and females (OR 4.1) there was a high likelihood that a second admission would be under involuntary status. Legal status on first admission did not predict the number of future admissions with numbers of readmissions being similar for both the voluntary and involuntary groups. However, legal

status was related to the number of subsequent admissions occurring under involuntary status. Of the original cohort 3420 went on to become “chronic patients” (four or more admissions). Analysis of this group revealed that of the chronic patients with an involuntary first admission, 41% of subsequent admissions were involuntary; the corresponding figure for those with a voluntary first admission was 13%. One finding of concern to the authors was that for the involuntary first admission group, the proportion of subsequent admissions occurring under involuntary status did not diminish over time, ranging from 16.1% to 18.9%.

A small US study followed 46 patients for three and a half years after hospital admission and reported a high risk of involuntary readmission for those with an index involuntary admission (McEvoy et al., 1989). Of 16 patients with an initial voluntary admission, three (19%) were readmitted involuntarily, compared with ten out of 12 (83%) for those whose initial admission was involuntary. The reasons advanced for the increased risk were greater clinical severity and lack of insight.

Higher risk of involuntary readmission was identified in an English comparison study of voluntary (n=100) and involuntary (n=150) patients admitted under England’s 1959 Mental Health Act (Szmukler et al. 1981). Following an involuntary index admission 26% of patients were involuntarily readmitted in the following year. By comparison, only 4% of patients with a voluntary index admission were readmitted under compulsion in the follow up year. The authors also reported clinical variables that showed the involuntary group to have higher levels of clinical symptoms which may explain their higher rate of involuntary readmission.

The findings of Fennig et al.’s (1999) study received limited support from a further Israeli study showing involuntary first admission was one predictor of a future involuntary admission (Rosca et al., 2006). However Rosca et al. qualified this finding with a conclusion that a clinical diagnosis of schizophrenia and certain demographic variables were stronger predictors of subsequent involuntary admission than was an initial involuntary admission.

In a follow up study of all patients admitted over a one year period Hansson et al. (1999) reported that those with more than three readmissions in the following year had

odds ratio of 4.42 for being readmitted under compulsion. Hansson et al. did not report legal status on index admission, but the higher risk of admission being under compulsory status, together with the previously reported research relating risk of compulsory admission to history of such admissions, strongly suggests that the patients in Hansson et al.'s study also carried an increased risk.

Overall, on univariate analysis, history of compulsory admissions carries an increased risk that a subsequent admission will be under involuntary status. However studies such as that of McEvoy, Appelbaum and Apperson et al. (1989) and Szmukler et al., (1981) suggest that clinical factors have greater explanatory power.

Social deprivation

Social stratification has been described as a “basic feature of social life” (Eaton & Harrison, 2000, p. 185) and one which is associated with disparities in health (Link & Phelan, 1996). However the contribution of socio-economic status to health outcomes is more problematic as there are numerous potential causal mechanisms and these have been poorly investigated (Eaton & Harrison, 2000). Use of the term “social deprivation” in epidemiological research on mental health has been advocated as important to “direct attention to the problem of causation” (Eaton & Harrison, 2000, p. 186) and thus avoid the problem of “circular epidemiology” (Kuller, 1999) in which descriptive findings are replicated without attention to causes. Social deprivation is a commonly used measure in New Zealand research where it has been subject to standardisation and widely applied (Salmond, Crampton & Atkinson, 2007). A related construct is “social exclusion”, used by Webber and Huxley (2004) to study risk of emergency compulsory admission. Social exclusion is a multidimensional measure of individual socioeconomic disadvantage which is less concerned with poverty than with participation in society.

Since the 1930s epidemiological studies of mental illness have shown higher rates of severe illness amongst those who are socially deprived. This is consistent with the observation of Link and Phelan (1996) that despite attention to identified risk factors and increased spending on health, socio-economic disparities in health persist. In mental

health, low socioeconomic status has been found to be associated with higher rates of psychotic illness, hospital admission, suicide, committal, and with poorer treatment outcomes.

Glover, Leese and McCrone (1999) studied the relationship between deprivation and three levels of mental health care need: primary care, general secondary care and specialist forensic. The investigators used a number of different measures of need in a study that covered 20 English inner city health districts, finding that severe psychiatric morbidity is more geographically concentrated than less severe problems. In primary care the prevalence of mental illness amongst the most morbid was twice that of the least morbid, while for secondary care the ratio was between 2.5 and 4 to 1. Mentally disordered offenders showed the highest disparity, with a ratio of 20:1.

The relationship between rates of committal and two factors, social deprivation and functioning of mental health services was the subject of a study by Bindman et al. (2002). The researchers used the Mental Illness Needs Index as a proxy for social deprivation. Data on rates of committal were collected in 34 mental health sectors in eight health Trusts in England. Rates of committal were found to be associated with social deprivation, although the range of rates of committal was in excess of the range of deprivation. The same study found that variation in committal was also associated with service function, independently of deprivation.

Webber and Huxley (2004) used retrospective case notes review in a case control study to investigate the relationship between emergency compulsory admission and social exclusion. The England and Wales Mental Health Act 1983¹² made specific provision (section 4) for “emergency assessment”, a form of civil commitment limited to a period of 72 hours unless converted to a longer period during that time. Section 4 admissions could be made on the basis of a single medical certificate rather than the two required under sections 2 and 3. In addition the certifying doctor need not be approved as having the “special experience” required of sections 2 and 3. Although admissions under section 4 were relatively uncommon, the pattern of those admissions is of interest because the

¹² Since replaced. Include this footnote in first mention of English legislation.

procedure provides fewer protections. It is significant then, that higher rates of section 4 admissions have been found in areas of social deprivation (Webber & Huxley, 2004).

In Webber and Huxley's (2004) study a six part measure of social exclusion was developed. The measure included housing, education, income, employment, social support and neighbourhood deprivation. The measure was piloted on a sample of ten prior to the study proper. The study sample was 300 assessments under mental health legislation, selected from two London boroughs (one urban, one suburban) with different rates of assessment under section 4. The boroughs were also differentiated on social deprivation and need for mental health services. The urban borough was more deprived, with a higher need for services, and with a higher rate of section 4 assessments than the suburban borough. Using logistic regression analysis the researchers compared groups from the two boroughs, and groups within each borough to control for groups from the same population. The only component of social exclusion found to be associated with risk of section 4 admission was having low support at home at the time of assessment (OR = 2.04), with no difference between the two groups.

A New Zealand study investigating the relationship between socio-economic deprivation and admission to inpatient mental health services found a "threefold gradient in admission prevalence and in total occupied bed days between persons living the most and least deprived areas" (Abas Vanderpyl & Robinson et al., 2003, p. 437). Annual period prevalence (number admitted per 100,000 per year) was chosen as a measure of utilisation as it considered less susceptible to bed availability than total admissions. Although the study did not specifically examine the relationship between deprivation and committal, the committal rate in the particular service has been reported in a previous study which found that 68% of inpatient admissions occurred under committal (Abas, Vanderpyl & Robinson et al., 2003). Although the above studies are consistent in showing a relationship between socioeconomic status and both severe mental illness and committal, there is no agreed explanation for this relationship. Abas Vanderpyl and Robinson et al. (2003) suggested that low income, unemployment lack of access to a car and single parent households, all associated with lower socioeconomic status, are indicators of need for mental health care.

Somewhat against the grain of research that has found higher rates of civil commitment amongst the socially deprived some research suggests that social deprivation is associated with lower rates of committal. Segal et al. (1998) noted that cost containment has created a barrier to inpatient admission, even under conditions of civil commitment. The observation that mental health law has been unevenly applied, especially in relation to the influence of ethnicity and social class on rates of compulsion, led Lincoln (2006) to test the hypothesis, derived from social control theory, that factors other than medical necessity and legal criteria influenced use of mental health legislation. Lincoln reasoned that as hospital resources become scarce, they are likely to be disproportionately accessed by people with higher socioeconomic status, reversing the previously observed trend of civil commitment being disproportionately applied to people who are socially deprived. Even under conditions of compulsion, hospitalisation may become a scarce and desirable good.

Lincoln's results indicated that rather than civil commitment being used as a means of social control of socially deprived individuals, those with relative social advantage were more easily able to access the scarce resource of a compulsory hospital admission. Clinical notes recorded both patients' attempts to secure admission against the recommendations of clinical staff, and clinicians' attempts to "build a case" (p. 64) that a patient could be said to fit criteria for civil commitment. Despite this apparent change in the social climate of civil commitment, "severe diagnosis and dangerous precipitating events" remained predictors of civil commitment decisions. However analysis of the relationship between social factors and civil commitment showed, with some exceptions, support for the *access* over the *social control* hypothesis: i.e. civil commitment is used as a means of limiting access to the scarce and desirable resource of hospital admission, rather than as a means of imposing an unwanted limitation on civil liberties. Blacks were less likely to gain admission, whereas those who presented with family support were more likely to gain admission. Lincoln advances reasons consistent with both hypotheses for the finding related to families. These are that families act as informal agents of social control (social control hypothesis) and as advocates for necessary care as defined by medical and legal criteria (access hypothesis).

Lincoln concluded that the observed patterns of influence of social factors over civil commitment "may reflect new forms of social control" (p. 73). Rather than

excluding people directly by coercive intervention, those who are already socially disadvantaged may be excluded as the denial of necessary care may lead to difficulty in performing social roles and disconnection from social networks. Emergency services, according to Lincoln, may be distributing health resources on the basis of perceived social worth. This observation is given some support by Segal et al. (1998) who found that having medical insurance was positively associated with return to emergency mental health service. Whether these findings from the United States can be generalised to the New Zealand setting is somewhat problematic because of significant differences in the social structure and mental health service provision of the two countries.

Lincoln's observations are consistent with those of Link and Phelan (1996) who noted that public health measures to address determinants of poor health outcomes provide disproportionate benefits to those who are socially advantaged, and that despite massive improvements in population health status, social class remains the most consistent predictor of poor health outcomes. If the findings from Lincoln's (2006) study represent a general trend in the relationship between social class and civil commitment, then it may be that the earlier reports of disproportionate use of civil commitment with more deprived people needs reconsideration. Currently there is no evidence that this is happening in New Zealand. However the effect of such a finding would be that social class remains a variable of interest in the study of civil commitment.

Geography

Geographical variation in rates of mental illness has been studied since the 19th century. Studies have highlighted significant disparities, suggesting the need for socio-political rather than solely medical interventions (Holley, 1998). Geographical research has followed traditional epidemiological models in an attempt to describe the spatial geography of mental illness, and the characteristics of locations of mental health service users and of services (Philo, 2004). Early studies yielded concepts such as "Jarvis's Law", that of distance-decay from centres of mental health care which accounts for the reduced utilisation of services with increasing distance from their physical location (Holley, 1998). More recently Penrose's model has been proposed. This model is a product of

deinstitutionalisation, according to which a reciprocal relationship was said to exist between the populations of prisons and psychiatric hospitals (Holley, 1998). Investigating such a relationship, however, is problematic, especially since deinstitutionalisation, when it became more likely that mental illness would present for the first time in a prison setting.

Since the 1940s geographical studies of mental illness have used ecological research designs in an attempt to map characteristics of regions to rates of mental illness. Much of this research has identified the concentration of mental illness in inner city urban locations (e.g. Bagley, Jacobson & Palmer, 1973; Faris & Dunhan, 1939; Ineichen, Harrison & Morgan, 1984). In relation to civil commitment, few studies have investigated either its spatial geography or locational associations. There is a significant gap in the literature in this respect, perhaps reflecting an assumption that rates of civil commitment will straightforwardly map on to rates of mental illness. Analysis of the relationship between geographical region and rates of committal has yielded mixed results. Urban regions appear to have higher rates of committal than rural regions, a finding that may be explained by hospital location when committal data relate to inpatient treatment, but this explanation would not apply to compulsory community treatment unless that measure was closely related to hospital treatment. However the relationship between rates of committal and location is not as stable or consistent as the relationship between mental illness and geographical location.

Engberg (1991) reported on rates of civil commitment in Greenland, the Farore Islands and Denmark, countries that at the time of the study had a common legislative framework. Of the three regions, Greenland had the highest rate of civil commitment at 43.5 per 100,000, with rates of 24.2 reported for Denmark and 19.2 for the Farore Islands. Engberg's suggested explanation for the high rate in Greenland was that region's high homicide rate, lower psychiatric bed availability, and reduced access to psychiatric treatment. The sparsely populated nature of Greenland was also considered to contribute, as small population centres are less likely to provide mental health services. This finding runs counter to research showing higher rates of committal as associated with urbanicity. Engberg further suggested that cultural differences between Greenland and Denmark may explain its higher use of civil commitment, although this explanation was not explored in any depth.

An English study which took rates of civil commitment as a dependent variable found a variation from 0 to 196.8 per 100,000 in civil commitment across 34 urban, suburban and rural geographical sectors in eight English Trusts (Bindman et al., 2002). The study did not report the rates in each sector so it is not possible to draw conclusions about the role of regional characteristics in the reported variation. However the variation was associated with a measure of deprivation, a characteristic known to be highly regionalised. A similar result was reported in Sweden by Kjellin et al. (2008). The focus of Kjellin's study was changes in rates of civil commitment over a decade of service reform and legislative change. Regions with previously high and low rates of compulsion were compared. The high and low regions were representative of the northern, middle and southern parts of Sweden. The socio-demographic structure of the regions was not reported although they are described as "demographically similar" (p. 57). Between 1991 and 2002 rates of committal dropped from 25 to 9 per 100,000 in the low rate region, but only from 35 to 20 in the high rate region. This study showed not only marked geographical variation but a marked geographical difference in reduction of rates of committal, indicating that observed variation may not be stable over time.

Inneichen et al. (1984) found higher rates in inner-city areas of Bristol, England, while in the United States Miller and Fiddleman (1983) found higher rates in suburban areas. A Swedish study (Kjellin, 1997) found that committal was more common in rural areas. Rates of committal were higher in urban areas (mean 14.7 per 100,000) than in rural areas (mean 10.7). Of the urban areas studied by Kjellin, those with psychiatric hospitals showed a higher rate of committal than those without (12.5 v 9.5 per 100,000) lending some support Jarvis's law of distance-decay. Regional variation increased after 1992 legislative reform, an increase attributed to geographical differences in applying the new law.

Hansson et al. (1999) found no consistent urban/rural pattern in their study of committal in seven Nordic regions. In Hansson's study the two major urban catchments of Stockholm (98 per 100,000) and Copenhagen (17 per 100,000) showed major differences, while the urban region of Stockholm (98 per 100,000) showed similar rates to the rural region of Bodo (99 per 100,000). In this study the service referred to was the strongest predictor of committal compulsory admission. Zinkler and Priebe's 2002 data

showed rates of committal in London were two times other parts of England (81.7 vs 154 per 100,000) as well as differences in different regions of Germany of between 18.6 to 127.3 per 100,000). In both these cases the characteristics of regions are not reported.

A number of studies have sampled regions with high and low rates of committal and investigated possible associated variables. In a Finnish ecological study of young people (13-17) subject to mental health legislation Siphoned (2010) found that marked variation between regions was associated with divorce rates, proportion of single parent families, social exclusion and use of outpatient mental health services. In Webber and Huxley's (2004) study of section 4 admissions in London, England, urban and suburban boroughs were markedly different in levels of deprivation (ranking 165 vs 301 out of 354) and mental health need (113.3 vs 97.3 on the Mental Health Needs Index). Differences in section 4 admissions were 37 per 100,000 in the urban borough compared to 6 per 100,000 in the suburban borough, differences which appear to exceed the differences in deprivation and mental health need.

Geographical differences have been reported in the United States trials of involuntary outpatient treatment. In North Carolina, Swartz et al. (1999) reported their sample as 62% urban. Although the contemporaneous New York trial (Steadman et al., 2001) did not report the geographical region of participants, a notable feature of the later New York evaluation was regional variation (Robbins et al., 2010). Use of this form of compulsory treatment was concentrated in the highly urbanised New York City area, with some rural districts making almost no use of assisted outpatient treatment at all. In the case of New York the reason for regional difference appear to lie in the views of clinicians and programme managers who in many of the rural New York counties did not support the use of assisted outpatient treatment.

An early New Zealand study (Malcom, 1989) showed that committal to hospital was related to psychiatric hospital location. The regions most strongly associated with higher admission rates were those in which institutional services were located. Malcolm's study lent some support to Jarvis's law but the subsequent closure of hospitals makes it unlikely that the association observed by Malcolm would apply now. Malcolm's data also shows a distinct urban/rural difference with the four largest cities having the highest first admission rates. As the hospitals were mainly located in these cities the urban

predominance is probably an artefact of hospital location. Kydd et al. (1991) also found regional variation in their study of the Auckland urban area. Variation was associated with the Jarman index, a measure of underprivilege similar to social deprivation. Urban drift of people with mental illness was suggested as an explanation, consistent with a strand of geographical literature on this phenomenon (Philo, 2004). Kydd et al.'s (1991) study had a more limited geographical scope than Malcolm's but is notable for its finding of a strong association with urbanicity.

In summary, geographical variation is commonly reported in studies of rates of civil commitment, but few studies have specifically examined for the influence of an effect of regionality. Most current studies are limited to reporting variables associated with regions (such as availability of services). Geographical variation must therefore be considered to be lacking in systematic research.

Risk to self and others

In exploring committal decisions risk to self and others is a somewhat problematic concept as the mental health legislation of many jurisdictions, including New Zealand specify this factor as a criterion for committal. It would be surprising, therefore, if this variable was not shown to be significantly associated with compulsion. Further complicating the construct of risk to self and others is the inclusion within a single definition of risk of self harm or suicide and dangerousness to others. Considering these two quite different factors together has the potential to confound any identified association with rates of civil commitment. Risk to self and others is very similar to the concept of dangerousness (Mills, 1988), although the latter is sometimes more narrowly interpreted to refer to risk to others. Dangerousness criteria were originally introduced in the United States as part of a move to limit the use of mental health legislation by removing the need for treatment standard (Hiday & Smith, 1987) although as Appelbaum (1994) later observed, clinicians are likely to interpret criteria in ways that conform to their perception of their ethical commitments. Risk to self and others is somewhat difficult to study as a variable contributing to rates of civil commitment because it does

not lend itself to a single convenient measure, and is often not reported in epidemiological studies.

In a series of studies of civil commitment decisions made in a Californian emergency room Segal et al. (1988a, 1988b, 1988c) showed that clinicians shared a common view of dangerousness which was strongly correlated with severe psychiatric symptomatology, and which correlated strongly with decisions to invoke civil commitment. In reviewing these studies Mills (1988) commented that it was reassuring that clinicians' decisions were congruent with the requirements of the law. However a limitation of the Segal et al. studies is that they were conducted at a single site and so could not detect variation in application of the dangerousness criteria across different sites.

In Segal's (1989) international comparison, introduction of a dangerousness standard in the United States was considered to account for a substantial proportion of the subsequent divergence of committal rates between England and the United States. The adoption of the dangerousness standard led to a substantial decrease in rates of compulsory admission in the United States, especially among women and the elderly, whereas at the same time rates remained unchanged in England. This study shows that in jurisdictions with a dangerousness standard, committal decisions are influenced by that standard.

Further evidence of the influence of the dangerousness standard comes in the form of a follow up study of patients involuntarily presenting at seven county general hospitals in California (Segal et al. 1998). In this study the records of 417 patients initially evaluated were reviewed after 12 months for evidence of a return for further emergency assessment. Of the 417 patients studied, 121 or 29% re-presented for emergency assessment within the 12 month follow up period. Predictors of return under compulsion were diagnosis of psychosis and indications of dangerousness at the initial presentation. Demographic factors, history of hospitalisation and adherence to follow up care were not associated with risk of further compulsory assessment.

In a complex study of decision making in psychiatric emergencies, Mulder, Koopman and Lyons et al. (2005) separated the decision to admit, need for involuntary admission, and actual voluntary admission in 720 patients seen at an emergency psychiatric service in Rotterdam, the Netherlands. Using multivariate logistic regression

analyses, the researchers found that decisions to admit were determined by family or friends' desire for admission, previous admissions, symptom severity and personality disorder. Involuntary admission was determined by lack of motivation, symptom severity, time of presentation, and danger to self or others. Involuntary admission was strongly associated with bed availability. Of note is the different set of variables operational at each stage of the admission process, and especially that danger to self or others was significant at only one stage, the decision for involuntary admission.

Criteria of dangerousness have been shown to vary across time in their interpretation. In a study of application of dangerousness criteria in the Netherlands, Mulder et al. (2007) showed that in that country, between 1997 and 2005, increasing use was made of “soft” (sic) dangerousness criteria (“arousing aggression”, “severe self-neglect”, “severe social breakdown”) although the percentage of patients diagnosed with psychosis did not change. Mulder’s study adds to a considerable body of work reviewed in this chapter that shows the clinical practice of committal is subject to variation as perceptions of how to interpret the criteria of legislation change.

Previously in this chapter the literature was reviewed showing an association between ethnicity and civil commitment. In seeking to explain this finding, Singh (1998) argued that perceived ethnicity may influence the perception of dangerousness, and that this may account for the higher proportion of Blacks in England placed under mental health legislation. A similar argument was recently advanced by Corrigan and Bhugra (2013), also in England, who argued that the high rate of diagnosis of use of compulsion with Black teenagers – three times higher than with whites – suggested the possibility of bias in the assessment of this group. No New Zealand studies have investigated the relationship between risk to self and others and use of mental health legislation.

Miscellaneous variables

This chapter has so far reviewed literature on the variables most commonly associated with use of mental health legislation. In this final section some additional factors are considered. These are grouped as “miscellaneous” not because they are minor

or trivial, but because they have been subject to minimal investigation. In the absence of variation in population demographics or in the nature of service provision Kjellin et al. (2008) suggested leadership might explain variation between Swedish counties. Pathway to care has been suggested by Bhui et al. (2003) on the basis that late intervention and involvement of police might contribute to greater symptom severity and increased perception of dangerousness. Somewhat in support of Bhui et al.'s findings, Myklebust et al. (2012) found emergency referral to be associated with civil commitment. Chowdhury (2005) also suggested that those who access mental health services through a forensic referral are at higher risk of committal. Segal et al. (1998) found that having insurance was associated with repeat civil commitment in the emergency department, concluding that those who could not pay were probably not brought by police for evaluation. Low social support was found to be associated with use of section 4 of the 1983 English Mental Health Act (Webber and Huxley, 2004) while Lorant (2007) and Siphoned (2011) found a range of social factors associated with civil commitment in Belgium and Finland respectively.

Conclusion

This chapter has reviewed a wide range of studies of factors that contribute to variation in use of mental health legislation. Many factors have been identified as contributing and studies have described the interplay of multiple variables. A qualitative study from the United States captures the complexity of civil commitment. Rubin, Snapp, Panzano and Taynor et al. (1996) studied civil commitment in Ohio and found variation from .32 to 2.11 per 1000 population. In each of the four regions studied the factors associated with civil commitment were different. They included a range of service, geographical and administrative factors which, when seen together illustrate the nature of civil commitment as a product of multiple influences with huge potential for variation. Of the factors identified in this chapter, diagnosis of psychosis stands out as consistently associated with civil commitment, although as the review makes clear, diagnosis alone does not account for variation in rates of committal. Variation between countries is probably not surprising, but the consistent pattern of marked variation within single jurisdictions is harder to explain. The qualitative study of Quirk et al. (2003) illustrates

the multifactorial nature of civil commitment, and raises the probability that any study that uses a predefined range of variables will miss some other contributing factors and risks oversimplifying a complex phenomenon.

Because mental health policy in New Zealand is community focussed, the following chapter completes the literature review section of the thesis by considering literature on compulsory treatment in community settings. The review was published in 2009 and is followed by a substantial commentary and discussion of more recent literature.

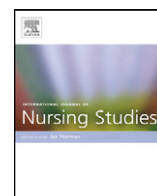
**CHAPTER SEVEN: COMPULSORY COMMUNITY MENTAL
HEALTH TREATMENT – LITERATURE REVIEW
(PUBLICATION)**



ELSEVIER

Contents lists available at ScienceDirect

International Journal of Nursing Studies

journal homepage: www.elsevier.com/ijns

Review

Compulsory community mental health treatment: Literature review

Anthony J. O'Brien^{a,b,*}, Brian G. McKenna^{a,c}, Robert R. Kydd^d^a School of Nursing, University of Auckland, Private Bag 92019, Auckland, New Zealand^b Liaison Psychiatry, Auckland City Hospital, Auckland District Health Board, Auckland, New Zealand^c Auckland Regional Forensic Psychiatry Services, Waitemata District Health Board, New Zealand^d Department of Psychological Medicine, University of Auckland, Private Bag 92019, Auckland, New Zealand

ARTICLE INFO

Article history:

Received 4 November 2008

Received in revised form 15 January 2009

Accepted 9 February 2009

Keywords:

Compulsory community treatment

Community treatment order

Mental health nursing

Research

ABSTRACT

Following their introduction in the United States in the 1970s various forms of compulsory treatment in the community have been introduced internationally. Compulsory treatment in the community involves a statutory framework that mandates enforceable treatment in a community setting. Such frameworks can be categorized as preventative, least restrictive, or as having both preventative and least restrictive features. Research falls into two categories; descriptive, naturalistic studies and controlled and uncontrolled comparative studies. The research has produced equivocal results, and presents numerous methodological challenges. Where programmes have demonstrated improved outcomes debate continues as to whether these outcomes are associated with legal compulsion or enhanced service provision. Service user, family and clinician perspectives demonstrate a divergence of views within and across groups, with clinicians more strongly in support than service users. The issue of compulsory community treatment is an important one for nurses, who are often at the forefront of clinical service provision, in some cases in statutory roles. Critical reflection on the issue of compulsory community treatment requires understanding of the limitations of empirical investigations and of the various ethical and social policy issues involved. There is a need for further research into compulsory community treatment and possible alternatives.

© 2009 Elsevier Ltd. All rights reserved.

What is already known about the topic?

- Compulsory care in the community is becoming increasingly common.
- Research into the effectiveness of compulsory treatment orders has produced equivocal evidence of effectiveness.
- Nurses are often involved in providing community care for people under compulsory care provisions, in some cases in statutory roles.

What this paper adds

- This review identifies the limits to the empirical evidence on community treatment orders.
- The review identifies the ambivalence apparent in research into patient and clinician perspectives on community treatment orders.
- The review identifies nursing practice as central to the operationalisation of community treatment orders.
- The review demonstrates the need to consider empirical evidence on compulsory community treatment in the context of ethical frameworks and social policy.

1. Introduction

Following their introduction in the United States in the 1970s various forms of compulsory treatment in the

* Corresponding author at: School of Nursing, University of Auckland, Private Bag 92019, Auckland, New Zealand. Tel.: +64 9 373 7599; fax: +64 9 367 7158.

E-mail address: a.obrien@auckland.ac.nz (A.J. O'Brien).

community have been introduced internationally. Despite reservations about such measures they appear to be favoured by policy makers and by some stakeholders. This issue is of concern to mental health nurses because nurses are involved at the front line of community mental health care, in some cases in statutory roles. This paper has two aims: to outline the history and development of various forms of compulsion in community mental health care, and to review the literature on compulsory treatment in the community, with an emphasis on the literature on effectiveness. The paper is organized into two main sections. The first section outlines the history and development of compulsory care in the community, showing that specific legal provisions such as community treatment orders (CTOs) are a formalization of previous measures such as conditional and supervised discharge. Also provided in the first section is an outline of the types of measures currently used and the terminology used in discussing compulsory community treatment. The second section provides a review of literature with an emphasis on evidence of effectiveness of CTOs. The section also includes a summary of literature on variation in use of CTOs and of stakeholder perceptions. Finally, implications for mental health nurses working with compulsory community treatment are discussed, noting that while understanding the research evidence is important, thinking needs to be informed by social and ethical analysis as much as by empirical evidence. Suggestions are made for further research in this area.

2. Compulsory treatment in the community

Compulsory treatment in the community is a mechanism by which the treatment wishes of a legally competent person may be overridden if that person is thought to present a potential risk to themselves or another person, or is at risk of serious deterioration in their health (Allen and Smith, 2001). Although community treatment orders are often perceived as a new extension of compulsory powers into community settings there have historically been many mechanisms involving forms of legal compulsion in community settings. Power (1999) notes that in Australia the practice of conditional discharge from hospital, with the option of early readmission, was well established long before the introduction of community treatment orders. A similar provision was available in New Zealand under the pre 1992 legislation (Dawson and Romans, 2001) and the introduction of the CTO in 1992 was a further development of this provision. New Zealand is one of the few jurisdictions in which a compulsory treatment order can be made without the person first being admitted to hospital. In many jurisdictions, for example New York (Steadman et al., 2001) and Ontario (Gray and O'Reilly, 2005) a compulsory order can only be issued after a period of hospitalization, in some cases after several hospitalizations. In many jurisdictions legislation was introduced towards the end of the period of deinstitutionalization and the concept of a compulsory order directing the person to community care reflected the growing policy commitment to community based care.

Jurisdictions without specific legislation may still provide community based treatment under compulsion. England and Wales mental health legislation makes provision for conditional discharge which requires the service user, still defined as an inpatient, to accept treatment in the community for extended periods (Shaw et al., 2007). These authors further note that this measure has been given a wide interpretation by the courts, with one judge describing the necessary in-hospital component of treatment as "gossamer thin" (p. 60). The England and Wales Mental Health (Patients in the Community) Act 1995 (Knight et al., 1998) created another form of compulsory community care through the supervised discharge order (SDO) (Canvin et al., 2002). An SDO can require the person to live at a specified address, allow access to professionals, and receive recommended treatment. This measure has been described as having similarities to the North Carolina involuntary outpatient order (Davies, 2002). A further form of compulsion provided for in English mental health legislation is the guardianship order (Bindman, 2004). Neither the SDO nor guardianship is used extensively as a form of compulsory community treatment as these measures lack powers of enforcement (Pinfold et al., 2001).

In a review of outpatient commitment in the United States, Swartz et al. (2006) included in their definition of outpatient commitment, judicial mechanisms used where there is no formal provision for an outpatient commitment order. Swartz describes informal mechanisms such as guardianship and conditional discharge as "de facto outpatient commitment" (p. 345). They offer a definition of outpatient commitment that includes both formal outpatient treatment orders and other legal measures that have the same effect. Swartz describes them as "...a subset of a broader set of civil legal procedures that include both statutorily explicit and implicit forms of compulsory outpatient treatment" (p. 344). In the state of Massachusetts, Geller et al. (1998) noted that in the absence of legal provision for involuntary outpatient treatment the courts used the guardianship statute to effectively make a ruling of incompetence in order to compel treatment in the community.

Reviewing Canadian legislation in twelve regions, Gray and O'Reilly (2005) noted that the option for compulsory community care can only be taken following a hospital admission, a requirement they felt to be at odds with the principle of providing care to the least restrictive standard. In comparing the Canadian legislation to that in Australia and New Zealand they argued that the move to a "community first" option in compulsory care was a "short conceptual step" (p. 21). This argument supports the model provided by Swartz et al. (2006) in which conditional discharge, hospital initiated orders, and those initiated in the community are all recognized as varieties of compulsory treatment in the community. In their systematic review of community treatment order research, Churchill et al. (2007) provided the following definition: "...any legal framework for community mental health treatment which [is] authorized by statute, located in the community with no necessary tie to hospitalization, and where the terms of the CTO [are] enforceable" (p. 9,

original emphasis). It is apparent that community treatment orders share conceptual and legal features of hospital oriented legislation. What remains contentious is whether community treatment orders make a contribution to improved outcomes, or whether the same outcomes could be achieved with improved services.

3. History of community treatment orders

According to Hiday (2003) the beginnings of compulsory treatment in the community lie in the first period of deinstitutionalization in the United States in the 1960s and 1970s. Zanni and Stavis (2007) report that the District of Columbia passed legislation for involuntary outpatient commitment in 1966. Early involuntary outpatient programs were seen as a means of providing a less restrictive alternative to hospitalization, and so were consistent with the imperative to increase individual autonomy and reduce involuntary hospitalization. These programs were developed exclusively in the United States at a time when legislation was being revised towards a dangerousness standard, with a greater emphasis on legal rather than medical determination of civil commitment (Appelbaum, 1994). Early programs were in part a response to critics of the psychiatric hospital, which was seen as fundamentally coercive. Hiday (2003) reports that despite this perception, there was legal and clinical resistance to involuntary outpatient treatment, both from a rights perspective, and from a perspective of effectiveness. These concerns drove the initial empirical studies which sought evidence that involuntary outpatient treatment could provide a safe alternative to hospitalization.

The second period of compulsory community treatment in the United States sought to address two concerns, the “revolving door syndrome” which saw patients having many readmissions (Geller, 1992), and the lack of treatment provided for many discharged patients (Appelbaum, 2001). Torrey and Kaplan (1995) reported that 35 US states had made legislative provision for compulsory community treatment by 1994. By 2001 Appelbaum reported a high level of interest in outpatient commitment laws in the United States with several states at that time considering their enactment (Appelbaum, 2001). More recently Swartz et al. (2006) reported that legislation was provided in 42 states and in the District of Columbia.

Australia began introducing CTOs from the mid 1980s, and by 1999 they had been introduced in all Australian States and Territories (Power, 1999). New Zealand introduced legislation for compulsory community treatment in 1992. Similar provisions were made in Canada in 1994 (Gray and O'Reilly, 2005) Scotland in 2005 (Lawton-Smith, 2005) and England in 2008 (Lawton-Smith et al., 2008). Apart from England and Scotland the only other European Union country to make provision for a compulsory community treatment order is Sweden (S. Sjostrom, personal communication, 24 August, 2008¹). Several European countries have provisions for hospital leave

under civil commitment (Kisely and Campbell, 2007). The only other country to provide for compulsory community treatment is Israel, which introduced legislation in 1991 (Bar El et al., 1998).

4. Terminology of compulsory community treatment

A number of different terms are used to refer to compulsory treatment in the community. In the United States the term involuntary outpatient treatment (IOT) order is commonly used (Geller, 1990). Other terms are: involuntary outpatient commitment (IOC) (Steadman et al., 2001); compulsory community treatment (CCT) (Gray and O'Reilly, 2005); compulsory ambulatory treatment (CAT) (Bar El et al., 1998); and assisted outpatient treatment (AOT) (Swartz and Swanson, 2004). In this paper the term community treatment order is used as a general descriptor, while in discussing studies from jurisdictions that use other terms, the language of that jurisdiction is used.

5. Typology of compulsory community treatment

In their systematic review of community treatment orders Churchill et al. (2007) identified three types of compulsory order: preventative, least restrictive, and orders which have both preventative and least restrictive features.

5.1. Preventative orders

Preventative orders are those described by Hiday (2003) as primarily aimed at preventing deterioration in mental state resulting in dangerousness. Under preventative orders different criteria are stipulated for involuntary hospitalization and compulsory care in the community (Churchill et al., 2007) with hospitalization requiring criteria such as “imminent danger” (i.e. Florida; Petrila and Christy, 2008) while community orders have criteria such as “inability to live safely in the community” (i.e. New York; Perlin, 2003). Preventative regimes are becoming more common in the United States (Churchill et al., 2007), and it is notable that in some cases regimes have been introduced following incidents of violence by people with untreated mental illness (Kisely and Campbell, 2007). Preventative legislation such as that provided in many United States jurisdictions is strongly reliant on judicial support rather than clinical discretion (Churchill et al., 2007). In a discussion of the role of legally mandated community treatment Appelbaum (2003) cautioned that the potential for mental health legislation to impact on incidents of violence is extremely limited, and is not a good justification for it. The English supervised discharge order is a form of preventative order as it is specifically aimed at preventing deterioration in patients with a known history of relapse following failure to comply with mental health treatment (Davies, 2002).

5.2. Least restrictive orders

Hiday (2003) described early compulsory community treatment in the United States as least restrictive as it was

¹ Will replace with published English language reference prior to publication.

conceptualized as a means of avoiding hospitalization, or facilitating discharge from hospital. Least restrictive orders have identical criteria for both hospital and community treatment (Churchill et al., 2007), and allow a patient who would otherwise be hospitalized to receive treatment in the community. Under this definition community treatment orders in New Zealand are least restrictive, although they are also argued to have a preventative role (Dawson, 2005). The notion of community care under compulsion as being least restrictive has been criticized by Fulop (1995) and Segal and Tauber (2007) who argue that limitations on liberty in the community can be as restrictive as committal to hospital. Munetz and Geller (1993) have also argued that care outside the hospital should not automatically be regarded as a less restrictive alternative.

5.3. Orders with mixed features

In jurisdictions that have broad compulsory community treatment criteria the boundary between preventative and least restrictive models becomes blurred. New Zealand legislation has the same criteria for both involuntary hospitalization and compulsory community care, a feature associated with least restrictive models (Dawson, 2005). However the breadth of the criteria and the extent of clinician discretion enable CTOs in New Zealand to be used preventatively; indeed the notion of intermittent disorder in New Zealand legislation (Simpson, 1998) seems to anticipate that the order can be used to prevent deterioration. The Australian states of Victoria and Western Australia also have legislation with mixed features, as do Israel, Wisconsin and Scotland (Churchill et al., 2007).

6. Aims of compulsory community treatment

The varying criteria and scope for clinical discretion in administering compulsory community treatment suggest that the aims of legislation differ across jurisdictions, something that becomes significant when comparing research across countries. Bindman (2004) identified aims of prevention of admission, early discharge from hospital, and to reduce risk of relapse by compelling compliance with treatment. In addition to these aims, prevention of violence and victimization have been stated as aims in some United States jurisdictions (Swanson et al., 2000; Hiday, 2003) and compulsory community treatment has also been considered to reduce criminal incarceration and promote a range of social objectives such as decreased homelessness (Compton et al., 2003). Kisely et al. (2007) questioned whether reduced time in hospital, rather than reduced frequency of hospitalization is an appropriate aim, as compulsory treatment would still be less restrictive if individuals spent less time in hospital. From a preventative perspective hospitalization may not be a negative outcome, as it may indicate greater service engagement and response to relapse at an earlier stage. Some studies have used service contacts as one of their outcome measures (e.g. Hiday and Scheid-Cook, 1989; Muirhead et al., 2006); another has used reduction in coercive events such as seclusion and restraint (Zanni and Stavis, 2007). Steadman

et al. (2001) and Swartz et al. (1999) considered quality of life measures as an outcome in their studies, suggesting this as another aim. Finally, healthcare costs have been measured in some studies, and cited by others as one of a number of aims of compulsory community treatment (e.g. Zanni and Stavis, 2007).

As this brief summary shows, the aims of compulsory community treatment are varied and will depend on local factors such as patterns of service provision and the patterns of interaction between mental health services and the criminal justice sector. Agreement on aims of compulsory community treatment is important from an ethical perspective because any extension of the state's *parens patriae* power to act in the best interests of citizens is dependent on such actions providing sufficient reciprocal benefits (Zanni and Stavis, 2007).

7. Research into compulsory community treatment

This section outlines the range of studies that have been reported, and the issues to be confronted in conducting research in this area. The focus is on studies completed in the past two decades because it is over this period that community treatment orders have become more widespread. In addition to studies of effectiveness, research has examined variation in use of CTOs and stakeholder perceptions. Literature was sourced by searching the electronic databases Medline, CINAHL and PsychINFO using terms 'involuntary outpatient treatment' 'community treatment order' and 'involuntary outpatient commitment'. In addition, reference lists of publications were consulted. The search was limited to the past two decades, and to English language publications. All papers reporting original research on effectiveness were reviewed. A sample of literature on stakeholder perceptions and variation was reviewed to demonstrate the range of views about CTOs and their variable use within and across jurisdictions. As this is a selective rather than systematic literature review this limitation must be born in mind.

Studies of the effectiveness of compulsory community treatment fall into two categories. In the first category are the smaller, mostly uncontrolled studies using descriptive naturalistic methods, with before and after or mirror-image designs. The second category comprises experimental studies, including the large randomized controlled trials conducted in North Carolina (Swartz et al., 1999) and New York (Steadman et al., 2001). In addition there are two systematic reviews (Kisley et al., 2006; Churchill et al., 2007).

8. Uncontrolled studies

A number of naturalistic studies have followed service users before and after implementation of a CTO. Van Putten et al. (1988) studied CTO patterns over an 18 month period before and after the introduction of least restrictive legislation in Arizona. Median days of hospitalization were reduced from 21 prior to the CTO to eight in the six to 12 months following their introduction. There was a large increase in contact with services, with 71% of patients maintaining contact after their outpatient committal order expired, compared to no patients maintaining contact

among those committed for inpatient treatment under the old law.

A small before and after study in the state of Ohio (Munetz et al., 1996) examined service use in relation to issuing of a CTO. In this study patients served as their own controls. The researchers reported significant reductions in average number of admissions and visits to emergency services, with increases in outpatient contacts and attendance at day treatment services. Time to readmission was measured in a further before and after study conducted in Quebec (Frank et al., 2005). Results showed increased time to readmission following a CTO compared with time to readmission in the five years preceding the CTO. Other naturalistic studies to report reductions in admissions and bed days associated with use of CTOs have been reported in North Carolina (Fernandez and Nygard, 1990); Iowa (Rohland et al., 2000); Florida (Esposito et al., 2008); New Hampshire (O'Keefe et al., 1997); New South Wales (Ozgul and Brunero, 1997; Muirhead et al., 2006) and Ontario (O'Brien and Farrell, 2005).

These uncontrolled studies have inherent weaknesses, such as lack of a control group, low numbers, failure to specify selection criteria, and a variety of potential confounders. Follow up periods were less than two years in each study. There was also little control of the nature of services provided meaning that the observed improvements could not be clearly ascribed to the involuntary nature of outpatient treatment. None of the studies met criteria of randomization and a comparable control group for inclusion in a subsequent Cochrane systematic review (Kisley et al., 2006).

9. Comparative studies

In this group of studies outcomes of patients subject to a CTO were compared with those of a control group. Preston et al. (2002) used a two stage before and after epidemiological design in which admissions, bed days and outpatient contacts were compared over a one year period for patients subject to a CTO and matched control group. The groups were equivalent in pre-CTO admissions but the CTO group had higher inpatient days and outpatient contacts. Results showed significant reductions in admissions and inpatient days in both the CTO and control groups and a significant increase in outpatient contacts for the CTO group compared to controls. The authors concluded that community treatment orders do not lead to reduced use of health services.

A similar epidemiological comparison study (Kisley et al., 2004) examined the influence of CTOs on admission rates using a two stage design linking data from three Western Australian databases. In this study a group of patients on CTOs were matched to a control group of and a further group of consecutive controls. Data were collected for a one year follow up period. Admission rates were significantly higher for the CTO group than for either matched controls or for consecutive controls. The researchers concluded that a CTO alone does not reduce hospital admissions.

A further Western Australian study compared patients discharged on a CTO with a matched group in Nova Scotia

(Kisley et al., 2005). The basis for the comparison was that Nova Scotia has similar population and mental health service system but does not have CTO legislation. The CTO group showed a higher readmission rate than the controls, however the CTO group spent less time in hospital in the following year compared to controls. From these results the researchers concluded that CTOs do not reduce admissions, but that greater vigilance by mental health services may lead to earlier intervention.

Increased admission was also a finding in a large database study conducted in Victoria, Australia (Burgess et al., 2006). This was a study of all admissions to Victorian public mental health services over a ten year period. Patients discharged on a CTO were compared to those discharged to voluntary status. Burgess et al. found that discharges on CTOs from a first admission were associated with a higher risk of readmission, but with a lower rate of readmissions following subsequent admissions. The CTO group was found to be more likely to be readmitted during the period following discharge than the non-CTO group, a difference that diminished when possible confounders such as diagnosis and marital status were controlled for. Regression analysis showed that the risk of readmission was highest following first admission and then declined. The increased risk following first admission accounted for the increase in overall risk. Burgess et al. concluded that the effect of the CTO was dependent on the patient's history. Treatment provided to CTO and control groups was not described.

A second database study of CTOs in Victoria was reported by Segal and Burgess (2006a). This study took a different approach to other CTO research by combining time in hospital under involuntary status with time following discharge under a CTO to yield a measure of restrictive care that included both. The study cohort consisted of patients discharged under a CTO over a ten year period and a comparison group discharged to voluntary status. Patients in the CTO group were found to have greater severity of illness than controls, but subsequent to discharge they had inpatient stays that were shorter than those of their control counterparts. They also had fewer days in inpatient care. However, using the combined measure the CTO group showed greater total days in care, suggesting that the effect of the CTO is to discharge patients sooner, with less symptom resolution. Segal and Burgess argued that early discharge on a CTO is likely to lead to increased concern by clinical staff to maintain supervisory oversight. A further analysis of the Victorian data using a matched control design comparing patients on CTOs with a voluntary group (Segal and Burgess, 2006b). Both groups received care over an extended period (>180 days). The CTO group showed improvements in hospital admissions and contacts with community services during the period of the CTO. The improvements were not sustained during a subsequent period of voluntary care, leading the authors to conclude that benefits were dependent on the compulsory nature of care. This study lends some support to the conclusions of Swartz et al. (2001) that an extended period of care under a CTO confers benefit.

A four year study in Toronto (Hunt et al., 2007) used routinely collected administrative data to follow patients placed on a CTO with a non-matched comparison group.

Prior to the study the CTO group showed a higher rate of hospital admission and a greater number of inpatient days than the control group. All patients received a similar programme of intensive case management and were followed up for one year. Although both groups showed a “clinically meaningful” (p. 653) reduction in hospitalizations this was more marked in the CTO group. In comparison to the control group, patients on a CTO showed a reduction in hospitalisations in the second six month period post-CTO and a reduction in the number of bed days in both the first and second six month periods. Conclusions were that CTOs assisted individuals who had historically refused services to maintain engagement with treatment.

Smaller comparison studies showing reductions in admissions and/or bed days have been reported in England (Sensky et al., 1991; North Carolina (Hiday and Scheid-Cook, 1991); Massachusetts (Geller et al., 1998); and New South Wales (Vaughan et al., 2000).

The comparison studies show mixed results on key outcomes and show some of the same weaknesses as the uncontrolled studies. Although those described in detail had large, and in some cases complete datasets, none used randomization. There is a possibility that observed changes represent regression to the mean or a change in the pattern of service provision over the study period. Three of the studies had long follow up periods (Burgess et al., 2006; Segal and Burgess, 2006a,b) but in the others the follow up period was a year or less. The epidemiological design of these studies meant that none could make findings of causation. As with the descriptive studies, none of the comparison studies met criteria for inclusion in the Cochrane systematic review conducted by Kisley et al. (2006).

10. Randomised controlled trials

Only two randomised controlled trials of CTOs have been conducted, both of which have produced equivocal results. In North Carolina Swartz et al. (1999) investigated the effect of a CTO on hospital admissions. Participants were randomized to either a court ordered CTO and standard care or to standard care only and followed for a period of one year. At the conclusion of the study period the CTO and control groups showed no statistically significant difference in number of admissions, medication compliance, quality of life, or perceived coercion. A small group of patients whose CTO was extended beyond the statutory maximum of 180 days was followed for a longer period and showed improvements in clinical functioning and service engagement, but this group was not randomized.

The second randomized controlled trial New York (Steadman et al., 2001). This study was an evaluation of a programme of compulsory community treatment authorized by the state legislature. Patients were randomized to either a court-ordered CTO and enhanced care or enhanced care only. At 11 month follow up the study showed no significant difference between the groups on acute admissions, days hospitalized discontinuation with treatment, or compliance with treatment. For perceived coercion there was no significant difference on any of the three domains measured. Quality of life was similar for both for the CTO

group and controls. The main reason offered for the lack of measurable effect of the CTO is that the measure was new and planned police enforcement was not provided. O'Reilly and Bishop (2001) commented on this study noting that the difference shown in days hospitalized is clinically significant even although results did not reach statistical significance.

Overall, the two randomized controlled trials were unable to demonstrate that the compulsory nature of a CTO makes a significant difference to service utilization or to patient outcomes. When the results of these studies were pooled in a Cochrane systematic review (Kisley et al., 2006) the combined data were still unable to demonstrate significant differences. Both studies encountered methodological problems such as concealment, difficulty controlling the nature and intensity of service provision, and in the case of New York, lack of police cooperation in enforcing the mandatory nature of treatment.

11. Stakeholder perceptions

Stakeholders' perceptions of compulsory community treatment have been investigated in a number of qualitative studies and cross-sectional surveys. The studies are exploratory in nature and in many cases represent the views of only a small number of service users, family members or clinicians. Demonstrating the range of findings from these studies is the qualitative interview study in New Zealand reported by Gibbs et al. (2005). The 42 patients interviewed were rated along a five part continuum from those “totally opposed” (7%) to the CTO to those “wholly favourable” (19%). A similar spread of perceptions of CTOs has been found in other studies of service user views (Boudreau and Lambert, 1993; Swartz et al., 2003). Interviews with 20 service users in England yielded “seemingly contradictory” results with participants simultaneously accepting and rejecting the supervised discharge orders (Canvin et al., 2002). A mixed methods study of service user perspectives in North Carolina found that 62% regarded CTOs as effective and 55% regarded them as fair (Swartz et al., 2004). Family members (Mullen et al., 2006) and clinicians (Scheid-Cook, 1993; Currier, 1997; Dawson and Romans, 2001; Romans et al., 2004) also expressed mixed views, from opposition to strong support for CTOs. Although clinicians are overall more likely to be in favour, Scheid-Cook (1993) argued that the views of clinicians and patients do not allow for a neat dichotomy of controller and controlled, but represent a more complex picture of perceptions of differing benefits. In the only reported study of an over-represented ethnic minority (Gibbs et al., 2004) a small number of New Zealand Maori service users, family members and clinicians expressed mixed views. Psychiatrists have been reported to be more strongly in favour of CTOs than service users, reporting benefits of greater engagement, compliance with treatment, and a perception of improved clinical care (Currier, 1997; O'Reilly et al., 2000; Romans et al., 2004).

12. Variation

Variation in use of CTOs can be approached in two ways, variation across time, and variation within or across

jurisdictions. Studies show that use of CTOs immediately following their introduction varies in subsequent years with both increases and decreases being observed. In one region of New Zealand, the numbers of CTOs rose in the first five years (Dawson and Romans, 2001) but appear to have reached a plateau, with recent data (Ministry of Health, 2006, 2007) showing rates similar to those recorded in 1997. Burgess et al. (2006) found that numbers of CTOs peaked six years after legislation was introduced in Western Australia but declined over the next four years. In Arizona, CTOs were used more frequently in the first six months of their implementation than in the second Van Putten et al., 1988). Rates of CTO use in New Zealand show marked regional variation (14–106 per 100,000 population) despite a common legal framework and relatively uniform service provision (Ministry of Health, 2007). Marked variation has also been noted in the use of Supervised Discharge Orders in England and Wales (Pinfold et al., 2001). A study in the English county of Leicestershire showed that despite having just 1.9% of the population of England and Wales, the region accounted for 5.7% of supervised discharge orders (Davies, 2002).

Variation across states in the United States has been documented by Miller (1992) who studied admissions in eight states following the introduction of CTOs with need for treatment criteria between 1975 and 1990. The results were varied, with three states reporting increased admissions and five reporting decreased admission, with an overall trend was towards less admissions. A national survey in the United States (Torrey and Kaplan, 1995) found that use of CTOs varied from “very common” to “very rare” and in an international comparison Lawton-Smith (2005) found that rates of CTO use varied between two and 60 per 100,000. Variation across jurisdictions is likely to reflect differences in legislation and service provision, while within jurisdictions the likely reasons for variation are clinicians' increasing familiarity with the legislation in its initial years as it becomes bedded in, and in later years, clinicians' perceptions of the utility of the CTO in practice (Dawson, 2006).

13. Methodological issues

Research into community treatment orders presents numerous methodological challenges arising from ethical and legal concerns, design issues, and practical problems of implementation (Dawson et al., 2001; Kisely and Campbell, 2007; Swartz et al., 1995). Individuals placed on CTOs are by definition those with more severe mental illness who have not engaged with mental health services. In some jurisdictions they may meet dangerousness criteria identical to criteria for involuntary inpatient admission, creating ethical questions about whether they should be randomized out of an intervention designed to reduce risk. For this reason, in the North Carolina and New York studies (Swartz et al., 2001; Steadman et al., 2001) patients with a history of violence were excluded. Regression to the mean has been cited by Segal and Burgess (2006a) and Hunt et al. (2007) as possibly explaining the positive outcomes demonstrated in their studies, and must be considered in any investigation of

individuals whose clinical status is furthest from the mean (Bland and Altman, 1994).

Although randomized controlled trials are regarded as the gold standard for evaluating the effectiveness of interventions, Thomas (2003) questions the appropriateness of using this methodology to evaluate complex interventions such as community treatment orders, citing difficulty in specifying the active components, making replication difficult. In support of Thomas the comment is frequently made in the research into CTOs that the effect of legal compulsion cannot be isolated from that of enhanced service provision (Geller et al., 2006). Other researchers have suggested that attention should be focused on refining the randomized controlled trial for use in complex interventions with multiple outcomes, such as compulsory treatment in the community (Hotopf et al., 1999; Hodgson et al., 2007). The difficulty in demonstrating whether a CTO alone results in improved outcomes is as much conceptual as methodological, as the CTO is not itself a programme of intervention and will always influence clinicians' perspectives of priorities for treatment and vigilance in maintaining follow up.

In all but two of the studies reviewed above the follow up times were two years or less, although some authors suggest that CTOs are most effective for those on long term orders (e.g. Swartz et al., 2001). Database studies (Burgess et al., 2006; Segal and Burgess, 2006a,b) enable large follow up periods but risk introducing confounders such as changes in service provision and clinical practice over time although these can be controlled for. Although there are sometimes questions about the reliability of administrative data (Byrne et al., 2005) studies based on administrative data avoid many of the problems so far encountered in CTO research and can be invaluable in evaluating services and policy (Wierdsma et al., 2008). Because of the complex nature of compulsory community treatment there is also a need for qualitative studies (Dawson et al., 2003; Kisely et al., 2005; Thomas, 2003). In reviewing research designs used to research complex interventions such as offending behavior programs, Hollin (2008) has argued that a range of qualitative and quantitative designs are necessary.

14. Discussion

Early involuntary outpatient commitment legislation was a response to societal demands to reduce the size of psychiatric hospitals (Hiday, 2003; Zanni and Stavits, 2007), however public concern is now more focused on issues of risk than on the rights of service users (Holloway et al., 2000; Bindman, 2004; Lawton-Smith, 2008). It is notable that in some jurisdictions legislation for CTOs has followed highly publicised incidents of homicide linked to individuals with mental illness (Geller et al., 2006; Kisely and Campbell, 2007). Recent reforms in England and Wales have been driven by political concerns with risk (Bindman, 2004) despite evidence that homicides attributable to mental illness have not been increasing (Taylor and Gunn, 1999; Simpson et al., 2004; Large et al., 2008). Appelbaum (2003) cautions that compulsory outpatient treatment is unlikely to reduce violence in the community and is not a good reason for legislative reform.

Although the two most robust randomized controlled trials of compulsory community treatment failed to demonstrate differences in key outcomes even when their data was pooled (Kisley et al., 2006), this finding should be weighed against the methodological problems encountered in conducting randomized controlled trials of complex interventions such as community treatment orders. Clinicians, patients and families all express some support for CTOs, as well as reservations, a situation referred to by Dawson et al. (2003) as “ambivalence”. Reasons for these views require further investigation and analysis, but are likely to continue. Despite equivocal evidence of effectiveness policy makers appear to favour compulsory community treatment, with legislative provision for community treatment orders becoming more common internationally.

Several commentators have noted that research has so far been unable to determine whether it is the services provided under compulsion or their compulsory nature that accounts for observed benefits (Kisley et al., 2005). In New York and North Carolina where all services users received enhanced care, reductions in admissions were observed in both groups with no significant difference between them (Steadman et al., 2001; Swartz et al., 2001). A similar phenomenon has been noted in Western Australia (Preston et al., 2002) and in Ontario Hunt et al. (2007). Legally mandated community treatment impacts on both service users and clinicians, suggesting that the effect of CTOs is not simply to compel treatment, but to bind services to service users resulting in more intensive follow up. In a similar vein, Bindman (2004) argues that compulsory community treatment “increases professional concern about responsibility for managing risk, reducing the threshold for admission” (p. 34). If the effect of CTOs is dependent on how strongly clinicians engage with service users this raises the question about whether this effect is dependent on compulsion. One clear area of divergence is in the stronger support for CTOs among clinicians than among service users.

Lawton-Smith et al. (2008) raise concerns about whether compulsory treatment may distract services from promoting voluntary services to hard-to-engage service users, refocusing resources on a small proportion at the expense of others. While this is a serious concern, it is usual in health care to provide greater resources to those with greater needs. However if, as Lawton-Smith et al. argue, CTO provisions result in a higher number of individuals being placed under compulsion, this would have the effect of distorting the nature of services. Geller et al. (2006) addressed this “net-widening” concern in a naturalistic study in Massachusetts, concluding that this concern was not realized in practice. Evidence from New Zealand from before and after the implementation of compulsory community treatment in 1992 indicates that between 1987 and 2005 there was no overall increase in the proportions of people subject to compulsion, although there was a shift in location from hospital to community care (Ministry of Health, 2006).

Two possible alternatives to CTOs have been suggested: advanced directives (Kisely and Campbell, 2007) and assertive community treatment (Zanni and Stavis, 2007)

and A randomized controlled trial of advanced directives found no difference between treatment and control groups in rates of compulsory admission (Papageorgiou et al., 2002). Both group showed an overall reduction in rates of compulsion, suggesting that the effect of the study might have been to sensitize clinicians to patients’ preferences. Another form of advance directive, the “joint crisis plan” has been found to be effective in reducing rates of compulsion (Henderson et al., 2004), although these results were produced under experimental conditions. In a study of 24 assertive outreach teams Priebe et al. (2003) measured proportions of admissions occurring under voluntary and compulsory status, concluding that assertive outreach does not prevent compulsory admission. Given the ethical imperative that care is provided to the least restrictive standard further research should evaluate models of service delivery aimed at reducing compulsion.

The issue of compulsory mental health care has received little attention in nursing literature, something that is surprising because mental health nurses provide a large proportion of the professional community mental health workforce. Moreover, mental health nurses act in statutory roles and thus play a key part in the enforcement of the requirements of mental health legislation (Hurley and Linsley, 2006; McKenna et al., 2006; Wand and Chiarella, 2006; Thom et al., 2008). Finally, community mental health nurses practise in multidisciplinary teams which have the capacity to moderate clinical decision making and bring a range of perspectives to bear on clinical practice. Smith (1995, p. 275) has argued that nurses involved in compulsory community treatment “Need to be prepared to advocate for patients who may be at risk for violation of their basic rights.” Bindman (2004, p. 35–6) also urged professionals to “provide clear ethical justifications for treatment pressures commensurate with the risks to their patients”, a recommendation that clearly applies to nurses. Heffern and Austin (1999) discussed compulsory community treatment in the light of its growing popularity in North America towards the end of the twentieth century, suggesting that assertive community treatment may be able to engage service users and thus provide benefits without compromising autonomy. In another nursing analysis Cullen-Drill and Schilling (2008) argue that evidence supports the use of compulsory community treatment, but that argument is at odds with the literature reviewed here, and with conclusions of both systematic reviews (Kisley et al., 2006; Churchill et al., 2007). Segal and Burgess (2006b) noted that the efficacy of CTO regimes is likely related to the quality of service provided, a significant observation for nurses providing care for people under CTOs. Apart from the study by Perese et al. (2004) in which case management was provided by nurses there are no reports of nurses’ practice in working with patients on CTOs.

Future debate about CTOs needs to take cognizance of the role of social policy in driving legislative reform to ensure that programs of community care are focused on the needs of people with mental illness rather than only on containing risk. Compulsory community care creates an ethical obligation to provide a level and quality of service that justifies the state’s use of its *parens patriae* power. This

should extend to continued analysis of the clinical care provided by community services, and to the encompassing issues of the social position of people with mental illness.

15. Conclusion

This review of compulsory community treatment has focused on the historical development of CTOs and the research evidence on their implementation. However, the wider debate about the place of compulsion in community mental health care cannot be settled by evidence alone. In her review of involuntary outpatient treatment in the United States Hiday (2003, p. 25) concluded that debate about compulsory community treatment involves:

“normative issues of what we as a society believe we ought to do, what we believe to be the rightful role of the state in exercising its power in protecting the weak, and what we believe to be the civil rights of the individual in being protected from state infringements on liberty.”

More recently, in response to arguments that empirical evidence provided support for policies of compulsory community treatment Segal and Tauber (2007) responded that empirical evidence can inform but not decide ethical issues. This is not a question about the weight of evidence; if it were, then the current evidence would not be robust enough to provide that support. The question, according to Segal and Tauber, is an ethical one of justification, in which arguments for autonomy must be pitched against arguments for the State's use of its *parens patriae* powers. Notwithstanding the limits of research into CTOs, evidence can inform ethical reflection and health policy. To engage in debate on compulsory community treatment nurses need a critically informed view that takes into account its historical development, the current social and political context, research evidence, and the relevant ethical arguments.

Conflict of interest

None.

References

- Allen, M., Smith, V.S., 2001. Opening Pandora's box: the practical and legal dangers of involuntary outpatient commitment. *Psychiatric Services* 52, 342–346.
- Appelbaum, P.S., 1994. *Almost a Revolution*. Mental Health Law and the Limits of Change. Oxford University Press, New York.
- Appelbaum, P.S., 2001. Thinking carefully about outpatient commitment. *Psychiatric Services* 52 (3), 347–350.
- Appelbaum, P.S., 2003. Dangerous persons, moral panic, and the uses of psychiatry. *Psychiatric Services* 54 (4), 441–442.
- Bar El, Y.C., Durst, R., Rabinowitz, J., Kalian, M., Teitelbaum, A., Shlafman, M., 1998. Implementation of order of compulsory ambulatory treatment in Jerusalem. *International Journal of Law and Psychiatry* 21 (1), 65–71.
- Bindman, J., 2004. Compulsion and freedom. *Psychiatry* 3 (9), 32–36.
- Bland, J.M., Altman, D.G., 1994. Statistics notes: some examples of regression towards the mean. *BMJ* 309 (6957), 780.
- Boudreau, F., Lambert, P., 1993. Compulsory community treatment? I. Ontario stakeholders' responses to "helping those who won't help themselves.". *Canadian Journal of Community Mental Health* 12 (1), 57–78.
- Burgess, P., Bindman, J., Leese, M., Henderson, C., Szmukler, G., 2006. Do community treatment orders for mental illness reduce admission to hospital? An epidemiological study. *Social Psychiatry & Psychiatric Epidemiology* 41, 574–579.
- Byrne, N., Regan, C., Howard, L., 2005. Administrative registers in psychiatric research: a systematic review of validity studies. *Acta Psychiatrica Scandinavica* 112, 409–414.
- Canvin, K., Bartlett, A., Pinfold, V., 2002. A 'bittersweet pill to swallow': learning from mental health service users' responses to community care in England. *Health and Social Care in the Community* 10 (5), 361–369.
- Churchill, R., Owen, G., Singh, S., Hotopf, M., 2007. *International Experiences of Community Treatment Orders*. Institute of Psychiatry, London.
- Compton, S.N., Swanson, J.W., Wagner, H.R., Swartz, M.S., Burns, B.J., Elbogen, E.B., 2003. Involuntary outpatient commitment and homelessness in persons with severe mental illness. *Mental Health Services Research* 5 (1), 27–38.
- Cullen-Drill, M., Schilling, K., 2008. The case for mandatory outpatient treatment. *Journal of Psychosocial Nursing* 46 (2), 33–41.
- Currier, G.W., 1997. A survey of New Zealand psychiatrists' clinical experience with the Mental Health (Compulsory Assessment and Treatment) Act of 1992. *New Zealand Medical Journal* 110 (1036), 6–9.
- Davies, S., 2002. Compulsory treatment in the community: current legal powers. *Advances in Psychiatric Treatment* 8 (3), 180–188.
- Dawson, J., 2005. *Community Treatment Orders: International Comparisons*. Otago University Print, Dunedin.
- Dawson, J., 2006. Fault-lines in community treatment order legislation. *International Journal of Law and Psychiatry* 29 (6), 482–494.
- Dawson, J., Romans, S., 2001. The use of community treatment orders in New Zealand: early findings. *Australian and New Zealand Journal of Psychiatry* 35, 190–195.
- Dawson, J., King, M., Papageorgiou, A., Davidson, O., 2001. Legal pitfalls of psychiatric research. *British Journal of Psychiatry* 178 (1), 67–70.
- Dawson, J., Romans, S., Gibbs, A., Ratter, N., 2003. Ambivalence about community treatment orders. *International Journal of Law and Psychiatry* 26, 243–255.
- Esposito, R., Westhead, V., Berko, J., 2008. Florida's outpatient commitment law: effective but underused. *Psychiatric Services* 59 (3), 328.
- Fernandez, G.A., Nygard, S., 1990. Impact of Involuntary outpatient commitment on the revolving-door syndrome in North Carolina. *Hospital and Community Psychiatry* 41 (9), 1001–1004.
- Frank, D., Perry, J.C., Kean, D., Sigman, M., Geagea, K., 2005. Effects of compulsory treatment orders on time to hospital readmission. *Psychiatric Services* 56 (7), 867–869.
- Fulop, N.J., 1995. Involuntary outpatient civil commitment: what can Britain learn from the U.S. experience? A civil liberties perspective. *International Journal of Law and Psychiatry* 18 (3), 291–303.
- Geller, J.L., 1990. Clinical guidelines for the use of involuntary outpatient treatment. *Hospital and Community Psychiatry* 41 (7), 749–755.
- Geller, J.L., 1992. A historical perspective on the role of state hospitals viewed from the era of the "revolving door". *American Journal of Psychiatry* 149 (11), 1526–1533.
- Geller, J.L., Fisher, W.H., Grudzinskas, J., Albert, J., Clayfield, J.C., Lawlor, T., 2006. Involuntary outpatient treatment as "desinstitutionalized coercion": the net-widening concerns. *International Journal of Law and Psychiatry* 29 (6), 551–562.
- Geller, J.L., Grudzinskas Jr., A.J., McDermeit, M., Fisher, W.H., Lawlor, T., 1998. The efficacy of involuntary treatment in Massachusetts. *Administration and Policy in Mental Health* 25 (3), 271–285.
- Gibbs, A., Dawson, J., Ansley, C., Mullen, R., 2005. How patients in New Zealand view community treatment orders. *Journal of Mental Health* 14 (4), 357–368.
- Gibbs, A., Dawson, J., Forsyth, H., Mullen, R., 2004. Maori experience of community treatment orders in Otago, New Zealand. *Australian and New Zealand Journal of Psychiatry* 38 (10), 830–835.
- Gray, J.E., O'Reilly, R.L., 2005. Canadian compulsory community treatment laws: recent reforms. *International Journal of Law and Psychiatry* 28 (1), 13–22.
- Henderson, C., Flood, C., Leese, M., Thornicroft, G., Sutherby, K., Szmukler, G., 2004. Effect of joint crisis plans on use of compulsory treatment in psychiatry: single blind randomised controlled trial. *BMJ* 329 (7458), 136.
- Heffern, W.A., Austin, W., 1999. Compulsory community treatment: ethical considerations. *Journal of Psychiatric and Mental Health Nursing* 6, 37–42.
- Hiday, V.A., 2003. Outpatient commitment. The state of empirical research on its outcomes. *Psychology, Public Policy, and Law* 9 (1/2), 8–32.

- Hiday, V.A., Scheid-Cook, T.L., 1989. A follow-up of chronic patients committed to outpatient treatment. *Hospital & Community Psychiatry* 40 (1), 52–59.
- Hiday, V.A., Scheid-Cook, T.L., 1991. Outpatient commitment for "revolving door" patients: compliance and treatment. *Journal of Nervous & Mental Disease* 179 (2), 83–88.
- Hodgson, R., Bushe, C., Hunter, R., 2007. Measurement of long-term outcomes in observational and randomised controlled trials. *British Journal of Psychiatry* 191 (Suppl. 50), s78–s84.
- Hollin, C.R., 2008. Evaluating offending behaviour programmes: does only randomization glister? *Criminology and Criminal Justice* 8 (1), 89–106.
- Holloway, F., Szmukler, G., Sullivan, D., 2000. Involuntary outpatient treatment. *Current Opinion in Psychiatry* 13, 669–692.
- Hotopf, M., Churchill, R., Lewis, G., 1999. Pragmatic randomised controlled trials in psychiatry. *The British Journal of Psychiatry* 175 (3), 217–223.
- Hunt, A.M., da Silva, A., Lurie, S., Goldbloom, D., 2007. Community treatment orders in Toronto: the emerging data. *Canadian Journal of Psychiatry* 52 (10), 647–656.
- Hurley, J., Linsley, P., 2006. Proposed changes to the Mental Health Act of England and Wales: research indicating future educational and training needs for mental health nurses. *Journal of Psychiatric and Mental Health Nursing* 13 (1), 48–54.
- Kisely, S., Campbell, L.A., 2007. Methodological issues in assessing the evidence for compulsory community treatment. *Current Psychiatric Reviews* 3, 51–56.
- Kisley, S., Campbell, L.A., Preston, N.J., 2006. Compulsory treatment and involuntary outpatient treatment for people with severe mental disorders: Cochrane Database of Systematic Reviews (3) CD004408.
- Kisely, S., Campbell, L.A., Scott, A., Preston, N.J., J., X., 2007. Randomized and non-randomized evidence for the effect of compulsory community and involuntary out-patient treatment on health service use: systematic review and meta-analysis. *Psychological Medicine* 37, 3–14.
- Kisley, S., Smith, M., Preston, N.J., Xiao, J., 2005. A comparison of health service use in two jurisdictions with and without compulsory community treatment. *Psychological Medicine* 35, 1–11.
- Kisely, S.R., Xiao, J., Preston, N.J., 2004. Impact of compulsory community treatment on admission rates: survival analysis using linked mental health and offender databases. *British Journal of Psychiatry* 184 (5), 432–438.
- Knight, A.C., Mumford, D.B., Nichol, R., 1998. Supervised discharge order: the first year in the South and West Region. *Psychiatric Bulletin* 22 (7), 418–420.
- Large, M., Smith, G., Swinson, N., Shaw, J., Nielssen, O., 2008. Homicide due to mental disorder in England and Wales over 50 years. *The British Journal of Psychiatry* 193 (2), 130–133.
- Lawton-Smith, S., 2005. A Question of Numbers. The Potential Impact of Community-Based Treatment Orders in England and Wales. King's Fund, London.
- Lawton-Smith, S., Dawson, J., Burns, T., 2008. Community treatment orders are not a good thing. *The British Journal of Psychiatry* 193 (2), 96–100.
- McKenna, B.G., O'Brien, A.J., Dal Din, T., Thom, K., 2006. Registered nurses as responsible clinicians under the New Zealand Mental Health (Compulsory Assessment and Treatment) Act 1992. *International Journal of Mental Health Nursing* 15 (2), 128–134.
- Miller, R.D., 1992. Need-for-treatment criteria for involuntary civil commitment: impact in practice. [see comment] *American Journal of Psychiatry* 149 (10), 1380–1384.
- Ministry of Health, 2006. Office of the Director of Mental Health. Annual Report 2005. Ministry of Health, Wellington.
- Ministry of Health, 2007. Office of the Director of Mental Health. Annual Report 2006. Ministry of Health, Wellington.
- Muirhead, D., Harvey, C., Ingram, G., 2006. Effectiveness of community treatment orders for treatment of schizophrenia with oral or depot antipsychotic medication: clinical outcomes. *Australian and New Zealand Journal of Psychiatry* 40 (6), 596–605.
- Mullen, R., Dawson, J., Gibbs, A., 2006. Dilemmas for clinicians in use of Community Treatment Orders. *International Journal of Law and Psychiatry* 29 (6), 535–550.
- Munetz, M.R., Geller, J.L., 1993. The least restrictive alternative in the postinstitutional era. *Hospital and Community Psychiatry* 44 (10), 967–973.
- Munetz, M.R., Grande, T., Kleist, J., Peterson, G.A., 1996. The effectiveness of outpatient civil commitment. *Psychiatric Services* 47 (11), 1251–1253.
- O'Brien, A.A., Farrell, S.J., 2005. Community treatment orders: profile of Canadian experience. *Canadian Journal of Psychiatry* 50 (1), 27–30.
- O'Keefe, M.A., Potenza, D.P., Mueser, K.T., 1997. Treatment outcomes for severely mentally ill people on conditional discharge to community-based treatment. *Journal of Nervous & Mental Disease* 185 (6), 409–411.
- O'Reilly, R.L., Keegan, D.L., Elias, J.W., 2000. A survey of the use of community treatment orders by psychiatrists in Saskatchewan. *Canadian Journal of Psychiatry* 45 (1), 79–81.
- O'Reilly, R., Bishop, J., 2001. Assessing the New York City involuntary outpatient treatment program. *Psychiatric Services* 52 (11), 1533.
- Ozgul, S., Brunero, S., 1997. A pilot study of the utilisation and outcome of community orders: client, carer, case manager and Mental Health Review Tribunal perspective. *Australian Health Review* 20 (4), 70–83.
- Papageorgiou, A., King, M., Janmohamed, A., Davidson, O., Dawson, J., 2002. Advance directives for patients compulsorily admitted to hospital with serious mental illness: randomised controlled trial. *British Journal of Psychiatry* 181 (6), 513–519.
- Perlin, M.L., 2003. Therapeutic jurisprudence and outpatient commitment law. *Psychology, Public Policy, and Law* 9 (1–2), 183–2008.
- Perese, E.F., Wu, Y.B., Ram, R., 2004. Effectiveness of assertive community treatment for patients referred under Kendra's Law: proximal and distal outcomes. *International Journal of Psychosocial Rehabilitation* 9 (1), 5–9.
- Petrila, J.D., Christy, A., 2008. Florida's outpatient commitment law: a lesson in failed reform? *Psychiatric Services* 59 (1), 21–23.
- Pinfold, V., Bindman, J., Thornicroft, G., Franklin, D., Hatfield, B., 2001. Persuading the persuadable: evaluating compulsory community treatment in England using Supervised Discharge Orders. *Social Psychiatry & Psychiatric Epidemiology* 36, 260–266.
- Power, P., 1999. Community treatment orders: the Australian experience. *The Journal of Forensic Psychiatry* 10 (1), 9–15.
- Preston, N.J., Kisely, S., Xiao, J., 2002. Assessing the outcome of compulsory psychiatric assessment in the community: epidemiological study in Western Australia. *British Medical Journal* 324, 1–5.
- Priebe, S., Fakhoury, W., Watts, J., Bebbington, P., Burns, T.O.M., Johnson, S., et al., 2003. Assertive outreach teams in London: patient characteristics and outcomes: Pan-London Assertive Outreach Study, Part 3. *The British Journal of Psychiatry* 183 (2), 148–154.
- Romans, S., Dawson, J., Mullen, R., Gibbs, A., 2004. How mental health clinicians view community treatment orders: a national New Zealand survey. *Australian and New Zealand Journal of Psychiatry* 38 (10), 836–841.
- Rohland, B., Rohrer, J., Richards, C., 2000. The long-term effect of outpatient commitment on service use. *Administration and Policy in Mental Health and Mental Health Services Research* 27 (6), 383–394.
- Scheid-Cook, T.L., 1993. Controllers and controlled: an analysis of participant constructions of outpatient commitment. *Sociology of Health & Illness* 15 (2), 179–198.
- Segal, S.P., Burgess, P.M., 2006a. Conditional release: a less restrictive alternative to hospitalization? *Psychiatric Services* 57 (11), 1600–1606.
- Segal, S.P., Burgess, P.M., 2006b. The utility of extended outpatient civil commitment. *International Journal of Law & Psychiatry* 29 (525–534).
- Segal, S.P., Tauber, A.L., 2007. Revisiting Hume's Law. *American Journal of Bioethics* 7 (11), 43–44.
- Sensky, T., Hughes, T., S., H., 1991. Compulsory psychiatric treatment in the community 1: a controlled study of compulsory community treatment with extended leave under the Mental Health Act: special characteristics of patients treated and the impact of treatment. *British Journal of Psychiatry* 158, 792–799.
- Shaw, I., Middleton, H., Cohen, J., 2007. Understanding Treatment Without Consent. An Analysis of the Work of the Mental Health Act Commission. Ashgate, Hampshire.
- Simpson, A.I.F., 1998. The interpretation of New Zealand's statutory definition of mental disorder. *Psychiatry, Psychology and Law* 5 (1), 147–152.
- Simpson, A.I.F., McKenna, B., Moskowitz, A., Skipworth, J., Barry-Walsh, J., 2004. Homicide and mental illness in New Zealand, 1970–2000. *British Journal of Psychiatry* 185 (5), 394–398.
- Smith, C.A., 1995. Use of involuntary outpatient commitment in community care of the seriously and persistently mentally ill. *Issues in Mental Health Nursing* 16, 275–284.
- Steadman, H.J., Gounis, K., Dennis, D., Hopper, K., Roche, B., Swartz, M.S., et al., 2001. Assessing the New York City involuntary outpatient commitment pilot program. *Psychiatric Services* 52 (3), 330–336.
- Swanson, J.W., Swartz, M.S., Wagner, H.R., Burns, B.J., Borum, R., Hiday, V.A., 2000. Involuntary out-patient commitment and reduction of violent behaviour in persons with severe mental illness. *The British Journal of Psychiatry* 176 (4), 324–331.
- Swartz, M., Burns, B., Hiday, V., George, L., Swanson, J., Wagner, H., 1995. New directions in research on involuntary outpatient commitment. *Psychiatric Services* 46 (4), 381–385.
- Swartz, M.S., Swanson, J.W., Wagner, H.R., Burns, B.J., Hiday, V.A., Borum, R., 1999. Can Involuntary outpatient commitment reduce

- hospital recidivism? Findings from a randomized trial with severely mentally ill individuals. *American Journal of Psychiatry* 156 (12), 1968–1975.
- Swartz, M.S., Swanson, J.W., Hiday, V.A., Wagner, H.R., Burns, B.J., Borum, R., 2001. A randomized controlled trial of outpatient commitment in North Carolina. *Psychiatric Services* 52 (3), 325–329.
- Swartz, M.S., Swanson, J.A., 2004. Involuntary outpatient commitment, community, treatment orders, and assisted outpatient treatment: what's in the data? *Canadian Journal of Psychiatry* 49 (5), 585–591.
- Swartz, M.S., Swanson, J.W., Kim, M., Petrila, J., 2006. Use of outpatient commitment or related civil court treatment orders in five U.S. communities. *Psychiatric Services* 57 (3), 343–349.
- Swartz, M.S., Swanson, J.W., Monahan, J., 2003. Endorsement of personal benefit of outpatient commitment among persons with severe mental illness. *Psychology, Public Policy, and Law* 9 (1–2), 70–79.
- Taylor, P.J., Gunn, J., 1999. Homicides by people with mental illness: myth and reality. *The British Journal of Psychiatry* 174 (1), 9–14.
- Thom, K., O'Brien, A.J., McKenna, B.G., 2008. Judging nursing practice: implications of habeas corpus rulings for mental health nurses in New Zealand. *Psychiatry, Psychology and Law* 15 (1), 131–139.
- Thomas, P., 2003. How should advance statements be implemented? *British Journal of Psychiatry* 182, 548–549.
- Torrey, E.F., Kaplan, R.J., 1995. A national survey of the use of outpatient commitment. *Psychiatric Services* 46 (8), 778–784.
- Van Putten, R.A., Santiago, J.M., Berren, M.R., 1988. Involuntary outpatient commitment in Arizona: a retrospective study. *Hospital and Community Psychiatry* 39 (9), 953–958.
- Vaughan, K., McConaghy, N., Wolf, C., Mhyr, C., Black, T., 2000. Community treatment orders: relationship to clinical care, medication compliance, behavioural disturbance and readmission. *Australian and New Zealand Journal of Psychiatry* 34, 801–808.
- Wand, T., Chiarella, M., 2006. A conversation: challenging the relevance and wisdom of separate mental health legislation. *International Journal of Mental Health Nursing* 15 (2), 119–127.
- Wierdsma, A.I., Sjoerd, S., van Os, J.J., Mulder, C.L., 2008. Case registers in psychiatry: do they still have a role for research and service monitoring? *Current Opinion in Psychiatry* 21 (379–384).
- Zanni, G.R., Stavis, P.F., 2007. The effectiveness and ethical justification of outpatient commitment. *The American Journal of Bioethics* 7 (11), 31–41.

COMMENTARY ON PUBLISHED LITERATURE REVIEW

Introduction

Debate on compulsion in mental health care has changed in some respects since the publication of my 2009 literature review (O'Brien, Kydd & McKenna, 2009) however the issue of compulsion community mental health care remains contested. Debates about effectiveness continue and the introduction of CTOs in England has brought considerable critical commentary that has not been evident over the time that CTOs have been available in Australia and New Zealand. There has been extensive evaluation of the redesigned New York programme of assisted outpatient treatment (Swartz, Swanson, Steadman, Robbins & Monahan, 2009), and community treatment orders have become part of mental health service delivery in England and Wales where they have been subject to evaluation by randomised controlled trial (Burns et al., 2013). Literature has debated the question of what is the most appropriate outcome for use of CTOs, noting that reductions in hospitalisations may be less important than other measures such as reduced hospital days, increased community contacts with mental health services, reduced police contacts, reduced victimisation and other measures (Kisely et al., 2013; Swartz et al., 2009).

Another significant development has been the steady increase in use of community treatment orders in New Zealand since 2009. The increase in use of CTOs has been summarised in a recent publication (O'Brien, 2014) which is included in Chapter Nine. The debate on compulsion, especially community compulsion, has broadened in recent years to include a greater focus on a human rights perspective (Callaghan & Ryan, 2012; Light, Kerridge, Ryan & Robertson, 2012; Hewitt, 2011; Khurmi & Curtice, 2010) and in light of the 2006 United Nations Convention on the Rights of Persons with Disabilities (Callaghan & Ryan, 2012; McSherry & Wilson, 2011). This development is of particular relevance in New Zealand (Gordon, 2013) as the New Zealand CTO regime is considered to walk close to the line of human rights infringement (Dawson, 2008) and, as shown in the recent review (O'Brien, 2014) New Zealand's rate of CTO use is amongst the highest in the world.

This summary will review the recent evidence and literature in relation to compulsion in community mental health and will consider the implications of that body of work for the current study, and for future research on use of legislation in mental health care. The summary is representative rather than comprehensive, but the search strategy is unlikely to have missed any substantial areas of discussion.

International growth in compulsory community mental health care

Compulsory community treatment in the form of a CTO was introduced into England and Wales in 2008 (Woolley, 2010), Sweden (Sjostrom, Zetterberg & Markström, 2011) and in various forms in France (Gourevitch, Brichant-Petitjean, Crocq & Petitjean, 2013), Pakistan (Gadit, 2012) and Spain (Cañete-Nicolás, 2012). In many jurisdictions, and most notably in New Zealand, rates of use of CTOs have risen in recent years.

The New York State assisted outpatient treatment programme

The initial New York assisted outpatient treatment programme (AOT) (formerly involuntary outpatient treatment, or IOT) was discussed in the published literature review (O'Brien, McKenna & Kydd, 2009) where it was noted that the evaluation was beset by methodological problems and found no difference between the group subjected to compulsory community treatment and voluntary controls on any measure (Steadman et al., 2001). Following redesign and reauthorising of the statute, the AOT programme was evaluated on a number of measures of effectiveness. An initial evaluation (Swartz et al., 2009) reported that the programme provided improved outcomes on the identified measures, and without the feared negative outcomes of stigma and aversion to services. Results have since been published in a number of separate reports which are reviewed below. Programme recipients are reported to be more engaged with services than a voluntary comparison group, to experience reductions in hospitalisations and days in hospital if admitted (Van Dorn, Swanson & Swartz et al., 2010) to have reduced involvement with the criminal justice system, greater adherence with medication (Van

Dorn et al., 2010) and to be subjectively improved in many areas of personal functioning. In terms of experience of AOT, recipients were reported to be no more positive or negative about their mental health treatment than their voluntary counterparts.

Rehospitalisation and medication possession

Patients whose AOT orders lasted for up to six months were compared with those on orders for six months or longer (n=3576) (Van Dorn, Swanson & Swartz et al., 2010). This study also controlled for receipt of two forms of intensive case coordination, assertive community treatment and intensive case management. Benefits of reduced admission and greater medication possession were found to be sustained for those on AOT for six months or more, even after the AOT was ended. Receipt of either form of intensive case coordination was also associated with reduced hospital admission and greater medication possession, although the benefits were greatest when intensive case coordination was combined with sustained period under AOT.

Reductions in arrest

Patients who were under AOT or an equivalent voluntary agreement were compared to a matched sample of fully voluntary patients (n=181) (Gilbert et al., 2010). The voluntary agreement involved the patient in committing, voluntarily, to the conditions that would otherwise have been imposed by the AOT. Data on arrests were collected prior to either AOT or a voluntary agreement, during the period of either arrangement, and after either arrangement was discontinued. Those currently under AOT were significantly less likely to be arrested than those in either the pre-AOT or pre-voluntary agreement reference group (OR .39; $p < .01$). There was no significant difference in arrests between those under a current voluntary agreement and those in the reference group, and no significant difference between those in either the post AOT group or the post voluntary agreement group and the reference group. The researchers concluded that AOT may have been critical in reducing arrest rates, possibly because those known by police to be under AOT may, at the point of arrest for minor infractions,

have been diverted to mental health services. The results were confounded by the marked regional patterns in take up of AOT and voluntary agreements (Robbins et al., 2010).

Violence, suicide risk and social functioning

Patients recently made subject to AOT were matched to a sample of outpatients receiving voluntary services (n=184) (Phelan, Sinkewicz, Castille Huz & Link., 2010). Outcomes of serious violent behaviour, suicide risk, psychotic symptoms, quality of life, perceived coercion, and stigma were measured using standardised instruments administered by interview at baseline and at three, six, nine and twelve months. The authors reported significant reductions in serious violence perpetration and suicide risk, and significant improvements in illness-related social functioning in the AOT group. There were no significant differences in psychotic symptoms, quality of life, perceived coercion, or stigma. The authors gave a cautious interpretation of these findings, noting modest improvements in the lives of AOT recipients, but that these improvements may be related to mandatory treatment enhancement rather than AOT. They argued that the results did not support any expansion of coercion in outpatient treatment.

Effect of AOT on provision of voluntary services

A concern investigated in the New York evaluation was whether prioritising services to a group of patients under a court mandate might lead to a reduction in services to voluntary patients. In New York this concern persisted even although the AOT programme brought with it a significant infusion of new funding. The investigators compared service utilisation data for an eight year period (1999-2007) from 3295 voluntary patients with that of 3587 patients mandated to AOT (Swanson et al., 2010). The study found that in the early years of the AOT programme (1999-2003) significantly fewer voluntary patients compared to those under AOT received either of the enhanced intensive services available (assertive community treatment and intensive case management). However this effect reduced subsequently and the level of services to the AOT and voluntary patients was comparable. There was, therefore, some support for the

concern that compulsory treatment might “crowd out” voluntary patients, but this effect was limited to the early period of the implementation of AOTs.

AOT and ethnic minorities

An interesting finding in the New York evaluation was in relation to the statistically disproportionate use of AOT with African American citizens (Swartz et al., 2009). The evaluation considered whether this over-representation constituted discrimination by depriving an already disadvantaged group of their civil liberties. The researchers concluded that overrepresentation was a result of higher likelihood of being poor, uninsured, of relying on public rather than private health care, and of greater likelihood of previous psychiatric hospitalisation.

Despite the positive findings reported by these recent evaluations of AOT in New York some reservations apply, especially when considering how the results might inform thinking about CTOs in New Zealand. The New York programme brought a significant infusion of new funds into mental health care which enabled a rapid expansion of services. Expanded services were provided to both voluntary and involuntary patients. In addition, AOT was variably implemented across the State of New York. Most orders were issued in New York City where services are described as well coordinated, but in some counties few orders were used (Robbins et al., 2010). This variability suggests that a single legal framework, even when applied with enhanced services, may be utilised more in some regions than in others. In the case of New York, administrators in some counties did not accept the need for compulsion and instead spent the additional funding on service improvements. In some cases these counties entered into voluntary agreements for enhanced services with individuals as an alternative to AOT. In New Zealand no additional funding is provided to resource CTOs, although DHBs may target services preferentially to those on CTOs. There is some evidence that service users and clinicians regard CTOs as entailing a greater claim to services (e.g. Gibbs, 2010), but no research is available showing whether increased service provision impacts on level of services provided to voluntary patients. In regard to trends in use of community compulsion, the linking of AOTs to enhanced services seems to have acted as a restraint on rates of use in

New York. In New Zealand rates have increased markedly between 2009 and 2011 (O'Brien, 2014) unrestrained by a requirement to provide significantly enhanced services.

Randomised controlled trial of community treatment orders (OCTET study)

Since the publication of the New York and North Carolina studies in 1999 and 2001, there have been consistent calls in the literature for more robust investigations into programmes of compulsory community based treatment (e.g. Burns & Dawson, 2009). The introduction of community treatment orders in England in 2008, noted in the previous chapter, was attended by a good deal of debate and controversy (Lawton-Smith, 2008; Woolley, 2008). However it also provided the opportunity for an investigation of a new regime in a setting that had undergone a long process of deinstitutionalisation but without a CTO mechanism such as that available in New Zealand since 1992. The English legislation retained the existing provision for supervised discharged under the rubric of “leave of absence”, providing clinicians with two options for compulsory care in the community care. Having two options for compulsory community care overcame the significant legal and ethical barriers to randomisation to compulsory care (Dawson, Burns & Rugkasa, 2011). Matching experimental and control groups saw patients assessed as meeting criteria for compulsory community treatment, but being denied that treatment if randomised to a control group. This was a dilemma that faced investigators in the North Carolina trial (Swartz et al., 1999).

The OCTET (Community Treatment Orders for Patients with Psychosis) trial (Burns et al., 2013) was a randomised controlled trial that compared patients discharged to a community treatment order (n=167) with those discharged to supervised leave (n=169). Participants were matched on key demographic, social and clinical variables and data on the key outcome of hospital admissions were collected at 12 months. The study found no difference in hospital admissions, with 36% of each group being readmitted at some time in the 12 month follow up period. However patients on CTOs spent a considerably longer period under a compulsory regime than those on supervised discharge (mean = 183 days CTO group vs 8 days supervised discharge group). For those admitted to hospital, days in hospital were similar (42 days for the CTO group; 48 days

for controls). The authors concluded that in terms of the primary outcome of hospital admissions, the study results did not justify the “significant curtailment of patients’ personal liberty” (p. 1) entailed by the CTO.

The conclusions of the OCTET study have been questioned (Segal, 2013) on the basis that the research allowed clinicians who favoured long term use of the supervised discharge provision to not enrol patients, thus biasing the control group towards a short period of compulsory treatment. Segal also questioned the study hypothesis that the CTO would reduce hospital admissions, citing the two previous randomised controlled trials that found no evidence of support for this hypothesis. According to Segal, alternative outcomes, such as reduced victimisation, reduced hospitalisation preceding release, and reduced mortality may have shown benefits of the CTO, as such benefits have been noted in other recent studies of CTOs (e.g. Kisely et al., 2013). It seems that OCTET, despite being the largest randomised controlled trial yet conducted, will not decide the issue of CTOs.

Other recent studies on compulsory community treatment

A recent New Zealand study is of interest as it compares Maori and non-Maori experiences of community treatment orders (Newton-Howes, Lacey & Banks, 2013). This study was set in one New Zealand region (Hawkes Bay) and used a 13 item questionnaire answered with a 5 point Likert score. The questionnaire was administered to 81 patients under CTOs, 40 Maori and 41 non-Maori. The authors noted that previous literature showed some evidence of differences in use of mental health legislation between the two groups. However the study cited in support of this claim (Kumar et al., 2008) actually found no such difference, and did not consider CTOs. Consistent with the findings of Kumar et al. (2008), the authors also found no difference in the reported experiences of Maori and non-Maori. In another similarity to Kumar et al. (2008), Newton-Howes, Lacey and Banks (2013) argued that the availability to the Hawkes Bay patients of a kaupapa Maori service reduced the tendency of Maori patients to experience CTOs as aversive.

In an English report of CTO use in people with intellectual disability Perera, Shaikh and Singh (2013) reported that 17 such orders were made for this population, although some of the reasons for using the CTO were different than those usually given for adults with mental illness. For example CTOs were used to oblige patients to accept support from carers, to impose restrictions on their living environments, and to improve their physical health. Lepping and Malik (2013) reviewed the use of CTOs in Wales and found two main goals being pursued with CTOs. These were treatment adherence and containing risk. Risk appeared to be broadly defined with some clinicians making liberal use of the England and Wales legislation's freedom to impose discretionary conditions. Examples of conditions included restricting home visits to family, stopping driving and checking mail. Taken together these two English studies show that where CTOs allow wide clinician discretion they are likely to be broadly applied, and not always for reasons the drafters of legislation had in mind.

In the only study in the literature to report specifically on gender in relation to use of CTOs, Gibbs (2010) provided an analysis of the experiences of ten women who were part of the Otago cohort of 42 reported on by Gibbs et al., (2005). Gibbs' (2010) analysis found that the women reported both benefits and limitations, although overall the advantages of greater access to services, sense of safety and reassurance for families outweighed the disadvantages of sense of stigma and of feeling coerced to accept treatment. This finding was similar to that of Gibbs et al.'s (2005) earlier study of the larger Otago cohort. A Canadian study of service users' perspectives (Schwarz et al. 2010) reached similar conclusions to Gibbs et al. (2010), but concluded that perception of stigma related to the CTO compounded existing feelings of stigma associated with mental illness. An English qualitative study (Rugkasa & Canvin, 2011) also reported mixed views amongst service users who have experienced CTOs.

A small observational study of 34 patients in England (Awara, Jaffar & Roberts, 2013) found reduced hospitalisations and reduced hospital time for patients in the year following a CTO compared with the same group in the period of their mental health service contact prior to CTOs being used. The study was compromised by the lack of a comparison group, and by the variability of the baseline period. In a West Australian study (Kisely et al., 2013) length of hospital stay was found to be reduced and frequency of community contacts increased following introduction of CTOs, with no overall

increase in CTO use in the 11 years studied. Other recent studies have investigated clinicians' views of CTOs (Manning, Molodynski, Rugkkasa, Dawson & Burns, 2011); use of depot antipsychotic medication (Ingram, Muirhead & Harvey, 2009; Patel, 2011), and service users' perspectives (Fahy, Javaid & Best, 2013; Ridley & Hunter, 2013).

Summary of recent literature

The most striking feature of the literature since 2009 is the difference between the positive findings of more recent evaluation of the New York AOT programme and the negative findings of CTOs in England. The programmes identified different outcomes for compulsory community treatment, and it may be, as Segal (2013) argued, that the emphasis in the OCTET study on reduced hospital admissions rather than the range of associated outcomes explored in New York evaluation meant that OCTET was doomed to negative findings. However as the lead OCTET researcher has noted, reduced hospital admissions was a major rationale for the controversial English legislation, so there were compelling reasons to investigate that outcome.

Conclusion

Literature on compulsion in community mental health care continues to accumulate. However the issue of effectiveness remains undecided, despite the attempt to provide greater clarity through the suggested gold standard research of the randomised controlled trial (Relton, Torgerson, O'Cathain & Nicholl, 2010). The most recent New York study showed positive findings on some outcomes but overall the authors expressed several reservations about those findings. The main difficulty encountered, one that is common to every study of compulsory community treatment, is that of distinguishing an independent effect of the compulsory regime from the enhanced treatment that accompanies it. The improvements in outcomes such as reduced victimisation and criminalization deserve further attention, especially if they can also be achieved without the use of compulsory treatment. The increasing number of countries adopting compulsory regimes suggests that policy in this area is not driven primarily by evidence,

but by considerations such as risk management and the perception that legal compulsion provides the level of coercion necessary to achieve the desired outcomes.

This commentary completes Section Two of the thesis. The literature on civil commitment shows variation to be a significant issue both in New Zealand and internationally. In the case of New Zealand there is limited research examining variation under the current legislation although some studies have included compulsory admission as a dependent variable. There is no research examining the most prevalent form of compulsion, community treatment orders. The next section comprises a single chapter outlining the theoretical framework used in the thesis. That section is followed by a series of empirical reports examining potential explanatory variables.

SECTION THREE: THEORETICAL FRAMEWORK

CHAPTER EIGHT: THEORETICAL AND METHODOLOGICAL FRAMEWORK

Introduction

The theoretical and methodological framework of this thesis seeks to integrate ecosocial theory of social epidemiology (Krieger, 1994, 2001) with the theoretical work of philosopher and historian Michel Foucault (1965/1988; 2006)¹³. Within that framework I have used the methodological strategies of historical analysis, social epidemiology, and survey research to explore questions about mental health legislation, especially as they relate to variation. In this chapter I outline the theoretical framework and related methodological strategies. Throughout the chapter I refer to the “discipline of psychiatry”. By that term I mean all those clinical professions that align themselves with psychiatry, including social work, psychology and occupational therapy, and most especially my own discipline of mental health nursing. I also include legal disciplines to the extent that they accept and employ psychiatric discourse in their own practices.

It should not be surprising that a theoretical framework for the study of civil commitment draws on multiple theoretical influences for, as Bracken (1995) observes, inquiries into psychiatry are “not easily accounted for within a single theoretical tradition” (p. 1). Despite Foucault being one of the most widely known critics of psychiatry, psychiatric researchers, especially those with a clinical focus, have paid scant regard to Foucault’s work (Bishop, 2009; Clapham, 2012). An integration of epidemiological and Foucauldian theory does not appear to have been attempted in the literature to date, so the framework proposed is both novel and innovative. This chapter provides an outline of Foucault’s account of psychiatry and his broader historical project for an archaeology of the human sciences, followed by a summary of Krieger’s model of ecosocial theory. The chapter concludes with an overview of how these theoretical influences are used in the thesis.

¹³ Throughout this chapter, and in Chapter 14 (Discussion) I use the terms “theory” and “theories” to refer to Foucault’s work, but as I discuss below, Foucault did not articulate a unifying theory and actually resisted the idea of attempting to do so. My use of “theory” and “theories” should be taken to refer to Foucault’s body of work, but not as implying that I have constructed from that work a unifying structure. On page 138 I discuss my own framework as unique to the present work.

I have taken from Krieger (2001) and Weed (2001) the idea that epidemiology needs to articulate its theoretical commitments. My intention is to achieve this using a Foucauldian framework. A synthesis of epidemiological and Foucauldian theory introduces a productive theoretical tension given that epidemiology's practice of enumeration is one of the techniques of governmentality first developed in the seventeenth century, and which Foucault regards as critical to the modern workings of power. The most obvious synergies between Foucauldian and ecosocial theory are that both are concerned with the social, both take a critical approach to health care, and both attempt to account for the operation of power. Foucauldian theory and social epidemiology can be said to belong within a broadly social constructionist theoretical framework, as both conceptualise health as produced within a network of social relationships. The major point of difference is that social epidemiology arguably has a different agenda in terms of health than Foucault; social epidemiology specifically attempts to account for the biological *qua* biological, something Foucault is not concerned with. On the other hand, Foucault's concern with health is part of his expansive theorizing of the formation of individual subjectivity within western society. I have called the resulting theoretical framework Foucauldian because the research is an attempt to both utilise and respond to one of psychiatry's most trenchant critics. In a review of Krieger's epidemiology – the only reference found in the literature linking Foucault and Krieger – Koch (2009, p. 104) argued that in her concern with social determinants of health and disease Krieger was “less a follower of the historian Foucault than of nineteenth century [geographers of health]”. Foucault's theories directly address and extend Krieger's ecosocial theory. Foucault elaborates, in a richly productive way, Krieger's concern with history, with particular regard for the history of psychiatry. Krieger's ecosocial theory of social epidemiology allows for consideration of multiple factors contributing to civil commitment, for their contingent operation historically and socially, and for their operation over multiple levels of organisation across time and space. A defining feature of Foucauldian critique of psychiatry is its view of psychiatric knowledge as historical and contingent, rather than produces “truthful discourse that sanction(s) psychiatry as a scientific discipline” (Iliopoulos, 2012, p. 68).

From a Foucauldian perspective the variables considered within an epidemiological analysis may themselves be a product of psychiatric discourse, so should

not be assumed to pre-exist their incorporation into that analysis. Krieger's ecosocial theory is a comfortable fit with Foucault's work, and with the existing literature on civil commitment which shows civil commitment to be a complex phenomenon with multiple contributing factors.

Foucault's analysis of psychiatry

Foucault wrote extensively on the history of psychiatry, on knowledge and power and on social institutions. The scope of Foucault's work is such that it is impossible to devise a theoretical framework that draws on all his key ideas, a situation compounded by Foucault's resistance to outlining a totalising theory (Rabinow, 1984). The theoretical framework of this thesis is one of a range of possible Foucauldian frameworks, but one which is specific to the current work. In keeping with Foucault's notion of "the author" (Foucault, 1984) I do not claim that my theoretical framework is simply a restatement of Foucault's ideas. My theoretical framework has been developed for a specific purpose, analysis of variation in mental health legislation and is not offered as having wider application.

In developing this framework I have drawn selectively from Foucault's work, focusing especially on how psychiatric knowledge and power are interdependent within the history of the asylum, an interdependence that is played out in the current relationship between modern concepts of mental illness and committal practice and the psychiatric service system. The full implications of Foucault's historical analysis become apparent in considering the role of psychiatry, especially the process of committal, in the formation of the subjectivity of those committed. Primary sources for the theoretical framework are Foucault's first major work *Madness and Civilization* (1965/1988)¹⁴ and the posthumously published *Psychiatric Power* (2006). The latter work extends considerably the arguments of *Madness and Civilization* and offers some important revisions. Several of Foucault's other primary works have also informed the theoretical framework. These are: *The Birth of Clinic*; (Foucault, 1994); *The Order of Things* (Foucault, 1970);

¹⁴ *Madness and Civilisation* was republished in 2006 (Foucault, 2006). The first English edition, the edition used in developing this framework, is an abridged version of the larger work, which is Foucault's PhD thesis, submitted in 1954.

Discipline and Punish (Foucault, 1995); *The Archaeology of Knowledge* (Foucault, 1972); and *The Will to Power* (Foucault, 2008). In addition I have drawn on an extensive secondary literature, including Rabinow's (1984) *Foucault Reader*.

Application of Foucault's ideas to psychiatry consists mainly of critical accounts of psychiatric power (Horrocks & Jevtic, 2001; Stevenson & Cutcliffe, 2006), perhaps an indication that psychiatry has not emancipated itself from the social control role it assumed in the asylum era. However, there are also some Foucauldian analyses of psychiatry that attempt to incorporate Foucault's critical position within an account of psychiatry as a clinical practice (e.g. Bracken, Khalifa & Thomas 2007; Mathews, 1995; Roberts, 2005). My intention in employing a Foucauldian framework for this study is to show how psychiatry needs to respond to the Foucauldian critique that despite the closure of the asylums it continues to operate as a disciplinary technology in the formation of subjectivity. As Beaulieu and Fillion (2008) have noted, Foucault died before the full realisation of deinstitutionalization, meaning that contemporary scholars must revisit Foucault's work to consider its implications for current psychiatric practice. This thesis is one attempt to apply Foucault's analysis to contemporary practice.

Foucauldian analysis in this thesis is intended to highlight the complexities inherent in use of mental health legislation and to show that while coercion is troubling from a clinical perspective, it reflects something more than the intentions and motivations of individual clinicians, and may even contradict those intentions. Such a position is consistent with Foucault's view that everyone is caught in technologies of power, including "those who exercise this power and those who are subject to it" (Foucault cited in Rabinow, 1984, p. 19.) Coercion also may not reflect the preferred social role of the psychiatric professions (Kallert, 2008) therefore creating tension between the professions and the wider society. On the other hand, Foucault's theory could be said to suggest that coercion is a natural component of the microphysics of power, and a reflection of psychiatry's position of authority in relation to madness.

Foucault took a critical view of the institutionalised practices of psychiatry, beginning with his history of psychiatry *Madness and Civilisation* (1965/1988). Speaking at the Collège de France in 1973 Foucault stated that at the time of writing *Madness and Civilisation* he was "very ignorant of antipsychiatry and especially of the psycho-

sociology of the time” (Foucault, 2006, p. 13-14). He did not identify with the label sometimes applied to him of being “anti-psychiatry” (Bracken & Thomas, 2010¹⁵) although in his recall of the “dear hysterics” (Foucault, 2006, p. 253) as the “first militants of antipsychiatry” (p. 254) he clearly had sympathy for antipsychiatry as an idea, if not for its intellectual and political organisation. Instead, Foucault saw his work as transforming the relationship of western thought with madness and psychiatry, especially in relation to the “truth” of the discourse of psychiatry (Foucault, 1991). The focus of this thesis on use of mental health legislation makes Foucault’s body of work apposite as a source of theory. Although Foucault denied that he wished to provide a unifying theory of psychiatry, medicine or the state, his genealogical approach to knowledge coheres well with the interwoven history of asylums, legislation and psychiatry as outlined in Chapter Two. As will be discussed later in this chapter Foucault’s ideas also cohere well with the theoretical commitments of social epidemiology. Because Foucault resists specifying a unifying theory or account of a phenomenon such as civil commitment, a Foucauldian account can recognise multiple influences without according primacy to any one factor, a specific set of factors or a single theoretical perspective.

Foucault’s historicising approach locates psychiatric theory within the carceral practice of psychiatry rather than within a neutral set of propositions. His position is summarised by Bracken (1995, p. 10): “According to Foucault, psychiatric theory and practice are premised upon the historical incarceration of the insane.” Bracken’s analysis, while accurate, understates Foucault’s wider concerns with the emergence of disciplinary regimes (Foucault, 1995) of which psychiatry is but one example. With that qualification in mind Bracken’s characterisation applies especially to Foucault’s early work such as *Madness and Civilisation*. Power in this work is oppressive, working to impose truth. In his later work Foucault (1995; 2006) wrote of power as productive, especially within the emerging institutions of the nineteenth century.

¹⁵ For a recent example of the mistaken identification of Foucault with “anti-psychiatry” see Shorter (2011). For a rebuttal, see Double (2011).

Foucault expressed the relationship between power and knowledge thus:

We should admit that rather than power produces knowledge (and not simply by encouraging it because it serves power or by applying it because it is useful); that power and knowledge directly imply one another; and that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time, power relations (Foucault, 1995, p. 27.)

This analysis of Foucault's has a compelling immediacy for the discipline of psychiatry, and especially for the emergence of psychiatric knowledge and authority in the asylum era. As the historical background in Chapter Two showed, medical assumption of legal powers to detain, and administrative authority over the asylum, enabled a science which had not yet been developed to assert, at the level of jurisprudence, the truth of its knowledge claims. The "knowledge" that insanity was a mental illness was produced within the medical institution of the asylum and was shown to be true by the exercise of medical authority. Later in this thesis I will explore the argument that the disciplinary power inherent in mental health legislation produces the knowledge of committability, risk and dangerousness.

While it might reasonably be objected that the historical circumstances of the asylum no longer apply, it must also be acknowledged that a set of practices developed in a specific set of historical circumstances might carry into the present the influences of their origins or as Mathews (1995, p. 23) expresses it, "the residue of this history". It is at least a reasonable concern that practices of coercion and restraint might continue in less overt ways in the post asylum era (Iliopoulis, 2012a). Foucault (2006, p. 181) argued in relation to psychiatric knowledge that what was true of "proto-psychiatry" (the psychiatry of the early nineteenth century) "is no doubt true, to a considerable extent, for the whole history of psychiatry up to the present"¹⁶. This concern is heightened when the administrative system of psychiatry still has significant reliance on a framework of coercive legislation.

¹⁶ This remark was made in a 1974 lecture at the Collège de France.

According to Foucault (2006), the historical ascendancy of psychiatric medicine reflected the realignment from sovereign power, marked by overt and visible force, to disciplinary power, marked by techniques of observation and monitoring which, ideally, were internalised. Disciplinary power originated as early as the late Medieval period, as religious and lay communities gradually assumed the role of inculcating order in groups of individuals. It formed the major nexus of political power by the nineteenth century. Disciplinary power requires greater efficiency than sovereign power and appeals to the subject to recognise the authority of the disciplining agent. Foucault (2006) presents as a critical moment in the emergence of the disciplinary power of psychiatry an encounter between King George III and his asylum attendants. This encounter is described in detail by Pinel (1806/1988) as a paradigm case of disciplinary power usurping sovereign power. The King is mad and must recognise the doctor's truth although the doctor, Thomas Willis, is absent from the crucial scene and in any case does not have a diagnosis or even a theory with which to explain the King's madness. Disciplinary power does not reside in the doctor, but operates through "relays" – systems of articulation represented by King George's attendants.

Bentham's panopticon is often cited as an example of the operationalising of disciplinary power as its design imposes unimpeded observation and demands the internalisation of the authority of the prison (Foucault, 1995). Recognition of disciplinary authority in turn obviates the need for the exercise of overt (sovereign) power. In its asylum origins psychiatric authority inherited the vestiges of sovereign power as they passed from the juridical institutions, to the nascent normative institutions of the asylum, the prison and the hospital. However the overriding function of the asylum was disciplinary; individuals were "disciplined" into accepting the doctor's truth. Foucault (2006) cites as a specific example Pinel's (1806/1988) injunction that a patient's acceptance of the doctor's version of reality is not only therapeutically necessary, it constitutes a cure. For Foucault the significance of the transaction between patient and doctor is that it precedes diagnosis, and thus the articulation of psychiatric knowledge. In Foucault's analysis, the exercise of power through incarceration generated the knowledge claimed by emergent science of psychiatry. In this formulation, Foucault reverses the roles commonly accorded to knowledge and power. Rather than seeing power as simply repressive, Foucault sees power as generative, and in the case of the asylum, as generating the scientific knowledge of psychiatry.

In Chapter Two I discussed Philo's (2004) critique of Foucault's argument about the discovery of the insane within the mixed carceral institutions of the nineteenth century. Philo's response was to note that madhouses existed in England throughout the early modern period, and so insanity was not a creation of the nineteenth century asylum. Although Philo's criticism is a reasonable interpretation of what Foucault had to say in *Madness and Civilisation*, in his later writing Foucault (2006) recognised the incarceration of the insane prior to the asylum, and the role of medicine in the early places of confinement. However Foucault also noted that the doctor's role prior to the nineteenth century was a more traditionally medical one, not the authoritative presence of the master of the asylum. I also discussed in Chapter Two that the psychiatric asylum evolved and proliferated in the absence of a science of psychiatry. In the early nineteenth century psychiatry was faced with the competing explanatory framework of moral treatment, a tension resolved by appropriating that framework before abandoning it to the assertion of psychiatric science. In this sense it seems reasonable to argue as Foucault does, that the *medical specialism of psychiatry* was produced by the asylum, a proposition supported by Scull (1993), even if the *insane* were already well recognised. Some of the more nuanced histories of madness (e.g. Bartlett & Wright, 1999; Parry-Jones, 1972; Philo, 2004; Scull, 1993) have shown that medical practice in the asylum era cannot be simplistically understood as a unilateral imposition of power, albeit that the emergence of the discipline of psychiatry did involve an assertion of power by a new medical specialism (Dowbiggin, 2011).

As psychiatry has secured greater acceptance of its epistemological claims and administrative authority and, most notably in relation to the process of deinstitutionalisation, it has been less reliant on the vestiges of sovereign power and more adept at exercising disciplinary power. The retreat from the enclosed physical space of the asylum has been matched by the emergence of more subtle forms of power that can operate at a distance, without psychiatric professionals and patients being present at a single site. Seen in this way, committal under section 11 (acute admission) or section 29 (community care) involve different technologies of power, although the overall function of both is disciplinary. Acute admission involves detention and containment but in the service of the wider objective of care in the community; community care involves mainly the disciplinary processes of observation and normalization in the form of treatment compliance. In making this comparison it needs to be noted that while a distinction

between the power represented by section 11 and that of section 29 may be useful as a heuristic, inpatient and community care are mutually supportive aspects of a single mental health service system: each draws on the other. Further, because the emphasis of mental health care in New Zealand is on care in the community it could be argued that the primary technology of power is exercised in the community. In New Zealand, most people subject to mental health legislation are not contained in a hospital facility, but are in community accommodation, many in their own homes where they may be subject to treatment regimes under community treatment orders (Minister of Health, 2005). Service activity also reflects the predominant emphasis on community care (Ministry of Health 2013b). From a Foucauldian perspective, containment and observation in the asylum have been replaced by the diffuse vigilance of community treatment.

The view of power in Foucault's later writing as not inherently repressive is of great significance when considering the use of mental health legislation. As Kendall (1995) argues, power is inherent in social relations, of which compulsion under legislation is but one very specific type. According to Kendall (1995) whether power relations are good or bad, depends on their reversibility, and our evaluation of their effects. Obviously, procedural protections which potentially render committal decisions reversible are important when considering the effects of mental health legislation, and it is crucial, within a Foucauldian framework, to account for individuals' attempts to mediate or reverse committal decisions. Roberts (2005, p. 40) has suggested that Foucault's concept of "reciprocal elucidation" provides a model of how mental health care can take account of the discursive construction of power, a process that could explain the judicial-clinical transactions that occur in hearings and appeals under mental health legislation. A central tension in applying Foucault's ideas to the use of mental health legislation is the position of committal as at once a clinical and a juridical procedure.

A final aspect of Foucault's thinking is important for this thesis. Epidemiology is an inherently reductive research method, and Foucault stresses that contingent explanatory systems, of which social epidemiology is an example *par excellence* can never fully grasp the human experience of madness (Kovel, 1995). Foucault regards the human being as a "complex system of distinct and multiple elements, unable to be mastered by the power of synthesis" (1991, p. 94). Although the focus of this thesis is not madness, but mental health legislation, Foucault's stricture nevertheless applies. The

multiple variables associated with use of mental health legislation, especially when considered systematically as advocated within Krieger's ecosocial model, can provide some clarification of patterns of variation in use of legislation, although such an account will always be partial.

Several limitations to Foucault's thinking are important when developing a Foucauldian theoretical framework. Given its most radical reading Foucault denies the possibility of universal standards of rationality, something Mathews (1995) sees as eliminating the possibility of distinguishing between mental illness and behaviour that is simply unconventional. This would clearly be problematic for a science of psychiatry which is premised on acceptance of the category "mental illness". The example of homosexuality is often cited as an example of psychiatry's willingness to pathologise difference and to lend medical authority to a political agenda (Silverstein, 2009). However, Mathews (1995) argues that valid distinctions between something called "illness" and unconventional behaviour can be made, especially given that current concepts of mental illness reference the potential of harm to the individual not in terms of others' imposed values, but in terms of the values and goals held by the mentally ill person. Furthermore, Mathews argues that for the purposes of theoretical clarity it is important to make distinctions where that is possible. Hacking (1999), while expressing sympathy for Foucault's archaeological method, is untroubled by Foucault's stance on universal rationality, arguing that psychiatric categories come and go (for example hysteria and multiple personality). Hacking further argues that our concern should be not whether these categories are "real" in some abstract Platonic sense, but whether they constitute accepted ways of being in the world at specific times. Clearly such a view allows for categories to be used, albeit that they may be contested and may, like hysteria, some day disappear. In the following section I respond to one especially influential argument about psychiatric categories.

In critiques of psychiatry a frequently made argument is that the concept of "mental illness" has no validity because what is being referred to is not an altered physical state, but something categorically different. This position has been most famously advanced by Szasz in his *The Myth of Mental Illness* (Szasz, 1961/1974)¹⁷, the

¹⁷ And re-stated recently (Szasz, 2011)

argument being that the concept of mental illness is a form of category mistake. There are compelling responses to Szasz (see for example Schwarz & Wiggins, 2005) but what is important to note here is that despite his critique of psychiatric power Foucault did not deny the reality of “mental illness” much less the experience of madness. Foucault objected to the reification of concepts such as “mental illness” within positivist medical science, and especially to the use of psychiatry as an authoritative, exclusive narrative. Foucault did not concern himself with the ontological question of whether madness should be conceived as a variety of illness, but with the *consequences* of the classification of madness as a medical concern. According to Beaulieu and Fillion (2008, p. 86) Foucault’s concern was “to view madness less as a clinical case than as a cultural condition”. For Foucault this can only be answered within an historicising framework – Foucault’s archaeology – that asks how in the modern period it became possible to speak of mental illness.

Psychiatrists, especially those committed to a biological model of mental illness, find some common ground with Szasz (Schwarz & Wiggins, 2005). They accept that to be a valid category, mental illness must have at least a putative biological substrate. Like their 19th century predecessors they argue that mental illness is indeed an illness in the terms Szasz requires. However they object to what they understand to be Foucault’s critique, arguing that the brain is the biological substrate of the mind, and that evidence is increasingly establishing the biological basis of mental illness which is therefore objectively real and not socially constructed. Perhaps the best proponent of this view is psychiatrist Edward Shorter who is also an accomplished historian. Shorter’s *A History of Psychiatry* (1997) can be read as a defence of biological psychiatry (which is how Shorter presents his work). In that book Shorter specifically rejects the arguments of Foucault, at least those laid out in the first abridged translation of *Madness and Civilization*. I will not attempt here to respond in full to Shorter’s critique. However, it is worth noting that the historical argument of *Madness and Civilization* represents only part of Foucault’s analysis of psychiatry. Furthermore Foucault’s analysis of psychiatry is only one part of Foucault’s wide ranging oeuvre, which extends to other health and social institutions and includes knowledge itself. Shorter himself makes many criticisms of past psychiatric practices, especially of interpersonal psychiatry, which is dismissed as “romanticism”, and psychoanalysis, which he describes as little more than neurologists’ attempts to legitimise the help-seeking of the affluent classes. These are both social constructionist

arguments: they propose that “romantic” and psychoanalytic models of psychiatry depend on socially constructed rather than objectively real concepts. The models of “romantic” psychiatry and of the early neurologists are the product of social factors reinforced by the authority of medicine, an argument that has more than a superficial resonance with those of Foucault.

In his analysis of the reasons for the swelling of the population of 19th century asylums Shorter’s arguments are especially relevant to this thesis. Shorter argued that venereal disease and alcoholism increased significantly in the 19th century, and that this, rather than medicalisation by psychiatrists, contributed to the increased numbers of people placed in asylums. Shorter acknowledges that this cannot be a complete explanation, as the proportion of admissions due to syphilis and alcohol were still relatively small, even if they did increase markedly. However Shorter goes on to argue that an otherwise unexplained increase in the incidence of schizophrenia was the main contributor to an expansion of asylum populations. In contemporary times schizophrenia, and especially the broader category of psychosis, is one of the factors strongly associated with rates of committal (see Chapter Six). Such an association would have held in the 19th century if Shorter’s (1997) explanation for the growth of asylums is correct. The theoretical framework of the thesis will be used to inquire into whether, or to what extent, a clinical concept such as psychosis can explain current rates of committal in New Zealand, and especially regional variation. Even when the strength of association is high, the Foucauldian framework requires analysis of whether “psychosis”, like “schizophrenia” conceals a set of language and practices that construct individuals as the subjects of psychiatric discourse. It should be noted here that this questioning of the explanatory power of psychosis is not an argument after Szasz (1961/1974) that schizophrenia, like other mental illnesses is a “myth” or after Boyle (2002) a “scientific delusion”. Consistency in the population subject to civil commitment supports there being a core set of phenomena that trigger the response of civil commitment; changing definitions of what those phenomena are supports the view that in different historical periods they have been conceptualized differently, and at some periods have not triggered a coercive response at all.

So far this outline of Foucault’s views on psychiatry and power has highlighted Foucault’s critical stance on psychiatry and its basis in analysis of the emergence of the

operation of disciplinary power that characterises modernity. The next section of this chapter will discuss how the theoretical commitments of social epidemiology can be aligned to a Foucauldian framework to inform an investigation into variation in the use of mental health legislation. If the psychiatric professions are to continue to manage madness they need to recognize that this is a fully social undertaking, not merely the application of the techniques of scientific medicine in a social context. This recognition provides the basis for a response to criticisms of psychiatry as a form of social control. Articulating a theory of social epidemiology that accounts for the “social” – something clearly required for a Foucauldian theoretical framework – is made difficult by the fact that epidemiology is a biomedical discipline that has traditionally focused on distribution of individual risk factors rather than “macro” factors such as the social environment. Nevertheless there is enough literature both on theory and research applications of a social model of epidemiology to support its utilisation in the current study.

Theory of social epidemiology

Recent scholarship in epidemiology has addressed the need to move beyond a concern with methods and practice to articulating the theories that underpin the discipline (Weed, 2001). Although epidemiology addresses issues of causation, and thus draws on scientific theories, like most areas of medicine it attempts to support broad generalisations but not universal laws (Schaffner, 1991)¹⁸. Epidemiology also supports ethical theories because the subject of interest to epidemiology is the health of individuals and communities (Weed, 2001). Ethical theory is obviously of interest in a study of mental health legislation as such legislation involves a significant infringement of normally accepted rights.

In outlining a theoretical framework for social epidemiology Krieger (2001, p. 668) states that “the central question is who and what is responsible for population patterns of health, and disease, and well-being, as manifested in present, past and changing social inequalities in health?” Such a formulation is helpful for analysis of

¹⁸ Cole (1996) disagrees with this view in relation to epidemiology, citing the non-random distribution of disease as an example of an empirical generalisation that amounts to a universal law. Cole’s argument has relevance for civil commitment which also show a consistent pattern of non-random distribution.

variation in mental health legislation, especially given that the literature review showed a clear relationship between rates of compulsion and social factors (Bindman, et al., 2002; Lorant et al., 2007; Siphoned et al., 2010). Krieger (2001) argues that theory is key to understanding the relationship between inequalities in health outcomes and population distributions of privilege and deprivation. According to Krieger there is a fundamental tension between theories that seek individualistic explanations (or causes) for health inequalities and those that seek societal explanations. The discipline of social epidemiology introduces social analysis to epidemiological research, raising questions about the contribution of societal level variables to health outcomes.

Krieger (2001) notes that the within the literature on epidemiology inclusion of “social” as a category is infrequent. She identifies three theoretical strands within the literature all of which seek to “elucidate principles capable of explaining social inequalities in health” (p. 669) but giving differing emphasis to social and biological factors. In relation to use of mental health legislation theories emphasising biological explanations can offer little in the absence of a plausible model linking biological variables to legal status. Setting aside debate about a biological theory of mental illness, it is clear that social factors are associated with variation in rates of committal.

Literature on social epidemiology identifies a number of factors that can usefully be conceived of as contributing to variation in rates of civil commitment. Within *psychosocial* theories contributors include acquired predisposition and population psychosocial factors such as social capital and social cohesion. Overall, psychosocial theories focus on individual response to stressors rather than the more sociopolitical question of the source of those stressors. *Social production* theories problematise the distribution of resources in societies and identify social determinants of health, and structural barriers to health. Such theories introduce an overtly political agenda, specifically in relation to distribution of power and class inequality at local and global levels. Within social production theories specific inequalities, for example in gender and ethnicity, can be considered as contributing to health outcomes. Analysis can also consider the role of social justice, including issues such as abusive relationships, trauma, and discrimination. There are also issues of rights to health, a concern that carries implications for governmental accountability. In relation to mental health legislation this level of analysis supports the position outlined by Kaiser (2009) who argued for inclusion

of positive rights in the overall mental health policy framework, especially where compulsion is concerned. Devolution to community care has severed the historical link between committal and provision of social services in the form of accommodation and supported living. A social production model of health has the potential to address the rights of those subject to committal to a minimum level of services, in addition to considering how social inequality may have contributed to the need for committal in the first place.

Despite the promise of a social production model Krieger (2001) argues that it has limited power to clarify the specific determinants contributing to inequalities. When examined closely, many “social” factors are revealed as socially distributed individual factors, introducing an element of circularity into the analysis (Kuller, 1999). In relation to mental health there is obvious difficulty in separating factors such as low income, access to primary health care services, and pathways to mental health care. In relation to civil commitment, a clinical model of committability may represent a medical response to a problem of social inequality. This calls to mind the Foucauldian notion that it is psychiatric power that produces the “knowledge” that an individual meets criteria for committal. The “truth” of this transaction is not a function of a set of non-contingent propositions, but is socially constructed. At this point it is important to mention that “socially constructed” does not mean that there is nothing “real” beyond the interaction between the individual subject to civil commitment and the psychiatric professionals (Hacking, 1999). It simply means that psychiatry, complete with its legally coercive framework, is one way of understanding what is going on, and is a version of events that is socially mandated.

A third theoretical strand *ecosocial theory*, seeks to address the multiple issues at play in health. The term “ecosocial” was introduced by Krieger (1999) to capture multiple influences on health, and their variation in time and space and over different levels of biological, ecological and social organisation (Krieger, 2001). Other variants of ecosocial theory have since been invoked, all of which seek to generate some broad principles of inquiry, rather than to articulate a totalising theory (Krieger, 2001). Krieger’s ecosocial theory incorporates: an historicised model of health and human biology; societal arrangements of power; individual life course; interplay between multiple levels of exposure; susceptibility and resistance, from individual to neighbourhood and societal;

and accountability and agency of individuals and also those who theorise health issues. While there is an obvious biological strand within Krieger's theory, the theory is broad enough to encapsulate the range of possible factors at play in use of mental health legislation. Most importantly, the model accounts for the social construction of illness and disease, a concept that is extremely hospitable to Foucault's social constructionist account of madness.

The ecosocial theoretical framework will be seen to reflect the modelling of explanatory variables presented in Chapter 6. In that chapter thirteen variables were discussed as contributing to variation in rates of civil commitment. The thirteen variables do not represent a complete list, but cover those most commonly referred to in the literature. The variables were grouped into three categories, those to do with the committal process, patient variables and wider social variables. They reflect the different levels of organisation described by Krieger (2001) and thus lend themselves to analysis using an ecosocial model. The wider scope of Krieger's model creates the opportunity for a multiple level model to be further theorised using Foucault's theories, especially as they reflect Krieger's concern for an historicised model. This latter concern recalls Foucault's (1972) archaeological method, his notion of who gets to declare knowledge, and of power producing knowledge (Foucault, 2006), issues that go to the heart of decisions about civil commitment.

Integrating social epidemiology within a Foucauldian framework

As noted in the introduction to this chapter, there are some significant synergies between Foucauldian theory and Krieger's ecosocial theory of social epidemiology. These are the concern with the social, the critical approach taken to analysis of health care, and their focus on the operation of power. Foucault's work is grounded in historical analysis and sees the asylum as having provided a site of disciplinary power that enabled the generation of the science of psychiatry. In contemporary time the medical discipline of psychiatry enjoys the social status that accords it considerable authority to speak about mental illness, albeit that that authority is both resisted and challenged. The legal power to sign certificates of assessment, wrested historically from lawyers in the provisions of

the 1828 amendment to the English Madhouses Act (Scull, 1993) authorises medicine to speak in the critical domain of committal decisions. Although committal decisions are both clinical and legal, recent scholarship has argued that even legal advocates may adopt a clinical perspective which has the effect of silencing the traditional legal perspective of autonomy within a dominant medical discourse (Perlin, 2003; Sjoström, 1997). Foucault adds to Krieger's ecosocial model of social epidemiology a concern that the variables associated with civil commitment are not value free, but may be discursively constructed within the discourse of psychiatry. Such a discourse may structure the phenomena observed, so that a decision to invoke mental health legislation becomes common sense, especially when linked to a diagnosis of psychosis. However, the discursive construction of the individual's clinical presentation will be opaque to all but the most consciously reflective actor. This structuring of the person's clinical presentation within a discourse of psychiatry is likely to apply especially to phenomena such as diagnosis and assessment of risk which clearly involve a degree of subjectivity, even if they are understood as matters of expert clinical opinion. But even more "objective" phenomena such as gender and ethnicity are interpreted and assigned meanings in specific contexts and so are discursively constructed (Krieger, 2001). As the literature review showed, these variables are known to have a clear relationship with rates of committal.

Methodological strategies

This thesis uses different methodological strategies for different pieces of empirical and analytical work. The different strategies are each aimed at contributing to understanding variation in use of mental health legislation, and are linked together within the ecosocial and Foucauldian theoretical framework. Methods of historical analysis inform the background to the thesis, and especially Chapter 4 which analysed the text of all five iterations of New Zealand mental health legislation to reveal compulsion as a practice that has always extended to community settings in New Zealand. Ecosocial and Foucauldian theory share a commitment to knowledge and health as historically situated and the analysis of the background chapters has provided historical context for the present day practice of committal.

Several surveys have been used to generate data on individual or social level factors in committal. Data from official reports and secondary analysis of data from a range of publications has enabled the national and international pattern of community treatment orders to be reported, and has also provided trend information about community treatment orders in New Zealand. A survey of mental health service provision reported in Chapter 11 relates a measure of service provision to rates of committal, providing both a regionalised picture of service provision and an analysis of its relationship to committal rates. A survey of clinicians with key roles in the process of committal was undertaken to identify individual level factor in committal decision making. Finally, published data on committal rates and on area social deprivation in New Zealand were used in an ecological study to investigate a possible relationship between area level deprivation and rates of committal. The results of the analytical and empirical work are reviewed in Chapter 14 where the ecosocial and Foucauldian theoretical framework is used to provide a theorised interpretation and to suggest a model of the committed person as produced by the intersection of psychiatric knowledge and power at a particular historical moment. Thus theory and methods are brought together in an interpretive strategy aimed at improving understanding not only of variation in rates of committal, but the practice of committal itself.

Conclusion

The theoretical framework of this thesis draws on Foucault's concepts of the historical construction of psychiatric power and knowledge, and the third of three strands of epidemiological theory identified by Krieger (2001), ecosocial theory. Within this theoretical framework, civil commitment and service provision rest on a foundation of medical science and authority vested in the discipline of psychiatry. Ecosocial theory captures the multiple influences on civil commitment and considers the phenomenon of civil commitment within a social context. This blend of theoretical influences is intended to generate observations of the different influences on civil commitment, how they might operate together or in combination, and how they might be accounted for within a comprehensive explanatory framework. A range of research methods, historical, survey and epidemiological are employed within the theoretical framework.

Four pieces of empirical work follow this chapter. They are: a regional analysis of New Zealand's use of legislation and a comparison with international rates; an ecological study of social deprivation and use of mental health legislation; a survey of service provision and correlation with use of legislation, and pilot study of a measure of clinician attitudes to explore their possible association with use of legislation. Following these four reports two discussion chapters complete the thesis.

SECTION FOUR: EMPIRICAL REPORTS

INTRODUCTION TO SECTION FOUR

Section Four of the thesis presents original empirical work driven by the ecosocial theoretical framework outlined in Chapter Eight. Ecosocial theory as outlined by Krieger (1994, 2001) provides for analysis of health phenomena at various levels of organisation from the cellular through to the social and political. In order to explore use of mental health legislation, ecosocial theory requires methodological approaches suited to the level of analysis undertaken. A wide range of studies can be included within an ecological framework. In the current thesis, four studies are included, focussing attention on variation in use of legislation in New Zealand and factors associated with that variation. Each of the four studies is presented a separate chapter of Section Four.

The first study takes rates of use of community treatment orders over seven years and shows a consistent pattern of regional variation, and a marked increase in rates between 2005 and 2011. New Zealand's rate of use of community treatment orders is also shown to be high by international standards, and this paper considers the implications of regional variation and New Zealand's high rate of community compulsion in light of the country's commitment to international human rights treaties, most notably the 2006 United Nations Convention on the Rights of Persons with Disabilities. This study was published as: O'Brien, A. J. (2014). Community treatment orders in New Zealand: Regional variability and international comparisons. *Australasian Psychiatry* (online ahead of print).

The second empirical report is an ecological study of social deprivation and use of mental health legislation in New Zealand. This study drew on national data on use of two sections of mental health legislation, section 11 (acute admission) and section 29 (community treatment order) across New Zealand's 21 District Health Boards. These data were related to population data on social deprivation from the same regions. Ecological analysis showed use of section 29 to be positively associated with high area rates of social deprivation, and use of section 11 to be negatively associated with low area rates of social deprivation. The measure of deprivation was the New Zealand deprivation index (NZDep2006) (Salmond, Crampton & Atkinson, 2007). Findings confirmed overseas research in which social factors such as deprivation were found to be associated with use

of legislation. However the different direction of association for sections 11 and 29 had not been previously reported. This study was published as: O'Brien, A. J., Kydd, R. R., & Frampton, C. (2011). Social deprivation and use of mental health legislation in New Zealand. *International Journal of Social Psychiatry* 58(6), 581-586.

The next report in Section Four is a study of the relationship between mental health service provision and general practitioner availability, and use of legislation. For this study data were collected by the researcher by means of a survey of District Health Boards and from published reports of general practitioner distribution. Data on inpatient and community respite beds, and numbers of psychiatrists and registered nurses were collected and correlated with rates of use of mental health legislation, controlling for population size. A positive association was found between availability of beds (inpatient and community respite combined) and use of section 11. No association was found between use of section 29 and any measure of health service provision. The results are consistent with previous New Zealand research into the association between bed availability and use of the previous (1969) mental health legislation, but are at odds with international studies that suggest a shortage of beds is a driver of higher rates of compulsion. This study has been submitted to the *New Zealand Medical Journal* as O'Brien, A. J. & Kydd, R. R. (2014) Health service availability and use of mental health legislation" and is currently under review.

The final empirical report considered the role of clinician decision making in use of mental health legislation. For this study, two instruments were developed by the researcher. The first was a series of clinical decision making vignettes representing common scenarios in the use of section 11 and section 29 (acute admission and community treatment orders respectively). The second was a 24-item instrument (The Clinician Perceptions of Civil Commitment Scale (CPoCCS)) designed to measure clinician perceptions of civil commitment. Both instruments were administered to a sample of 169 clinicians, purposively selected to represent District Health Boards with high and low rates of use of legislation. The sample was also chosen to represent the two groups of clinicians most closely involved in use of mental health legislation, psychiatrists and registered nurses assigned the statutory roles of responsible clinician and duly authorised officer respectively. Results of both instruments were compared with rates of use of legislation in participants' health districts. The vignette instrument did not

predict DHB decision making and so could not be used to test the convergent validity of the CPoCCS. Factor analysis of the CPoCCS revealed a three factor structure. One of the three factors, necessities and benefits, was positively associated with the role of duly authorised officer, but not with health service rates of committal. The implications of this study are that individual clinicians' perceptions of the need to use mental health legislation are not reflected in the rates of use of legislation in their health district districts. These findings suggest that factors other than the views of individual clinicians determine committal rates. This report has been prepared for publication but is not yet submitted.

**CHAPTER NINE: COMMUNITY TREATMENT ORDERS IN
NEW ZEALAND: REGIONAL VARIABILITY AND
INTERNATIONAL COMPARISONS (PUBLICATION 3)**

Community treatment orders in New Zealand: regional variability and international comparisons

Anthony J O'Brien Centre for Mental Health Research, University of Auckland, Auckland, New Zealand

Abstract

Objectives: Community treatment orders (CTOs) have been used in New Zealand since 1992 and are now used in most Commonwealth countries. There is little research on the rate of use of CTOs in New Zealand. This study compares the prevalence of CTO use across New Zealand's 20 health districts and makes comparisons with international prevalence rates.

Methods: New Zealand Ministry of Health reports provided data on rates of CTO use in New Zealand between 2005 and 2011. International rates were obtained from published reports and academic literature on CTO use.

Results: Rates of CTO use in New Zealand show marked and persistent regional variation over the period of data collection. National average rates increased from 58 per 100,000 in 2005 to 84 per 100,000 in 2011. Rates of use of CTOs are increasing internationally. New Zealand's CTO use is high by international comparisons.

Conclusions: New Zealand's high and increasing rate of CTO use by international standards raises questions about the delivery and functioning of mental health services, and about mental health service users' experience of mental health care. The high rate of CTO use needs to be addressed as a human rights issue as well as a clinical issue.

Keywords: Community treatment order, mental health legislation, coercion, community mental health, human rights

Community treatment orders (CTOs) were introduced into mental health care in New Zealand with the passage of the Mental Health (Compulsory Assessment and Treatment) Act (1992) (the Act). Introduced during the period of deinstitutionalisation of mental health services, CTOs reflected and facilitated contemporary mental health policy of care in the community rather than in inpatient facilities. As in other jurisdictions, CTOs did not represent an entirely new innovation,¹ since the previous legislation, the Mental Health Act (1969), had allowed patients to be discharged from hospital on leave. This measure had allowed significant numbers of patients to be discharged from hospital, albeit conditionally. By 1996, almost all New Zealand's stand-alone hospitals had closed and CTOs had become an embedded component of the mental health service system. CTOs mandate that patients accept treatment from mental health services or face the sanction of return to hospital. In New Zealand, the criteria for invoking a CTO are identical to those for involuntary acute admission, with the additional requirement that appropriate services are available and that the social circumstances of the patient permit provision of mental health care in the community.

Community treatment orders are used in many countries, including Australia,² Canada,³ England and Wales⁴ and Sweden⁵, and in the United States under the regime of involuntary outpatient treatment (IOT).⁶ Although CTOs have become routine in clinical practice in New Zealand and Australia, they have been controversial in Canada⁷ and in England and Wales where they were introduced in 2008.⁴ Commentators have described opinions as reflecting 'ambivalence' about CTOs since even those in favour of CTOs frequently report reservations about their use.⁸

A major area of debate about CTOs concerns the issue of effectiveness. Much of this debate centres around two randomised controlled trials of IOTs in the United States, one in North Carolina⁹ and the other in New York.¹⁰ Neither study demonstrated a difference in the

Corresponding author:

Anthony J O'Brien, Senior Lecturer, Centre for Mental Health Research, University of Auckland, Private Bag 92 019, Auckland, New Zealand.
Email: a.obrien@auckland.ac.nz

key outcome of hospital admissions, leading to questions about the clinical effectiveness of IOTs. More recently, a randomised controlled trial of CTOs in England showed no difference in hospital admissions when compared to hospital leave.¹¹ In addition, the English study showed that patients on CTOs were kept under legal compulsion in the community for longer than those on hospital leave. Although failure to reduce hospital admissions has been seen as a weakness of CTOs, some commentators have questioned the appropriateness of hospital admission as a primary outcome, citing instead such outcomes as reduced police contacts, reduced victimisation, fewer hospital days and increased outpatient contacts as more appropriate measures of CTO effectiveness.¹²

Literature has reported significant regional variation in use of mental health legislation in New Zealand under the previous (1969) legislation¹³ and under the current legislation.¹⁴ Although most international literature has focussed on commitment in general rather than CTOs, significant variation has been reported in Europe,¹⁵ England¹⁶ and the United States.¹⁷ In addition, coercion in the community is a growing concern as countries move towards more community based mental health care. Current New Zealand mental health policy continues the policy direction of the past three decades of mental health care in the community. It is therefore critical that New Zealand's use of CTOs is subject to critical analysis, and that use of CTOs is monitored in relation to comparable jurisdictions. This study reports New Zealand data over a seven year period. Rates of CTO use across health districts are reported, and New Zealand's use of CTOs is compared to international experience.

Methods

For the past seven years the New Zealand Ministry of Health has published data on use of CTOs.¹⁸ In addition to national average rates per 100,000, the ministry's reports show use of CTOs in each of New Zealand's 20 district health boards (DHBs). At the start of the period under consideration New Zealand had 21 DHBs. Two DHBs (Otago and Southland) were combined in 2010. Data were extracted from these reports for the years 2005–2011. For international comparisons, recent data on use of CTOs in Australia were extracted from Light et al.'s report.² Further data were extracted from a study published by Lawton-Smith¹⁹ and from reports from individual jurisdictions. Lawton-Smith's¹⁹ report covered New Zealand, three Australian states, three Canadian provinces and four states of the United States. A further report by Lawton-Smith²⁰ provided data from the year after CTOs were introduced into Scotland. Data from the above sources were collated to compare CTO use across New Zealand's health districts and over time, to compare New Zealand with comparable jurisdictions internationally and to compare international trends in CTO use over time.

Results

In the most recent year (2011), use of CTOs in New Zealand varied from 33 per 100,000 in the Canterbury DHB to 151 per 100,000 in the Waitemata DHB. The national average rate was 84 per 100,000. In 17 of the 20 health districts rates increased or remained the same over the seven years of data reported, with eight districts showing increases in excess of 50%. In four health districts, rates increased by more than 100%.

National trends over time show a clear increase between 2005 and 2011, with average rates increasing from 58 per 100,000 in 2005 to 84 per 100,000 in 2011. This increase is especially marked in the last three years, with rates increasing from 63 per 100,000 in 2009 to 84 per 100,000 in 2011.

New Zealand's use of CTOs compared to other jurisdictions are presented in Table 1.

Data from the most recent year (2011) are used for comparison. Comparisons are made with the seven Australian states and territories reported in Light et al.'s² study. These comparisons show that New Zealand's rate of CTO use (84 per 100,000) is higher than every Australian region with the exception of Victoria (99 per 100,000). New Zealand rates show greater variability than that reported in Australian states and territories (range 33–151 per 100,000 (New Zealand); 30–99 per 100,000 (Australia)). New Zealand's rate is also significantly higher than for any of the other international comparator jurisdictions. Outside Australia, the highest rate is reported in the District of Columbia (54 per 100,000, 2004). The international data also show the trend towards increased use of CTOs. Rates have increased in all Australian regions for which comparative data are available. Rates have also increased in New York between 1999 and 2008 and in Scotland between 2005 and 2012.

Discussion

The results show marked regional variability and a significant increase in use of CTOs nationally and in most New Zealand health districts. Results are also consistent with Australian research showing increased use of CTOs.² Comparing with Australian states and territories, New Zealand rates show greater variability and, with the exception of the state of Victoria, significantly higher rates. A direct national comparison is not possible because no overall rate for Australia has been published.

In every jurisdiction for which there is an earlier benchmark, rates of CTO use have shown marked increases. Some of these increases have been quite dramatic, but none more so than in New Zealand. Notably, the two jurisdictions with the highest rates, Victoria and New Zealand, have had provision for CTOs for over two decades. It may be that over time clinicians become more accustomed to the regime, and perhaps less averse to coercion in community care.

Table 1. Use of community treatment orders in New Zealand: International comparisons

<i>Jurisdiction</i>	<i>Period of data collection</i>	<i>Most recent rate of CTO use¹</i>	<i>Previously reported rates^{2,3}</i>
New Zealand ⁴	2011	85 ⁶	44 (2003)
Otago, New Zealand ⁵	2011	76 ⁶	27 (1992–98)
New South Wales ⁷	2010/11	46 ⁸	37 (2003)
Victoria	2010/11	99 ⁸	55 (2003)
Queensland	September 2011	61 ⁶	43 (2005)
South Australia	2010/11	51 ⁶	–
Tasmania	2010/11	30 ⁶	–
Northern Territory	2010/11	56 ⁶	–
Western Australia	December 2004	49 ⁸	18 (1997–98)
New York State ⁹	2005	12 4	–
Toronto, Ontario ¹⁰	2000–2004	–	6
Ontario	2000–2003	–	2
Saskatchewan	1995–1998	–	2
North Carolina	1985–1988	–	22
District of Columbia, United States	2004	–	54
Israel	2004	–	16
Scotland ¹¹	2012	15 ¹²	3 (2005) ¹¹

¹Data are reported differently in different reports, in some cases as rates of CTOs per 100,000 and in other cases as rates of people subject to CTOs. In practice there is likely to be little difference between these measures as relatively few individuals would be on a CTO twice in a year.

²Lawton-Smith, S. (2005). *A question of numbers. The potential impact of community-based treatment orders in England and Wales*. London: King's Fund.

³Data in this column show rates of people subject to CTOs.

⁴Ministry of Health. (2012). *Office of the Director of Mental Health. Annual Report 2011*. Wellington: Ministry of Health.

⁵Otago data for 2011 are from Ministry of Health (2012); data for 1992–98 from Lawton-Smith (2005).

⁶Rate of CTO per 100,000 population.

⁷Data for all recent Australian jurisdictions is from Light, E., Kerridge, I., Ryan, C., & Robertson, M. (2011). Community treatment orders in Australia: rates and patterns of use. *Australasian Psychiatry*, 20(6), 478–482.

⁸Rate of people subject to CTOs.

⁹Based on a calculation on data reported by Swartz, M. S., Swanson, J. W., Steadman, H. J., Robbins, P. C., & Monahan, J. (2009). *New York State Assisted Outpatient Treatment Program Evaluation* Durham, North Carolina: Duke University School of Medicine.

¹⁰Data for all remaining jurisdictions except Scotland is from Lawton –Smith (2005).

¹¹Lawton-Smith, S. (2006). *Community-based compulsory treatment orders in Scotland. The early evidence*. London: King's Fund.

¹²Based on 827 Compulsory Community Treatment Orders (Mental Welfare Commission of Scotland (2012) *Annual monitoring report – 2011–12. The Mental Health (Care and Treatment) (Scotland) Act 2003*) in a Scottish population of 5,254,800 (<http://www.gro-scotland.gov.uk/>).

A particular feature of this analysis is the marked increase in use of CTOs in New Zealand between 2009 and 2011. It seems unlikely that this increase could be explained either by clinicians' increasing familiarity with the CTO regime or by a simple aggregation of patients over time.

Studies that have demonstrated benefits of CTOs, such as increased service engagement and reduced hospital days, have been unable to answer the question of whether the legal coercion of the CTO is responsible for the benefits observed, by influencing patients to accept

treatment or whether benefits are due to the greater service commitment to a group of patients, identified by their legal status as having high levels of need.²⁰ This debate raises the question of whether greater commitment of services provided by programmes such as assertive community treatment could provide comparable benefits without the element of legal coercion. Other alternatives that have been attempted, with mixed results, are joint crisis plans²¹ and advance directives.²² Results of evaluations of the New York Assisted Outpatient Treatment (AOT) Program suggest that for a group with very high needs there are benefits of AOT which are not achieved with more intensive services alone.²³ However use of compulsory community treatment is much less common in New York, and this finding may not apply to the relatively large numbers subject to CTOs in New Zealand.

CTOs represent a diffuse form of psychiatric surveillance compared to the direct control of people committed to hospital in the institutional era. Although CTOs are rightly regarded as less restrictive than committal to hospital they do raise concerns about the extent of medically mediated legal control of people with mental illness. Dawson²⁴ has noted that the New Zealand CTO regime walks a fine line in terms of infringing on human rights, and this concern is attenuated given the trend towards increasing use of CTOs in New Zealand. One legal commentator²⁵ has suggested that increasing use of CTOs could be seen as the realisation of a modern *hôpital général*, a social network of heightened vigilance, after the model described by Foucault. In the context of services' growing risk consciousness, and in light of Dawson's concerns about human rights, increasing use of CTOs needs to be understood as a human rights issue.²⁶ Such an approach is signalled by the 2006 United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) which New Zealand has ratified. The UNCRPD has been cited as influential in reform of mental health legislation in Tasmania and Victoria²⁶ as it strengthens the rights claims of people with disabilities, including those with mental illness, and therefore provides a framework within which coercive measures such as CTOs should be viewed.

Reporting on use of mental health legislation in New Zealand is undertaken by the Ministry of Health, which is also responsible for administration of the Act. In relation to CTOs the ministry reports only annual data and does not report trends over time. More comprehensive monitoring might occur if it was undertaken by an independent body. New Zealand's Mental Health Commission, established in 1996, has recently been absorbed into a wider Office of Disability Rights and so now has considerably less capacity to monitor the mental health sector. By contrast, Australia,⁶ Ireland²⁷ and Canada²⁸ have recently established mental health commissions which allow for greater independence in monitoring and have been influential in mental health reform.²⁹ Both England³⁰ and Scotland³¹ also have independent mental health monitoring bodies.

Commentators have called for the development of a more robust evidence base on CTOs. In particular, there have been calls for more randomised controlled trials. However, although the randomised controlled trial is regarded as the gold standard in clinical effectiveness studies, there are some important issues that need to be taken into account when considering such studies in the New Zealand context. Firstly, the New Zealand population is small and it is doubtful if there could ever be a randomised controlled trial of sufficient power to demonstrate the clinical effectiveness of CTOs. The regional variability shown in the current study means that it is doubtful that a significant number of health districts could combine their data, and in any case the regional variability probably reflects, in part, underlying population differences, and so the results of a single randomised controlled trial may not be generalisable to all New Zealand's health districts. A more practicable alternative would be to conduct studies, such as that reported from Victoria,³² using administrative databases. Database studies do not suffer selection bias, can include all individuals subject to CTOs and do not encounter the legal and ethical problems commonly faced by interventions such as CTOs.

The issues of CTOs are not limited to those of clinical effectiveness. Any coercive measure will struggle for acceptability with users of mental health services, and CTOs are no exception to this. Although there is literature reporting that a significant minority of service users find the use of CTOs acceptable, studies also consistently report that service users find CTOs aversive.⁸ There is also the consideration of the wider impact of use of compulsion on service users' perception of mental health services. As Segal and Tauber³³ have argued, the ethical conflicts inherent in compulsory community treatment cannot be decided by empirical evidence alone; robust ethical debate is also necessary in deciding the future role of CTOs in mental health policy and clinical practice.

Conclusions

The increasing use of CTOs in New Zealand is a concern for clinicians as it means that community mental health services are increasingly being delivered under conditions of legal coercion. It seems difficult to reconcile increasing coercion in the community with the vision of the reformers who advocated for the closure of the old hospitals and the adoption of community mental health care policies. The relatively high rate of CTO use in New Zealand also raises questions of whether the measure is being appropriately targeted to a high needs group, or whether it has become a default option in defensively oriented mental health services. The fact that some regions of New Zealand show relatively low rates suggests that there is scope to reduce the overall use of CTOs.

Disclosure

The author reports no conflict of interest. The author alone is responsible for the content and writing of the paper.

References

1. O'Brien AJ and Kydd RR. Compulsory community care in New Zealand mental health legislation 1846–1992. *Sage Open* 2013; 3(2). DOI: 10.1177/2158244013490175.
2. Light E, Kerridge I, Ryan C and Robertson M. Community treatment orders in Australia: rates and patterns of use. *Australasian Psych* 2012; 20: 478–482.
3. O'Reilly RL. Community treatment orders: an essential tool in the face of continuing deinstitutionalisation. *Canadian J Psych* 2006; 51: 686–688.
4. Lawton-Smith S, Dawson J and Burns T. Community treatment orders are not a good thing. *British J Psych* 2008; 193: 96–100.
5. Sjöström S, Zetterberg L and Markström U. Why community compulsion became the solution. Reforming mental health law in Sweden. *International J Law Psych* 2011; 34: 419–428.
6. Geller JL, Fisher WH, Grudzinskas J, et al. Involuntary outpatient treatment as “desinstitutionalized coercion”: the net-widening concerns. *International J Law Psych* 2006; 29: 551–562.
7. O'Reilly R. Why are community treatment orders controversial? *Canadian J Psych* 2004; 49: 579–584.
8. Dawson J, Romans S, Gibbs A, et al. Ambivalence about community treatment orders. *International J Law Psych* 2003; 26: 243–255.
9. Swartz MS, Swanson JW, Wagner HR, et al. Can Involuntary outpatient commitment reduce hospital recidivism? Findings from a randomized trial with severely mentally ill individuals. *American J Psych* 1999; 156: 1968–1975.
10. Steadman HJ, Gounis K and Dennis D. Assessing the New York City involuntary outpatient commitment pilot programme. *Psych Services* 2001; 52: 330–336.
11. Burns T, Rugkasa J, Molodynski A, et al. Community treatment orders for patients with psychosis (OCTET): a randomised controlled trial. *Lancet* 2013; 381: 1627–1633.
12. Swartz MS, Wilder CM and Swanson J W. Assessing outcomes for consumers in New York's assisted outpatient treatment program. *Psych Services* 2010; 61: 976–981.
13. Kydd RR, Nola PF and Wright JJ. Mental health needs in Auckland: 1982–6. An analysis using the Jarman index. *New Zealand Med J* 1991; 104: 255–257.
14. O'Brien A, Kydd RR and Frampton C. Social deprivation and use of mental health legislation in New Zealand. *International J Social Psych* 2012; 58: 581–586.
15. Zinkler M and Priebe S. Detention of the mentally ill in Europe—a review. *Acta Psychiatrica Scandinavica* 2002; 106: 3–8.
16. Bindman J, Tighe J, Thornicroft G, et al. Poverty, poor services, and compulsory psychiatric admission in England. *Social Psych Psych Epidemiology* 2002; 37: 341–345.
17. Durham ML and Pierce GL. Legal intervention in civil commitment: the impact of broadened commitment criteria. *Annals American Academy Political Social Sci* 1986; 484: 42–55.
18. Ministry of Health. Office of the Director of Mental Health. Annual Report 2005–2011. Wellington: Ministry of Health, 2006–2012.
19. Lawton-Smith S. A question of numbers. The potential impact of community-based treatment orders in England and Wales 2005. Report, King's Fund, London, 2005.
20. Lawton-Smith S. Community-based compulsory treatment orders in Scotland. The early evidence 2006. Report, King's Fund, London, 2006.
21. Thornicroft G, Farrelly S, Szmukler, et al. Clinical outcomes of joint crisis plans to reduce compulsory treatment for people with psychosis: a randomised controlled trial. *Lancet* 2013; 381: 1634–1641.
22. Papageorgiou A, King M, Janmohamed A, et al. Advance directives for patients compulsorily admitted to hospital with serious mental illness: randomised controlled trial. *British J Psych* 2002; 181: 513–519.
23. Swartz MS, Swanson JW, Steadman HJ, et al. New York State assisted outpatient treatment program evaluation, Report, Duke University School of Medicine, Durham, North Carolina, USA, 2009.
24. Dawson J. Community treatment orders and human rights. *Law Context* 2008; 26: 148–159.
25. Hewitt D. The strange republic of the good. Community treatment orders and their conditions. *J Mental Health Law* 2011; Spring: 39–47.
26. Callaghan S and Ryan C. Rising to the human rights challenge in compulsory treatment—new approaches to mental health law in Australia. *Australian New Zealand J Psych* 2012; 46: 611–620.
27. O'Farrell L, Gilheany P and Smyth R. The contribution of the Mental Health Commission in Ireland to the reform of mental health services. *Mental Health Rev J* 2012; 17: 199–210.
28. Kaiser HA. Canadian mental health law: the slow process of redirecting the ship of state. *Health Law J* 2009; 17: 139–194.
29. Rosenberg D and Rosen R. Can mental health commissions really drive reform? Towards better resourcing, services, accountability and stakeholder engagement. *Australasian Psych* 2012; 20: 193–198.
30. Care Quality Commission. Mental Health Act Annual Report 2010/11. Care Quality Commission, London, 2011.
31. Mental Welfare Commission of Scotland. Annual monitoring report—2011–12. The Mental Health (Care and Treatment) (Scotland) Act 2003. (n.p.): Mental Welfare Commission of Scotland, 2012.
32. Segal SP and Burgess PM. Conditional release: a less restrictive alternative to hospitalization? *Psych Services* 2006; 57: 1600–1606.
33. Segal SP and Tauber AI. Revisiting Hume's law. *American J Bioethics* 2007; 7: 43–44.

**CHAPTER TEN: SOCIAL DEPRIVATION AND USE OF MENTAL
HEALTH LEGISLATION IN NEW ZEALAND (PUBLICATION 4)**

Social deprivation and use of mental health legislation in New Zealand

International Journal of
Social Psychiatry
58(6) 581–586
© The Author(s) 2011
Reprints and permissions:
sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/0020764011415339
isp.sagepub.com


Anthony John O'Brien,¹ Robert Kydd² and
Christopher Frampton³

Abstract

Background: Low socioeconomic status has consistently been associated with poorer health outcomes. Few studies have used ecological analysis to explore relationships between area measures of deprivation and use of mental health legislation.

Methods: We used an ecological design to explore associations between two area measures of relative deprivation and the two most commonly used sections of New Zealand mental health legislation.

Results: High levels of relative deprivation were positively correlated with use of both acute and long-term community care provisions of mental health legislation with the correlation with long-term care achieving significance ($r = .518$, $p = .016$). Low levels of relative deprivation showed negative correlations with use of both provisions. The correlation of $-.493$ between low levels of relative deprivation and acute care provisions was significant at $p = .023$. In stepwise regression, the proportion of the population aged 15–64 contributed to the model for section 11, but ethnicity contributed to neither model.

Conclusion: Mental health legislation is used disproportionately in areas with high levels of relative deprivation. The results have implications for regional allocation of funding for mental health and social services to support community-based care. Further research is needed to explore other factors that may account for the regional variation.

Keywords

mental health legislation, ecological study, deprivation, community care

Introduction

Patterns of health care reflect social conditions (Lazzarini & Klitzman, 2002) and epidemiological studies have consistently demonstrated a link between measures of socioeconomic status and health (Frohlich & Potvin, 2008; Link & Phelan, 1996; Marmot, 2001). In New Zealand, socioeconomic inequalities in health are well recognized (Ministry of Health and University of Otago, 2006) and became more pronounced over the final two decades of the last century (Pearce, Tisch, & Barnett, 2008). Concern over social disparities in health saw the development of health policy specifically aimed at addressing inequality (Ministry of Health, 2002). This paper is concerned with an area of disparity seldom addressed in the epidemiological literature: the relationship between area socioeconomic status and use of mental health legislation.

Variation in use of mental health legislation is a consistent feature of mental health services internationally (Bindman, Tighe, Thornicroft, & Leese, 2002; Hoyer, 2008; Riecher-Rössler & Rössler, 1993; Salize & Dressing, 2004). Many reasons for this variation have been suggested, including sociodemographic and clinical variables; clinician and judicial

interpretation of legislation; the configuration, availability and location of mental health services; and wider social factors. Poverty has been associated with use of mental health legislation in the UK (Bindman et al., 2002) where the related construct of social exclusion has been associated with hospital admission under emergency provisions (Webber & Huxley, 2004). A Finnish ecological study found a range of socioeconomic factors to be associated with higher rates of compulsory care of minors, independently of rates of

¹Centre for Mental Health Research, School of Nursing, The University of Auckland, New Zealand

²Department of Psychological Medicine, The University of Auckland, New Zealand

³Department of Medicine, University of Otago, New Zealand

Corresponding author:

Anthony John O'Brien, Senior Lecturer, Centre for Mental Health Research, School of Nursing, The University of Auckland, Private Bag 92 019, Auckland 1142, New Zealand
Email: a.obrien@auckland.ac.nz

mental illness (Siponen, Välimäki, Kaivosoja, Marttunen, & Kaltiala-Heino, 2010).

In New Zealand, rates of admission to psychiatric hospitals in the institutional era were associated with hospital location (Malcolm, 1989). Over the same period variation in both compulsory and voluntary admissions was shown to occur across regions in association with poverty (Kydd, Nola, & Wright, 1991). Both these New Zealand studies reported admissions under the 1969 mental health legislation at a time when mental health services were hospital focused. Research following the introduction in 1992 of more community-focused legislation has also suggested an association between legal and sociodemographic status (Abas, Vanderpyl, Robinson, & Crampton, 2003). In another New Zealand study, deprivation was associated with longer length of stay (Abas, Vanderpyl, Robinson, Le Prou, & Crampton, 2006).

Current New Zealand mental health legislation (the Mental Health (Community Assessment and Treatment) Act (1992) (the Act)) contains two main provisions for compulsory mental health care. These are for assessment and treatment in acute crises, and for long-term care, usually in the community. Criteria for compulsory care are identical in both cases, requiring that the patient has a mental disorder and presents with a serious risk to their health or safety, or to the safety of others. The Act excludes presentations caused solely by substance use or intellectual disability, and with a small number of exceptions does not cover forensic presentations. Acute care under compulsion will normally be provided under section 11 of the Act, which provides for an initial five-day period of assessment and treatment, while longer-term compulsory care is in most cases provided under a community treatment order (section 29) (Ministry of Health, 2009). An additional measure, inpatient on leave status (section 31) is used relatively rarely and so was not considered in this analysis. For both acute and long-term care, section 28 signals a preference for community care as the first option. Acute provisions direct care to 'the patient's place of residence' in the first instance, with the option of admission to a 'specified hospital' if adequate treatment cannot be provided as an outpatient. In practice, most acute dispositions are to inpatient mental health units. Long-term care under a community treatment order is contingent upon adequate treatment being available in the community. This latter requirement anticipates that an appropriate level of resources is available to support community care. The significance of the legislative direction towards community care becomes apparent in light of concern about the adequacy of community mental health care resources (Mental Health Commission, 2004). For a more detailed outline of the provisions of New Zealand mental health legislation, see Bell and Brookbanks (2005).

For the last four years, the Ministry of Health has published data showing rates of use of mental health legislation

in each District Health Board (DHB) (Ministry of Health, 2006, 2007, 2008, 2009). The data show regional variation in use of both section 11 and section 29. This variation has been consistent over the four years of the Ministry reports. In addition, data on socioeconomic status using a well-accepted measure of social deprivation, the NZDep2006, (Salmond, Crampton, & Atkinson, 2007) also shows variation across DHB regions (Pearce, Barnett, Collings, & Jones, 2007; Pearce et al., 2008). New Zealand census data are collected on a five-yearly basis and provide information used to calculate NZDep scores based on small areas of at least 100 people. Deprivation is measured using nine discrete items of sociodemographic information to yield an NZDep score of between 1 and 10, with a score of 1 representing the least deprived and 10 representing the most deprived. The items of NZDep2006 are: receiving a means-tested benefit; income below a set threshold; dwelling not owner occupied; single parent family; unemployment; no qualifications; household below a bedroom occupancy threshold; lack of access to a telephone; lack of access to a car. The construction of NZDep is fully described by Salmond et al. (2007).

The developers of NZDep stress that it is an area of measure of relative deprivation; it is neither an individual nor an absolute measure. The first consideration is important in interpreting studies using NZDep to avoid the ecological fallacy, interpretation of results of ecological studies as applying to individuals (Macintyre & Ellaway, 2000). The second consideration is important as relative rather than absolute deprivation has been shown to be associated with poorer health outcomes (Wilkinson & Pickett, 2007). New Zealand ecological studies have found that geographical variation in a range of health measures is related to socioeconomic status, including mortality (Pearce et al., 2008), tobacco smoking (Barnett, Moon, & Kearns, 2004), asthma (Salmond, Crampton, Hales, Lewis, & Pearce, 1999) and suicide (Pearce et al., 2007). Availability of NZDep data for DHB regions enables research to test for an ecological association between relative deprivation at the regional level of DHBs and rates of civil commitment. This study explores the ecological relationship between use of mental health legislation and DHB region. The hypothesis is that variation in rates of committal across DHBs is partly explained by the socioeconomic structure of the DHB population.

The aims of the study were to explore, using ecological analysis, the association between the socioeconomic structure of the DHB population and rates of committal.

Methods

The study took a national focus with data on relative deprivation and use of legislation collected from all 21 DHB regions. We used an ecological design similar to those used by Bindman et al. (2002) and Siponen et al. (2010).

The first source of data is the annual reports of the Director of Mental Health for the four years 2005 to 2008 (Ministry of Health, 2006, 2007, 2008, 2009). Reports for each year include rates per 100,000 per month of people placed under mental health legislation. Four-year averages relating to the two most commonly used sections of the Mental Health Act (sections 11 and 29) have been used in this analysis. The averages cover a total of approximately 3000 cases (Ministry of Health, 2006). The second source of data is the NZDep2006 Area Concordance file (University of Otago, 2010), which lists meshblocks by NZDep score and DHB, making it possible to construct a pivot table showing numbers of the population in each decile area by DHB. Using a method described by Brabyn and Barnett (2004), two area measures of deprivation were determined by calculating the proportion of each DHB population in deciles 1–3 (least deprived) and 8–10 (most deprived). These measures were used in the correlational analysis. Data on ethnicity and age were extracted from the 2006 Census DHB Area Summary Tables (Statistics New Zealand, 2010). In the case of ethnicity, the proportion of the DHB population reported as Maori was calculated as Maori have been shown to be at a higher risk of being subject to mental health legislation (Wheeler, Robinson, & Robinson, 2005). For age, a calculation was made of the population aged 15–34 as younger people are more at risk of committal (Wheeler et al., 2005).

DHB rates of committal for the four years 2005 to 2008 were analysed to determine if the variation seen in individual years was consistent across the four-year period. DHBs were ranked according to rates of committal under each section. Correlation analyses using Pearson's correlation coefficient were performed to determine the relationship between the area measures of deprivation and rates of committal. All analyses were undertaken using Microsoft Excel 2007. The study involved aggregated data from publicly available databases so ethics approval was not required.

Results

Use of mental health legislation

DHB rates of use of mental health legislation are shown in Table 1.

The table shows marked variation in use of both sections, with the four-year averaged rate showing a threefold variation in the use of section 11 and a fourfold variation in use of section 29. To test whether DHB rates of section 11 were related to rates of section 29, correlational analysis of both rates was undertaken, with a resulting value of $r = .506$ ($p = .019$). Figure 1 shows the correlation of rates of use of sections 11 and 29 in the 21 DHBs.

This level of correlation indicates that almost half of the variation between DHBs' rates of use of sections 11 and

Table 1. Committal under section 11 and 29 of the Mental Health (Compulsory Assessment and Treatment) Act (1992): Averaged rates, 2005–2008.

Region (DHB)	Section 11 Acute care	Section 29 Long-term community care
Auckland	10.5	64.25
Bay of Plenty	9.25	37.25
Canterbury	11.5	49
Capital and Coast	10.75	79.5
Counties Manukau	9	77.25
Hawkes Bay	10.75	60
Hutt	9.25	45.25
Lakes	7.75	59.5
MidCentral	8.5	23.5
Nelson Marlborough	8.5	41.75
Northland	11.25	81.5
Otago	14	64.25
South Canterbury	11	48.25
Southland	5	38.75
Tairāwhiti	13.25	84.25
Taranaki	14	41.25
Waikato	12.75	85.75
Wairarapa	5.25	54.5
Waitemata	8	52
West Coast	12	52.25
Whanganui	15	96.25

sections 29 is unexplained by a simple model of progression from acute to long-term compulsory treatment.

Relative deprivation between DHBs

There is an inverse relationship between high and low levels of relative deprivation in New Zealand. The correlation between the low deprivation measure and the high deprivation measure was $-.79$ ($p > .001$), showing that a similar pattern of area differences in relative deprivation is apparent whether the high or low measure is adopted.

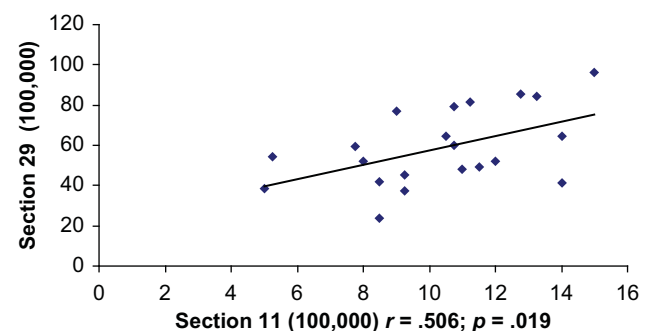


Figure 1. Correlation of sections 11 and 29 of the Mental Health (Compulsory Assessment and Treatment) Act (1992): Averaged rates, 2005–2008.

Table 2. Relative deprivation and Mental Health Act status.

		Section 11	Section 29
Section 11	Pearson correlation	1	.506*
	<i>p</i>		.019
	<i>n</i>	21	21
Section 29	Pearson correlation	.506*	1
	<i>p</i>	.019	
	<i>n</i>	21	21
NZDep 8–10	Pearson correlation	.280	.518*
	<i>p</i>	.218	.016
	<i>n</i>	21	21
NZDep 1–3	Pearson correlation	-.493*	-.315
	<i>p</i>	.023	.165
	<i>n</i>	21	21
Population 15–34	Pearson correlation	.031	.134
	<i>p</i>	.892	.563
	<i>n</i>	21	21
Proportion Maori	Pearson correlation	.154	.404
	<i>p</i>	.504	.069
	<i>n</i>	21	21

* $p < .05$ level (two-tailed)

Relative deprivation and Mental Health Act status

Correlations between sections 11 and 29 and the two area measures of relative deprivation are shown in Table 2.

The measure of most deprivation (NZDep 8–10) was positively correlated with use of both section 11 and section 29, while the measure of least deprivation (NZDep 1–3) was negatively correlated with use of both sections. Statistically significant correlations, but in opposite directions, were observed between NZDep 8–10 and section 29 ($r = .518$, $p = .016$) and between NZDep 1–3 and section 11 ($r = -.493$, $p = .023$), explaining respectively 27% and 24% of the variance. In regression analysis ethnicity and age of the population were added to each model. In the case of ethnicity Pearson correlations were .154 ($p \geq .5$) and .404 ($p = .069$) for sections 11 and 29 respectively, adding nothing to either model, although for section 29 the association approached significance. For age of the population the values for sections 11 and 29 respectively were (proportion 15–34) $r = .031$ ($p \geq .8$) and $r = -.134$ ($p \geq .563$) and (proportion 15–64) $r = .075$ ($p \geq .747$) and $r = -.165$ ($p \geq .475$). In stepwise regression to predict section 11, NZDep 1–3, population proportion 15–64 and NZDep 8–10 combined to explain 39% of the variation ($r^2 = 0.388$). With every extra 10% of people in NZDep 1–3, the rate of section 11 drops by 4.0, while with every extra 10% of people in NZDep 8–10, the rate of section 29 increases by 9.2. The area measure of relative deprivation shows marked divergence in relation to sections 11 and 29, indicating that relative deprivation is influential in avoiding acute admission (section 11) in low deprivation areas, and in utilizing community treatment orders (section 29) in high deprivation areas. In the case of section 11, the additional contribution explained by adding

section 29 and the proportion of the population aged 15–64 to the model suggests that while relative deprivation is influential, there are also other factors contributing to variation between regions. The near significance of the proportion of the population that was Maori for section 29 suggests that ethnicity may be one such factor.

Discussion

This is the first New Zealand epidemiological study to use national data to examine the relationship between social deprivation and legal status under mental health legislation. While the effects are modest, the findings suggest that the inequalities observed in other areas of health also apply in mental health. Regions with high levels of deprivation make more use of both acute and long-term care provisions and those with low levels of deprivation make less use of these provisions. Differences observed in this study are not due to differences in legislation as New Zealand has a single legislative regime across all health districts. It is possible that differences reflect variation in rates of mental illness. The 2006 New Zealand Mental Health Survey (Oakley-Browne et al., 2006) found that those living in the least deprived areas (NZDep 1 and 2) had the lowest rates of disorder, although that survey did not include schizophrenia or bipolar disorder, the diagnoses most likely to be associated with use of mental health legislation (Wheeler et al., 2005).

An association between poverty and the need for services has been identified for almost two decades (Thornicroft, 1991) and is supported by New Zealand studies under previous (Kydd et al., 1991) and current legislation (Abas et al., 2003). The results of this study are consistent with previous ecological studies (Bindman et al. 2002; Siponen et al. 2010) in two respects. First, low area socioeconomic status is associated with greater use of mental health legislation and, second, there is additional unexplained regional variation in the use of mental health legislation. These findings support the conclusion of Abas et al. (2003) that resources need to be directed to regions with high deprivation. Funding to regions is currently allocated on a population basis with no adjustment for level of deprivation. Consideration should be given to whether any additional resources are best focused on community or inpatient care. Base rates of use of community treatment orders are higher than those for acute treatment, suggesting a greater potential to reduce rates in community care.

Commenting on socioeconomic differences in rates of committal, Siponen et al. (2010) noted that compulsory care should be initiated not for social, but strictly for psychiatric reasons. Lorant, Depuydt, Gillain, Guillet, and Dubois (2007) also cite availability of social resources as influencing the use of legislation. Lack of social support and social resources may exacerbate symptoms of mental illness, so that mental health services may be compensating for unavailable social support. This possibility is supported by findings from Webber and Huxley (2004) who found that of six

components of a measure of social exclusion, only low social support was associated with increased likelihood of use of the emergency provisions of English legislation. As noted above, NZDep2006 is composed of nine separate factors, and it is possible that some of these factors contribute more than others to the observed association between relative deprivation and rates of committal. Further research could test for the contribution of individual factors, although NZDep2006 does not specifically include social support.

A range of factors not explored in this study might explain some of the variation between regions. In previous studies Siponen et al. (2010) suggested suboptimal use of community services as contributing and Bindman et al. (2002) considered that patterns of service provision and availability might influence rates of committal. In relation to the current study we note that the DHB regions are ethnically, geographically and socioeconomically diverse with populations varying between 21,000 and 466,000. Such diversity creates many possible factors that might account for variation in health outcomes.

Because this is an ecological study we cannot report on the socioeconomic status of individuals subject to legislation; nor can we determine causation. We caution that NZDep is an area rather than individual measure. Findings at DHB regional level cannot be applied to individuals (the ecological fallacy). Further, there is likely to be considerable internal heterogeneity within DHBs with respect to social deprivation (Pearce et al., 2008). Another possible limitation is the quality of data on use of mental health legislation reported by DHBs. These data are not drawn from the national mental health data collection and so it is not possible to verify reported rates against patient records. A database study currently in progress will overcome this limitation.

Conclusions

Area deprivation is one factor that influences rates of compulsory treatment for acute care and long-term community care. Further research is needed to identify additional factors, and these are likely to vary by region. While funding to DHBs needs to recognize differences in need according to regional variation in deprivation, DHBs also need to consider the balance of funding allocated to inpatient and community services. Efforts to reduce the use of mental health legislation should be directed to regions where rates are highest, and targeted to enhanced provision of services in the community. Social agencies other than mental health services also need to target services to this group.

References

- Abas, M., Vanderpyl, J., Robinson, E. & Crampton, P. (2003). More deprived areas need greater resources for mental health. *Australian and New Zealand Journal of Psychiatry*, 37, 437–444.
- Abas, M. A., Vanderpyl, J., Robinson, E., Le Prou, T. & Crampton, P. (2006). Socioeconomic deprivation and duration of hospital stay in severe mental disorder. *The British Journal of Psychiatry*, 188, 581–582.
- Barnett, R., Moon, G. & Kearns, R. (2004). Social inequality and ethnic differences in smoking in New Zealand. *Social Science & Medicine*, 59, 129–143.
- Bell, S. & Brookbanks, W. J. (2005). *Mental health law in New Zealand*, 2nd edn. Wellington, New Zealand: Brookers.
- Bindman, J., Tighe, J., Thornicroft, G. & Leese, M. (2002). Poverty, poor services, and compulsory psychiatric admission in England. *Social Psychiatry and Psychiatric Epidemiology*, 37, 341–345.
- Brabyn, L. & Barnett, R. (2004). Population need and geographical access to general practitioners in rural New Zealand. *New Zealand Medical Journal*, 117(1199), U996.
- Frohlich, K. L. & Potvin, L. (2008). The inequality paradox: The population approach and vulnerable populations. *American Journal of Public Health*, 98, 216–221.
- Hoyer, G. (2008). Involuntary hospitalization in contemporary mental health care. Some (still) unanswered questions. *Journal of Mental Health*, 17, 281–292.
- Kydd, R. R., Nola, P. F. & Wright, J. J. (1991). Mental health needs in Auckland: 1982–6. An analysis using the Jarman index. *New Zealand Medical Journal*, 104, 255–257.
- Lazzarini, Z. & Klitzman, R. (2002). HIV and the law: Integrating law, policy, and social epidemiology. *Journal of Medicine, Law, and Ethics*, 30, 533–547.
- Link, B. G. & Phelan, J. C. (1996). Understanding sociodemographic differences in health: The role of fundamental social causes. *American Journal of Public Health*, 86, 471–473.
- Lorant, V., Depuydt, C., Gillain, B., Guillet, A. & Dubois, V. (2007). Involuntary commitment in psychiatric care: What drives the decision? *Social Psychiatry & Psychiatric Epidemiology*, 42, 360–365.
- Macintyre, S. & Ellaway, A. (2000). Ecological approaches: Rediscovering the role of the physical and social environment. In L. F. Berkman & I. Kawachi (Eds), *Social Epidemiology* (pp. 332–348). New York: Oxford University Press.
- Malcolm, L. (1989). Bed availability as a significant influence on rates of committal to New Zealand's psychiatric hospitals. *New Zealand Medical Journal*, 102, 8–9.
- Marmot, M. (2001). Inequalities in health. *New England Journal of Medicine*, 345, 134–136.
- Mental Health Commission. (2004). Report on Progress 2002–2003. *Towards implementing the Blueprint for Mental Health Services in New Zealand*. Wellington, New Zealand: Mental Health Commission.
- Ministry of Health. (2002). *Reducing inequalities in health*. Wellington, New Zealand: Ministry of Health.
- Ministry of Health. (2006). *Office of the Director of Mental Health. Annual Report 2005*. Wellington, New Zealand: Ministry of Health.
- Ministry of Health. (2007). *Office of the Director of Mental Health. Annual Report 2006*. Wellington, New Zealand: Ministry of Health.
- Ministry of Health. (2008). *Office of the Director of Mental Health. Annual Report 2007*. Wellington, New Zealand: Ministry of Health.
- Ministry of Health. (2009). *Office of the Director of Mental Health. Annual Report 2008*. Wellington, New Zealand: Ministry of Health.

- Ministry of Health and University of Otago. (2006). *Decades of disparity III: Ethnic and socioeconomic inequalities in mortality, New Zealand 1981–1999*. Wellington, New Zealand: Ministry of Health.
- Oakley-Browne, M. A., Wells, J. E. & Scott, K. M. (Eds). (2006). *Te Rau Hinengaro: The New Zealand Mental Health Survey*. Wellington, New Zealand: Ministry of Health.
- Pearce, J., Barnett, R., Collings, S. & Jones, I. (2007). Did geographical inequalities in suicide among men aged 15–44 in New Zealand increase during the period 1980–2001? *Australian & New Zealand Journal of Psychiatry*, 41, 359–365.
- Pearce, J., Tisch, C. & Barnett, R. (2008). Have geographical inequalities in cause-specific mortality in New Zealand increased during the period 1980–2001? *New Zealand Medical Journal*, 121, 15–27.
- Riecher-Rössler, A. & Rössler, W. (1993). Compulsory admission of psychiatric patients: An international comparison. *Acta Psychiatrica Scandinavica*, 87, 231–236.
- Salize, H. J. & Dressing, H. (2004). Epidemiology of involuntary placement of mentally ill people across the European Union. *British Journal of Psychiatry*, 184, 163–168.
- Salmond, C., Crampton, P. & Atkinson, J. (2007). *NZDep2006 Index of Deprivation*. Wellington, New Zealand: Department of Public Health, Wellington School of Medicine and Health Sciences.
- Salmond, C., Crampton, P., Hales, S., Lewis, S. & Pearce, N. (1999). Asthma prevalence and deprivation: A small area analysis. *Journal of Epidemiology and Community Health*, 53, 476–480.
- Siponen, U., Välimäki, M., Kaivosoja, M., Marttunen, M. & Kaltiala-Heino, R. (2010). A comparison of two hospital districts with low and high figures in the compulsory care of minors: An ecological study. *Social Psychiatry & Psychiatric Epidemiology*. (Epub ahead of print).
- Statistics New Zealand. (2010). *2006 Census. District Health Board Area Summary Tables*. Retrieved from <http://www.stats.govt.nz/Census/about-2006-census/district-health-board-area-summary-tables.aspx>
- Thornicroft, G. (1991). Social deprivation and rates of treated mental disorder. Developing statistical models to predict psychiatric service utilisation. *The British Journal of Psychiatry*, 158, 475–484.
- University of Otago. (2010). *NZDep2006 Area Concordance file*. Retrieved from <http://www.wnmeds.ac.nz/academic/dph/research/socialindicators.html>
- Webber, M. & Huxley, P. (2004). Social exclusion and risk of emergency compulsory admission. A case-control study. *Social Psychiatry and Psychiatric Epidemiology*, 39, 1000–1009.
- Wheeler, A., Robinson, E. & Robinson, G. (2005). Admissions to acute psychiatric inpatient services in Auckland, New Zealand: A demographic and clinical review. *The New Zealand Medical Journal*, 118, 1–15.
- Wilkinson, R. G. & Pickett, K. E. (2007). The problems of relative deprivation: Why some societies do better than others. *Social Science & Medicine*, 65, 1965–1978.

CHAPTER ELEVEN: HEALTH SERVICE AVAILABILITY AND USE OF MENTAL HEALTH LEGISLATION (PUBLICATION 5)

One of the factors suggested as contributing to variation in rates of committal is the level of mental health services provided. Studies investigating this possibility have exclusively focussed on inpatient committal rather than compulsory community care (e.g. Bindman, Tighe, Thornicroft & Leese, 2002; Hotopf, Wall, Buchanan, Wessely & Churchill, 2000; Kjellin, 1997). In their review of committal rates in Europe, Riecher-Rossler and Rossler (1993) suggested that better served areas showed lower rates of committal, although the authors did not report data on levels of service provision. Wall et al. (1999) in England made a similar claim based on changes in bed rates and committal rates over time. Hansson (1999) compared rates of committal and inpatient beds across four Nordic countries and found that as inpatient beds reduced committal rates increased. These findings and arguments offer the intuitively plausible explanation that limited access to beds might delay admission until the person's mental state deteriorates to the extent that they meet legislative criteria for compulsory admission.

Studies have not consistently found a correlation between low bed numbers and compulsory admission. In New Zealand, Malcolm (1989) found a positive correlation between committal and hospital location, with more admissions in areas closer to psychiatric hospitals. Malcolm's finding is perhaps less surprising in the era of large hospitals than it would be today. In international studies, Engberg (1991) found that low bed availability was related to a low rate of committal in Greenland, the Faroe Islands and Denmark while Hatling (2002) found no correlation between rates of compulsion and availability of services in various regions of Norway. Bindman et al. (2002) found both negative and positive correlations between service provision and committal rates across different English Trusts.

Pathway to care has also been cited as possibly related to committal rates. In an English study which considered a variety of aspects of pathway to care Morgan et al. (2005) found that African-Caribbean people were less likely to be referred by a general practitioner and were more likely to be committed. A New Zealand study of first episode psychosis found that 47.3% of the cohort of 200 had been in contact with their general

practitioner in the six months prior to referral to an early psychosis programme (Turner, Smith-Hamel & Mulder, 2006). A relatively high 36.3% had experienced compulsory admission. Although they made relatively few referrals, Turner et al. noted that general practitioners may be important gatekeepers of access to specialist mental health care. Neither of the above studies related the overall provision of general practitioner services to rates of compulsory admission, but they raise the possibility that general practitioner availability may contribute to District Health Board (DHB) committal rates. General practitioner availability is known to be variable across New Zealand DHBs, and is low by international standards (New Zealand Medical Association, 2009).

New Zealand offers the opportunity to examine two aspects of compulsion, inpatient admission under section 11 of the Mental Health (Compulsory Assessment and Treatment) Act (1992) (the Act) and compulsory community treatment under section 29. The criteria of the Act are identical in each instance. This study therefore sought to investigate the relationship between two measures of service provision: availability of general practitioners and specialist mental health service provision, and committal rates under each section. The study hypothesis was that measures of service provision and general practitioner availability would be significantly correlated with one or both measures of compulsion.

Methods

The study employed an ecological design. It used survey methods and officially reported data on committal rates and general practitioner availability. A survey of mental health services was developed using categories determined from a review of literature and discussion between researchers and mental health services staff. Categories included numbers of beds, numbers of psychiatrists and nurses, and numbers of general practitioners. Data in all categories were converted to rates per 100,000 population calculated using data hosted on the website of Statistics New Zealand (<http://www.stats.govt.nz/>). Individual measures were combined to give an overall measure of service intensity. The survey was sent to the 21 DHB mental health managers

or a nominated member of staff. Analysis was undertaken to identify correlations between any of the measures of service provision and use of section 11 and section 29.

Data collection

For the mental health services survey contacts were initially established by telephone, and the survey was posted out. After four weeks, ten surveys had been returned and remaining services were contacted by phone or email. One DHB initially declined participation but provided data following a request under the Official Information Act. The final response rate was 100%. In cases where data returned were unclear or missing, DHB service managers were contacted for clarification. Data reflects service provision at the time of data collection from April to August 2010 and may be different to service provision in previous or subsequent years, although any differences are not thought to be large. Rates of committal were taken from four years of data reported by the Ministry of Health (Ministry of Health 2006-9). Data on general practitioner availability were extracted from a report from the medical professional body the New Zealand Medical Association (New Zealand Medical Association, 2009). Data were accessed from the Statistics New Zealand website to calculate rates of beds, psychiatrists and nurses per 100,000 population aged 18-65 (Statistics New Zealand, 2010).

Analysis

All data were entered into Microsoft Excel (2010) for analysis. Numbers of respite, subacute and rehabilitation beds were added to numbers of inpatient beds to give the additional measure of total beds. DHBs were ranked on each measure of service provision: inpatient beds, total beds, psychiatrists and registered nurses per 100,000 population. Rankings were averaged to provide an overall measure of DHB service intensity which was treated as an additional independent variable. The Wairarapa DHB was dropped for analyses involving beds and service intensity as that DHB does not provide inpatient services. Pearson's Product Moment correlation was calculated, pairing

each independent variable with each of the two dependent variables. Significance was set at $p < .05$.

Results

The full dataset is displayed in Table 1¹⁹. In total beds, Taranaki DHB showed the highest rate of provision (62 per 100,000 of the adult (18-65) population) while Bay of Plenty showed the lowest rate of 17.5. Psychiatrists per 100,000 ranged from 4.7 for South Canterbury DHB to 30 for Capital and Coast DHB. Excluding South Canterbury and Wairarapa DHBs as outliers, because some of their mental health services are provided by a neighbouring DHB, the lowest figure for psychiatrists was 12.6 per 100,000 shared by Bay of Plenty and Hawkes Bay DHBs. Again excluding Wairarapa, West Coast DHB employed the most nurses (174.8 per 100,000) while Southland (33.8) employed the least. Overall, Capital and Coast DHB provided the highest level of services, while, after excluding outliers, Bay of Plenty was the lowest ranked provider. The results of the correlational analysis are presented in Table 2²⁰. Only the two measures of bed availability and use of section 11 produced significant correlations ($r = .56$ (total beds); $r = .42$ (inpatient beds) ($p < .005$, 2-tailed)).

Discussion

A strength of the current study is that it used a complete national data set and so provides a picture of compulsion over the whole of New Zealand. In addition, the study reports inpatient and community compulsion separately, something that is unique in the international literature. As mental health services move towards greater community provision it will be increasingly important to monitor compulsion in both inpatient and community settings.

¹⁹ Page 178.

²⁰ Page 179.

The finding that higher provision of beds is significantly correlated with compulsory acute admission is at odds with arguments that lack of beds is a driver of compulsory acute admission (Riecher-Rossler & Rossler, 1993; Kjellin et al., 1997; Hotopf, 2000). The results suggest that the opposite is true: that availability of beds is associated with a greater rate of compulsory acute admission. This finding is consistent with the findings of Engberg (1991) and with the earlier New Zealand study of Malcolm (1989). It might be argued that an association between availability of inpatient beds and use of section 11 is to be expected because patients can only be admitted where there is an available bed. However such an argument misses the points that admission need not be under compulsion, and that the extent of bed provision may represent a service policy that anticipates the level of demand for compulsory admission.

An important finding is that the significant correlation for acute compulsory admission was not found with compulsory community care. A previous New Zealand ecological study (O'Brien, Kydd & Frampton, 2011) found significant associations between the same two forms of compulsion and area levels of social deprivation, although the direction of association was different for each measure. Taking the finding of the current study together with those of O'Brien, Kydd and Frampton (2011) it is apparent that different factors are associated with different forms of compulsion.

It is noteworthy that bed provision alone produced significant correlations while the overall measure of service intensity did not. Bindman et al. (2002) noted that there is no satisfactory overall measure of mental health service provision, and in the absence of such a standard, ad hoc measures such as that used in this study may not accurately measure service intensity. A further consideration is that the research did not consider community based service provision. New Zealand mental health services are predominantly community based (Ministry of Health, 2013) so future research should attempt to account for community contacts within an overall measure of service provision.

As this is an ecological study the results cannot show a causal relationship. Overall associations are not necessarily reflected in every DHB. For example, Taranaki DHB had the highest provision of total beds per 100,000, but a below average use of acute compulsory care. The data suggest that at time of the study Taranaki had a

relatively high number of non-inpatient acute beds, perhaps suggesting that options such as community respite were preventing hospital admission under compulsion. Although the acute provisions of the Act are not limited to hospital settings, in practice committal under section 11 most frequently involves hospital admission. A further limitation is that the study did not include factors previously shown to be associated with inpatient committal, such as ethnicity and diagnosis of psychosis (Wheeler et al, 2005; Abas Vanderpyl & Le Prou et al., 2003).

The lack of significance of general practitioner availability may mean that the population data used in the current study is not sufficiently sensitive to show the gatekeeping role of general practitioners noted by Turner, Smith-Hamel and Mulder (2006). A low prevalence phenomenon such as civil commitment may need more detailed patient level data to elucidate the role of general practitioners.

It is possible that some data were reported differently across DHBs. For example some DHBs have a budget for casual nurses that are additional to the number of fulltime equivalent positions. Although the survey was designed to exclude data relating to alcohol and drug and other specialist services, in some DHBs it was not possible to disaggregate staff and bed numbers for mental health services from those for specialist services. However, in DHBs whose data included specialist service staff and bed numbers, those numbers are relatively small, and are not thought to impact significantly on overall results. Another difficulty is that some psychiatrists divide their time between general adult mental health services and older person's services, making estimation of the total staffing resource imprecise. As with other specialist services, this is not thought to have significantly influenced the major findings.

Although the survey form was discussed with DHB services prior to distribution, it was evident from the completed forms that terms such as "sub-acute" and "rehabilitation" are used differently in different services. This problem was resolved by using a single measure of beds that included all categories. Configuration of mental health services varies across DHBs, especially in relation to services such as respite beds used as an alternative to admission. Some DHBs have a capped budget for respite beds, and respite is not available once the budget is spent. This makes quantifying the respite bed provision somewhat problematic. Discussion with DHB clinicians and managers suggests

that these sources of error are likely to be small, and the numbers of inpatient beds and total number of staff are reasonably well defined.

From the data collected, preliminary comparisons are possible with accepted benchmarks for bed numbers. The data reported here suggest that most DHBs are providing beds at the levels projected in the resource guideline established in 1998 (Mental Health Commission, 1998). That benchmark is set at 15 beds per 100,000 total population. Even accounting for the lower denominator used in the current study (population aged 15-65), provision seems high in relation to the Mental Health Commission guideline.

Conclusion

The results are subject to the caveat that surveys and officially reported data may contain inaccuracies. Notwithstanding this caveat the association between acute compulsory care and bed availability is high, and seems unlikely to be wholly artefactual. The study does not suggest that any service factor other than available beds contributes to rates of either inpatient or community compulsion. Future research should focus on trends in use of compulsory admission, their relationship to bed numbers, and into alternatives that may prevent the need for compulsion. There is also a need to understand why rates of committal in some DHBs are much higher than in others. These differences are unlikely to be due to differences in clinical presentation alone, and challenge clinicians and service providers to explore non-coercive interventions in mental health care.

Table 1: Mental health service provision and general practitioner availability by DHB

DHB	Inpatient beds/ 100,000	Total beds / 100,000	R	Psychiatrists /100,000	R	RNs / 100,000	R	Average ranking	Ranked place	General Practitioners/ 100,000 ¹	Section 11 ²	Section 29 ²
Auckland	20	32.1	15	25.5	6	77.2	12	11	12=	101.3	10.5	64.25
Bay of Plenty	17.5	17.5	20	12.6	18=	46	17	18.3	20	79.7	9.25	37.25
Canterbury	24.7	48.4	3	25	8	143	4	5	3	85	11.5	49
Capital & Coast	16.1	39.4	6	30	1	142	5	4	1	84	10.75	79.5
Counties-Manukau	18.4	34.6	10	28.1	2=	91	10	7.3	6	60.3	9	77.25
Hawkes Bay	23.4	34	11	12.6	18=	58.5	16	15	16	78.7	10.75	60
Hutt Valley	30	35.5	9	28.1	2=	103.3	9	6.7	5	67.3	9.25	45.25
Lakes	19	33.3	12=	13.2	16=	152.4	3	10.3	10	84.3	7.75	59.5
Mid Central	23.3	23.3	18	13.2	16=	85.4	12	15.3	17	72	8.5	23.5
Nelson Marlborough	23.5	38.8	7	27.3	4	166.1	2	4.3	2	81	8.5	41.75
Northland	31.2	44.7	5	22.8	9	87.7	11	8.3	8=	80.3	11.25	81.5
Otago	25.4	45.9	4	18	12	116.4	7	7.7	7	92.7	14	64.25
South Canterbury	16.2	25.6	17	4.7	21	73.5	14	17.3	19	76	11	48.25
Southland	32.4	32.4	14	13.7	15	33.8	19	16	18	79.3	5	38.75
Tairāwhiti ³	29.6	37	8	14.6	14		21	14.3	15	79	13.25	84.25
Taranaki	28.8	62	1	20.2	10	120.9	6	5.7	4	61.7	14	41.25
Waikato	25.6	28.3	16	19.4	11	59.4	15	13.7	14	68.3	12.75	85.75
Wairarapa ⁴				10.8	20	31.25	20			71.7	5.25	54.5
Waitemata	20.7	21.9	19	25.5	5	95.8	8	10.7	11	62	8	52
West Coast	23.8	33.3	12=	18.1	12	174.8	1	8.3	8=	68.7	12	52.25
Whanganui	33	54	2	17.4	13	42.3	18	11	12=	78.7	15	96.25
Average	24.13	36.1		19.5		95.01				76.76	10.35	58.87

R = Ranking

¹Source: Medical Council of New Zealand (2010). *The New Zealand Medical Workforce in 2009*

²Average rates, 2005-8. Source: Ministry of Health. (2006-9). *Office of the Director of Mental Health. Annual Report 2005-8*. Wellington: Ministry of Health.

³Number of nurses for Tairāwhiti not available

⁴Inpatient mental health services for Wairarapa DHB are provided by the neighbouring Capital and Coast DHB

Table 2: key correlations, Mental health service and general practitioner availability (n=20)

	Section 11	Section 29
Section 11	1	.61
Section 29	.61	1
Total beds/100,000 ¹	.56 ²	.24
Inpatient beds/100,000	.42 ²	.21
RNs	.20	-.12
Medical	-.09	.22
Service intensity	-.19	-.16
GP availability	-.25	.004

¹Includes respite beds

² $p < .005$ (2-tailed)

References

- Abas, M., Vanderpyl, J., Prou, T. L., Kydd, R., Emery, B., & Foliaki, S. A. (2003). Psychiatric hospitalization: reasons for admission and alternatives to admission in South Auckland, New Zealand. *Australian and New Zealand Journal of Psychiatry*, 37(5), 620-625.
- Bindman, J., Tighe, J., Thornicroft, G., & Leese, M. (2002). Poverty, poor services, and compulsory psychiatric admission in England. *Social Psychiatry and Psychiatric Epidemiology*, 37, 341-345.
- Engberg, M. (1991). Involuntary commitment in Greenland, the Faroe Islands and Denmark. *Acta Psychiatrica Scandinavica*, 84(4), 353-356.
- Hatling, T., Krogen, T., & Ulleberg, P. (2002). Compulsory admissions to psychiatric hospitals in Norway--International comparisons and regional variations. *Journal of Mental Health*, 11(6), 623-634.
- Hotopf, M., Wall, S., Buchanan, A., Wessely, S., & Churchill, R. (2000). Changing patterns in the use of the Mental Health Act 1983 in England, 1984-1996. *British Journal of Psychiatry*, 176, 479-484.
- Kjellin, L. (1997). Compulsory psychiatric care in Sweden 1979-1993. Prevalence of committed patients, discharge rates and area variation. *Social Psychiatry & Psychiatric Epidemiology*, 32(2), 90-96.
- Malcolm, L. (1989). Bed availability as a significant influence on rates of committal to New Zealand's psychiatric hospitals. *New Zealand Medical Journal*, 102, 8-9.
- Ministry of Health. (2006-9). *Office of the Director of Mental Health. Annual Report 2005-8*. Wellington: Ministry of Health.
- Ministry of Health. (2013). *Mental health and addiction: Service use 2009/10*. Wellington: Ministry of Health.
- Morgan, C., Mallett, R., Hutchinson, G., Bagalkote, H., Morgan, K., Fearon, P., et al. (2005). Pathways to care and ethnicity. 1: Sample characteristics and compulsory admission: Report from the AESOP study. *The British Journal of Psychiatry*, 186(4), 281-289.
- New Zealand Medical Association. (2009). *An analysis of the New Zealand general practitioner workforce – Update 2009*. n.p.: New Zealand Medical Association.

O'Brien, A. J., Kydd, R. R., & Frampton, C. (2011). Social deprivation and use of mental health legislation in New Zealand. *International Journal of Social Psychiatry* 58(6), 581-586.

Statistics New Zealand (2010). 2006 Census. District Health Board Area Summary Tables. Retrieved on July 20 from <http://www.stats.govt.nz/Census/about-2006-census/district-health-board-area-summary-tables.aspx>

Wheeler, A., Robinson, E. Robinson, G. (2005). Admissions to acute psychiatric inpatient services in Auckland, New Zealand: a demographic and clinical review. *The New Zealand Medical Journal*, 118(1226), 1-15.

CHAPTER TWELVE: ARE CLINICIAN PERCEPTIONS OF CIVIL COMMITMENT RELATED TO REGIONAL VARIATION IN RATES OF CIVIL COMMITMENT? (PUBLICATION 6)

Abstract

Background

Clinician perceptions of civil commitment have been suggested as contributing to variation in rates of compulsion. Variation has been reported in multiple international jurisdictions and is evident in New Zealand. However there is little research which attempts to explore how clinician perceptions of civil commitment are related to rates of committal.

Aims

The study had three aims. 1. To develop and test the psychometric properties of a questionnaire designed to measure clinician perceptions regarding the use of civil commitment. 2. To determine whether clinician perceptions predict the rate of committal in their health districts. 3. To determine whether perceptions of nurses and doctors are associated with the rate of committal in their health districts.

Methods

A new 24-item survey of attitudes to civil commitment (The Clinician Perceptions of Civil Commitment Scale (CPoCCS)) was developed and tested using principal components analysis. To test for convergent validity, results of the CPoCCS were compared to responses to ten clinical vignettes representing common scenarios in which a decision to use mental health legislation might be considered. Predictive validity of the CPoCCS was tested against the rate of committal in the respondents' health districts (District Health Boards – DHBs). Separate analysis was conducted to determine the relationship of clinical role with DHB rates of committal. A purposive sample of 169 mental health nurses and psychiatrists were recruited from nine DHBs selected to represent those with high and low rates of use of civil commitment.

Results

Principal components analysis revealed a 3-factor model which was labeled “Quality of relationships and services”, “Necessities and benefits”, and “Negative effects”. The model explained 39% of the overall variance in attitudes. Convergent validity with the clinical vignettes was not established. Of the three CPoCCS factors, necessities and benefits showed an association with DHB rates of committal ($p = .02$). Two factors, negative effects ($p = .07$) and necessities and benefits ($p = .03$) showed an association with clinical role. On regression analysis the association of necessities and benefits and clinical role remained ($p = .004$) and the association of necessities and benefits and DHB rates of committal approached significance ($p = .06$).

Conclusions

Variations in rates of civil commitment across DHBs are not related to the views of individual clinicians. Future development of the CPoCCS should focus on perceptions of necessity and benefits. Clinicians in multidisciplinary teams should be aware of interdisciplinary differences in perceptions of civil commitment.

Key words: civil commitment, variation, mental health legislation, decision making

Introduction

Use of mental health legislation is an ethically and clinically challenging aspect of professional practice, but one which is ubiquitous throughout the world. Multiple studies have identified variation in use of legislation between different jurisdictions in Europe (Riecher-Rossler & Rossler, 1993; Salize & Dressing, 2004) within European jurisdictions such as Finland (Siponen, Valimaka, Kaivosoja, Marttunen, & Kaltiala-Heino, 2010) Sweden (Kjellin, 1997) and England (Bindman, Tighe, Thornicroft, & Leese, 2002) between Commonwealth countries (Lawton-Smith, 2005). Variation has also been noted across time, for example in the United States, Italy and England/Wales (Segal, 1989), Washington (Durham & Pierce, 1986), England (Hotopf, Wall, Buchanan, Wessely, & Churchill, 2000) and Sweden (Kjellin, Ostman, & Ostman, 2008).

Several New Zealand studies have noted variation in rates of committal. (Malcolm, 1989) reported that rates of compulsory admission under New Zealand's previous (1969) legislation were higher in districts where psychiatric hospitals were located. (Kydd, Nola, & Wright, 1991) studied committal under the same legislation, and noted variation of between 44 and 149/100,000 across four contiguous geographical areas. The variation was associated with a measure of underprivilege, the Jarman Index. A more recent study noted variation associated with an area measure of social deprivation under current legislation, the Mental Health (Compulsory Assessment and Treatment) Act (1992) (the Act) (O'Brien, Kydd, & Frampton, 2011).

Clinician decision making has been identified as one factor that may influence rates of committal. In their studies of rates of committal in European countries (Riecher-Rossler & Rossler, 1993) and Zinkler and Priebe (2002) referred to interpretation of legislation as possibly contributing to variation in rates although they did not empirically investigate such a construct. In the New Zealand context Wheeler (2005) has argued that decisions to use mental health legislation reflect "the varied training and practice of a large number of clinicians" (p. 7 of 9). A similar argument was made by the Director of Mental Health who commented that "variations in practice" may be one possible explanation for variation in rates of committal (Ministry of Health, 2010) p. x. More recently, du Fresne (2013) also commented on variation between clinicians in making committal decisions.

New Zealand's statutory mental health services are provided by 20²¹ District Health Boards (DHBs) with populations varying from 32000 to 481000 (www.stats.govt.nz). Although there are some regional differences in the pattern and extent of mental health services, all districts have the common features of mobile community mental health teams, some form of case management, and access to inpatient mental health services attached to general hospitals.

In the operation of New Zealand mental health legislation, two professional groups play key roles. The first group is doctors (usually psychiatrists) who act in the role of responsible clinician, with decision making authority in questions of committal, and with responsibility to manage the care of patients under the Act. Registered nurses comprise the second group, acting in the role of duly authorised officer, with responsibility to provide advice and assistance in the operation of the Act. Nurses acting as duly authorized officers do not have formal authority to make decisions to apply the Act. A small number of other health professionals are also assigned the roles of responsible clinician and duly authorized officer.

Doctors and nurses work as members of multidisciplinary mental health teams, and hence influence each other's decision making in clinical matters, including committal. However differences in education and professional socialisation may mean that these two professional groups hold different views about use of mental health legislation. Ministry of Health reports show that the most commonly used sections are Section 11 (usually used for acute admission) and Section 29 (community treatment order) (Ministry of Health, 2006-2012). These two sections were chosen for examination in the current report because they address different but equally important aspects of compulsory care: emergency treatment and long community term care. For the year 2011 variation in use of Section 11 was between 7 and 15/100,000²² and in use of Section 29 between 33 and 151/10,000 (Ministry of Health, 2012).

²¹ At the time the study was designed there were 21 DHBs. Two DHBs (Otago and Southland) merged in 2010 to form the Southern DHB, however they are shown as separate DHBs in this report as the data on DHB rates of use of legislation dates to the period prior to the merger. At the time of the study the mental health services in in the Otago and Southland regions were little changed as a result of the merger.

²² This figure excludes the Wairarapa and South Canterbury DHBs which have limited inpatient services and admit some patients to mental health units in neighbouring DHBs.

Three lines of research have been followed in investigating the role of clinical decision making in the use of mental health legislation. The first uses analysis of actual committal decisions against defined criteria to determine if decisions reflect the legal standard (e.g. Engleman, Jobes, Berman, and Langbein (1998); (Lidz, Mulvey, Appelbaum, & Cleveland, 1989). Such studies have generally shown that clinicians make decisions that are consistent with the criteria of legislation. The second uses vignettes to present clinicians with hypothetical scenarios considered to represent typical situations in which committal might be considered e.g. Wynn, Myklebust, and Bratland (2007) Abramowitz, Bentov-Gofrit, Khawaled, Bauer, and Cohen (2011). The third line of research makes use of questionnaires to measure clinicians' attitudes and beliefs about use of legislation (Brooks, 2007; Shao, Xie, & Wu) 2012. A limitation of the existing research is that it has not resulted in a standardized instrument that could be applied across multiple settings or time points. Differences in the criteria of legislation and provision of mental health services mean that the results of international studies may not be applicable in the New Zealand context. Furthermore, although formal decision-making in New Zealand is vested in psychiatrists, the organization of clinical services and the positioning of nurses in the statutory role of duly authorized officer mean that both professional groups are influential in decisions on civil commitment. Most previous research on decision making under mental health legislation has focused on the practice of psychiatrists, perhaps reflecting that in other jurisdictions other professionals are less influential. No New Zealand study has investigated the role of clinical decision making in use of mental health legislation. The current study explored the factor structure of a new 24 item survey of clinician attitudes to use of mental health legislation, the CPoCCS. The CPoCCS was then used to predict rates of committal in DHBs. The study also investigated the relationship between decisions on 10 clinical vignettes, in DHBs with high and low rates of use of legislation. Further analysis explored the relationship between participants' clinical roles and their perceptions of civil commitment.

Methods

Aims

The study had three aims. The study had three aims. 1. To develop and test the psychometric properties of a questionnaire designed to measure clinician perceptions regarding the use of civil commitment. 2. To determine whether clinician perceptions predict the rate of committal in their health districts. 3. To determine whether perceptions of nurses and doctors are associated with the rate of committal in their health districts.

Design

The study used survey methods to generate data from clinicians employed in health districts purposively selected to represent those with high and low rates of use of mental health legislation.

Data sources

Data from reports of the Office of the Director of Mental Health (Ministry of Health, 2006) (Ministry of Health, 2007, 2008; Ministry of Health 2009; Ministry of Health, 2010) were analysed to determine DHBs with high and low rates of use of Sections 11 and 29. Clinicians from a total of nine DHBs formed the sample. The sample consisted of clinicians in the five DHBs that showed the highest rates of use of mental health legislation and four of the five DHBs that showed the lowest rates. A fifth DHB with a low rate of committal did not respond to requests to participate in the study. The clinicians sampled were those holding statutory responsibility under the Act. They were doctors (usually psychiatrists or psychiatrists in training) appointed as responsible clinicians, or nurses appointed as duly authorized officers. The study excluded forensic, age related specialty services, and addiction services.

Sample

A total of 169 survey forms were returned giving a response rate of 29%. Of the 169 survey forms 162 provided data on respondents' clinical role (61 responsible clinicians and 101 duly authorized officers, missing data =2). These data were used in the analysis of the CPoCCS. The final sample size of 162 comfortably met the suggested guideline of five respondents per item for component analysis (Hair, Black, Babin, Anderson, & Tatham, 2005). A large majority of participants (90.1%, $n=146$) had over ten years of clinical experience. The majority of participants were female (57.4%, $n= 93$); most responsible clinicians (62.3%, $n = 38$) were male while most duly authorized officers (69.9%, $n= 70$) were female. Characteristics of participants in the CPoCCS survey are presented in Table 1.

Table 1: Characteristics of respondents (n=162).Clinician Perceptions of Civil Commitment Scale (CPoCCS)

		Years' experience				Gender	
		0-5	6-10	11-20	Over 20	Male	Female
Responsible		0	6	29	26	38	23
	clinicians ($n=61$)						
Duly	Authorized	0	12	38	50	31	70
	Officer ($n=101$)						

Forty-six responses did not clearly identify their DHB and were excluded from analysis of the vignettes. The final sample size of 123 comfortably met the suggested guideline of five respondents per item (Hair et al., 2005). The majority of participants in the vignette study (88.6.3%, $n=109$) had over ten years of clinical experience. The majority of participants were female (63.4%, $n= 78$); most responsible clinicians (59%, $n = 26$) were male while most duly authorized officers (64%, $n= 51$) were female. Characteristics of participants in the vignette study are presented in Table 2.

Table 2: Characteristics of Respondents (Vignettes) (n=123)

		Years experience				Gender	
		0-5	6-10	11-20	Over 20	Male	Female
Responsible		0	5	22	17	26	18
clinicians (n=44)							
Duly	Authorized	1	8	29	39	28	50
Officer (n=79)							

Instruments

Clinician Perceptions of Civil Commitment Scale (CPoCCS)

The Clinician Perceptions of Civil Commitment Scale (CPoCCS) is a new 24 item instrument designed to measure clinicians' attitudes to civil commitment. The CPoCCS was tested for the first time in the current study. From the literature on civil commitment a set of 35 potential items were generated reflecting clinician perceptions of use of Sections 11 and 29. These included general issues of the ethics of civil commitment, support for the dangerousness standard embodied in the notion of risk to self or others, concern about use of civil commitment to allay public anxieties about people with mental illness, preventing relapse and maintaining stability, the place of substance use in civil commitment, the effect on the therapeutic relationship of civil commitment, and the long term effect of civil commitment on patients' engagement with services. In developing the CPoCCS, allowance was made for the specific requirements of New Zealand legislation, for example the exclusion of substance abuse as sole grounds for committal.

On further analysis, and after discussing early drafts of the CPoCCS with clinicians, researchers and supervisors, the items were reduced to 24 for inclusion in the questionnaire. Five constructs were identified a priori that were thought to capture most issues covered in debate about civil commitment. These were: benefits (whether patients received any advantages or assistance); harms (whether patients might be disadvantaged through the use of legislation); perceptions of clinical practice (perceptions of how decisions to use legislation might impact on care and treatment); clinicians' general

beliefs about the use of coercion (specific perceptions about use of mental health legislation); and necessity (the perception that in some instances use of mental health legislation is necessitated by clinical urgency or need for care). Items were further reviewed by clinical experts to confirm content and face validity. Participants were asked to respond on a 7-point Likert scale (1 = strongly agree, 7 = strongly disagree). Five and seven point scales have been found to provide comparable results (Dawes, 2008) and both yield superior data to scales with less than five or more than seven items (Dawes, 2008; Preston & Colman, 2000). To limit any confounding by patterning of responses the individual items were scrambled in the final questionnaire using an online random number generator (<http://www.random.org/>). The final version of the questionnaire was presented to a group of clinical experts and found to have acceptable face validity²³.

Clinical vignettes

Ten vignettes were written to represent the most common scenarios in which clinicians would consider using sections 11 and 29 of the Act. Trial vignettes were written to include factors commonly encountered in clinical practice, and which often play a part in decisions to use mental health legislation. These included risk to self and others, self-harm or suicidality, neglect of self-care, compliance with medication, engagement in treatment, history of mental illness, psychosis, interpersonal conflict and substance abuse. Vignettes were discussed with five mental health nurses and four psychiatrists to gauge their authenticity, clarity, and representativeness of clinical practice. The vignettes required clinicians to rate level of agreement with a committal decision on a seven point Likert scale (1 = strongly agree, 7 = strongly disagree). Initial responses indicated high face validity. In response to feedback changes were made to provide greater variance in the number of risk factors across the vignettes²⁴.

²³ The questionnaire is shown in Appendix 7.

²⁴ The questionnaire is shown in Appendix 8.

Procedure

Key officials in the identified DHBs were contacted by telephone and email and invited to participate. Once they had agreed, DHBs were sent survey packs containing an information sheet, a demographic data collection form, the survey and vignette instruments and a return envelope. To maximise the response rate, participants were offered an incentive of entry into a prize draw. Survey forms were returned anonymously to the researcher. Ethics approval was obtained from the Multi-region Ethics Committee of the Ministry of Health (MEC/10/009/EXP).

Analytic strategy

In line with the study aims, analysis was conducted in two phases. First, the CPoCCS was examined using principal components analysis with oblimin rotation to identify the component structure. The reliability of each component was then assessed. The second stage of analysis examined whether the component scores of the CPoCCS could predict (a) decision making in the clinical vignettes and (b) variation in the use of legislation across New Zealand's DHBs. All data were analysed using SPSS version 20. Data were cleaned and missing variables entered where they were available.

Results

Clinician Perceptions of Civil Commitment Scale

Initial analysis of the CPoCCS for normality included tests of skewness and kurtosis. Items showed reasonably normal distributions. Cronbach's alpha was calculated to determine internal reliability and intraclass coefficient, the reliability of each factor and of the complete instrument. While established instruments set a Cronbach alpha coefficient of $\geq .80$, the lower level of $\geq .70$ is considered acceptable for instruments in the early stages of development Morris et al. (2011). Accordingly, a level of $\geq .70$ was set for the current study. The measured reliability of the CPoCCS total was .701 and so was at an acceptable level. Inspection of the correlation matrix revealed many coefficients of .3 and above. The Kaiser-Meyer-Olkin value was .703, exceeding the recommended

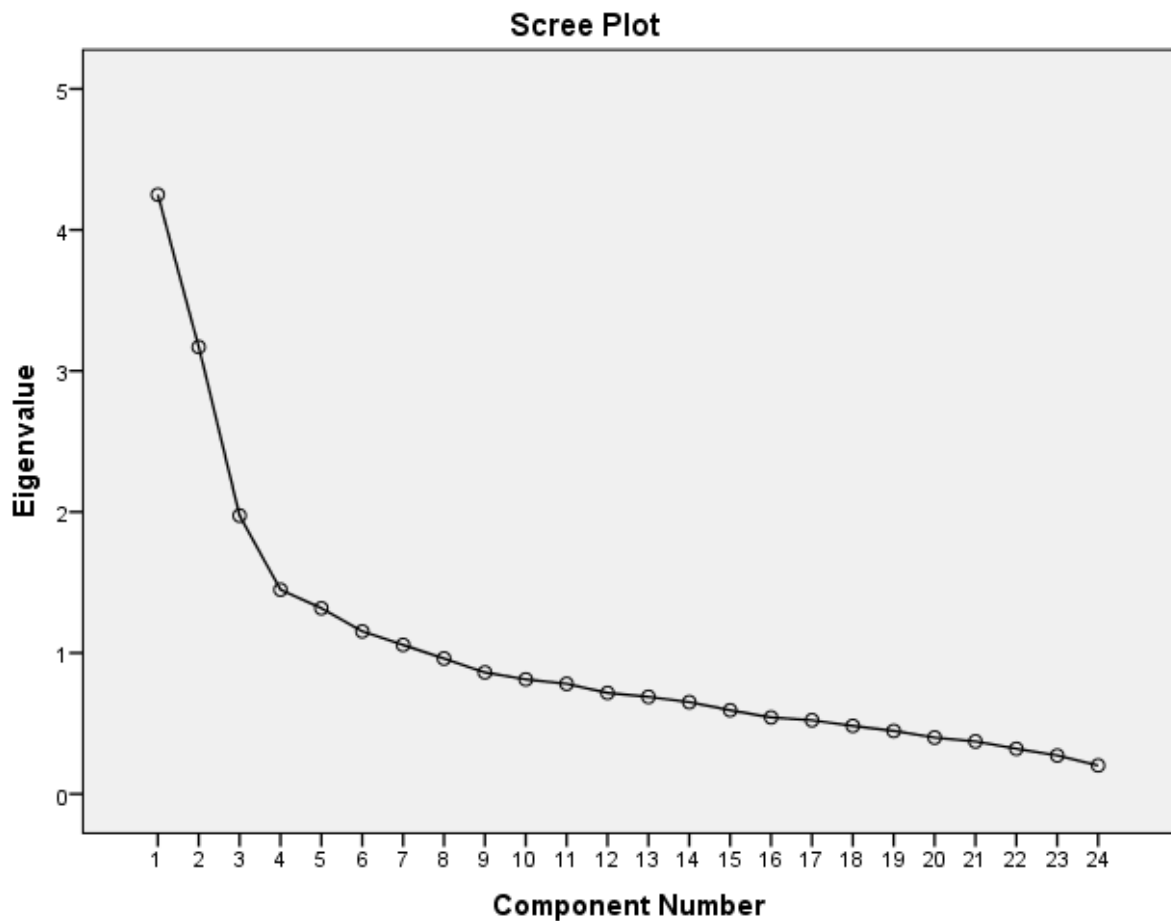
value of .6 (Kaiser, 1970). Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance (χ^2 ; df 276, $p < .0001$), supporting the factorability of the correlation matrix. Item mean scores are shown Table 3.

Table 3: Item mean scores Clinician Perceptions of Civil Commitment Scale (CPoCCS) (n=161)

	Item	M	SD
1	It is better to let people learn from their experience of relapse than to prevent relapse through use of the Mental Health Act	4.43	1.34
2	Clinicians should work in collaboration with patients rather than use the coercive powers of the Mental Health Act	2.47	1.16
3	For people with severe mental illness, use of the Mental Health Act is essential to gain control of their symptoms	4.17	1.40
4	The Mental Health Act is essential when patients with severe mental illness are non-compliant with antipsychotic medication	3.36	1.36
5	Use of the Mental Health Act could be avoided with better integrated mental health services	3.75	1.48
6	The Mental Health Act can provide a period of stability that will allow people to engage in voluntary mental health care	2.73	1.10
7	Some people will only take their medications if they are under the Mental Health Act	2.56	1.19
8	The Mental Health Act should always be used in cases where there is clear risk of harm to others	3.49	1.61
9	Use of the Mental Health Act undermines the therapeutic relationship between patients and clinicians	4.53	1.12
10	Even patients with severe mental illness can be treated without use of coercion through the Mental Health Act	2.81	1.21
11	Most patients with severe mental illness accept treatment if it is not coerced through the use of the Mental Health Act	4.09	1.05
12	Use of the Mental Health Act assists people with severe mental illness to get access to services	3.41	1.18
13	For people with severe mental illness who lack insight, use of the Mental Health Act is essential to gaining treatment adherence	3.26	1.17
14	Use of the Mental Health Act makes it difficult for patients to feel included in society	4.25	1.15
15	Use of the Mental Health Act adds to the stigma of mental illness	3.69	1.18
16	Using the Mental Health Act is inconsistent with the principle of least restrictive care	4.60	1.19
17	Family members find it reassuring for a relative with severe mental illness to be treated under the Mental Health Act	3.25	1.02
18	For people with severe mental illness who abuse substances the Mental Health Act is an important means of preventing deterioration in mental state	4.38	1.18
19	Clinicians who are able to get alongside patients are less likely to use the coercive powers of the Mental Health Act	3.07	1.13
20	Intensive community mental health care could prevent the need to use the Mental Health Act	3.55	1.43
21	Once they are well, most people will acknowledge that use of the Mental Health Act was necessary to ensure they received appropriate treatment	3.50	1.06
22	Often, the most effective way to provide care for a person with severe mental illness is through use of the Mental Health Act	3.57	1.28
23	Use of the Mental Health Act tends to drive people away from mental health services	4.32	.95
24	Use of the Mental Health Act undermines patients' autonomy	4.00	1.16

Next, the 24 items of CPoCCS were subjected to principal components analysis. Principal components analysis revealed seven components exceeding eigenvalues of 1 explaining 60% of the variance. An inspection of the scree plot (Figure 1) revealed a clear break after the third component. Using Cattell's scree test (Cattell, 1966), it was decided to retain three components for further analysis.

Figure 1. Scree Plot



A second principal components analysis was then conducted. This analysis explained 39% of the total variance, the individual components contributing 17.7%, 13.2% and 8.2% respectively. To aid in the interpretation of these three components, oblimin rotation was performed, as there was a reasonable expectation that the components would be correlated. The rotated solution revealed a simple structure (Thurstone, 1947) with all components showing a number of strong loadings and all but two items loading substantially on only one component. Correlation between the

components was weak, varying between $r=-.03$ and $r=.1$. Two items (numbers 9 and 10) failed to load at above the level of .475 and were dropped from the analysis. The three components were labelled “Quality of relationships and services”, “Necessity and benefits”, and “Negative effects”. Quality of relationships and services included concepts such as collaboration, and practices that might improve services and result in less committal, for example Item 1, “Clinicians should work in collaboration with patients rather than use the coercive powers of the Mental Health Act” and Item 3, “Intensive community mental health care could prevent the need to use the Mental Health Act”. Necessity and benefits included practices of committal perceived as providing benefits, and situations where clinicians might perceive they had no option but committal but where there was nevertheless some expectation of benefit. Examples included Item 12, “Often, the most effective way to provide care for a person with severe mental illness is through use of the Mental Health Act” and Item 15, “The Mental Health Act can provide a period of stability that will allow people to engage in voluntary mental health care”. The third factor “Negative effects” included aversive effects of mental health legislation, such as Item, 23, “Use of the Mental Health Act tends to drive people away from mental health services” and Item 24, “Use of the Mental Health Act undermines patients’ autonomy”. The factor structure reflected the a priori constructs decided during the instrument development. Reliability of the three components was .78, .79 and .60 respectively. Results of the principal components analysis are shown in Table 4.

Table 4: CPoCCS: Principal components analysis and Oblimin rotation showing structure matrix

	Survey item	Components			CM
		1	2	3	
1	Clinicians should work in collaboration with patients rather than use the coercive powers of the Mental Health Act	.667			.452
2	Clinicians who are able to get alongside patients are less likely to use the coercive powers of the Mental Health Act	.661			.457
3	Intensive community mental health care could prevent the need to use the Mental Health Act	.660			.439
4	Most patients with severe mental illness accept treatment if it is not coerced through the use of the Mental Health Act	.603			.441
5	Use of the Mental Health Act makes it difficult for patients to feel included in society	.567			.485
6	Using the Mental Health Act is inconsistent with the principle of least restrictive care	.563			.362
7	Use of the Mental Health Act adds to the stigma of mental illness	.545			.416
8	Use of the Mental Health Act could be avoided with better integrated mental health services	.504			.255
9	Even patients with severe mental illness can be treated without use of coercion through the Mental Health Act	.455			.289
10	It is better to let people learn from their experience of relapse than to prevent relapse through use of the Mental Health Act	.363			.169
11	For people with severe mental illness who lack insight, use of the Mental Health Act is essential to gaining treatment adherence		.684		.479
12	Often, the most effective way to provide care for a person with severe mental illness is through use of the Mental Health Act		.673		.490
13	The Mental Health Act is essential when patients with severe mental illness are non-compliant with antipsychotic medication		.662		.486
14	Family members find it reassuring for a relative with severe mental illness to be treated under the Mental Health Act		.598		.433
15	The Mental Health Act can provide a period of stability that will allow people to engage in voluntary mental health care		.590		.363
16	Some people will only take their medications if they are under the Mental Health Act		.571		.337
17	For people with severe mental illness, use of the Mental Health Act is essential to gain control of their symptoms		.551		.377
18	For people with severe mental illness who abuse substances the Mental Health Act is an important means of preventing deterioration in mental state		.530		.364
19	Use of the Mental Health Act assists people with severe mental illness to get access to services		.513		.270
20	The Mental Health Act should always be used in cases where there is clear risk of harm to others		.480		.321
21	Once they are well, most people will acknowledge that use of the Mental Health Act was necessary to ensure they received appropriate treatment			-.632	.547
22	Use of the Mental Health Act undermines the therapeutic relationship between patients and clinicians			.628	.399
23	Use of the Mental Health Act tends to drive people away from mental health services			.593	.401
24	Use of the Mental Health Act undermines patients' autonomy			.549	.361

CM, communalities

Vignette survey

Ratings on the vignettes were compared across clinicians from high versus low DHBs using an independent samples two-tailed *t*-test (see Table 5). A positive association ($p=.04$) on vignette 7 was the only significant difference. For the aggregate vignettes (10 vignettes) there was no difference between DHBs. The aggregate vignettes did not predict the scores on the individual factors of the CPoCCS, or on any combinations of factors. Because no differences between DHBs were identified the vignette instrument could not be used to test the convergent validity of the CPoCCS.

Table 5: Results of clinical vignette analysis by DHB's with high and low rates of committal (n=123)

	High DHBs		Low DHBs		Overall	
	M	SD	M	SD	M	SD
Section 11						
Vignette 1	3.77 ¹	1.12	3.61	1.38	3.67	1.27
Vignette 2	3.75	1.04	3.44	1.45	3.56	1.29
Vignette 3	4.19	1.08	4.20	1.14	4.19	1.11
Vignette 4	4.58	.75	4.43	1.10	4.49	.96
Vignette 5	4.95	.95	5.07	.92	5.02	.94
Section 29						
Vignette 6	5.13	.79	4.91	1.18	5.03	1.02
Vignette 7*	3.93	1.04	3.50	1.21	3.67	1.16
Vignette 8	4.56	.95	4.61	1.13	4.60	1.06
Vignette 9	5.23	.80	5.20	1.07	5.21	.96
Vignette 10	4.45	1.01	4.25	1.30	4.33	1.19

* $p<.05$, 2-tailed, independent samples *t*-test

¹ 1 = very strongly agree, 7 = very strongly disagree

Predictive validity of the CPoCCS

Ratings on the CPoCCS factors were contrasted across DHBs and between clinician groups. One way ANOVAs were used to test univariate associations firstly between CPoCCS factors and DHBs, and then between CPoCCS factors and clinician groups. On univariate analysis, one of the three factors, necessities and benefits, was

associated with both DHB ($p=.02$) and clinical role ($p=.03$). Further analysis was then conducted using a general linear model to test the interaction between clinician group and DHB. On this analysis the association of necessities and benefits with DHBs approached significance ($p=.06$) and was strongly associated with clinical role ($p=.004$). The effect of the interaction between clinician group and DHB was not significant ($p=.107$). The results of these analyses are shown in Table 6.

Table 6. Predictive validity of Clinician Perceptions of Civil Commitment Scale (CPoCCS)

Anova DHB

CPoCCS factor	n ¹	df	F	p
Negative effects	120	119	.74	.39
Necessities and benefits	116	115	5.84	.02
Quality of relationships and services	118	117	.14	.71

Anova clinical role

CPoCCS factor	n ²	df	F	p
Negative effects	155	154	3.44	.07
Necessities and benefits	154	153	4.28	.03
Quality of relationships and services	159	158	1.33	.25

General linear model

DHB	n	df	F	p
Negative effects	2	1	.046	.83
Necessities and benefits	2	1	3.729	.06
Quality of relationships and services	2	1	.226	.66

Clinical role

Negative effects	2	1	1.948	.17
Necessities and benefits	2	1	8.652	.004
Quality of relationships and services	2	1	.049	.82

DHB / Clinical role interaction

Negative effects	2	1	.464	.5
Necessities and benefits	2	1	2.646	.107
Quality of relationships and services	2	1	.822	.37

¹ Missing data = 3, 7 and 5

² Missing data = 7, 8 and 3

Discussion

This study sought to validate a new instrument, the CPoCCS, designed to measure clinician perceptions of civil commitment, and to test whether that instruments would predict clinical decision making in DHBs. Content and face validity of the CPoCCS were established by literature review, analysis of the wording of mental health legislation, discussion with clinical experts, and further review of the items by the researchers. Internal reliability was established at .701 and is acceptable for an instrument under development (Morris et al., 2011). The three factor solution drew on 22 of the 24 items used meaning that there was little redundancy in the questionnaire items. The solution explained 39% of variance in decision making related to civil commitment, suggesting that there is scope for the instrument to be further refined. Predictive validity of the CPoCCS was not established, and concurrent validity could not be established using the vignette instrument.

The vignette instrument did not predict DHB decision making despite content and face validity being established through review by clinical experts. However, previous vignette research into clinical decision making in civil commitment has found vignette methods to be successful (e.g. (Abramowitz et al., 2011; Wynn et al., 2007)). The vignettes used in the current study may have been too brief to identify differences, or they may have provided too strong a signal of the key issues written into their construction.

Of the individual factors of the CPoCCS “necessity and benefits” proved to be the most discriminating, with a significant difference between psychiatrists (responsible clinicians) and nurses (duly authorised officers) and a difference that approached significance between high and low DHBs. The ten items contributing to this factor suggest that the mental health act confers benefits to certain groups of people, or is necessary in some specified circumstances. The items have a strong clinical orientation, for example “For people with severe mental illness, use of the Mental Health Act is essential to gain control of their symptoms” and “Some people will only take their medications if they are under the Mental Health Act”. Responsible clinicians (psychiatrists) were in greater agreement with the necessities and benefits of the Act than duly authorised officers (nurses). Although most psychiatrists in the study were male and most nurses were female, difference between clinical roles is not attributable to gender as

analysis by gender showed no difference. This result indicates that clinicians acting in statutory roles under the Mental Health Act bring different perspectives their work, with responsible clinicians having a greater perception of need for and benefits of compulsion than duly authorized officers. This conclusion supports the observation of (Wheeler, 2005) that committal decisions reflect the varied training of clinicians, by suggesting that one source of difference is professional discipline. This result could be interpreted as meaning that the intent of the Act to bring a range of disciplinary perspectives to bear on decision making is being realised (McKenna & O'Brien, 2013). At the same time, differences between key groups of clinicians may introduce a tension into decision making of multidisciplinary teams. Differences in the perspectives of professional groups and how they impact on decision making, team functioning, and clinical care is an issue that warrants further investigation.

Previous research into decision making in civil commitment has focused on the clinician who makes the final decision, usually a psychiatrist. In the current study we identified two groups of clinicians, psychiatrists and nurses, each with statutory responsibility under mental health legislation, although only one (psychiatrists) with final decision making authority. Because mental health services are staffed by multidisciplinary teams we reasoned that the inclusion of both doctors and nurses would better reflect clinical decision making in practice. Differences between decision making by doctors and nurses have been noted in studies of ethical issues (Grundstein-Amado, 1993; Oberle & Hughes, 2001; Robertson, 1996). Even where different groups share opinions about specific cases their reasons for holding those opinions may differ. (Elger & Harding, 2004) found that although medical and law students had common views concerning compulsory hospitalisation of suicidal individuals with Huntington's disease, medical students saw this as being in the patients' interests, while law students identified benefits to families. Further research could explore the reasons held by different professional groups for their opinions about the need for civil commitment.

Existing research into clinical decision making has been based on single sites, and so has not been able to capture variation across regions covered by the same legislation. Strengths of the current study are that it drew on a representative sample of services, with different rates of committal, across a single jurisdiction and compared perceptions of clinicians with the population rates of committal in their health districts.

In the context of reform of the 1983 Mental Health Act of England and Wales, (Glover-Thomas, 2011) noted that the reformed legislation provides wide discretion to clinicians who in turn evince understandings of the legal standards that are highly pragmatic and at times idiosyncratic. Glover-Thomas (2011) further noted that the new legislation operates in a context of risk consciousness, and that a range of non-clinical factors impact on risk assessment, and therefore on decisions to use legislation. The results of the current study suggest that differences in the views held by different professional groups are one such non-clinical factor.

When asked for their individual views of civil commitment clinicians from DHBs with high and low rates of use of mental health legislation did not show significant differences in perceptions of civil commitment or in clinical decision making. This finding is in contrast to the suggestion in previous literature (Riecher-Rossler & Rossler, 1993; Zinkler & Priebe, 2002) that clinician decision making may explain variation in use of mental health legislation. It is possible however, that the views expressed by individual clinicians in response to a survey do not reflect their decisions in clinical practice. As much as could be ascertained, the clinicians surveyed were those employed by the DHBs whose rates of committal are highly divergent. Their perceptions and decisions in clinical practice appear somewhat different than those measured in the current study.

Differences in interpretation of legal criteria have been cited as explaining regional variations in Europe, but the large regional differences seen in New Zealand cannot be explained by clinicians' views as reported by the participants in the current study. One interpretation is that clinicians' decisions in practice do not reflect their personal views of civil commitment. This observation is supported by the assertion of (Kjellin et al., 2008) that service culture is a driver for rates of civil commitment, suggesting that individual clinicians' views are moderated by the culture of their clinical service. Another possibility is that population differences are more influential than clinicians' individual views, a possibility that is supported by the previous New Zealand studies of (Kydd et al., 1991) and (O'Brien et al., 2011).

Limitations

There are several limitations to this study. The data on DHB rates of civil commitment were collected between 2006 and 2010 while the surveys were administered in 2012. Mitigating this limitation is the consistency of DHB rates of civil commitment over the five years for which data were available. The study drew participants from nine of New Zealand's 21 DHB regions each with its own mental health service, meaning that the generalisability of findings can be considered relatively high within the New Zealand context. The response rate of 29%, while providing a sufficient number of participants for the study, creates a possibility of response bias. It is possible that those responding had more emphatic views about use of mental health legislation, although the direction of bias cannot be determined on the basis of the available data. The study needs to be read with the response rate in mind.

Conclusions

Regional differences in rates of civil commitment are not explained by differences in the perceptions of individual clinicians. Differences between members of multidisciplinary teams in perceptions of civil commitment could be significant in clinical practice, especially where there may be disagreement about the necessity for compulsion, and about potential benefits. Additional studies are needed to develop the CPoCCS by further assessment of construct reliability and by confirmatory factor analysis. Any such studies should focus on clinician perceptions of necessities and benefits. Understanding variation in rates of civil commitment requires research into factors other than clinician decision-making. Future research should also explore the implications of differences between professional groups both for decisions on civil commitment and for the functioning of multidisciplinary teams.

References

- Abramowitz, M. Z., Bentov-Gofrit, D., Khawaled, R., Bauer, A., & Cohen, T. (2011). Attitudes among medical and law students toward decision-making in regard to involuntary psychiatric hospitalization. *International Journal of Law and Psychiatry*, 34(5), 368-373.
- Bartlett, M. S. (1954). A note on the multiplying factors for various x^2 approximation. *Journal of the Royal Statistical Society, Series B16*, 296-298.
- Bindman, J., Tighe, J., Thornicroft, G., & Leese, M. (2002). Poverty, poor services, and compulsory psychiatric admission in England. *Social Psychiatry and Psychiatric Epidemiology*, 37, 341-345.
- Brooks, R. A. (2007). Psychiatrists' opinions about involuntary civil commitment: Results of a national survey. *Journal of the American Academy of Psychiatry & the Law* 35(2), 219-228.
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1(2), 245-276.
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5-point, 7-point and 10-point scales. *International Journal of Market Research*, 50(1), 61-77.
- du Fresne, S. (2013). The role of the responsible clinician. In J. Dawson & K. Gledhill (Eds.), *New Zealand's Mental Health Act in Practice* (pp. 183-197). Wellington: Victoria University Press.
- Durham, M. L., & Pierce, G. L. (1986). Legal intervention in civil commitment: the impact of broadened commitment criteria. *Annals of the American Academy of Political & Social Science*(484), 42-55.
- Elger, B. S., & Harding, T. W. (2004). Should a suicidal patient with Huntington's disease be hospitalized against her will? Attitudes among future physicians and lawyers and discussion of ethical issues. *General Hospital Psychiatry*, 26, 136-144.
- Engleman, N. B., Jobes, D. A., Berman, A. L., & Langbein, L. I. (1998). Clinicians' decision making about involuntary commitment. *Psychiatric Services*, 49(7), 941-945.
- Glover-Thomas, N. (2011). The age of risk: Risk perception and determination following the Mental Health Act 2007. *Medical Law Review*, 19(4), 581-605.
- Grundstein-Amado, R. (1993). Ethical decision-making processes used by health care providers. *Journal of Advanced Nursing*, 18(11), 1701-1709.
- Hair, J., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2005). *Multivariate data analysis*. Upper Saddle River, NJ.: Prentice-Hall.
- Hotopf, M., Wall, S., Buchanan, A., Wessely, S., & Churchill, R. (2000). Changing patterns in the use of the Mental Health Act 1983 in England, 1984-1996. *British Journal of Psychiatry*, 176, 479-484.
- Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika* 35(4), 401-415.
- Kjellin, L. (1997). Compulsory psychiatric care in Sweden 1979-1993. Prevalence of committed patients, discharge rates and area variation. *Social Psychiatry & Psychiatric Epidemiology*, 32(2), 90-96.
- Kjellin, L., Ostman, O., & Ostman, M. (2008). Compulsory care in Sweden. Development 1979-2002 and area variation. *International Journal of Law and Psychiatry*, 31, 51-59.
- Kydd, R. R., Nola, P. F., & Wright, J. J. (1991). Mental health needs in Auckland: 1982-6. An analysis using the Jarman index. *New Zealand Medical Journal*, 104(914), 255-257.

- Lawton-Smith, S. (2005). *A question of numbers. The potential impact of community-based treatment orders in England and Wales*. London: King's Fund.
- Lidz, C. W., Mulvey, E. P., Appelbaum, P. S., & Cleveland, S. (1989). Commitment: The consistency of clinicians and the use of legal standards. *American Journal of Psychiatry*, *146*(2), 176-181.
- Malcolm, L. (1989). Bed availability as a significant influence on rates of committal to New Zealand's psychiatric hospitals. *New Zealand Medical Journal*, *102*, 8-9.
- McKenna, B. G., & O'Brien, A. J. (2013). Mental health nursing and the Mental Health Act. In J. Dawson & K. Gledhill (Eds.), *New Zealand Mental Health Act*. Wellington: Victoria University Press.
- Ministry of Health. (2006). *The New Zealand Suicide Prevention Strategy 2006-2016*. Wellington: Ministry of Health.
- Ministry of Health. (2007). *Office of the Director of Mental Health. Annual Report 2006*. Wellington: Ministry of Health.
- Ministry of Health. (2008). *Office of the Director of Mental Health. Annual Report 2007*. Wellington: Ministry of Health.
- Ministry of Health (2009). *Office of the Director of Mental Health: Annual Report 2008*. Wellington: Ministry of Health.
- Ministry of Health. (2010). *Office of the Director of Mental Health: Annual Report 2009*. Wellington: Ministry of Health.
- Ministry of Health. (2012). *Office of the Director of Mental Health. Annual Report 2011*. Wellington: Ministry of Health.
- Morris, R., Scott, P. A., Cocoman, A., Chambers, M., Guise, V., Välimäki, M., et al. (2011). Is the Community Attitudes towards the Mentally Ill scale valid for use in the investigation of European nurses' attitudes towards the mentally ill? A confirmatory factor analytic approach. *Journal of Advanced Nursing*, *68*(2), 460-470.
- O'Brien, A. J., Kydd, R. R., & Frampton, C. (2011). Social deprivation and use of mental health legislation in New Zealand. *International Journal of Social Psychiatry* *58*(6), 581-586.
- Oberle, K., & Hughes, D. (2001). Doctors' and nurses' perceptions of ethical problems in end-of-life decisions. *Journal of Advanced Nursing*, *33*(6), 707-715.
- Preston, C. C., & Colman, A. M. (2000). Optimal number of response categories in rating scales: reliability, validity, discriminating power, and respondent preferences. *Acta Psychologica*, *104*(1), 1-15.
- Riecher-Rossler, A., & Rossler, W. (1993). Compulsory admission of psychiatric patients: an international comparison. *Acta Psychiatrica Scandinavica*, *87*, 231-236.
- Robertson, D. W. (1996). Ethical theory, ethnography, and differences between doctors and nurses in approaches to patient care. *Journal of Medical Ethics*, *22*(5), 292-299.
- Salize, H. J., & Dressing, H. (2004). Epidemiology of involuntary placement of mentally ill people across the European Union. *British Journal of Psychiatry*, *184*(2), 163-168.
- Segal, S. P. (1989). Civil commitment standards and patient mix in England/Wales, Italy, and the United States. *American Journal of Psychiatry*, *146*(2), 187-193.
- Shao, Y., Xie, B., & Wu, Z. Psychiatrists' attitudes towards the procedure of involuntary admission to mental hospitals in China. *International Journal of Social Psychiatry*, *58*(4), 440-447.
- Siponen, U., Valimaka, M., Kaivosoja, M., Marttunen, M., & Kaltiala-Heino, R. (2010). A comparison of two hospital districts with low and high figures in the compulsory care of minors: An ecological study. *Social Psychiatry & Psychiatric Epidemiology*, *46*(8), 661-670.
- Thurstone, L. L. (1947). *Multiple factor analysis*. Chicago.: University of Chicago Press.

- Wheeler, A., Robinson, E. Robinson, G. (2005). Admissions to acute psychiatric inpatient services in Auckland, New Zealand: a demographic and clinical review. *The New Zealand Medical Journal*, 118(1226), 1-15.
- Wynn, R., Myklebust, L., & Bratland, T. (2007). Psychologists and coercion: Decisions regarding involuntary psychiatric admission and treatment in a group of Norwegian psychologists *Nordic Journal of Psychiatry*, 61, 433-437.
- Zinkler, M., & Priebe, S. (2002). Detention of the mentally ill in Europe - a review. *Acta Psychiatrica Scandinavica*, 106(1), 3-8.

SECTION FIVE: DISCUSSION AND CONCLUSIONS

**CHAPTER THIRTEEN: MENTAL HEALTH LEGISLATION AND
SOCIAL DEPRIVATION (PUBLICATION 7)**

Chapter 17

Social Deprivation and Use of the Mental Health Act

Anthony J O'Brien

1. Introduction

The 21 years since the passage of the MHA have seen significant changes in New Zealand health and social policy. These include a redefinition of the state as less socially interventionist, growing socio-economic disparity, the completion of deinstitutionalisation, and the further development of community mental health care. In this context it is important to consider how application of legislation might affect different groups in New Zealand society based on their access to material and social resources, which are major influences on access to health care and on health outcomes. Across a wide range of measures, people from more deprived areas consistently show markedly poorer health than those from less deprived areas in such diverse measures as cardiac health, smoking-related diseases, obesity, child health, suicide, and a wide range of mental disorders. Disparities between ethnic groups are also apparent, with Māori more likely than non-Māori to experience mental illness and compulsory care.

This chapter focuses on the relationship between social deprivation and use of the MHA, applying a public-health orientation. Research establishes that the incidence of severe mental illness is socially distributed, a pattern that is reflected in the use of legislation. This research, from New Zealand and abroad, is reviewed. The limited nature of the literature as it addresses deprivation means that links need to be drawn between disparate studies. The following topics are discussed: the relationship between health and social deprivation, the implications of growing disparity in New Zealand, responses to disparities in the application of legislation, implications for mental health policy, and methodological issues.

The reality of deprivation as a factor in use of legislation challenges legal and health practitioners to consider how an understanding of population factors should influence their professional practice, especially in such areas as clinical

decision-making, advocacy, and use of compulsory powers. A particular challenge relates to the monitoring and use of community treatment orders (CTOs). This use of the legislation is strongly related to deprivation, appears to have increased markedly within the past decade, and is likely to be sensitive to ongoing policy emphasis on community care.

2. Social deprivation in New Zealand

In New Zealand the most commonly accepted measure of social deprivation is the New Zealand Deprivation Index (NZDep), a measure that assigns relative deprivation scores to small population areas (Salmond, Crampton & Atkinson, 2007). The current NZDep (NZDep2006) has been used in various iterations since 1991 (Salmond, Crampton & Sutton, 1998), and so predates the implementation of the MHA. The index is calculated by combining census data on nine variables across eight dimensions: income (receiving a means-tested benefit, or living in households below an income threshold); not living in own home; living in a single parent family; unemployment; lack of qualifications; living in a household below a bedroom occupancy threshold; lack of access to a telephone; and lack of access to a car. NZDep2006 measures areas rather than individuals, and the areas are ranked relative to each other rather than against an absolute standard. In New Zealand, social deprivation is strongly associated with ethnicity (Ministry of Health and University of Otago, 2006), a variable not included in calculating the NZDep2006. This association has major implications for the use of mental health legislation, as Māori experience disproportionately high levels of severe mental illness (Baxter, 2007) and are disproportionately likely to be subjected to compulsory treatment (Wheeler, Robinson & Robinson, 2005).

Social deprivation and mental health

A relationship between mental illness and socio-economic status is well established and has been consistently reported among people with severe mental illness, both in New Zealand (Abas et al., 2003, 2006; Kydd, Nola & Wright, 1991) and overseas (Thornicroft, 1991; Croudace et al., 2000; Bindman et al., 2002; Kingsford & Webber, 2010). Socially distributed patterns of mental health inequality were noted in the most comprehensive community-based survey undertaken in New Zealand, the 2006 New Zealand Mental Health Survey: *Te Rau Hinengaro* (Oakley-Browne, Wells & Scott, 2006), which identified socio-economic differences in the distribution of a range of mental illnesses, including severe mental illness (Wells, 2006). The most deprived quintile of the New Zealand population, based on the NZDep2001, experiences serious mental illness at more than twice the rate of the least deprived quintile. The

differences are summarised in Table 1. *Te Rau Hinengaro* is of interest to an understanding of compulsion because, being a community survey, it drew on a non-clinical sample and so provides an understanding of the population with severe mental illness who are at most risk of compulsion. In relation to both deprivation and ethnicity, *Te Rau Hinengaro* reflected findings from clinical studies, that people living in areas of high deprivation, especially Māori, have higher rates of morbidity. These findings are supported by recent data on mental health service use (Ministry of Health, 2013) that show greater rates of service use among the most deprived, and significantly higher service use by Māori compared to non-Māori.

Table 1. Deprivation and serious mental disorder¹

Area characteristics (NZDep2001 quintiles) ²	12 month prevalence of serious disorder % (95% CI)
5 (most deprived)	6.9 (5.9–8.1)
4	5.2 (4.1–6.5)
3	5.1 (4.0–6.3)
2	3.5 (2.6–4.5)
1 (least deprived)	3.2 (2.4–3.2)

1. Source: Oakley-Browne, M., Wells, J.E., & Scott, K.M. (2006). *Te Rau Hinengaro: the New Zealand Mental Health Survey*. Wellington: Ministry of Health.

2. Quintiles represent NZDep deciles collapsed into five groups of two.

Variation in use of legislation

In studies of mental health legislation use, variation is a consistent theme, an issue also discussed by Gordon in chapter 15 of this volume. Variation has been linked to a diverse range of factors including: hospital location; different wording or interpretation of legislation; service configuration; clinical characteristics of patients, such as substance use and psychosis; clinician training and attitudes; demographic variables, such as gender and age; ethnicity; and service culture. Variation provides an opportunity to study factors associated with health processes and outcomes, including factors which imply inequality, and which suggest a need to distribute resources and target services to individuals and populations with high needs.

Socioeconomic factors including deprivation have been investigated in a number of studies of rates of committal. Bindman and colleagues (2002) investigated compulsory admissions under sections 2 and 3 of the Mental Health Act 1983 (UK) in a 12-month period over 1998/1999, covering eight mental

health provider trusts serving an adult population of 1.7 million, purposively selected to be representative of the range of service types, populations and regions of England. Rates of committal ranged from 0 to 196.8 per 100,000, with mean rates varying between 28.2 and 62.5 per 100,000. Deprivation was the strongest predictor of compulsion, although there was variation between regions which was not correlated with variation in resource allocation. In a Belgian study, Lorant and colleagues (2007) argued that compulsion is used when clinicians are unable to meet the needs of patients with higher levels of social need, in effect arguing that a social need threshold operates in addition to any clinical or legal criteria in making decisions under mental health legislation. A Finnish study (Siponen et al., 2010) also identified social factors as influencing rates of committal of young people. The differences were related to a range of socio-economic indicators, including parental employment, education, migration, income, adult crime rate, and adults in detoxification centres. In the absence of epidemiological evidence of different rates of mental disorder, the authors suggested that social factors were responsible for the different rates of compulsion.

A small number of studies have investigated variation in use of mental health legislation in New Zealand. Malcolm (1989) found that rates of compulsory admission under the 1969 legislation were higher in regions where psychiatric hospitals were located. Variation across regions ranged from 270 to 883 compulsory admissions per 100,000. Malcolm reasoned in areas with high use of legislation factors other than clinical presentation influenced committal decisions. Availability of beds was the explanation advanced, which is at odds with English research (e.g. Wall et al., 1999; Hotopf et al., 2000) that cited *lack* of beds as a reason for increases in rates of committal. One possible reason for this difference is that factors such as bed availability operate differently as the overall policy framework and service philosophy change. Malcolm's observations predate the full implementation of community care in New Zealand, whereas the data of Hotopf and colleagues relate to the community-care era in England. Malcolm's study shows regional variation long before the period of the current MHA. In light of later research (discussed below) showing socio-economic factors contributing to rates of committal, it is possible that such factors contributed to the variation observed by Malcolm.

The earliest New Zealand study using an instrument comparable to the NZDep2006, namely the NZDep91 (1991), found a significant correlation between deprivation and poor health status (Salmond, Crampton & Sutton, 1998). For some small areas in 1991 the assigned level of deprivation was probably influenced by the presence of large psychiatric hospitals in those areas that contained high numbers of people who were not employed (Callister, 1998). Deprivation may also have been associated with committal rates in 1991, as

well as in the previous decade when Malcolm's study was conducted. However deprivation was not considered in Malcolm's study. A second study of variation in use of the 1969 legislation did find a relationship between committal and socio-economic position.

Kydd and colleagues (1991) investigated variation in committal rates as one of a number of dependent variables considered as an outcome of a measure of underprivilege, the Jarman index. Five-year data were collected in four urban areas that formed a single geographical region. Committal rates varied between 44 and 149 per 100,000 across the four areas, significantly less than the rates reported by Malcolm two years earlier. This is a considerable variation for contiguous geographical areas, and indicates the regionality of rates of compulsion. The Jarman index, a combined measure of eight socio-demographic variables (Jarman, 1984), was calculated as a mean for each area and correlated with rates of compulsory hospital admission. The study found that compulsory admissions were higher in areas with greater underprivilege. Individual components – of poverty, living without adult company, and transient residence – independently contributed to the overall Jarman score.

A study of the needs of high users of mental health services in the northern region (Kydd et al., 2006) compared use of legislation across four District Health Boards (DHBs) between 1997 and 2004. Data for both inpatient and community compulsion are shown in Table 2. This study included only individuals with a diagnosis of schizophrenia, but this would represent a substantial proportion of those under the Act. The number of service users in this study who were compulsorily treated under the MHA increased from 386 in 1997 to 780 in 2004, representing 22 per cent and 29 per cent, respectively, of high users with a diagnosis of schizophrenia. Most of this increase was due to an increase in the number of service users under CTOs, which almost doubled, from 278 to 590. The study did not report deprivation.

Ministry of Health reports over the past seven years have demonstrated wide and consistent variation in use of the most commonly applied sections of New Zealand mental health legislation. Comparing data for all 20 DHBs, rates of acute assessment (s 11) show a threefold variation between the highest and lowest DHBs, and rates of CTOs (s 29) show a fivefold variation (Ministry of Health, 2006–2012). Clearly the variation noted by Malcolm (1989), and Kydd and colleagues (1991), has persisted. However, reasons for the variation remain poorly understood, with the Director of Mental Health observing in his 2010 report that 'the report does not attempt to interpret data variations among DHBs, as any such differences could be due to a number of variables, including practice, size, location, population demographics and configuration' (Ministry of Health, 2010, p. iii).

Table 2. Mental Health Act status of high users of mental health services in the northern region.

District Health Board	Year	Status (%) ¹		
		Voluntary	Involuntary (community)	Involuntary (inpatient)
Auckland	1997	79.1	13.7	5.1
	2004	73.7	20.9	3.4
Waitemata	1997	78.7	14.8	4.0
	2004	65.1	21.2	7.0
Counties Manukau	1997	73.1	21.6	4.9
	2004	72.3	22.3	4.9
Northland	1997	84.0	11.7	3.7
	2004	68.4	28.2	3.0
Total ²	1997	77.7	16.1	4.6
	2004	70.6	22.3	4.7

1 Patients committed under the Criminal Procedure (Mentally Impaired Persons) Act 2003 have been omitted.

2 Total numbers were 386 for 1997 and 780 for 2004. Most of this increase was due to an increase in numbers under community treatment orders.

Adapted from: R. Kydd, J. Vanderpyl, T. le Prou, J. Wells, T. Ruangsri, R. Marshall, et al. (2006). *Needs of high users of mental health services in the Northern Region*. Auckland: University of Auckland.

A recent New Zealand study used an ecological design to explore associations between NZDep2006 and use of ss 11 and 29 (O'Brien, Kydd & Frampton, 2011). High levels of deprivation were positively correlated with use of both acute and community care, whereas low levels of deprivation showed negative correlations with use of both provisions. The negative correlation between low levels of deprivation and use of s 11, and the positive correlation between high levels of deprivation and use of s 29, were statistically significant, which is of interest in itself, because it suggests that deprivation plays a different role in the use of each section. At an area level, low deprivation is protective against use of s 11, while high deprivation is a risk factor for s 29. Section 29 requires availability of adequate social resources yet appears to be invoked with those who are most likely to lack such resources. These differences extend previous understandings of the relationship between deprivation and severe mental illness, and they have implications for any conclusions about how deprivation should inform resource allocation.

Māori mental health, deprivation, and legal status

A number of studies and official publications have reported Māori rates of mental illness, hospitalisation, and deprivation, although there has been no systematic study of Māori rates of committal. That is a gap that urgently needs addressing. The available literature suggests that deprivation contributes to higher rates of severe mental illness amongst Māori, and to patterns of health care that make compulsory care more likely. The broader issue of Māori experience of compulsory treatment, in particular the cultural construction of diagnostic and MHA criteria, is discussed by Elder and Tapsell in chapter 14 of this volume.

By the middle of the 20th century the Māori population had become more urbanised through increasing internal migration (Durie, 2001). This was followed by marked increases in hospital admissions for psychiatric disorder between 1970 and 1991 (Pōmare et al., 1995), most frequently for psychosis, a diagnosis associated with compulsory admission. Increases in hospital admissions for Māori contrasted with the trend for non-Māori, which decreased over the same period. The pathway of Māori admissions contributed to a greater likelihood that such admissions would occur under compulsion, as Māori were more likely than non-Māori to be admitted through the justice system and to be admitted to forensic services.

Recent research has shown similar patterns of higher rates of severe mental illness among Māori when compared to non-Māori. The 2006 mental health survey, *Te Rau Hinengaro* (Baxter et al., 2006), found that in the 12 months prior to the survey 29.6 per cent of Māori experienced serious mental health disorders and 42.6 per cent experienced disorders of moderate severity. Rates were higher in areas of high deprivation, and contact with mental health services was low, especially when compared to prevalence of severe mental illness. The same survey reported that Māori were far more likely to be living in more deprived areas, with 43.7 per cent living in the most deprived areas compared to 8 per cent living in the least deprived areas. Between 2000 and 2005, Māori rates of admission for mental illness were consistently almost double (1.8 times) the rates for non-Māori (Baxter, 2007), with admissions for psychosis representing the overwhelming majority of mental health-related hospital admissions for Māori. The disparity between Māori and non-Māori is greatest for psychotic illness, with the rate for the most common diagnostic category, schizophrenia and related illness, 3.5 times the non-Māori rate. Such disparities in the diagnoses most commonly associated with committal clearly leave Māori vulnerable to higher rates of compulsory care.

A review of Māori mental health needs (Baxter, 2008) suggests that differences in health sector response to Māori with mental illness overlay reported differences in rates of illness. For example, despite Māori being more

likely than non-Māori to be diagnosed with depression in primary care, this diagnosis accounts for lower rates of hospital admission than for non-Māori with the same diagnosis. Similarly, the high rate of substance abuse amongst Māori identified by Te Rau Hinengaro (Baxter et al., 2006) is not matched by hospital admissions with this diagnosis.

A number of studies have reported on either ethnicity or deprivation in relation to compulsion. Māori were over-represented in a South Auckland study of inpatient admissions by Abas and colleagues (2003), which reported over half the sample living in areas of high or moderate deprivation. A similar proportion of the sample population was admitted involuntarily. However, the study did not report the proportion of involuntary patients who were Māori, or the proportion of involuntary patients living in areas of high deprivation, so it is not possible to draw firm conclusions about relationships between ethnicity, deprivation and legal status. Nevertheless, given the high proportions of the study population who were Māori, and the high proportion living in deprived areas, the data suggest a possible association. A cross-sectional study of adult inpatient mental health units in the Auckland region (Wheeler et al., 2005) showed that Māori were admitted at twice their population rate, were more likely than non-Māori to be diagnosed with a psychotic disorder, and were more likely to be admitted involuntarily. The Wheeler study did not record area or individual deprivation levels. In a review of studies of ethnicity in mental health research, Tapsell and Mellso (2007) reported an increased rate of diagnosis of schizophrenia for Māori compared to non-Māori, and a similar difference in morbidity measured by the inpatient subscales of the Health of the Nation Outcome Scale (Wing et al., 1998). Māori were more likely to be secluded, a procedure that necessitates compulsory legal status, and they were also more likely to be prescribed long acting neuroleptic drugs, and in higher doses. None of the studies included in Tapsell and Mellso's review measured deprivation.

A study in a region of New Zealand with a high Māori population included use of compulsory admission among a range of restrictive practices considered as dependent variables. Kumar and colleagues (2008) compared the care provided for 125 Māori and 175 non-Māori patients admitted to Rotorua Hospital over 2000/2001. This study found that differences identified earlier using national statistics (and by Wheeler, Robinson & Robinson, 2005) were not observed in Rotorua. Māori and non-Māori were equally likely to be admitted under compulsory status. Integration of a Māori mental health team within the mainstream mental health services was cited as possibly contributing to limited use of involuntary treatment. Finally, the ecological study of O'Brien, Kydd and Frampton (2011) found that the Māori proportion of the DHB population was associated with the use of CTOs. The association approached statistical significance and was much higher than the association with the use of s 11,

suggesting that, for Māori, compulsion in community care is a major issue.

Overall, the research evidence confirms that the rates of mental health admissions for Māori increased to high levels between 1970 and 1990, as non-Māori rates declined; and that the disparity between Māori and non-Māori has been sustained ever since. Māori presenting to mental health services are more likely to come from deprived areas, to be diagnosed with schizophrenia or psychosis, to have greater morbidity, and to be secluded or prescribed depot medications: all factors associated with higher rates of committal. Most of the studies examined here that considered legal status found Māori more likely to be admitted under compulsory status, but did not measure socio-economic position. The picture is of high risk of committal, an observation that receives much anecdotal support, but for which a solid research basis is currently lacking. The 2008 study by Kumar and colleagues goes against the grain of other regional and national evidence, however, suggesting that local initiatives such as Māori mental health teams may be able to mitigate the influence of ethnicity on legal status. This effect may be due to the cultural skills brought to clinical encounters by Māori clinicians. As Elder and Tapsell (chapter 14, this volume) explain, Māori expressions of distress may be culturally constructed within mainstream psychiatry as representing psychosis, thus meeting the criteria of the first limb of the Act. Mainstream clinicians may also be more inclined to assess Māori as meeting the second-limb criteria of dangerousness. Given the strong association with both ethnicity and deprivation in the use of CTOs, the findings of Kumar and colleagues would be especially significant if the same effect were found in community settings. Available data sources make it possible to explore the relationship between Māori ethnicity, deprivation and compulsory status under the Act and such research is clearly an urgent priority.

Summary of literature

The available literature on deprivation and use of mental health legislation is rather sparse. Clinical studies frequently do not report data on deprivation, despite such data being readily available. A possible reason for that omission is that deprivation may be seen as 'social' rather than 'medical', and hence as not amenable to clinical intervention, an issue discussed below. Even in studies that do report deprivation (such as Abas et al., 2003) the data is reported in aggregate form only, and not in relation to subgroups of patients defined in terms of legal status. On the other hand, legal status is outside the range of data sought in population surveys such as *Te Rau Hinengaro*, which rely on self-reporting. Conclusions about the relationship between deprivation and use of legislation rely, of necessity, on interpretation across quite disparate studies, and are therefore somewhat tentative. A further limitation is that many of the studies are cross-

sectional, use different methods of data collection, and have been undertaken in a limited number of DHBs. Nevertheless it does seem clear that a relationship between deprivation and compulsion exists. Hopefully future research will address this question more systematically. The chapter now turns to some of the implications of the relationship between deprivation and use of legislation.

3. Should deprivation influence rates of committal?

An association between use of mental health legislation and social deprivation is probably not surprising, given that compulsion is used when an individual's personal coping resources are strained beyond their limits and family resources are unable to provide the additional support needed. New Zealand is characterised by significant health disparities related to both ethnicity and deprivation, and it would be surprising if these disparities were not reflected in use of mental health services and legislation. Although social reasons for invoking legislation have been criticised (e.g., Lorant et al., 2007; Siponen et al., 2010) as being outside the legal criteria for compulsory treatment, they are relevant to clinical decision-making if the influence of social factors on individual mental health is considered. In areas with high deprivation it is more likely that someone with severe mental illness will be living in a household already under social duress. The individual dimensions of the NZDep2006 reflect this, as they include factors such as low household income, lack of bedrooms, lack of access to telephone and car, and other factors that would pose difficulties in supporting a family member with mental illness. Any difficulties faced by households are likely to be compounded by lack of more widely available community resources in regions with relatively high deprivation. Studies of neighbourhood effects have found that living in a deprived neighbourhood has a negative impact on health, possibly because of dependence on limited collective neighbourhood resources (Pearce & Merletti, 2006). The effect of deprivation on mental illness is likely to be greater for areas of high deprivation (Glover, Leese & McCrone, 1999), suggesting that less deprived people are more able to mitigate factors that contribute to severe mental illness. In the context of growing social inequality in New Zealand, greater use of mental health legislation in population areas of high deprivation may represent, to the decision-maker in the compulsory assessment process, a rational allocation of resources toward a group with high needs.

Growing disparity

On the basis of past trends, growing socio-economic disparity in New Zealand (Howden-Chapman et al., 2002) is likely to accentuate existing differences in use of legislation. Data from the OECD suggest that inequality is growing more rapidly in New Zealand than in other OECD countries (Carroll et al., 2011).

Poverty is associated with severe mental illness and is a barrier to adequate housing, healthcare and transport (Warner, 2008), all factors that are built into the measurement of deprivation in New Zealand. There is also a view that deprivation is an intergenerational phenomenon in New Zealand (Maloney, 2004), exposing successive generations to mental health risks. However, the interaction between deprivation and use of legislation may be more complex than shown in current studies. Experience in the United States (Lincoln, 2006) has shown that as resources become scarcer (and, one might conversely say, as need increases through increased inequality), use of mental health legislation can become a valued resource whose distribution is in the hands of mental health practitioners. Lincoln's study of involuntary hospitalisation following presentation to the emergency department showed that, rather than disproportionately hospitalising people from marginalised groups, clinicians tended to treat and release, reversing the pattern of disproportionate committal that has previously been explained by social control theory. Lincoln argued that people from higher socio-economic groups who were in acute crisis were better able than marginalised people to use their social resources to access care. No research of this nature has been reported in New Zealand, but a qualitative study of the use of CTOs in the Otago region (Gibbs et al., 2004) may lend some support to compulsion under such orders acting as a de facto means of rationing scarce health resources. Although they were ambivalent overall about their CTOs, Māori patients reported that the orders guaranteed access to mental health services and social resources such as accommodation and welfare payments. Benefits such as these directly reflect the components of the NZDep2006, as well as the requirement that for patients under CTOs their social circumstances must be adequate.

How can differences in use of mental health legislation be addressed?

It is clear that social deprivation plays a role in the prevalence of severe mental illness and in health service response, but less obvious how health and legal practitioners can respond in ways that address and moderate the effects of social processes on individuals (Hunter, 2013). A recent New Zealand study that sought to measure social inclusion of people with mental distress (Mental Health Commission, 2011) noted that many of the determinants of health and well-being lie outside the health sector. These include employment, housing, freedom from violence and discrimination, and supportive relationships. Clinicians and legal professionals may feel that it is not within their remit to directly address social issues, which require action at the political level. However, practitioners daily confront inequality in their professional roles. The statistical associations of epidemiological studies take on a deeply personal dimension when a patient

is detained for an assessment, seeks legal advocacy in the committal process, or appeals their compulsory status. Among the responses suggested by Abas and colleagues (2003) is adjustment of the resource allocation to take account of deprivation, by directing additional resources to supportive accommodation and assertive outreach teams, as well as additional inpatient beds. Health funding is currently weighted to take account of social deprivation (Penno, Audas & Gauld, 2012) indicating some policy-level commitment to such suggestions. However it is very difficult to determine how the deprivation weighting applied to DHBs is translated into services for its intended target group.

Mental health policy

Current mental health policy consolidates the direction of the past two decades towards care in the community (Mental Health Commission, 2012) and goes further in anticipating integration of mental health services within primary care. Recent initiatives have seen employment of psychiatrists in primary care, and mental health nurses have developed specialist roles, including assessment, case management, and referral and liaison. Primary care services already provide care for a significant number of people with severe mental illness, and this number looks likely to increase under present policies. Notably, Māori are more likely to seek mental health care from primary rather than secondary care practitioners (Baxter, 2008). It is conceivable in the future, if it is not happening already, that patients on CTOs could have their care managed within the primary care sector by a specialist nurse who would also be the responsible clinician (see McKenna and O'Brien, chapter 11, this volume, for a discussion of nurses as RCs). Whether greater integration within primary care will make a difference to the relationship between deprivation and committal is not clear. Access to primary care is itself related to social deprivation, with more affluent (less deprived) regions having a greater availability of general practitioners than more deprived areas (Brabyn & Barnett, 2004). This differential access to primary care may influence not only the mental health response in primary care, but also rates and timeliness of referral to specialist mental health services, and consequently use of mental health legislation. Reducing disparities in use of mental health legislation may depend in part on the success of initiatives to address unequal access to primary care (Hefford, Crampton & Foley, 2005). Such changes are of course subject to political whim, and can struggle for success in the face of larger economic challenges and the vested interests of professional groups (Gault, 2009). In the case of severe mental illness, stigma and clinicians' perceptions of their role and skills are additional barriers to greater integration within primary care (O'Brien, Moir & Thom, 2010).

Methodological issues

Understanding the relationship between deprivation and use of mental health legislation is complex, because a long series of events, at various degrees of proximity to the event of committal, can be cited as influential (Byrne, 2005; Pearce & Merletti, 2006). Traditional models of risk factor analysis are not adequate for such complex events. Although the relationship between deprivation and mental illness is strong and persistent, it diminishes when studies have controlled for clinical syndromes, especially psychosis (e.g., Abas et al., 2006; van der Post et al., 2011). This 'washing out', in analysis, of social factors in the presence of clinical diagnoses, raises the question whether diagnosis is in some respects a clinical response to social and material need, one which enables and legitimises employment of considerable health resources, but at the cost of constructing a social issue as a medical one. This is not to say that psychosis is simply a social construct overlaid on experience for the purposes of 'medicalisation'. Such a position ignores the reality that altered cognitive and emotional states are to some extent a product of deprivation, are experienced as deeply distressing, and in some cases are attended by behaviours that pose considerable risk to the distressed person and others close to them. However, an exclusive research focus on clinical factors is not adequate in studies of complex phenomena such as compulsory treatment, especially given the contribution of deprivation. A focus on clinical factors underestimates the complexity of the ways in which the various contributing factors interact within individual trajectories.

4. Conclusion

The relationship between use of compulsion and social deprivation is ethically troubling because it suggests that those already deprived of social and material resources face an additional loss of personal liberties. It might be argued that losses of personal liberties, at the point at which they are invoked, are an unfortunate necessity, counterbalanced by the benefits of protection, healthcare, and improved access to resources provided while under compulsion. Some of the research literature supports this argument, but raises another question of whether compulsion is the only means by which such benefits can be provided. Compounding this complexity is the lack of research into the relationship between deprivation and severe mental illness, especially research which also considers compulsion. There is also little research into the disproportionate use of legislation with Māori, and its relationship to social deprivation. Future research into compulsory treatment needs to include both deprivation and legal status among the variables of interest. There is a need for more systematic research, including use of existing administrative datasets, such as those held by the

Ministry of Health, that can enable trend analysis in addition to cross-sectional studies. Another priority is to investigate social and clinical interventions which might reduce the use of compulsion. Research into compulsion and social deprivation appears to have fallen into the ‘too hard basket’, perhaps because it is neither wholly clinical nor wholly social. The problems, and the methodologies needed to address them, may be complex, but the issues involve some of our most vulnerable citizens, and cannot continue to languish.

References

- Abas, M., Vanderpyl, J., Robinson, E., & Crampton, P. (2003). More deprived areas need greater resources for mental health. *Australian and New Zealand Journal of Psychiatry*, 37(4), 437–444.
- Abas, M. A., Vanderpyl, J., Robinson, E., Le Prou, T., & Crampton, P. (2006). Socio-economic deprivation and duration of hospital stay in severe mental disorder. *British Journal of Psychiatry*, 188(6), 581–582.
- Baxter, J., Kingi, T. K., Tapsell, R., & Durie, M. (2006). Māori. In M. Oakley-Browne, J. E. Wells & K. M. Scott (eds), *Te Rau Hinengaro: the New Zealand Mental Health Survey* (pp. 140–178). Wellington: Ministry of Health.
- Baxter, J. (2007). Mental health: Psychiatric disorder and suicide. In B. Robson & R. Harris (eds), *Hauora: Māori Standards of Health IV. A study of the years 2000–2005*. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare (pp. 121–138).
- Baxter, J. (2008). *Maori mental health needs profile. A review of the evidence*. Palmerston North: Te Rau Matatini.
- Bindman, J., Tighe, J., Thornicroft, G., & Leese, M. (2002). Poverty, poor services, and compulsory psychiatric admission in England. *Social Psychiatry and Psychiatric Epidemiology*, 37, 341–345.
- Brabyn, L., & Barnett, R. (2004). Population need and geographical access to general practitioners in rural New Zealand. *New Zealand Medical Journal*, 117 (1199).
- Byrne, D. (2005). Complexity, configurations and cases. *Theory, Culture & Society*, 22(5), 95–111.
- Callister, P. (1998). Some geographic dimensions of being work-rich and work-poor. Changes between 1986 and 1996. *Social Policy Journal of New Zealand*, 11.
- Carroll, P., Caswell, S., Huakau, J., Howden-Chapman, P., & Perry, P. (2011). The widening gap: perceptions of poverty and income inequalities and implications for health and social outcomes. *Social Policy Journal of New Zealand*, 37, 111–122.
- Croudace, T. J., Kayne, R., Jones, P. B., & Harrison, G. L. (2000). Non-linear relationship between an index of social deprivation, psychiatric admission prevalence and the incidence of psychosis. *Psychological Medicine*, 30(1), 177–185.
- Durie, M. (2001). *Mauri Ora. The dynamics of Maori health*. Auckland: Oxford University Press.
- Gault, I. (2009). Service-user and carer perspectives on compliance and community treatment in mental health services. *Health & Social Care in the Community*, 17(5), 514–513.

- Gibbs, A., Dawson, J., Forsyth, H., & Mullen, R. (2004). Maori experience of community treatment orders in Otago, New Zealand. *Australian and New Zealand Journal of Psychiatry*, 38(10), 830–835.
- Glover, G. R., Leese, M., & McCrone, P. (1999). More severe mental illness is more concentrated in deprived areas. *British Journal of Psychiatry*, 175, 544–548.
- Hefford, M., Crampton, P., & Foley, J. (2005). Reducing health disparities through primary care reform: the New Zealand experiment. *Health Policy*, 72(1), 9–23.
- Hotopf, M., Wall, S., Buchanan, A., Wessely, S., & Churchill, R. (2000). Changing patterns in the use of the Mental Health Act 1983 in England, 1984–1996. *British Journal of Psychiatry*, 176, 479–484.
- Howden-Chapman, P., Blakely, T., Blaiklock, A. J., & Kiro, C. (2002). Closing the health gap. *New Zealand Medical Journal*, 113(1114): 301–302.
- Hunter, E. (2013). Indicators of psychoses or psychoses as indicators: the relationship between indigenous social disadvantage and serious mental illness. *Australasian Psychiatry*, 21(1), 22–26.
- Jarman, B. (1984). Underprivileged areas: Validation and distribution of scores. *British Medical Journal* (289), 1587–1592.
- Kingsford, R., & Webber, M. (2010). Social deprivation and the outcomes of crisis resolution and home treatment for people with mental health problems: a historical cohort study. *Health & Social Care in the Community*, 18(5), 456–464.
- Kumar, S., Ng, B., Simpson, A., Fischer, J., & Robinson, E. (2008). No evidence of restrictive care practices in Maori admitted to a New Zealand psychiatric inpatient unit. *Social Psychiatry and Psychiatric Epidemiology*, 43, 387–391.
- Kydd, R. R., Nola, P. F., & Wright, J. J. (1991). Mental health needs in Auckland: 1982–6. An analysis using the Jarman index. *New Zealand Medical Journal*, 104 (914), 255–257.
- Kydd, R., Vanderpyl, J., le Prou, T., Wells, J., Ruangsri, T., Marshall, R., et al. (2006). *Needs of high users of mental health services in the Northern Region*. Auckland: University of Auckland.
- Lincoln, A. (2006). Psychiatric emergency room decision-making, social control and the ‘undeserving sick’. *Sociology of Health & Illness*, 28(1), 54–75.
- Lorant, V., Depuydt, C., Gillain, B., Guillet, A., & Dubois, V. (2007). Involuntary commitment in psychiatric care: what drives the decision? *Social Psychiatry & Psychiatric Epidemiology*, 42, 360–365.
- Malcolm, L. (1989). Bed availability as a significant influence on rates of committal to New Zealand’s psychiatric hospitals. *New Zealand Medical Journal*, 102, 8–9.
- Maloney, T. (2004). Are the outcomes of young adults linked to the family income experienced in childhood? *Social Policy Journal of New Zealand*, 22, 55–81.
- Mental Health Commission. (2011). *Measuring social inclusion. People with experience of mental distress and addiction*. Wellington: Mental Health Commission.
- Mental Health Commission. (2012). *Blueprint II: How things need to be*. Wellington: Mental Health Commission.
- Ministry of Health. (2006). *Office of the Director of Mental Health. Annual Report 2005*. Wellington: Ministry of Health.

- Ministry of Health. (2007). *Office of the Director of Mental Health. Annual Report 2006*. Wellington: Ministry of Health.
- Ministry of Health. (2008). *Office of the Director of Mental Health. Annual Report 2007*. Wellington: Ministry of Health.
- Ministry of Health. (2009). *Office of the Director of Mental Health. Annual Report 2008*. Wellington: Ministry of Health.
- Ministry of Health. (2010). *Office of the Director of Mental Health. Annual Report 2009*. Wellington: Ministry of Health.
- Ministry of Health. (2011). *Office of the Director of Mental Health. Annual Report 2010*. Wellington: Ministry of Health.
- Ministry of Health. (2012). *Office of the Director of Mental Health. Annual Report 2011*. Wellington: Ministry of Health.
- Ministry of Health. (2013). *Mental health and addiction: Service use 2009/10*. Wellington: Ministry of Health.
- Ministry of Health and University of Otago. (2006). *Decades of Disparity III: Ethnic and socioeconomic inequalities in mortality, New Zealand 1981–1999*. Wellington: Ministry of Health.
- Oakley-Browne, M., Wells, J. E., & Scott, K. M. (2006). *Te Rau Hinengaro: the New Zealand Mental Health Survey*. Wellington: Ministry of Health.
- O'Brien, A. J., Kydd, R. R., & Frampton, C. (2011). Social deprivation and use of mental health legislation in New Zealand. *International Journal of Social Psychiatry*, 1–6.
- O'Brien, A. J., Moir, F., & Thom, K. (2010). The provision of mental health care by Primary Health Organisations in the northern region: Barriers and enablers. *Journal of Primary Health Care*, 1(2), 120–125.
- Pearce, N., & Merletti, F. (2006). Complexity, simplicity, and epidemiology. *International Journal of Epidemiology*, 35(3), 515–519.
- Penno, E., Audas, R., & Gauld, R. (2012). *The state of the art? An analysis of New Zealand's population-based funding formula for health services*. Dunedin: Centre for Health Systems, University of Otago.
- Pōmare E., Keefe-Ormsby V., Ormsby C., Pearce N., Reid P., Robson B., et al. (1995). *Hauora. Māori standards of health III: a study of the years 1970–1991*. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare.
- Salmond, C., Crampton, P., & Atkinson, J. (2007). *NZDep2006 Index of Deprivation*. Wellington: University of Otago.
- Salmond, C., Crampton, P., King, P., & Waldegrave, C. (2006). NZiDep: A New Zealand index of socioeconomic deprivation for individuals. *Social Science and Medicine*, 62(6), 1474–1485.
- Salmond, C., Crampton, P., & Sutton, F. (1998). NZDep91: A New Zealand index of deprivation. *Australian and New Zealand Journal of Public Health*, 22(7), 835–837.
- Siponen, U., Valimaka, M., Kaivosoja, M., Marttunen, M., & Kaltiala-Heino, R. (2010). A comparison of two hospital districts with low and high figures in the compulsory care of minors: An ecological study. *Social Psychiatry and Psychiatric Epidemiology*, 46(8), 661–670.

- Tapsell, R., & Mellsop, G. (2007). The contributions of culture and ethnicity to New Zealand mental health research findings. *International Journal of Social Psychiatry*, 53(4), 317–324.
- Thornicroft, G. (1991). Social deprivation and rates of treated mental disorder. Developing statistical models to predict psychiatric service utilisation. *British Journal of Psychiatry*, 158(4), 475–484.
- van der Post, L., Visch, I., Mulder, C., Schoevers, R., Dekker, J., & Beekman, A. (2011). Factors associate with higher risks of compulsory admission for immigrants: A report from the ASAP study. *International Journal of Social Psychiatry*, 58(4), 374–380.
- Wall, S., Hotopf, M., Wessely, S., & Churchill, R. (1999). Trends in the use of the Mental Health Act: England, 1984–96. *British Medical Journal*, 318 (7197), 1520–1521.
- Warner, R. (2008). Social factors as a basis for treatment. In C. Morgan, K. McKenzie, & P. Fearon (eds). *Society and psychosis* (pp. 163–178). Cambridge, England: Cambridge University Press.
- Wells, J. E. (2006). Prevalence and severity across aggregate disorders. In M. Oakley-Browne, J. E. Wells & K. M. Scott (eds), *Te Rau Hinengaro. The New Zealand Mental Health Survey* (pp. 23–36). Wellington: Ministry of Health.
- Wheeler, A., Robinson, E. Robinson, G. (2005). Admissions to acute psychiatric inpatient services in Auckland, New Zealand: a demographic and clinical review. *The New Zealand Medical Journal*, 118 (1226), 1–15.
- Wing, J. K., Beevor, A. S., Curtis, R. H., Park, S. B., Hadden, S., & Burns, A. (1998). Health of the Nation Outcome Scales (HoNOS). Research and development. *The British Journal of Psychiatry*, 172(1), 11–18.

CHAPTER FOURTEEN: CONCLUDING DISCUSSION

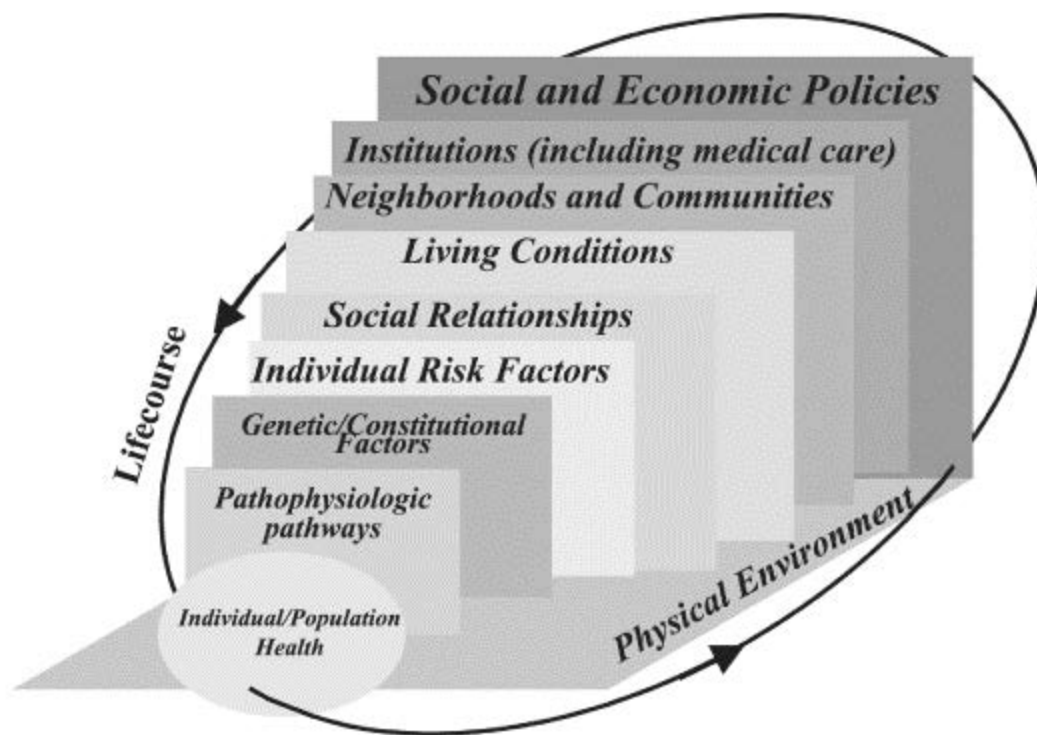
Introduction

The body of work presented in this thesis uses a Foucauldian and ecosocial theoretical framework to examine variation in the use of mental health legislation in New Zealand. A range of scholarly work has been presented, including historical background and analysis, literature reviews and empirical work. In this discussion I review the findings of the thesis with reference to the theoretical framework, and explore the major areas of discussion arising from the analysis and findings. I outline a concept developed from my research and analysis: “The production of the committed subject”. With this concept I aim to provide a framework which integrates the ecosocial and Foucauldian theoretical framework of the thesis with my own and others’ empirical observations. The concept of the production of the committed subject is an original theoretical contribution to the understanding of committal under mental health legislation. This concept holds that the procedure of committal, especially in relation to community treatment orders, is a medically mediated response to a social issue. However it is not a response that can be understood by a naïve form of social control theory. Following the discussion I review the limitations of the current work and offer suggestions for further research and analysis. Returning to the original impetus for the study I then provide a brief reflection on the research process, on my own learning, and the implications of each for my future clinical and academic work.

The ecosocial theoretical framework of the thesis generates hypotheses at different levels of organisation, from the cellular to the social and political, all of which are historically contextualised (Krieger, 2001; 2011). Krieger has not provided a diagrammatic model of her ecosocial theory, but one which closely approximates Krieger’s model is that of Kaplan (2002) reproduced in Figure 14.1 (see following page). Using Kaplan’s model as a guide, the ecosocial model has provided analysis at the *social and economic* level (legislation and health policy); the *level of institutions* (health services and clinician decision making); and at the level of *neighbourhoods and communities and living conditions* (social deprivation).

The thesis began by exploring the historical context and development of mental health legislation, firstly the 1774 English Madhouses Act, then other early English legislation, followed by New Zealand legislation from 1840. This analysis illustrates the socially and historically contingent nature of mental health legislation, and provides the context for the thesis. The empirical investigations reported in Section Four explore societal, social, health service and clinician factors associated with use of legislation. Taken together, and seen in the context of the historical background, the picture emerging is that of committal as a medically mediated social response to mental illness. This analysis is explored more fully later in this chapter as “the production of the committed subject”. But first the major findings of the thesis are reviewed.

Figure 14-2: Multicausal model of disease causation



Source: Kaplan, G. (2002). Upstream approaches to reducing socioeconomic inequalities in health. *Revista Brasileira de Epidemiologia*, 5(Suppl. 1), 18-27.

Significant findings

My analysis of the text of the various iterations of New Zealand mental health legislation, from 1846 to 1992, showed that legislation was shaped to serve social policy objectives, initially of containment of “dangerous” individuals, then their large scale sequestration, and latterly deinstitutionalisation and compulsory care in the community. While pursuing these social objectives, each iteration of legislation made provision for some form of compulsory care in the community. Early committal was by judicial order, with support of a medical certificate, but this function gradually shifted to greater medical control, reaching its apotheosis in 1969 when committal, at least at the initial stage, became a fully medical procedure. As social policy objectives changed, medicine realigned its practice, most notably by accepting the role of compulsory surveillance of individuals in community settings.

Analysis of variation in the use of community treatment orders in New Zealand shows, over the six years reported in Chapter 9, an up to five fold variation. In addition, rates of use of community treatment orders have increased in recent years, and are high by international standards. The international comparison suggests a *societal level* influence, a situation analogous to New Zealand’s high rate of criminal incarceration (Pratt, 2013). New Zealand appears to be a country which tolerates a high level of State intrusion into individual liberties. By contrast, New Zealand has closed all the former stand-alone psychiatric hospitals (Brunton, 2013) and in consequence makes relatively limited use of long term inpatient care, with mental health services being predominantly delivered in community settings (Ministry of Health 2013b). However as I argue in Chapter 9, hospital closure has been replaced by a diffuse form of State surveillance in the form of the community treatment order, with Hewitt (2011) suggesting that such regimes amount to a modern *hôpital general* as described by Foucault (1965/1988).

In the case of social deprivation, the ecological study reported in Chapter 10 found associations between area level deprivation and use of compulsory treatment. Using Kaplan’s model, this finding suggests a *neighbourhood and living conditions level* of influence. Although previous New Zealand research showed high levels of deprivation to be related to compulsory inpatient admission (Kydd et al., 1991) the current research extends this understanding by drawing on a national sample of health districts and

investigating two different forms of compulsion. Area deprivation was found to be negatively associated with rates of acute admission and positively associated with rates of community treatment orders. The contrasting associations between social deprivation in different forms of compulsion has not been previously reported in the international literature and is given added significance because of the continuing policy commitment to community based mental health care.

The association of bed availability with acute committal rates (Chapter 11) provides evidence at the *level of institutions*, in this case health services in the form of acute beds. An association with bed availability is not a new finding in the New Zealand context: a similar conclusion was reached by Malcolm (1989). However Malcolm's research considered hospital committal under the previous (1969) legislation, which directed the committed patient to hospital. To observe a similar association in an era of community focused care suggests that the policy direction of community focused care may not be being fully realised. The current finding also stands in contrast to international research conclusions, that have suggested lack of available beds may be an influential factor in rates of committal (e.g. Hansson et al. (1999); Riecher-Rossler & Rossler, (1993); Wall et al. (1999)). Of course different factors may be influential in different settings, but the current research suggests the need for caution in applying international findings to the New Zealand context.

The study of clinical decision making presented in Chapter 12 is the first such study to be conducted in New Zealand, and one of a small number of decision making studies internationally. Like the study of bed availability, the decision making study focuses on the *level of institutions*. The major finding of this study, of no relationship between the full version of the Clinician Perceptions of Civil Commitment Scale and DHB rates of committal, suggests that the individual clinician perceptions may not be a primary driver for the variation across DHBs observed in New Zealand. However the same study found that perceptions of committal, especially perceptions to do with the necessity for and benefits of committal, are related to clinical role. Psychiatrists reported a greater perception than nurses of necessity for use of compulsion and of potential benefits. This unexpected finding furthers understanding of committal decision making by suggesting that a straightforward explanation of committal as driven by the perceptions of individual clinicians (see, for example, Zinkler & Priebe, 2002)) is not

sufficient. DHB rates of committal appear to be influenced by other factors, lending some support to Kjellin's (2008) suggestion that service leadership, another *institutional level* factor, may influence DHB rates.

The production of the committed subject

In this section I consider how psychiatry, especially through the use of community treatment orders, may be participating in what I have called “the production of the committed subject”. By that term, I mean that committal under a community treatment order may be understood as a medically mediated social response to a complex set of issues and needs which are constructed as medical for the altruistic, and perhaps paternalistic, purpose of providing access to what is seen as a valued social resource: mental health care. The arguments advanced here are influenced by the Foucauldian theoretical framework of the thesis, but are also supported by my own and others' empirical work showing the links between social and individual level factors and rates of committal.

My own study on social deprivation and use of mental health legislation in New Zealand (O'Brien et al., 2011) showed a significant association between use of community treatment orders and high area level deprivation. Although findings from an ecological study cannot be applied to individuals (Macintyre & Ellaway, 2000) clinicians with whom I have discussed this finding express no surprise that such an association should be observed. My findings cohere with clinical experience suggesting that those under community treatment orders are frequently individuals with limited access to social goods. Moreover, research into associations between area and individual level deprivation suggests that the level area measure can provide a proxy for individual level deprivation (Salmond Crampton, King & Waldegrave, 2006).

Assuming that the relatively disadvantaged economic position of people subject to community treatment orders is not merely apocryphal, what role does status under a community treatment order play in their identity and broader social position? My concept of “the production of the committed subject” suggests that in the presence of certain clinical symptoms, but not exclusively because of those symptoms, psychiatry offers a

trade-off. The trade-off is between full citizenship status, with recognition of individual autonomy and normally accepted rights, and conditional citizenship (Fennell, 1986) as a “committed subject”, in return for certain benefits (mental health care, support from a non-clinical support worker, perhaps easier access to some benefit payments, subsidised medication). Support for the ideal of committal involving such a trade-off comes from qualitative studies of service users’ perceptions of community treatment orders. A theme of the small number of studies is that notwithstanding their reservations about the limitations imposed by a compulsory treatment order, the order provides reassurance that they will be prioritised for care (Brophy & Ring, 2004; Canvin, Bartlett & Pinfold, 2005²⁵; Gibbs, 2010). However in return they must accept the restrictions of the community treatment order, including compliance with medications that have significant side effects and adverse effects (Stahl, 2013), attendance at clinical appointments, the possibility of easier compulsory admission to hospital, and most of all the status of committal: a legally binding relationship with a State agent that has no parallels in other areas of social life.

It may be objected that in reality the community treatment order has “no teeth” (Stroud, Doughty & Banks (n.d. p. 8); Dreezer & Dreezer Inc, 2005, p. 13)); that for those subject to such an order sanctions are not automatic, and that, in any case, many patients subject to community treatment orders avoid contact with mental health service staff and do not adhere to the terms of the order. The community treatment order within New Zealand legislation provides for compulsory inpatient treatment if “the patient cannot continue to be treated adequately in the community” (section 29(3)) although anecdotally, such admissions do not occur unless there is a significant deterioration in the person’s mental health. But such arguments miss the point that the community treatment order is a form of coercion delivered through mental health service staff acting as agents of the State. It is precisely this “threat” (Segal et al., 2009, p. 95) of enforced treatment that is considered critical to the efficacy of the community treatment order.

A second objection to the notion of the social production of the committed subject might be that persons subject to community treatment orders “really do” have a serious mental illness. Clinical studies routinely report psychosis or some equivalent diagnostic

²⁵ This study investigated services users’ views of supervised discharge orders (SDOs) under the 1983 English legislation. SDOs contain many of the features of community treatment orders.

category to be the variable most strongly associated with compulsory status both internationally (e.g. Kisely, Xiao & Preston (2004); Salize & Dressing (2004); Segal et al., (2009)) and in New Zealand (Wheeler et al. (2005)). This second objection goes to the heart of my concept of “the committed subject”. It is my suggestion that the diagnosis of psychosis, for those subject to community treatment orders, is a medical label applied to an individual with some clinical symptoms and a need for mental health care, but also with complex personal and social needs. The argument that the diagnosed illness is the “cause” of their committed status is therefore somewhat circular. In addition, according primacy to diagnosis can be seen as a discursive manoeuvre (Foucault, 1972), a use of language which asserts particular (medical) discourse to the exclusion of others. Such an argument has been advanced to explain the exclusion of societal contributors to violence against women in New Zealand television documentaries (Michelle & Weaver, 2003).

In considering the notion of “the production of the committed subject” it is worth noting that actions may have more than one intention or consequence. When a doctor makes a decision to invoke committal, or when a nurse supports that decision by assisting in the organisation of care, there is an overt clinical function being fulfilled. In a recent English study of community treatment orders psychiatrists reported that decision making was “largely based on clinical grounds” (Manning et al., 2011, p. 328), a finding also reported in other studies of clinical decision making (e.g. Engelmann et al., (1998); Lidz et al. (1989)). But a clinical procedure may obscure a simultaneous social function. When mental illness provides the dominant model for thinking about the committal process, the issue of social need, and the social function performed by committal, are likely to remain opaque. The patient is encouraged to agree that the psychiatric explanation for what is going on represents a “truth” to which they must submit (Foucault, 1997) in order to gain the benefits of treatment. It may also be true, especially where families are involved, that the family has yielded its traditional position of speaking for the person to the disciplinary apparatus of psychiatry (Kallert, 2004).

Under the above model, the process of committal serves a dual function. It is both a clinical and legal procedure, something noted on the first page of this thesis, and one which assigns the person a status as a particular type of patient. The committed patient is one who is deserving because of illness but who is obliged, rather than invited, to accept treatment. In cases of civil commitment the diagnosis of psychosis serves to legitimise the

social role of psychiatry by constructing a social problem as a medical one. This is an argument outlined in Chapter 13 of this thesis (O'Brien, 2013).

The empirical work and historical analysis of this thesis lend support to the concept of “the production of the committed subject”. The process of committal, historically vested in an emergent discipline of psychiatry was the State’s response to a crisis of legitimacy in the 19th century asylums. Psychiatry was also experiencing a crisis of legitimacy, creating a convenient confluence of interests. Psychiatry’s crisis was resolved, in part, by claiming exclusivity in the writing of committal certificates thus creating an enduring nexus of State and medical authority. Diagnosis continues to underpin the role of psychiatrists in committal, even where, as in New Zealand, committal does not require a diagnosis. Many studies of variation in rates of civil commitment cited in this thesis (e.g. Bindman, et al., 2002; Lorant et al., 2007; Sipponen et al., 2010), and my own empirical work, show that committal is a function not only of individual factors, but of variables at different levels of organisation. But for committal to serve its social function it needs the imprimatur of a psychiatric diagnosis; it requires that the person with clinical symptoms and limited social resources, be constructed, through psychiatric classification and certification, as “the committed subject”.

Having outlined my concept of the production of the committed subject I need to make it clear that this is not another variant of the social control theory of psychiatry (Horowitz, 1982). Such theories have been called into question by research showing that management of access to limited social goods provides a better model than social control for understanding committal (Lincoln, 2006). In addition, Foucault’s analysis of psychiatry never advanced such a deterministic model of social control. Foucault saw psychiatry as a cultural practice (Beaulieu & Fillion 2008) and, as such, not driven primarily by the intentions of actors, the aspirations of the professions, or even the overt agendas of political elites. As a cultural practice psychiatry admits a variety of individual views and intentions among practitioners, which is why practitioners with a range of perspectives, from “recovery focused” (e.g. Munetz, Frese & Frederick, 2001) through “critical psychiatry” (e.g. Double, 2006) to biologically deterministic (e.g. Torrey & Zdanowicz, 2001) all support, albeit under different caveats, the psychiatric practice of legal coercion. The production of the committed subject occurs not because of the intentions of individual actors, but because, as in the 19th century, the social response to

mental illness, within the criteria of legislation, requires the legitimacy of psychiatric classification.

Ecosocial and Foucauldian theoretical framework

The Foucauldian theoretical framework used to inform this study has provided a rich source of heuristics with which to examine contemporary practice and the place of civil commitment in civil society and in health care. Krieger's ecosocial theory has driven the empirically focused work through exploration of some of the factors suggested as contributing to variation. The combination of theoretical influences addresses two issues: that epidemiological studies tend to be under theorised (Krieger, 2011; Weed, 2001) and that many critiques of committal, and of psychiatric practice more generally, are unhelpfully ideological (Shorter, 1997). The current research suggests influences of societal, neighbourhood, and service level factors on rates of committal, and confirms the need for theory, advocated by Krieger (2011) and Weed (2001) in epidemiological research. In view of these findings future investigations and analysis should be contextually and theoretically grounded on the socially constructed nature of both mental illness and mental health treatment. This awareness should not constrain future studies, but should ensure that researchers are mindful of the contingent nature of their subject matter. My experience in the current study suggests that theoretical engagement is productive in terms of the depth of analysis it generates, and in the range of questions suggested.

Compulsory treatment and public accountability

Two decades ago Dawson, Abbott and Henning (1987) noted that while the Ministry of Health's annual publication of the time *Mental Health Data* provided detailed diagnostic and demographic data on the hospital population, there was very little data on the subset of patients subject to mental health legislation. In 2014 this situation is changed, but there are still gaps in the available information. The annual reports of the Director of Mental Health, published since 2006, provide some comparative data on use

of mental health legislation, but no detailed analysis of demographic or clinical characteristics. Also, the annual reports contain only an estimate of the number of people committed, and no overall estimate of prevalence. There is no analysis of trends over time or of known risk factors such as ethnicity. The lack of readily available, sufficiently detailed data from official sources is a serious gap in the availability of comprehensive health information. This gap is a significant constraint our ability to monitor and evaluate health policy. It is of particular significance given the powers of mental health legislation to curtail civil liberties, and the differential effect such powers have on Maori and others living in areas of high deprivation.

Limitations

The current research has considered some, but not all of the variables that potentially contribute to variation in the use of mental health legislation. While the results add to existing knowledge, more research is needed to better understand variation in the process of committal. Two of the studies reported in this thesis used an ecological design, and this design presents problems for analysis, especially if ecological measures are not controlled for individual level variables (Morgenstern, 1995). This limitation can be overcome with multiple level studies and multilevel analysis (Marmot, 2003). However, the methods of an individual study depend on the phenomena of interest, and in the case of variation in use of mental health legislation, there is a need for both “upstream” studies which focus on social level variables, and “downstream” studies which focus on individual level variables (Marmot, 2003). In designing such studies Krieger (2009) urges caution in dichotomising levels, as suggested by Marmot (2003), an approach which Krieger suggests has been adopted by both biologically and socially deterministic researchers.

An important aspect of use of legislation not considered in this thesis is service users’ perception of use of legislation, and of coercion more generally. There is a considerable literature on this topic, and it shows a range of responses, from rejection of the need for legislation to acceptance that in some very narrowly defined situations, legislation might represent the best, perhaps the only available, response to actions that

might be dangerous to oneself or to others (Sibitz, Scheutz & Lakeman et al., 2011). The thesis has given only limited attention to Maori experience and has not investigated the often reported disproportionate use of mental health legislation with Maori (e.g. Elder & Tapsell, 2013). More generally, the additional factors outlined in Chapter 6 have not been examined in the current study.

Further research

There are several areas that present themselves for further research. In New Zealand use of community treatment orders has increased markedly since 2009 (O'Brien, 2014). Apart from Dawson's Otago community treatment order study (Dawson, 2005) there has been little New Zealand research into use of community treatment orders. It seems likely that a substantial number of those persons now on community treatment orders have been on them for a considerable number of years (Dawson & Gledhill, 2013), but this question cannot be answered from the available research. Also unknown are the long term outcomes for those on community treatment orders, in hospital days, engagement with treatment, or prevention of adverse personal events such as arrest, imprisonment or victimisation. There is an urgent need for these issues to be systematically investigated.

So far only three randomised controlled trials have investigated the effectiveness of compulsory community treatment. They are the North Carolina study (Swartz et al., 2001; the New York study (Steadman et al., 2001) and the recent OCTET study conducted in England (Burns et al. 2013). All three studies have experienced design and methodological problems (see Kisely & Campbell (2007) regarding the US studies, and Segal (2013) regarding the English study). Any further such trials will face significant ethical and cost barriers (Burns & Dawson, 2009) but calls for further randomised studies continue (Dawson, 2013). However it is possible to conduct useful research into community treatment orders without conducting randomised controlled trials. Studies conducted in Australia (Segal & Burgess, 2006a, 2006b., Segal & Burgess, 2008; Segal et al., 2009) have used administrative databases, in some cases linking data held by criminal justice and health administrators to characterise the population of people subject to

compulsory community treatment and their clinical and social outcomes. Such approaches offer the advantages of comprehensive data covering large numbers of individuals and diverse outcomes. New Zealand's small population makes it unlikely that a randomised controlled trial could ever be undertaken here. Regional variation in practice further dilutes the potential pool of participants. However database studies could be undertaken without undue cost and without the ethical issues encountered in experimental application of a compulsory measure with individuals at high risk (Atkinson, 2007).

There is a need for specific research into use of committal with Maori (Elder & Tapsell, 2013), as the few studies available, and a considerable amount of indirect evidence, suggest that use of compulsion with Maori is disproportionate compared to the European population (O'Brien, 2013). The epidemiological question about prevalence could be answered relatively easily from available data, but there is a need for studies that account for the interaction between ethnicity and social deprivation. Studies into Maori rates of committal also need to account for the age structure of the Maori population, which is younger than that of New Zealand at large (Statistics New Zealand, 2012). This has the potential to inflate calculations of rates of committal among Maori.

The empirical work of this thesis has shown that the predictors of different forms of committal (acute admission and community compulsion) are different. In addition to research into community treatment orders there is a need for research investigating the use of committal in inpatient admissions. Although DHB variation is not as marked in inpatient admission (O'Brien & Kydd, 2014) it is still significant and suggests that there is some scope for reducing this form of coercion.

Mental health legislation and mental health policy

New Zealand's current mental health legislation was enacted in 1992 at a time when a major focus of mental health policy was hospital closure and the establishment of community based mental health services. Internationally, mental health legislation was moving away from the previous need for treatment standard towards criteria of

dangerousness (Appelbaum, 1984). Since 1992 mental health policy has undergone significant change with the development of a “recovery” focus in mental health care internationally (Anthony, 1993; Jacobson & Curtis, 2000; Slade, 2009) and in New Zealand (Clayton & Tse, 2003; O’Hagan, 2004). Recent discussion of mental health legislation speaks of the need for a human rights perspective (Callaghan & Ryan, 2012; Szmukler, Daw & Callard, 2013) and the possibility of “fusion” legislation (Dawson & Szmukler, 2006). The fusion model would see the end of separate mental health legislation in favour of legislation in which a single capacity standard for treatment without consent would apply across all health settings. A common theme in current debates about mental health legislation is the place of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (Callard et al., 2012; O’Brien & Thom, 2014) which New Zealand has endorsed and ratified. Under the UNCRPD, legislation based on a person’s membership of a status group (such as people with mental disorder) is considered discriminatory, and countries have been urged to repeal such legislation (Szmukler et al., 2013). The human rights perspective of the UNCRPD supports the mental health policy emphasis on recovery; however it provides a challenge to mental health legislation, such as New Zealand’s, which is based on membership of a status group (Bartlett, 2009). Just as, historically legislation has been redrawn to meet contemporary social and policy objectives, current legislation now seems out of step with the emerging human rights perspective.

Reflections on the research process

I began this thesis with questions about the place of coercion in mental health care. My early observation that variation was an unexplained phenomenon, and might lead to a greater understanding of reasons for use of coercion has proved fruitful. In order to explore the issue of variation I needed to understand both the current literature on variation and the range of possible methods of investigation. My initial exploration of the history of civil commitment led me towards the Foucauldian and ecosocial theoretical perspective that ultimately informed the study because it was apparent that committal was a dual legal and medical procedure that occurred at particular historical moments and was related to social level variables. Reflecting on the reasons for this development, and their

implications for current practice I was drawn to the Foucault's notion of *archaeology*, (Foucault, 1972) that embedded in the practices and procedures of today, and opaque to consciousness, are the residues of past experience. Now, when I observe and participate in procedures under mental health legislation, or read about such procedures in clinical records or academic literature, I am keenly aware of the contingent nature of the knowledge at play, its contestability, and the operations of power. In this way my research has helped me, I hope, become a more critically thoughtful clinical practitioner and researcher.

It has been a rewarding and illuminating experience to conduct research while engaged in the academic discipline of nursing (and more broadly, health sciences), and in the clinical practice of mental health nursing. Much is made in academic literature of the "theory-practice gap" (Cribb, 2010) and over the period of the current study I felt constantly caught between the pragmatic ethical concerns of clinical practice and the more theoretical concerns of the academy. The former primarily requires action, the best actions that the circumstances will allow, while the latter demands critical analysis and questioning about what is ideal, or "best practice". Ideally, of course, these concerns should be blended both in clinical practice and in the academic work that aims to inform clinical practice. My experience has been that although this blending does occur, a necessary tension remains. As a personal outcome of my research I feel better able to participate in both processes.

Conclusion

In this thesis I have examined variation, through the lens of ecosocial and Foucauldian theory, from historical, social and clinical perspectives. The investigation has revealed some important associations and has led to improved understanding of contributing factors. The research has been informed by my dialogue with mental health professional and wider academic community. Variation in use of mental health legislation is a complex phenomenon. Despite the conclusions of many researchers that variation might be due to numerous specific factors, it is not susceptible to easy explanations. Although many factors have been found to be associated with variation, in the literature

reviewed and in the empirical work of this study, there is currently no comprehensive theoretical or empirical model of either committal or variation in rates of committal. Variation in use of mental health legislation appears to conform to Byrne's concept of "complex complexity" (Byrne, 2005) which avoids attempts to explain phenomena using a limited set of rules. Instead, in cases of complex complexity research must be socially engaged and seek "different configurations of causes" (p. 95) in different contexts. Well theorised multiple level analyses are needed to advance understanding in this area. My concept of the production of the committed subject is an attempt to suggest a model of committal, especially in relation to use of community treatment orders, in the New Zealand context.

Mental health legislation appears to be at a historic junction and faces new challenges to its legitimacy. Under the emerging human rights perspective, even if variation were to be successfully addressed the current conceptual and ethical basis of committal is not sustainable. Equally, as many historical examples attest, reform of legislative criteria will not in itself address rates of use of legislation, or variation across districts. As there seems currently to be no agenda for reform, the current model of legislation will be in place for many more years. Clinicians, managers and policy makers will therefore need to explore alternatives to compulsion, and researchers will need to support those efforts by evaluating effectiveness, both of alternatives and of programmes of compulsory treatment.

APPENDICES



Multi-region Ethics Committee

Ministry of Health
133 Molesworth Street
PO Box 5013
Wellington 6145
Phone (04) 470 0655
(04) 470 0646
Fax (04) 496 2340

Email: multiregion_ethicscommittee@moh.govt.nz

18 March 2010

Mr Anthony O'Brien
School of Nursing
University of Auckland
Private Bag 92019
Auckland 1142

Dear Anthony

Ethics ref: **MEC/10/09/EXP**
Study title: Application of mental health legislation in New Zealand
Investigators: Mr Anthony O'Brien

The above study has been given ethical approval by the Multi-region Ethics Committee.

Approved Documents

- Information and Request for Participants, Version 1, dated 18th of March 2010
- Request for Information and DHB Mental Health Services, Version 1, dated 18th of March 2010
- Data Collection Form: DHB Clinicians, Version 1, dated 18th of March 2010
- Mental Health Services Study, Version 1, dated 18th of March 2010

Certification

The Committee is satisfied that this study is not being conducted principally for the benefit of the manufacturer or distributor of the medicine or item in respect of which the trial is being carried out.

Accreditation

The Committee involved in the approval of this study is accredited by the Health Research Council and is constituted and operates in accordance with the Operational Standard for Ethics Committees, April 2006.

Final Report

The study is approved until **30 September 2010**. A final report is required at the end of the study. The report form is available on <http://www.ethicscommittees.health.govt.nz> and should be forwarded along with a summary of the results. If the study will not be completed as advised, please forward a progress report and an application for extension of ethical approval one month before the above date.

Requirements for SAE Reporting

The Principal Investigator will inform the Committee as soon as possible of any of the following untoward medical occurrences at any dose that:

- involves a fatal reaction, or
- involves a life-threatening reaction, or
- results in persistent or significant disability or incapacity, or
- results in a congenital abnormality..

Where the application is for a study with a data monitoring committee SAEs must be reporting by the principal investigator to the ethics committee where they

- are unexpected because they are not outlined in the investigator's brochure, and
- are not defined study end—points(e.g. death or hospitalisation) and
- occur in patients located in New Zealand , and
- if the study involves blinding, result in a decision to break the study code.

There is no requirement for the individual reporting to ethics committees of SAEs that do not meet all of these criteria.

SAEs should be individually reported within the time-frames for expedited reporting set out in ICH guidelines

Amendments

All amendments to the study must be advised to the Committee prior to their implementation, except in the case where immediate implementation is required for reasons of safety. In such cases the Committee must be notified as soon as possible of the change.

Please quote the above ethics committee reference number in all correspondence.

The Principal Investigator is responsible for advising any other study sites of approvals and all other correspondence with the Ethics Committee.

It should be noted that Ethics Committee approval does not imply any resource commitment or administrative facilitation by any healthcare provider within whose facility the research is to be carried out. Where applicable, authority for this must be obtained separately from the appropriate manager within the organisation.

We wish you well with your study.

Yours sincerely



Claire Lindsay
Administrator
Multi-region

Email: claire_lindsay@moh.govt.nz



Multi-region Ethics Committee

Ministry of Health
No. 1 The Terrace
PO Box 5013
Wellington 6145
Phone (04) 816 2403
(04) 816 2646
Fax (04) 496 2343

Email: multiregion_ethicscommittee@moh.govt.nz

8 November 2011

Mr Anthony O'Brien
University of Auckland
School of Nursing
Auckland University
Private Bag 92019
Auckland

Dear Mr O'Brien

Ethics ref: **MEC/10/009/EXP** (please quote in all correspondence)
Study title: Application of mental health legislation in New Zealand
Investigators: Mr Anthony O'Brien

Thank you for your letter dated 19 October 2011 enclosing documentation relating to the above named study. Your request for an extension to 31 March 2012 has been reviewed and approved by the Chairperson of the Multi-region Ethics Committee under delegated authority.

Approved Documents

- Letter dated 19 October 2011 requesting an extension to 31 March 2012
- Amended DHB clinician data collection form v2 September 1, 2011
- Letter requesting clinician participation v2, October 19, 2011

Please note that an annual progress report was due for this study on 30 September 2011. Providing an annual report and final reports are requirements of ongoing ethical approval.

You can submit the report electronically if it is more convenient for you. Please email the report to Multiregion_EthicsCommittee@moh.govt.nz. The report form can be found on our website at www.ethicscommittees.health.govt.nz.

Please do not hesitate to contact me should you have any queries.

Yours sincerely

Kirsten Forrest
Administrator
Multi-Region Ethics Committee
Email: Multiregion_ethicscommittee@MOH.govt.nz

Appendix 3. Request for information (DHB mental health services)



Faculty of Medical and Health Sciences
School of Nursing
The University of Auckland
Private Bag 92019
Auckland, New Zealand

REQUEST FOR INFORMATION ON DHB MENTAL HEALTH SERVICES

PhD study. Application of mental health legislation in New Zealand

I am a PhD student in the School of Psychological Medicine, University of Auckland. My research involves an epidemiological study examining factors influencing the use of the Mental Health (Compulsory Assessment and Treatment) Act 1992 (the Act).

One such factor is extent and nature of mental health services provided by DHBs. In addition to this I will be collecting data on a range of other variables. I can send the full study protocol if you are interested.

At the conclusion of the study, towards the end of 2011, I hope to be able to report on how service structure and systems of delivery are related to variation in use of mental health legislation. This information will be of value to funders and providers of statutory services, as well as to policy makers.

I invite you participate in this research by completing the enclosed mental health services survey form. This will require reporting on the range of mental health services provided in your DHB.

Return of the survey form will be taken as consent to participate.

On completion of the study the results will be reported to all participants.

The supervisors for the study are Professor Rob Kydd r.kydd@auckland.ac.nz (373 7599, 86531) and Assoc Professor Brian McKenna b.mckenna@auckland.ac.nz (373 7599 x89554) who can be contacted regarding any ethical concerns.

This project has been granted ethical approval by Multi-region Ethics Committee for the period from April 2010 to September 2011 (Reference Number MEC/10/09/EXP).

If you have any queries regarding this study please do not hesitate to contact me.

Yours sincerely

Version 1, March 18, 2010

Tony O'Brien
Senior Lecturer
School of Nursing
Faculty of Medical and Health Sciences
University of Auckland
3737599 ext 85693

Appendix 4. Mental health services survey



Faculty of Medical and Health Sciences
School of Nursing
The University of Auckland
Private Bag 92019
Auckland, New Zealand

PhD study. Application of mental health legislation in New Zealand

Mental health services survey

This survey is aimed at gaining understanding of provision of adult mental health services in your DHB. By ‘adult mental health services’ I mean services provided to adults aged (usually) 18 to 65 as part of the general adult mental health service. I want to **exclude** child and youth services, older adult (over 65) services, specialist addiction services, intellectual disability services and forensic services. I want to **include** specialist services such as early psychosis, eating disorder, home based treatment etc even if these services are sometimes provided to younger patients.

Please enter the appropriate number in the box to the right of each question.

Inpatient beds	
Number of acute adult inpatient mental health beds (exclude those exclusively for addictions)	
Note: For this question include only the establishment of dedicated adult beds (including intensive care). Don't include youth or other beds, even if they are sometimes used for adult patients. Don't include Older Adult (over 65) beds.	

Number of adult inpatient mental health rehabilitation beds (exclude those exclusively for addictions)	
Note: For this question include only beds within DHB provided services. Don't include youth or other beds, even if they are sometimes used for adult patients. Don't include Older Adult (over 65) beds.	

Number of adult inpatient mental health sub-acute beds (exclude those exclusively for addictions) – often services have one or the other and often terms used interchangeably	
Note: For this question include only beds within DHB provided services. Don't include	

youth or other beds, even if they are sometimes used for adult patients. Don't include Older Adult (over 65) beds.

Respite beds (or other alternatives to acute admission)

Number of beds available for respite care as an alternative to acute admission (exclude those exclusively for addictions).

Note: For this question include beds within DHB **and** NGO provided services. Don't include youth or other beds, even if they are sometimes used for adult patients. Don't include Older Adult (over 65) beds.

Mobile crisis team availability

Please indicate the availability of a mobile crisis team in your DHB

Awake mobile team available seven days, 24 hours

Awake mobile team available seven days, 16 hours (i.e. 8am – 4pm or similar)

Awake mobile team available Monday to Friday, 16 hours (i.e. 8am – 4pm or similar)

Total mental health clinical staff

Number of fulltime equivalent registered nurses employed in mental health (exclude those exclusively for addictions).

Note: For this question include only Registered Nurses, not Enrolled Nurses. Don't include nurses employed in Child and Youth services or Older Adult (over 65) services.

Number of fulltime equivalent specialist psychiatrists employed in mental health (exclude those exclusively for addictions).

Number of fulltime equivalent psychiatric registrars employed in mental health (exclude those exclusively for addictions).

Number of fulltime equivalent Medical Officers (Special Scale) employed in

mental health (exclude those exclusively for addictions).	
---	--

Staff in community mental health services	
--	--

Medical staff (fulltime equivalents) employed in adult community mental services (exclude those exclusively for addictions).	
--	--

Nursing staff (fulltime equivalents) employed in adult community mental health services (exclude those exclusively for addictions)	
--	--

Note: For this question include any specialist mental health services that are accessed by the adult population. Don't include Child and Youth or Older Adult (over 65) Services.

Kaupapa Maori, or Maori mental health services	
---	--

Total staff (fulltime equivalents) employed Kaupapa Maori or Maori mental health services (exclude those exclusively for addictions).	
---	--

Note: For this question include all medical staff and registered nurses, **and** all cultural support workers.

Appendix 5. Information and request for clinician participants



Faculty of Medical and Health Sciences
School of Nursing
The University of Auckland
Private Bag 92019
Auckland, New Zealand

INFORMATION AND REQUEST FOR PARTICIPANTS

PhD study. Application of mental health legislation in New Zealand

I am a PhD student in the School of Psychological Medicine, University of Auckland. My research involves an epidemiological study examining factors influencing the use of the Mental Health (Compulsory Assessment and Treatment) Act 1992 (the Act).

One such factor is decision making by mental health clinicians, especially nurses and doctors in the statutory roles of Duly Authorised Officer or Responsible Clinician. To study of clinical decision making I have developed a series of ten vignettes describing scenarios in which a clinician might consider use of the Act. In addition, I have developed a rating scale to measure perceptions of civil commitment.

I invite you participate in this research by completing the two survey forms and by providing some demographic data for the purposes of analysis. The survey is anonymous and no individual responses will be reported. Data will not be reported for individual DHBs.

Return of the survey forms will be taken as consent to participate.

What happens to the information?

Information will only be accessed by the Principal Investigator and supervisors. It will be stored on University of Auckland premises for the duration of the study. Once the thesis has been examined and accepted you will be sent a link to a summary of the findings. Aspects of the study may be submitted for publication in peer reviewed journals or presented at professional conferences.

How will your identity remain confidential?

No material that could identify you will be used in any reports on this study. The survey forms will be kept in a locked location at the University of Auckland and destroyed ten years after completion of the study. Data will be stored on password protected computer files and kept on the University of Auckland server.

Participation incentive

Version 2, October 19 2011

As an incentive to participate in this study participants are offered the opportunity to have their names entered into a draw for a Restaurants New Zealand voucher to the value of \$250, redeemable in every district in New Zealand. To be eligible to enter the draw simply tick the box on the incentive form provided, place that form in the separate envelope provided, seal the envelope and include with the survey forms. To preserve confidentiality, do not write your name on the outside of the envelope. On receipt, envelopes will be separated from the survey and data collection forms. One envelope will be drawn under supervision, and the rest will be destroyed.

The supervisors for the study are Professor Rob Kydd r.kydd@auckland.ac.nz (373 7599, 86531 and Assoc Professor Brian McKenna b.mckenna@auckland.ac.nz (373 7599 x89554) who can be contacted regarding any ethical concerns.

This project has been granted ethical approval by Multi-region Ethics Committee for the period from April 2010 to March 30 2012 (Reference Number MEC/10/09/EXP).

If you have any queries regarding this study please do not hesitate to contact me.

Yours sincerely

Tony O'Brien
Senior Lecturer
School of Nursing
Faculty of Medical and Health Sciences
University of Auckland
3737599 ext 85693

Appendix 6. Data collection form: DHB clinicians



THE UNIVERSITY OF AUCKLAND
NEW ZEALAND

Faculty of Medical and Health Sciences
School of Nursing
The University of Auckland
Private Bag 92019
Auckland, New Zealand

PhD study. Application of mental health legislation in New Zealand

Data collection form: DHB clinicians

Please tick the appropriate box:

Clinical role

Responsible clinician	
Duly authorized officer	

Professional discipline

Registered Nurse	
Psychiatrist	
Psychiatric Registrar	
Other medical practitioner (please state)	
Other professional discipline (please state)	

Years of clinical experience in mental health care

1-5 years	
6-10 years	
11-20 years	
More than 20 years	

Gender

Male	
Female	

Which DHB are you employed in?

Appendix 7. Clinician Perceptions of Civil Commitment instrument



Faculty of Medical and Health Sciences
School of Nursing
The University of Auckland
Private Bag 92019
Auckland, New Zealand

Application of mental health legislation in New Zealand

A PhD study conducted by Anthony O'Brien, University of Auckland.
Supervisor Professor Rob Kydd, University of Auckland.

Clinician Perceptions of Civil Commitment Scale (CPoCCS)[©]

This instrument is designed to measure clinician perceptions of compulsory mental health care under the Mental Health (Compulsory Assessment and Treatment) Act (1992).

Please indicate your agreement or disagreement with each of the following statements by placing a tick in the appropriate box.

		Very strongly agree	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Very strongly disagree
1	It is better to let people learn from their experience of relapse than to prevent relapse through use of the Mental Health Act							
2	Clinicians should work in collaboration with patients rather than use the coercive powers of the Mental Health Act.							
3	For people with severe mental illness, use of the Mental Health Act is essential to gain control of their symptoms.							
4	The Mental Health Act is essential when patients with severe mental illness are non-compliant with antipsychotic medication.							
5	Use of the Mental Health Act could be avoided with better integrated mental health services.							
6	The Mental Health Act can provide a period of stability that will allow people to engage in voluntary mental health care.							
7	Some people will only take their medications if they are under the Mental Health Act.							
8	The Mental Health Act should always be used in cases where there							

	is clear risk of harm to others							
--	---------------------------------	--	--	--	--	--	--	--

Clinician Perceptions of Civil Commitment Scale (CPoCCS)[®]

		Very strongly agree	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Very strongly disagree
9	Use of the Mental Health Act undermines the therapeutic relationship between patients and clinicians							
10	Even patients with severe mental illness can be treated without use of coercion through the Mental Health Act.							
11	Most patients with severe mental illness accept treatment if it is not coerced through the use of the Mental Health Act							
12	Use of the Mental Health Act assists people with severe mental illness to get access to services.							
13	For people with severe mental illness who lack insight, use of the Mental Health Act is essential to gaining treatment adherence.							
14	Use of the Mental Health Act makes it difficult for patients to feel included in society							
15	Use of the Mental Health Act adds to the stigma of mental illness.							
16	Using the Mental Health Act is inconsistent with the principle of least restrictive care.							
17	Family members find it reassuring for a relative with severe mental illness to be treated under the Mental Health Act							
18	For people with severe mental illness who abuse substances the Mental Health Act is an important means of preventing deterioration in mental state.							
19	Clinicians who are able to get alongside patients are less likely to use the coercive powers of the Mental Health Act							
20	Intensive community mental health care could prevent the need to use the Mental Health Act.							
21	Once they are well, most people will acknowledge that use of the Mental Health Act was necessary to ensure they received appropriate treatment.							
22	Often, the most effective way to provide care for a person with severe mental illness is through use of the Mental Health Act							
23	Use of the Mental Health Act tends to drive people away from mental health services.							
24	Use of the Mental Health Act undermines patients' autonomy							



Faculty of Medical and Health Sciences
School of Nursing
The University of Auckland
Private Bag 92019
Auckland, New Zealand

Application of mental health legislation in New Zealand

A PhD study conducted by Anthony O'Brien, University of Auckland.
Supervisor Professor Rob Kydd, University of Auckland.

Clinical decision making vignettes

Part One. Hospital admission under Section 11 of the Act.

The following scenarios describe situations in which a clinician might consider an initial period of assessment and treatment under Section 11 of the Mental Health (Compulsory Assessment and Treatment) Act. The scenarios are not complete; in real life situations you would ask more questions and take more history. However for the purposes of this study you are asked to indicate your views on the basis of the information given.

Please indicate your response by placing a tick in the appropriate box.

Scenario 1

Richard is 37 years old and lives with his parents in a caravan located on their property. He has a previous diagnosis of schizophrenia and has twice previously been admitted to inpatient care under Section 11 of the Mental Health Act. Today his mother has phoned the crisis team saying that her son is unwell. He has been smoking marijuana, something that his psychiatrist has advised against. He told his mother that she is to let no-one on to the property and to phone him if anyone approaches. Recently he has been neglecting his personal hygiene, and his mother tells you she believes he has not been taking his medication. He has not attended his last two scheduled appointments with the community mental health service.

In your opinion should Richard be admitted to hospital under section 11 of the Mental Health Act?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Scenario 2

Scott is 42 years old, and is a farm worker who lives with his wife and two children on his employer's dairy farm. He has a history of bipolar disorder for which he takes lithium. His last acute episode was three years ago. Scott's wife has called the community mental health team because she is concerned that Scot might be getting high. He has been sleeping poorly, missing work, and getting into arguments with his employer. Scott has also been drinking an increased amount of alcohol. Scott's wife wonders if he is taking his prescribed medication, but he will not talk to her about that. She is concerned that Scot's employer has a weapon on the property and Scot knows how to access it.

In your opinion should Scot be admitted to hospital under section 11 of the Mental Health Act?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Scenario 3

Ben is 19 years old and in his first year of university study. He lives with his parents and his two younger sisters. He has no history of mental illness and his academic progress this year has been good. The university counselor has phoned you for advice because Ben has sought counseling for depression and stress related to a relationship that ended unexpectedly. When she last saw him, Ben said he had had thoughts of suicide by taking an overdose of paracetamol which was available in the family home. Ben has also reported recent feelings that fellow students have been spying on him, accessing his personal records and passing on confidential information about him.

In your opinion should Ben be admitted to hospital under section 11 of the Mental Health Act?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Scenario 4

Alan is a 55 year old single sickness beneficiary who lives in a Housing New Zealand flat in the central city. He has a long history of mental illness and has previously been diagnosed with schizophrenia. He is currently treated with a depot antipsychotic agent. At his last clinical review three months ago his community treatment order was discontinued. He is supported by a community mental health team and attends various community groups. Alan has no immediate family and few friends. Recently he has become suspicious of other tenants in his block of flats, accusing them of leaving rubbish on his doorstep and laughing at him as they walk past his door. Although he normally has a placid nature, in the past week Alan has had several heated arguments with his neighbours.

In your opinion should Alan be admitted to hospital under section 11 of the Mental Health Act?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Scenario 5

Marie is a teacher aged 39 who lives with her husband and two children. Over the past year she has felt depressed and has had increasing difficulty coping with the demands of her job and family. Three months ago her GP diagnosed Marie with depression and prescribed an SSRI. Marie experienced some improvement in her mood but continued to feel depressed. An increase in the dose of SSRI has resulted in no change and Marie is referred to the community mental health team for assessment. Marie tells you she has a history of self harm by cutting her wrists as an adolescent. Her intake of alcohol has increased in the past six months, and when intoxicated she has thoughts of self harm. In the past week she has twice acted on these thoughts, making superficial cuts to both wrists.

In your opinion should Marie be admitted to hospital under section 11 of the Mental Health Act?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Part Two. Community treatment orders.

The following scenarios describe situations in which a clinician might consider treatment under a community treatment order under Section 29 of the Mental Health (Compulsory Assessment and Treatment) Act. The scenarios are not complete; in real life situations you would ask more questions and take more history. However for the purposes of this study you are asked to indicate your views on the basis of the information given.

Please indicate your response by placing a tick in the appropriate box.

Scenario 6

Steve is a 33 year old single man who six months ago spent three weeks in inpatient care with an episode of acute psychosis. He had been hearing voices and had persecutory ideas. It was Steve's third such admission, the first being at age 19. Since discharge, Steve has been treated under a community treatment order. He has maintained his employment at a furniture factory and has engaged well with his community mental health team. He is currently treated with Olanzapine. Marijuana was thought to have contributed to Steve's last acute episode, and he has not used marijuana since. Steve still hears voices occasionally, especially if he is tired or stressed. He wishes to have his community treatment order discontinued and consents to continued mental health care. Steve's community treatment order is about to be reviewed.

In your opinion, does Steve need to be treated under a community treatment order?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Scenario 7

Marsha is a 29 year old artist who has been treated under a community treatment order for two years. This period of treatment followed a suicide attempt in response to voices and Marsha's subsequent reluctance to accept treatment voluntarily. Since she has been under the community treatment order Marsha has engaged in community mental health care. She has been visited by a key worker and has been prescribed antipsychotic medication which she accepts. However she is bothered by side effects, especially weight gain, and frequently requests that the medication is discontinued. Marsha flats with fellow artists and enjoys a busy social life. At a routine clinical review Marie asks that her community treatment order be discontinued.

In your opinion, does Marsha need to be treated under a community treatment order?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Scenario 8

Trevor is a 39 year old single man who has lived in his parents' bach at a small holiday town for the past fifteen years. He had numerous admissions in his twenties when he was a regular user of marijuana. On one admission he was found to have a knife in his possession, which he said was necessary for his protection. More recently, Trevor has enjoyed a long period of stability under a community treatment order. He receives regular visits from a community mental health nurse who administers his monthly depot antipsychotic medication. Trevor frequently asks to be taken off his community treatment order. He says it interferes with his freedom, and he would like to get a job and travel. Recently, Trevor moved to the city and has found accommodation through a social agency. His community treatment order is due for review, and Trevor states that he has been well for many years, and the community treatment order should be discontinued.

In your opinion, does Trevor need to be treated under a community treatment order?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Scenario 9

Mark is 35 and had a first episode of bipolar disorder a year ago. During that episode Mark gave away most of his possessions and began several romantic relationships. He was taken into police custody following a fight in a bar, and from there he was admitted to hospital under Section 11 of the Mental Health (Compulsory Assessment and Treatment) Act. On discharge Mark was placed on a community treatment order which was renewed after the first six months. He has now been well for a year and is compliant with his lithium treatment. Mark has returned to his career as a graphic designer and has held down full time work for the past six months. Mark's community treatment order is due to be reviewed.

In your opinion, does Mark need to be treated under a community treatment order?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

Scenario 10

Barry is a 52 year old man with a long history of mental illness who lives in a group boarding house with several other mental health service users. Barry has a diagnosis of schizophrenia and has been under a community treatment order for five years. He receives regular visits from a key worker, and attends a community mental health centre for clinical review and medication. Although Barry likes his accommodation, from time to time he travels to the central city, drinks excessive amounts of alcohol and is usually returned home by the police. On one occasion he was briefly admitted to hospital with pneumonia. Barry's community treatment order is due for review, and he asks that it be discontinued as he is compliant with treatment and has not needed acute admission for several years.

In your opinion, does Barry need to be treated under a community treatment order?

Very strongly agree	Strongly agree	agree	neutral	disagree	Strongly disagree	Very strongly disagree
1	2	3	4	5	6	7

REFERENCES

Abas, M., Vanderpyl, J., Robinson, E., & Crampton, P. (2003). More deprived areas need greater resources for mental health. *Australian and New Zealand Journal of Psychiatry*, 37(4), 437-444.

Abas, M., Vanderpyl, J., Le Prou, T., Kydd, R., Emery, B., & Foliaki, S. A. (2003). Psychiatric hospitalization: reasons for admission and alternatives to admission in South Auckland, New Zealand. *Australian and New Zealand Journal of Psychiatry*, 37(5), 620-625.

Abas, M., Vanderpyl, J., & Robinson, E. (2008). Socioeconomic deprivation and extended hospitalization in severe mental disorder: A two-year follow-up study *Psychiatric Services*, 188, 322-325.

Abas, M. A., Vanderpyl, J., Robinson, E., Le Prou, T., & Crampton, P. (2006). Socioeconomic deprivation and duration of hospital stay in severe mental disorder. *British Journal of Psychiatry*, 188(6), 581–582.

Arboleda-Florez, J. (2012). Psychiatry and the law –do the fields agree in their views on coercive treatment? In T. W. Kallert, J. E. Mezzich & J. Monahan (Eds.), *Coercive treatment in psychiatry: Clinical, legal and ethical aspects* (pp. 83-96). Hoboken: Wiley-Blackwell.

Allderidge, P. (1979). Hospitals, madhouses and asylums: Cycles in the care of the insane *British Journal of Psychiatry*, 134, 321-334.

Anthony, W. A. (1993). Recovery from mental illness: the guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, 16(4), 11.

Andrews, J., Briggs, A., Porter, R., Tucker, P., & Waddington, K. (1997). *The history of Bethlem*. London: Routledge.

Appelbaum, P. S. (1984). Standards for civil commitment: a critical review of empirical research. *International Journal of Law & Psychiatry*, 7(2), 133-144.

Appelbaum, P. S. (1994). *Almost a revolution. Mental health law and the limits of change*. New York: Oxford University Press.

Appelbaum, P. S. (1997). Almost a revolution: An international perspective on the law of involuntary civil commitment. *Journal of the American Academy of Psychiatry and the Law*, 25(2), 135-147.

Atkinson, J. (2007). *Advance directives in mental health. Theory, practice and ethics*. London: Jessica Kingsley Publishers.

Audini, B., & Lelliott, P. (2002). Age, gender and ethnicity of those detained under Part II of the Mental Health Act 1983. *British Journal of Psychiatry*, 180(3), 222-226.

Awara, M. A., Jaffar, K., & Roberts, P. (2013). Effectiveness of the community treatment order in streamlining psychiatric services. *Journal of Mental Health*, 22(2), 191-197.

Bagley, C., Jacobson, S. & Palmer, C. (1973). Social structure and the ecological distribution of mental illness, suicide, and delinquency. *Psychological Medicine*, 3(2), 177-187.

Bartlett, P. (2000). Structures of confinement in 19th-century asylums: A comparative study using England and Ontario. *International Journal of Law and Psychiatry*, 23(1), 1-13.

Bartlett, P. (2009). The United Nations Convention on the Rights of Persons with Disabilities and the future of mental health law. *Psychiatry*, 8(12), 496-498.

Bartlett, P., & Wright, D. (1999). Community care and its antecedents. In P. Bartlett & D. Wright (Eds.), *Outside the walls of the asylum. The history of care in the community, 1750-2000* (pp. 1-18). London, England: Athlone Press.

Beaulieu, A., & Fillion, R. (2008). *Michel Foucault, History of madness*, translated by Jonathan Murphy and Jean Khalifa. *Foucault Studies*, 5, 74-89.

Bell, S., & Brookbanks, W. J. (2005). *Mental health law in New Zealand* (2nd ed.). Wellington: Brookers.

Berkman, L. F., & Kawachi, I. (2000). A historical framework for social epidemiology. In L. F. Berkman & I. Kawachi (Eds.). *Social Epidemiology* (pp. 3-12). New York: Oxford University Press.

Bertolote, J., Tabora, J. G. V., Arboleda-Florez, J., & Torres-Gonzales, F. (2002). The impact of legislation on mental health policy. In N. Sartorius, W. Gaebel, L. L. Lopez-Ibor & M. Maj (Eds.), *Psychiatry in society*, (pp. 79-100). West Sussex, UK: John Wiley.

Bhui, K., Stansfield, S., Hull, S., Priebe, S., Mole, F., & Feder, G. (2003). Ethnic variations in pathways to and use of specialist mental health services in the UK. *British Journal of Psychiatry*, *182*, 105-116.

Bindman, J., Tighe, J., Thornicroft, G., & Leese, M. (2002). Poverty, poor services, and compulsory psychiatric admission in England. *Social Psychiatry and Psychiatric Epidemiology*, *37*, 341-345.

Bishop, J. P. (2009). Revisiting Foucault. *Journal of Medicine and Philosophy*, *34*(4), 323-327.

Blaug, M. (1963). The myth of the old poor law and the making of the new. *The Journal of Economic History*, *23*(2), 151-184.

Boyle, M. (2002). *Schizophrenia. A scientific delusion?* (2nd ed.). East Sussex: Routledge.

Bracken, P. (1995). Beyond liberation: Michel Foucault and the notion of a critical psychiatry. *Philosophy of Psychiatry and Psychology*, *2*(1), 1-13.

Bracken, P., Khalfa, J., & Thomas, P. (2007). Recent translations of Foucault on mental health. *Current Opinion in Psychiatry*, *20*, 605-608.

Bracken, P., & Thomas, P. (2010). From Szasz to Foucault: On the role of critical psychiatry. *Philosophy, Psychiatry, & Psychology*, *17*(3), 219-228.

Brophy, L., & Ring, D. (2004). The efficacy of involuntary treatment in the community: Consumer and service provider perspectives. *Social Work in Mental Health*, *2*(2-3), 157-174.

Brunton, W. (1996). Colonies for the mind: The historical context of services for forensic psychiatry in New Zealand. In W. Brunton, D. Chaplow & J. Peters (Eds.), *Psychiatry and the law: Clinical and legal issues* (pp. 3-58). Wellington: Brookers.

Brunton, W. (2003). The origins of deinstitutionalisation in New Zealand. *Health and History*, *5*(2), 75-103.

Brunton, W. (2005). The place of public inquiries in shaping New Zealand's national mental health policy 1858-1996. *Australian and New Zealand Health Policy*, *2*:24 (online). doi:10.1186/1743-8462-2-24.

Brunton, W. (2013). Mental health services. Retrieved from <http://www.teara.govt.nz/en/mental-health-services>

Burgess, P., Bindman, J., Leese, M., Henderson, C., & Szukler, G. (2006). Do community treatment orders for mental illness reduce admission to hospital? An epidemiological study. *Social Psychiatry & Psychiatric Epidemiology*, *41*, 574-579.

Burns, T., & Dawson, J. (2009). Community treatment orders: how ethical without experimental evidence? *Psychological Medicine*, 39, 1583-1586.

Burns T, Rugkasa, J, Molodynski A, Dawson, J. Yeeles, K., Vazquez-Montes, M...Priebe, S. (2013). Community treatment orders for patients with psychosis (OCTET): a randomised controlled trial. *The Lancet*, 381, 1627-1633.

Butler, M., Corboy, J., & Filley, C. (2009). How the conflict between American psychiatry and neurology delayed the appreciation of cognitive dysfunction in multiple sclerosis. *Neuropsychology Review*, 19(3), 399-410.

Byrne, D. (2005). Complexity, configurations and cases. *Theory, Culture & Society*, 22(5), 95–111.

Callaghan, S., & Ryan, C. (2012). Rising to the human rights challenge in compulsory treatment – new approaches to mental health law in Australia. *Australian and New Zealand Journal of Psychiatry*, 46(7), 611-620.

Callard, F., Sartorius, N., Arboleda-Flórez, J., Bartlett, P., Helmchen, H., Stuart, H., . . . Thornicroft, G. (2012). Health, health care and the right to health *Mental Illness, Discrimination and the Law* (pp. 125-136): John Wiley & Sons, Ltd.

Cañete-Nicolás C, Hernández-Viadel M, Bellido-Rodríguez C, Lera-Calatayud G, Asensio-Pascual P, Pérez-Prieto JF, et al. (2012). Involuntary outpatient treatment (iot) for severe mental patients: current situation in Spain. *Actas españolas de psiquiatría*, 40(1), 27-33.

Canguilhem, G. (1966/1991). *The normal and the pathological (with an introduction by Michel Foucault)*. New York: Zone Books.

Canvin, K., Bartlett, A., & Pinfold, V. (2005). Acceptability of compulsory powers in the community: the ethical considerations of mental health service users on supervised discharge and guardianship. *Journal of Medical Ethics*, 31(8), 457-462.

Care Quality Commission (2011). *Mental Health Act Annual Report 2010/11*. London: Author.

Carney, T. (2007). Mental health legislation in the Commonwealth. *Current Opinion in Psychiatry*, 20, 482-485.

Castel, R. (1988). *The regulation of madness. The origins of incarceration in France*. Berkley: University of California Press.

Charland. (2007). Benevolent theory: moral treatment at the York Retreat. *History of Psychiatry*, 18(1), 61-80.

Chowdhury, N. A., Whittle, N., McCarthy, K., Bailey, S., & Harrington, R. (2005). Ethnicity and its relevance in a seven-year admission cohort to an English national adolescent medium secure health service unit. *Criminal Behaviour & Mental Health, 15*(4), 261-272.

Clapham, M. (2012). Psychiatric power and its reversals: Can we keep practice humane? *Philosophy, Psychiatry, & Psychology 19*(1), 63-65.

Clayton, J., & Tse, S. (2003). An educational journey towards recovery for individuals with persistent mental illnesses: A New Zealand perspective. *Psychiatric Rehabilitation Journal, 27*(1), 72-78.

Cole, S. R. (1996). Atheoretical science: a response to the poverty of Popperian epidemiology. *International Journal of Epidemiology, 25*, 899-900.

Corrigall, R., & Bhugra, D. (2013). The role of ethnicity and diagnosis in rates of adolescent psychiatric admission and compulsory detention: a longitudinal case-note study. *Journal of the Royal Society of Medicine, 106*(5), 190-195.

Cribb, A. (2010). Translational ethics? The theory–practice gap in medical ethics. *Journal of Medical Ethics, 36*(4), 207-210.

Cummins, C. J. (2003). *A history of medical administration in in New South Wales, 1788-1973* (2nd ed.). Sydney: NSW Department of Health.

Davies, S. (2002). Compulsory treatment in the community: current legal powers. *Advances in Psychiatric Treatment, 8*(3), 180-188.

Dawson, J. (2005). *Community treatment orders: International comparisons*. Dunedin, New Zealand: Otago University Print.

Dawson, J. (2006). Fault-lines in community treatment order legislation. *International Journal of Law and Psychiatry, 29*(6), 482-494.

Dawson J. (2007). Factors influencing the use of community treatment orders. *Psychiatry, 6*, 42-44.

Dawson, J. (2008). Community treatment orders and human rights. *Law in Context 26*(2), 148-159.

Dawson, J. (2013). The complex meaning of “mental disorder”. In J. Dawson and K. Gledhill (Eds.), *New Zealand’s mental health act in practice* (pp. 29-45). Wellington: Victoria University Press.

Dawson, J. B., Abbott, M. W., & Henning, M. A. (1987). Who gets committed: Demographic and diagnostic data. *New Zealand Medical Journal, 100*, 142-145.

Dawson, J., Burns, T., & Rugkasa, J. (2011). Lawfulness of a randomised trial of the new community treatment order regime for England and Wales. *Medical Law Review*, 19(1), 1-26.

Dawson, J & Gledhill, K. (2013). Introduction. In J. Dawson & K. Gledhill (Eds.). *New Zealand's Mental Health Act in practice* (pp. 17-25). Wellington: Victoria University Press.

Dawson, J. & Gledhill, K (Eds.) (2013). *New Zealand's Mental Health Act in practice*. Wellington: Victoria University Press.

Dawson, J., & Romans, S. (2001). The use of community treatment orders in New Zealand: Early findings. *Australian and New Zealand Journal of Psychiatry*, 35, 190-195.

Dawson, J., & Szmukler, G. (2006). Fusion of mental health and incapacity legislation. *British Journal of Psychiatry*, 188(6), 504-509.

Deraas, T. S., Hansen, V., Giæver, A., & Olstad, R. (2006). Acute psychiatric admissions from an out-of-hours casualty clinic; how do referring doctors and admitting specialists agree? *BMC Health Services Research*, 6(41), 1186-1141.

Double, D. (2006). *Critical psychiatry: The limits of madness*. New York: Palgrave Macmillan.

Double, D. (2011). Whistling in the wind. *The Psychiatrist Online*, 35, 315.

Dowbiggin, I. (2011). *The quest for mental health: A tale of science, medicine, scandal, sorrow, and mass society*. New York: Cambridge.

Dreezer & Dreezer Inc. (2005). *Report on the legislated review of community treatment orders, required under section 33.9 of the Mental Health Act. For the Ontario Ministry of Health and Long-Term Care*. Ontario. (n.p.).

Dubos, R. (1959). *The mirage of health: Utopian progress and biological change*. New York: Anchor Books.

Durham, M. L., & Pierce, G. L. (1986). Legal intervention in civil commitment: the impact of broadened commitment criteria. *Annals of the American Academy of Political & Social Science*(484), 42-55.

Durie, M. (2001). Mauri Ora. *The dynamics of Maori health*. Auckland: Oxford University Press.

Durst, R., Teitelbaum, A., Bar-El, Y., Shlafman, M., & Ginath, Y. (1999). Evaluation of compulsory ambulatory treatment in Israel. *Psychiatric Services*, 50(5), 698-700.

Eastman, N. (1990). Consent to psychiatric treatment. In J. J. Bradley, V. J. Horton-Ash & M. L. Page (Eds.), *Psychiatry and the law* (pp. 24-32). Dorchester: Dulphar Medical Relation.

Eaton, W. W., & Harrison, G. (2000). Epidemiology, social deprivation and community psychiatry. *Current Opinion in Psychiatry*, 13(2), 185-187.

Elder, H., & Tapsell, R. (2013). Maori and the Mental Health Act. In J. Dawson, & K. Gledhill (Eds.), *New Zealand's Mental Health Act in practice* (pp. 249-267). Wellington: Victoria University Press.

Engberg, M. (1991). Involuntary commitment in Greenland, the Faroe Islands and Denmark. *Acta Psychiatrica Scandinavica*, 84(4), 353-356.

Engleman, N. B., Jobes, D. A., Berman, A. L., & Langbein, L. I. (1998). Clinicians' decision making about involuntary commitment. *Psychiatric Services*, 49(7), 941-945.

Ernst, W. (1991). The social history of pakeha psychiatry in nineteenth century New Zealand. Main themes. In L. Bryder (Ed.), *A Healthy country : essays on the social history of medicine in New Zealand* (pp. 64-84, 212-217.). Wellington: Bridget Williams Books.

Eyton, A., Chatton, A., Safran, E., & Khazaal, Y. (2013). Impact of psychiatrists' qualifications on the rate of compulsory admissions. *Psychiatric Quarterly* 84(1), 73-80.

Fahy, G. M., Javaid, S., & Best, J. (2013). Supervised community treatment: Patient perspectives in two Merseyside mental health teams. *Mental Health Review Journal*, 18(3), 157-164.

Faris, R. E. L. & Dunham, H. W. (1939). *Mental disorders in urban areas: an ecological study of schizophrenia and other psychoses*. Oxford, England: University of Chicago Press.

Fennell, P. (1986). Law and psychiatry: The legal constitution of the psychiatric system. *Journal of Law and Society*, 13(1), 35-65.

Fennig, S., Rabinowitz, J., & Fennig, S. (1999). Involuntary first admission of patients with schizophrenia as a predictor of future admissions. *Psychiatric Services*, 50(8), 1049-1052.

Folnegovic´-Smalc, Uzun, S., & Ljubin, T. (2000). Sex-specific characteristics of involuntary hospitalization in Croatia. *Nordic Journal of Psychiatry*, 54(1), 55-59.

Foucault, M. (1965/1988). *Madness and civilization. A History of insanity in the Age of Reason*. Vintage Books, New York.

Foucault, M. (1970). *The order of things: an archaeology of the human sciences*. London: Tavistock Publications.

Foucault, M. (1972). *The archaeology of knowledge* New York: Pantheon Books.

Foucault, M. (1984). What is an author. In Rabinow, P. (Ed.). (1984). *The Foucault reader* (pp. 101-120). Pantheon Books, New York.

Foucault, M. (1991). Nietzsche, genealogy, history. In P. Rabinow (Ed.), (1984). *The Foucault reader* (pp. 76-100). London: Penguin.

Foucault, M. (1994). *The birth of the clinic: an archaeology of medical perception*. New York: Vintage Books.

Foucault, M. (1995). *Discipline and punish. The birth of the prison*. New York: Vintage.

Foucault, M. (1997). The ethics of the concern for self as a practice of freedom (trans Robert Hurley and others). In P. Rabinow (Ed.) *Michel Foucault: ethics, subjectivity and truth: the essential works of Michel Foucault 1954–1984, Volume 1*. London: Penguin Press, pp. 281–301.

Foucault, M. (2006). *Psychiatric power. Lectures at the College de France 1973-1974*. London Palgrave MacMillan.

Foucault, M. (2008). *The history of sexuality Vol.1, The will to knowledge* Camberwell, Victoria: Penguin.

Gadit, A. A. (2012). 'Community Treatment Order'. How often is it being used? *Journal of Pakistan Medical Association* <http://www.jpma.org.pk/PdfDownload/3875.pdf>

Geller, J. L., Grudzinskas, A. J., McDermeit, M., Fisher, W. H., & Lawlor, T. (1998). The efficacy of involuntary treatment in Massachusetts. *Administration and Policy in Mental Health*, 25(3), 271-285.

George, L., Durbin, J., Sheldon, T. & Goering, P. (2002). Patient and contextual factors related to the decision to hospitalize patients from emergency psychiatric services. *Psychiatric Services*, 53(12), 1586-1591.

Gibbs, A. (2010). Coping with compulsion: Women's views of being on a community treatment order. *Australian Social Work* 68(2), 223-233.

Gibbs, A., Dawson, J., Ansley, C. & Mullen, R. (2005). How patients in New Zealand view community treatment orders. *Journal of Mental Health*, 14(4), 357-368.

Gibbs, A., Dawson, J., Forsyth, H. & Mullen, R. (2004). Maori experience of community treatment orders in Otago, New Zealand. *Australian and New Zealand Journal of Psychiatry*, 38(10), 830 –835.

Gilbert, A. R., Moser, L. L., Van Dorn, R. A., Swanson, J. W., Wilder, C. M., Robbins, P. C., et al. (2010). Reductions in arrest under assisted outpatient treatment in New York. *Psychiatric Services*, *61*(10), 996-999.

Glover, G. R., Leese, M., & McCrone, P. (1999). More severe mental illness is more concentrated in deprived areas. *British Journal of Psychiatry*, *175*, 544–548.

Gordon, S. (2013). The recovery of compulsory assessment and treatment. In J. Dawson and K. Gledhill (Eds.), *New Zealand's mental health act in practice* (pp. 268-284). Wellington: Victoria University Press.

Gourevitch, R., Brichant-Petitjean, C., Crocq, M.-A. & Petitjean, F. (2013). Law & psychiatry: The evolution of laws regulating psychiatric commitment in France *Psychiatric Services*, *64*(7), 609-612.

Gray, J. E., & O'Reilly, R. L. (2005). Canadian compulsory community treatment laws: Recent reforms. *International Journal of Law and Psychiatry*, *28*(1), 13-22.

Hacking, I. (1999). *The social construction of what?* Harvard University Press.

Hamilton, J. (1983). Mental Health Act 1983 *British Medical Journal*, *286*, 1720-1725.

Hansson, L., Muus, S., Saarento, O., Vinding, H. R., Göstas, G. & Sandlund, M. (1999). The Nordic comparative study on sectorized psychiatry: rates of compulsory care and use of compulsory admissions during a 1-year follow-up. *Social Psychiatry and Psychiatric Epidemiology*, *34*, 99-104.

Hatling, T., Krogen, T., & Ulleberg, P. (2002). Compulsory admissions to psychiatric hospitals in Norway--International comparisons and regional variations. *Journal of Mental Health*, *11*(6), 623-634.

Hewitt, D. (2011). The strange republic of the good. Community treatment orders and their conditions. *Journal of Mental Health Law*, *Spring*, 39-47.

Hiday, V. A. (2003). Outpatient commitment. The state of empirical research on its outcomes. *Psychology, Public Policy, and Law*, *9*(1/2), 8-32.

Hiday, V. A., & Scheid-Cook, T. L. (1989). A follow-up of chronic patients committed to outpatient treatment. *Hospital & Community Psychiatry*, *40*(1), 52-59.

Hiday, V. A., & Smith, L. N. (1987). Effects of the dangerousness standard in civil commitment. *Journal of Psychiatry & Law*, *15*(3), 433-454.

Holley, H. L. (1998). Geography and mental health: a review. *Social Psychiatry and Psychiatric Epidemiology*, *33*(11), 535-542.

Horowitz, A. V. (2002). *Creating mental illness*. Chicago: University of Chicago Press.

Horrocks, C., & Jevtic, Z. (2001). *Introducing Foucault*. London: Icon.

Hotopf, M., Wall, S., Buchanan, A., Wessely, S., & Churchill, R. (2000). Changing patterns in the use of the Mental Health Act 1983 in England, 1984-1996. *British Journal of Psychiatry*, *176*, 479-484.

Hoyer, G. (2008) Involuntary hospitalization in contemporary mental health care. Some (still) unanswered questions. *Journal of Mental Health*, *17*(3), 281-292.

Hunt, A. M., da Silva, A., Lurie, S., & Goldbloom, D. (2007). Community treatment orders in Toronto: The emerging data. *Canadian Journal of Psychiatry*, *52*(10), 647-656.

Huxley, P., & Kerfoot, M. (1993). Variation in requests to social services for assessment for compulsory psychiatric admission. *Social Psychiatry and Psychiatric Epidemiology*, *28*, 71-76.

Iliopoulos, J. (2012). Foucault, the logic of psychiatric power, and its paradoxes. *Philosophy, Psychiatry, & Psychology*, *19*(1), 67-69.

Ingram, G., Muirhead, D., & Harvey, C. (2009). Effectiveness of community treatment orders for treatment of schizophrenia with oral or depot antipsychotic medication: changes in problem behaviours and social functioning. *Australian and New Zealand Journal of Psychiatry*, *43*(11), 1077-1083.

Inneichen B, Harrison G & Morgan H.G. (1984). Psychiatric hospital admissions in Bristol. I. Geographical and ethnic factors. *British Journal of Psychiatry*, *145*, 600-611.

Jacobson, N., & Curtis, L. (2000). Recovery as policy in mental health services: Strategies emerging from the states. *Psychiatric Rehabilitation Journal*, *23*(4), 333-341.

Kaiser, H. A. (2009). Canadian mental health law: The slow process of redirecting the ship of state. *Health Law Journal*, *17*, 139-194.

Kallert, T. W. (2004). Coercion in psychiatric care – patients' and relatives' experiences from four Swedish psychiatric services. *Nordic Journal of Psychiatry*, *58*(2), 153-159.

Kallert, T. W. (2008). Coercion in psychiatry. *Current Opinion in Psychiatry*, *21*(5), 485-489.

Kallert, T., Glöckner, M., & Schützwahl, M. (2008). Involuntary vs. voluntary hospital admission. *European Archives of Psychiatry and Clinical Neuroscience*, *258*(4), 195-209.

Kaltiala-Heino, R. (2004). Increase in involuntary admissions of minors. *Social Psychiatry and Psychiatric Epidemiology*, 39, 53-59.

Kaplan, G. (2002). Upstream approaches to reducing socioeconomic inequalities in health. *Revista Brasileira de Epidemiologia*, 5(Suppl. 1), 18-27.

Karmen, H. (2000). *Early modern European society*. New York: Routledge.

Kendall, T. (1995). Commentary on "Beyond Liberation". *Philosophy, Psychiatry, & Psychology*, 2(1), 15-17.

Kelsey, J. (1993). *Rolling back the state: Privatisation of power in Aotearoa/New Zealand*. Wellington: Bridget Williams Books.

Keown, P., Weich, S., Bhui, K. S., & Scott, J. (2011). Association between provision of mental illness beds and rate of involuntary admissions in the NHS in England 1988-2008: ecological study. *BMJ*, 343.

Khurmi, S., & Curtice, M. (2010). The supervised community treatment order and the Human Rights Act 1998. *Advances in Psychiatric Treatment*, 16, 263-27.

Kisely, S. R., Xiao, J., & Preston, N. J. (2004). Impact of compulsory community treatment on admission rates: Survival analysis using linked mental health and offender databases. *British Journal of Psychiatry*, 184(5), 432-438.

Kisely, S., & Campbell, L. A. (2007). Methodological issues in assessing the evidence for compulsory community treatment. *Current Psychiatric Reviews* 3, 51-56.

Kisely, S., Preston, N., Xiao, J., Lawrence, D., Louise, S., Crowe, E., et al. (2013). An eleven-year evaluation of the effect of community treatment orders on changes in mental health service use. *Journal of Psychiatric Research*, 47(5), 650-656.

Kjellin, L. (1997). Compulsory psychiatric care in Sweden 1979-1993. Prevalence of committed patients, discharge rates and area variation. *Social Psychiatry & Psychiatric Epidemiology*, 32(2), 90-96.

Kjellin, L., Ostman, O., & Ostman, M. (2008). Compulsory care in Sweden. 1979-2002 and area variation. *International Journal of Law and Psychiatry*, 31, 51-59.

Koch, T. (2009). Social epidemiology as medical geography: Back to the future. *GeoJournal*, 74(2), 99-106.

Kovel, J. (1995). Commentary on "Beyond liberation" and "Moralist or therapist". *Philosophy of Psychiatry and Psychology*, 2(1), 33-34.

Kozumplik, O., Jukic, V., & Goreta, M. (2003). Involuntary hospitalizations of patients with mental disorders in Vrapce psychiatric hospital: Five years of

implementation of first Croatian law on protection of persons with mental disorders. *Croatian Medical Journal*, 44(5), 601-605.

Krieger, N. (1994). Epidemiology and the web of causation: Has anyone seen the spider? *Social Science & Medicine*, 39(7), 887-903.

Krieger, N. (2001). Theories for social epidemiology in the 21st century: an ecosocial perspective. *International Journal of Epidemiology*, 30(4), 668-677.

Krieger, N. (2009). Proximal, distal, and the politics of causation: what's level got to do with it? *American Journal of Public Health*, 98(2), 221-230.

Kuller, L. H. (1999). Invited commentary: Circular epidemiology. *American Journal of Epidemiology*, 150(9), 897-903.

Kumar, S., Ng, B., Simpson, A., Fischer, J., & Robinson, E. (2008). No evidence of restrictive care practices in Maori admitted to a New Zealand psychiatric inpatient unit. *Social Psychiatry and Psychiatric Epidemiology*, 43, 387-391.

Kydd, R. R., Nola, P. F., & Wright, J. J. (1991). Mental health needs in Auckland: 1982-6. An analysis using the Jarman index. *New Zealand Medical Journal*, 104(914), 255-257.

Lawton-Smith, S. (2005). *A question of numbers. The potential impact of community-based treatment orders in England and Wales*. London: King's Fund.

Lawton-Smith, S. (2006). *Community-based compulsory treatment orders in Scotland. The early evidence*. London: King's Fund.

Lawton-Smith, S., Dawson, J., & Burns, T. (2008). Community treatment orders are not a good thing. *The British Journal of Psychiatry*, 193(2), 96-100.

Lay, B., Nordt, C., & Rossler, W. (2011). Variation in use of coercive measures in psychiatric hospitals. *European Psychiatry*, 26(4), 244-251.

Lecompte, D. (1995). The paradoxical increase in involuntary commitment admissions after the revision of the civil commitment law in Belgium. *Medicine and Law*, 14, 53-57.

Lepping, P., & Malik, M. (2013). Community treatment orders: current practice and a framework to aid clinicians. *The Psychiatrist*, 37(2), 54-57.

Lepping, P., Steinert, T., Gebhardt, R.-P., & Rottgers, H. R. (2004). Attitudes of mental health professionals and lay-people towards involuntary admission and treatment in England and Germany - a questionnaire analysis. *European Psychiatry*, 19(2), 91-95.

Lidz, C. W., Mulvey, E. P., Appelbaum, P. S., & Cleveland, S. (1989). Commitment: The consistency of clinicians and the use of legal standards. *American Journal of Psychiatry*, *146*(2), 176-181.

Light, E., Kerridge, I., Ryan, C., & Robertson, M. (2011). Community treatment orders in Australia: rates and patterns of use. *Australasian Psychiatry*, *20*(6), 478-482.

Lincoln, A. (2006). Psychiatric emergency room decision-making, social control and the 'undeserving sick'. *Sociology of Health & Illness*, *28*(1), 54-75.

Lindsey, M. A., Joe, S., Muroff, J., & Ford, B. E. (2010). Social and clinical factors associated with psychiatric emergency service use and civil commitment among African-American youth. *General Hospital Psychiatry*, *32*(3), 300-309.

Link, B. G., & Phelan, J. C. (1996) Understanding sociodemographic differences in health--the role of fundamental social causes. *American Journal of Public Health*, *86*(4), 471-473.

Lorant, V., Depuydt, C., Gillain, B., Guillet, A., & Dubois, V. (2007). Involuntary commitment in psychiatric care: what drives the decision? *Social Psychiatry & Psychiatric Epidemiology*, *42*, 360-365.

Lutzen, K. (1998). Subtle coercion in psychiatric practice. *Journal of Psychiatric and Mental Health Nursing*, *5*(2), 101-107.

Macintyre, S., & Ellaway, A. (2000). Ecological approaches: Rediscovering the role of the physical and social environment. In L. F. Berkman & I. Kawachi (Eds.), *Social Epidemiology* (pp. 332-348). New York: Oxford University Press.

Mackenzie, S., & Shirlaw, N. (2002). *Mental health and the law: a legal resource for people who experience mental illness* Wellington: Wellington Community Law Centre.

Malcolm, L. (1989). Bed availability as a significant influence on rates of committal to New Zealand's psychiatric hospitals. *New Zealand Medical Journal*, *102*, 8-9.

Manning, C., Molodynski, A., Rugkasa, J., Dawson, J., & Burns, T. (2011). Community treatment orders in England and Wales: national survey of clinicians' views and use. *The Psychiatrist*, *35*(9), 328-333.

Marmot, M. G. (2003). Understanding social inequalities in health. *Perspectives in Biology and Medicine*, *46*(3), S9-23.

Mathews, E. (1995). Moralism or therapist? Foucault and the critique of psychiatry. *Philosophy, Psychiatry, & Psychology*, *2*(1), 19-30.

McEvoy, J. P., Appelbaum, P. S., Apperson, L. J., Geller, J. L. & Freter, S. (1989). Why must some schizophrenic patients be involuntarily committed? The role of insight. *Comprehensive Psychiatry*, 30, 13–17.

McKenna, B. G., & O'Brien, A. J. (2013). Mental health nursing and the Mental Health Act. In J. Dawson & K. Gledhill (Eds.), *New Zealand's Mental Health Act in practice* (pp. 198-212). Wellington: Victoria University Press.

McKenna, B. G., O'Brien, A. J., Dal Din, T., & Thom, K. (2006). Registered nurses as responsible clinicians under the New Zealand Mental Health (Compulsory Assessment and Treatment) Act 1992. *International Journal of Mental Health Nursing*, 15(2), 128-134.

McSherry, B., & Wilson, K. (2011). Detention and treatment down under. Human rights and mental health laws in Australia and Zealand. *Medical Law Review*, 19(4), 548-580.

Mental Health (Compulsory Assessment and Treatment) Act, 46 Stat, N.Z. (1992).

Mental Health Commission (2006). Report on progress 2004/2005. Wellington: New Zealand.

Mental Health Commission (2012). *Blueprint II: How things need to be*. Wellington: Mental Health Commission.

Michelle, C., & Weaver, C. K. (2003). Discursive manoeuvres and hegemonic recuperations in New Zealand *Feminist Media Studies*, 3(3), 283-299.

Mihai, A., Allen, M., Beezhold, J., Rosu, C., Nirestean, A., & Damsa, C. (2009). Are female psychiatry residents better to propose in emergency a voluntary hospitalization? *Psychiatric Quarterly*, 80(4), 233-239.

Miller, R. D. & Fiddleman, P. B. (1983). Emergency involuntary commitment: a look at the decision-making process. *Hospital & Community Psychiatry*, 34(3), 249-254.

Mills, M. J. (1988). The relationship between perceived dangerousness and mental illness *Archives of General Psychiatry*, 45(8), 770-772.

Minister of Health. (2005). *Te Tahuhu - Improving mental health 2005-2015: The second New Zealand mental health and addiction plan*. Wellington: Ministry of Health.

Ministry of Health (2002). *Competencies for the role and function of responsible clinicians under the Mental Health (Compulsory Assessment and Treatment) Act 1992*. Wellington: Ministry of Health

Ministry of Health. (2006). *Office of the Director of Mental Health. Annual Report 2005*. Wellington: Ministry of Health.

Ministry of Health. (2007). *Office of the Director of Mental Health. Annual Report 2006*. Wellington: Ministry of Health.

Ministry of Health. (2008). *Office of the Director of Mental Health. Annual Report 2007*. Wellington: Ministry of Health.

Ministry of Health (2009). *Office of the Director of Mental Health: Annual Report 2008*. Wellington: Ministry of Health.

Ministry of Health. (2010a). *Office of the Director of Mental Health: Annual Report 2009*. Wellington: Ministry of Health.

Ministry of Health. (2010b). *What happens to your mental health and addiction information?* Wellington: Ministry of Health.

Ministry of Health. (2011). *Office of the Director of Mental Health. Annual Report 2010*. Wellington: Ministry of Health.

Ministry of Health. (2012). *Office of the Director of Mental Health. Annual Report 2011*. Wellington: Ministry of Health.

Ministry of Health. (2013a). *Office of the Director of Mental Health. Annual Report 2012*. Wellington: Ministry of Health.

Ministry of Health. (2013b). *Mental health and addiction: Service use 2009/10*. Wellington: Ministry of Health.

Möller-Leimkühler, A. M. (2003). The gender gap in suicide and premature death or: why are men so vulnerable? *European Archives of Psychiatry and Clinical Neuroscience* 253, 1-8.

Morgenstern, H. (1995). Ecologic studies in epidemiology: Concepts, principles, and methods. *Annual Review of Public Health*, 16, 61-81.

Muirhead, D., Harvey, C., & Ingram, G. (2006). Effectiveness of community treatment orders for treatment of schizophrenia with oral or depot antipsychotic medication: clinical outcomes. *Australian and New Zealand Journal of Psychiatry*, 40(6), 596-605.

Mulder, C. L., Koopmans, G. T., & Lyons, J. S. (2005). Determinants of indicated versus actual level of care in psychiatric emergency services. *Psychiatric Services*, 56(4), 452-457.

Mulder, C. L., Koopmans, G. T., & Seltjen, J.-P. (2006). Emergency psychiatry, compulsory admissions and clinical presentation among immigrants to The Netherlands. *British Journal of Psychiatry*, *188*(4), 386-391.

Mulder, C. L., Uitenbroek, D., Broer, J. M. D., Lendemeijer, B., Veldhuizen, J. R., Tilburg, W. v., et al. (2007). Changing patterns in emergency involuntary admissions in the Netherlands in the period 2000-2004. *International Journal of Law and Psychiatry*, *31*(4), 331–336.

Muntez, M. R., & Frese III, F. (2001). Getting ready for recovery: Reconciling mandatory treatment with the recovery vision. *Psychiatric Rehabilitation Journal*, *25*(1), 35-42.

Munetz, M. R., Grande, T., Kleist, J., & Peterson, G. A. (1996). The effectiveness of outpatient civil commitment. *Psychiatric Services*, *47*(11), 1251-1253.

Munk-Jørgensen P (1999). Has deinstitutionalization gone too far? *European Archives of Psychiatry and Clinical Neuroscience*, *249*, 136–143.

Myklebust, L. H., Sorgaard, K., Rootvold, K., & Wynn, R. (2012). Factors of importance to involuntary admission. *Nordic Journal of Psychiatry*, *66*(3), 178-182.

Nahon, D., Pugachova, I., Yoffe, R., & Levav, Y. (2006). The impact of rights advocacy, mental health legislation and psychiatric reform on the epidemiology of involuntary psychiatric hospitalizations. *Medicine & Law*, *25*, 283-295.

National Health Statistics Centre. (1973). *Mental health data*. Wellington, New Zealand: Author.

Newton-Howes, G., Lacey, C., & Banks, D. (2013). Community treatment orders: the experiences of Non-Maori and Maori within mainstream and Maori mental health services. *Social Psychiatry and Psychiatric Epidemiology*, 1-7.

Nilstun, T., & Syse, A. (2000). The right to accept and the right to refuse. *Acta Psychiatrica Scandinavica, Supplementum*, *399*, 31-34.

Nolan, P. (1993). *A history of mental health nursing*. London: Chapman & Hall.

O'Brien, A. A., & Farrell, S. J. (2005). Community treatment orders: Profile of Canadian experience. *Canadian Journal of Psychiatry*, *50*(1), 27-30.

O'Brien, A. J. (2000). *The therapeutic relationship: perceptions of mental health nurses. a thesis presented in partial fulfilment of the requirements for the degree of Master of Philosophy*. Massey University, New Zealand.

O'Brien, A. J. (2001). The therapeutic relationship: historical development and contemporary significance. *Journal of Psychiatric and Mental Health Nursing*, 8, 129-137.

O'Brien, A. J. (2010). Capacity, consent, and mental health legislation: Time for a new standard? *Contemporary Nurse*, 34(2), 237-247.

O'Brien, A. J. (2013). Social deprivation and use of the Mental Health Act. In J. Dawson & K. Gledhill (Eds.). *New Zealand's Mental Health Act in practice* (pp. 302-318). Wellington: Victoria University Press.

O'Brien, A. J. (2014). Community treatment orders in New Zealand: regional variability and international comparisons. *Australasian Psychiatry*. Online ahead of print. Retrieved from: <http://apy.sagepub.com/>

O'Brien, A. J., & Golding, C. G. (2003). Coercion in mental healthcare: the principle of least coercive care. *Journal of Psychiatric & Mental Health Nursing*, 10(2), 167-173.

O'Brien, A. J., & Kar, A. (2006). The role of second health professionals under New Zealand mental health legislation. *Journal of Psychiatric and Mental Health Nursing*, 13(3), 356-363.

O'Brien, A. J., & Kydd, R. R. (2013). Compulsory community care in New Zealand mental health legislation 1846-1992 *Sage Open*. April – June 1-8. doi 10.1177/2158244013490175

O'Brien, A. J. R. & Kydd, R. (2014). Health service availability and use of mental health legislation. *New Zealand Medical Journal* (in review).

O'Brien, A. J., Kydd, R. R., & Frampton, C. (2011). Social deprivation and use of mental health legislation in New Zealand. *International Journal of Social Psychiatry*, 58(6), 581-586.

O'Brien, A. J., McKenna, B. G., & Kydd, R. R. (2009). Compulsory community mental health treatment: Literature review. *International Journal of Nursing Studies*, 46(9), 1245-1255.

O'Brien, A. J. & Thom, K. (2014). The United Nations Convention on the Rights of Persons with Disabilities and its implications for compulsory treatment and mental health nursing.

O'Hagan, M. (2004). Guest Editorial: Recovery in New Zealand: Lessons for Australia? *Advances in Mental Health*, 3(1), 5-7.

Quirk, A., Lelliott, P., Audini, B., & Buston, K. (2003). Non-clinical and extra-legal influences on decisions about compulsory admission to psychiatric hospital. *Journal of Mental Health, 12*(2), 119-130.

Paris, J. (2010). *The use and misuse of psychiatric drugs. An evidence based critique*. Oxford: Wiley-Blackwell.

Parry-Jones, W. L. (1972). *The trade in lunacy: A study of private madhouses in England in the eighteenth and nineteenth centuries* London: Routledge and Kegan Paul.

Patel, M. (2011). Increased use of antipsychotic long-acting injections with community treatment orders. *Therapeutic Advances in Psychopharmacology, 1*(2), 37-45.

Perera, B., Shaikh, A., & Singh, N. (2013). The use of community treatment orders in an intellectual disability service. *Advances in Mental Health and Intellectual Disabilities, 7*(3), 129-134.

Perlin, M. L. (2003). Therapeutic jurisprudence and outpatient commitment law. *Psychology, Public Policy, and Law, 9*(1-2), 183-2008.

Phelan, J. C., Sinkewicz, M., Castille, D. M., Huz, S., & Link, B. G. (2010). Effectiveness and outcomes of assisted outpatient treatment in New York State. *Psychiatric Services, 61*(2), 137-143.

Phillips, M. R., Chen, H., Diesfeld, K., Xie, B., Cheng, H. G., Mellsop, G., et al. (2013). China's New Mental Health Law: Reframing Involuntary Treatment. *American Journal of Psychiatry, 170*(6), 588-591.

Philo, C. (2004). *A geographical history of institutional provision for the insane from medieval times to the 1860s in England and Wales. The space preserved for insanity*. Lewiston, New York: The Edwin Mellen Press.

Pinel, P. H. (1806/1988). *A treatise on insanity. In which are contained the principles of a new and more practical nosology of maniacal disorders than has yet been offered to the public, exemplified by numerous and accurate historical relations of cases from the author's public and private practice: With plates illustrative of the craniology of maniacs and ideots*. Birmingham, Alabama: Gryphon Editions Inc.

Porter, R. (1988). *A social history of madness: The world through the eyes of the insane*. New York: Weidenfeld & Nicolson.

Porter, R. (1992). Psychiatry pre-1800. *Current Opinion in Psychiatry, 5*(5), 718-721.

Pratt, J. (2013). *A punitive society: Falling crime and rising imprisonment in New Zealand*. Wellington: Bridget Williams Books.

Priebe, S., Fakhoury, W., Watts, J., Bebbington, P., Burns, T. O. M., Johnson, S... Wright, C. (2003). Assertive outreach teams in London: patient characteristics and outcomes: Pan-London Assertive Outreach Study, Part 3. *The British Journal of Psychiatry*, 183(2), 148-154.

Quirk, A., Lelliott, P., Audini, B., & Buston, K. (2003). Non-clinical and extra-legal influences on decisions about compulsory admission to psychiatric hospital. *Journal of Mental Health*, 12(2), 119-130.

Rabinow, P. (Ed.). (1984). *The Foucault reader*. Pantheon Books, New York.

Relton, C., Torgerson, D., O’Cathain, A., & Nicholl, J. (2010). Rethinking pragmatic randomised controlled trials: introducing the “cohort multiple randomised controlled trial” design. *BMJ*, 340.

Ridley, J., & Hunter, S. (2013). Subjective experiences of compulsory treatment from a qualitative study of early implementation of the Mental Health (Care & Treatment) (Scotland) Act 2003. *Health and Social Care in the Community*, 21(5), 509-518.

Riecher-Rossler, A., & Rossler, W. (1993). Compulsory admission of psychiatric patients: an international comparison. *Acta Psychiatrica Scandinavica*, 87, 231-236.

Robbins, P. C., Keator, K. J., Steadman, H. J., Swanson, J. W., Wilder, C. M., & Swartz, M. S. (2010). Regional differences in New York's assisted outpatient treatment program. *Psychiatric Services*, 61(10), 970-975.

Roberts, M. (2005). The production of the psychiatric subject: power, knowledge and Michel Foucault. *Nursing Philosophy*, 6(33-42).

Robinson, I. D. (1972). Description and evaluation of a psychiatric home visiting service. *New Zealand Medical Journal*, 75(476), 15-19.

Rosca, P., Bauer, A., Grinshpoon, A., Khawaled, R., Mester, R., & Ponizovsky, A. M. (2006). Rehospitalizations among psychiatric patients whose first admission was involuntary: A10-year follow-up. *Israeli Journal of Psychiatry and Related Science*, 43(1), 57–64.

Rose, N. (1996). Psychiatry as political science: Advanced liberalism and the administration of risk. *History of the Human Sciences*, 9(2), 1-23.

Rothman, D. (1971). *The discovery of the asylum: Social order and disorder in the new republic*. Boston: Little, Brown & Co.

Rubin, W. V., Snapp, M. B., Panzano, P. C., & Taynor, J. (1996). Variation in civil commitment processes across jurisdictions: An approach for monitoring and

managing change in mental health systems. *Journal of Mental Health Administration*, 23(4), 375-388.

Rugkasa, J., & Canvin, K. (2011). Community treatment orders: a qualitative investigation of patient experiences in England. *Psychiatrische Praxis*, 38 S.01, OP35_EL.

Salize, H. J., & Dressing, H. (2004). Epidemiology of involuntary placement of mentally ill people across the European Union. *British Journal of Psychiatry*, 184(2), 163-168.

Salmond, C., Crampton, P., & Atkinson, J. (2007). *NZDep2006 Index of Deprivation*. Wellington: University of Otago.

Salmond, C., Crampton, P., King, P., & Waldegrave, C. (2006). NZiDep: A New Zealand index of socioeconomic deprivation for individuals. *Social Science & Medicine*, 62(6), 1474-1485.

Sanguineti, V. R., Samuel, S. E., Schwartz, S. L., & Robeson, M. R. (1996). Retrospective study of 2,200 involuntary psychiatric admissions and readmissions. *American Journal of Psychiatry*, 153(3), 392-396.

Schaffner, K. F. (1993). *Discovery and explanation in biology and medicine*. Chicago: University of Chicago Press.

Schirmann, F. (2013). Badness, madness and the brain – the late 19th-century controversy on immoral persons and their malfunctioning brains. *History of the Human Sciences*, 26(2), 33-50.

Schwarz, L., O'Brien, A. M., Morel, V., Armstrong, M., Fleming, C., & Moore, P. (2010). Community treatment orders: The service user speaks. Exploring the lived experience of community treatment orders. *International Journal of Psychosocial Rehabilitation*, 15(1), 39-50.

Schwartz, M. A., & Wiggins, O. P. (2005). Psychiatry fraud and force? A commentary on E. Fuller Torrey and Thomas Szasz. *Journal of Humanistic Psychology*, 45(3), 403-415.

Scull, A. (1993). *Most solitary of afflictions: Madness and society in Britain, 1700-1900*. New Haven and London: Yale University Press.

Segal, S. P. (1989). Civil commitment standards and patient mix in England/Wales, Italy, and the United States. *American Journal of Psychiatry*, 146(2), 187-193.

Segal, S. (2013). Community treatment orders do not reduce hospital readmission in people with psychosis *Evidence-Based Mental Health*16, 116.

Segal, S. P., & Burgess, P. M. (2006a). The utility of extended outpatient civil commitment. *International Journal of Law & Psychiatry*, 29(525-534).

Segal, S. P., & Burgess, P. M. (2006b). Conditional release: A less restrictive alternative to hospitalization? *Psychiatric Services* 57(11), 1600-1606.

Segal, S. P., & Burgess, P. M. (2008). Use of community treatment orders to prevent psychiatric hospitalization. *Australian and New Zealand Journal of Psychiatry*, 42(8), 732-739.

Segal, S. P., Preston, N., Kisely, S., & Xiao, J. (2009). Conditional release in Western Australia: Effect on hospital length of stay. *Psychiatric Services*, 60(1), 94-99.

Segal, S. P., Watson, M. A., Goldfinger, S. M., & Averbuck, D. S. (1988a). Civil commitment in the psychiatric emergency room. I. The assessment of dangerousness by emergency room clinicians. *Archives of General Psychiatry*, 45(8), 748-752.

Segal, S. P., Watson, M. A., Goldfinger, S. M., & Averbuck, D. S. (1988b). Civil commitment in the psychiatric emergency room. Mental disorder indicators and three dangerousness criteria. *Archives of General Psychiatry*, 45(8), 753-758.

Segal, S. P., Watson, M. A., Goldfinger, S. M., & Averbuck, D. S. (1988c). Civil commitment in the psychiatric emergency room. III. Disposition as a function of mental disorder and dangerousness indicators. *Archives of General Psychiatry*, 45(8), 759-763.

Shepherd, G., Muijen, M., Dean, R., & Cooney, M. (1996). Residential care in hospital and in the community--quality of care and quality of life. *British Journal of Psychiatry*, 168(448-456).

Shorter, E. (1997). *A history of psychiatry. From the era of the asylum to the age of prozac*. New York: John Wiley & Sons, Inc.

Sibitz, I., Scheutz, A., Lakeman, R., Schrank, B., Schaffer, M., & Amering, M. (2011). Impact of coercive measures on life stories: qualitative study. *The British Journal of Psychiatry*, 199(3), 239-244.

Silverstein, C. (2009). The implications of removing homosexuality from the DSM as a mental disorder. *Archives of Sexual Behavior* 38(2), 161-163.

Singh, S. P., Croudace, T., Beck, A., & Harrison, G. (1998). Perceived ethnicity and risk of compulsory admission. *Social Psychiatry and Psychiatric Epidemiology*, 33, 39-44.

Siponen, U., Valimaka, M., Kaivosoja, M., Marttunen, M., & Kaltiala-Heino, R. (2010). A comparison of two hospital districts with low and high figures in the compulsory care of minors: An ecological study. *Social Psychiatry & Psychiatric Epidemiology*, 46(8), 661-670.

Sittar, S., Pinal, D. A., Din, A. U., & Appelbaum, P. S. (2006). To commit or not to commit: the psychiatry resident as a variable in involuntary commitment decisions. *Psychiatric Services*, 30(3), 191-195.

Sjostrom, S. (1997). *Party or patient? Discursive practices relating to coercion in psychiatric and legal settings*. Umea: Borea Bokforlag.

Sjöström, S., Zetterberg, L., & Markström, U. (2011). Why community compulsion became the solution — Reforming mental health law in Sweden. *International Journal of Law and Psychiatry*, 34(6), 419–428.

Slade, M. (2009). The contribution of mental health services to recovery. *Journal of Mental Health*, 18(5), 367-371.

Smith, L. (1999). *Cure, comfort and safe custody: Public lunatic asylums in early nineteenth-century England*, London: Leicester University Press.

Soothill, K., Kupituksa, P., Badiani, D., & Macmillan, F. (1990). Compulsory admissions to mental hospitals: A replication study. *International Journal of Law and Psychiatry*, 13(3), 179-190.

Stahl, S. (2013). *Stahl's essential psychopharmacology: neuroscientific basis and practical applications* (4th ed.). New York: Cambridge University Press.

Statistics New Zealand (2010). 2006 Census. District Health Board Area Summary Tables. Retrieved on July 20 from <http://www.stats.govt.nz/Census/about-2006-census/district-health-board-area-summary-tables.aspx>.

Statistics New Zealand (2012). *Demographic trends: 2011*. Wellington: Statistics New Zealand.

Steadman, H. J., Gounis, K., Dennis, D., Hopper, K., Roche, B., Swartz, M. S., et al. (2001). Assessing the New York City involuntary outpatient commitment pilot program. *Psychiatric Services*, 52(3), 330-336.

Stevenson, C., & Cutcliffe, J. (2006). Problematizing special observation in psychiatry: Foucault, archaeology, discourse and power/knowledge. *Journal of Psychiatric and Mental Health Nursing*, 13, 713-721.

Stroud, J., Doughty, K., & Banks, L. (n.d.). *An exploration of service user and practitioner experiences of community treatment orders*. n.p.: University of Brighton and National Institute for Health Research.

Sturdy, H., & Parry-Jones, W. (1999). Boarding out of insane patients. The significance of the Scottish system, 1857-1913. In P. Bartlett & D. Wright (Eds.), *Outside the walls of the asylum. The history of care in the community, 1750-2000* (pp. 86-114). London, England: Athlone Press.

Suzuki, A. (2006). *Madness at home. The psychiatrist, the patient, and the family in England, 1820-1860*: University of California Press.

Swanson, J. W., Van Dorn, R. A., Swartz, M. S., Cliso, A. M., Wilder, C. M., Moser, L. L., et al. (2010). Robbing Peter to pay Paul: did New York State's outpatient commitment program crowd out voluntary service recipients? *Psychiatric Services*, *61*(10), 988-995.

Swartz, M. S., Swanson, J. W., Steadman, H. J., Robbins, P. C. & Monahan, J. (2009). *New York State assisted outpatient treatment program evaluation*. Durham, North Carolina: Duke University School of Medicine.

Swartz, M. S., Swanson, J. W., Wagner, H. R., Burns, B. J., Hiday, V. A., & Borum, R. (1999). Can Involuntary outpatient commitment reduce hospital recidivism? Findings from a randomized trial with severely mentally ill individuals. *American Journal of Psychiatry*, *156*(12), 1968-1975.

Swartz, M. S., Swanson, J. W., Hiday, V. A., Wagner, H. R., Burns, B. J., Borum, R. (2001). A randomized controlled trial of outpatient commitment in North Carolina. *Psychiatric Services* *52* (3), 325–329.

Szasz, T. (1961/1974). *The myth of mental illness: Foundations of a theory of personal conduct*. New York: HarperCollins.

Szasz, T. (2011). The myth of mental illness: 50 years later. *The Psychiatrist*, *35*(5), 179-182

Szmukler, G. I., Bird, A. S, & Button, E. J. (1981). Compulsory admissions in a London borough: I. Social and clinical features and a follow-up. *Psychological Medicine* *11*, 617–636.

Szmukler, G., Daw, R. & Callard, F. (2013). Mental health law and the UN Convention on the rights of persons with disabilities. *International Journal of Law and Psychiatry*, <http://dx.doi.org/10.1016/j.ijlp.2013.11.024>

Szmukler, G., & Holloway, F. (2000). Reform of the Mental Health Act: Health or safety? *British Journal of Psychiatry*, *177*(3), 196-200.

Taylor, J., & Idris, K. (2003). Use of the Mental Health (Scotland) Act (1984) in south Glasgow. *The Psychiatrist*, *27*, 141-144.

Taylor, P. J., & Gunn, J. (1999). Homicides by people with mental illness: myth and reality. *The British Journal of Psychiatry*, *174*(1), 9-14.

Thom, K., Black, S., & Panther, G. (2013). *Balancing individual rights with public safety: the decision-making of the Mental Health Review Tribunal*. Auckland: Centre for Mental Health Research.

Thom, K., O'Brien, A. J., & McKenna, B. G. (2008). Judging nursing practice: Implications of habeas corpus rulings for mental health nurses in New Zealand *Psychiatry, Psychology and Law*, *15*(1), 131-139.

Torrey, E. F., & Kaplan, R. J. (1995). A national survey of the use of outpatient commitment. *Psychiatric Services*, *46*(8), 778-784.

Torrey, E. F., & Zdanowicz, M. (2001). Outpatient commitment: What, why, and for whom? *Psychiatric Services*, *52*(3), 337-341.

United Nations (2014). Convention and Optional Protocol Signatures and Ratifications. <http://www.un.org/disabilities/countries.asp?navid=12&pid=166>. Accessed 27 February 2014.

University of Auckland (2013) *Statute and guidelines for the degree of Doctor of Philosophy (2011, revised 2013)*. Auckland: Author.

Unsworth, C. (1993). Law and lunacy in psychiatry's 'golden age'. *Oxford Journal of Legal Studies*, *13*(4), 479-507.

Van Dorn, R. A., Swanson, J. W., Swartz, M. S., Wilder, C. M., Moser, L. L., Gilbert, A. R., et al. (2010). Continuing medication and hospitalization outcomes after assisted outpatient treatment in New York. *Psychiatric Services*, *61*(10), 982-987.

Van Putten, R. A., Santiago, J. M., & Berren, M. R. (1988). Involuntary outpatient commitment in Arizona: A retrospective study. *Hospital and Community Psychiatry*, *39*(9), 953-958.

Vaughan, K., McConaghy, N., Wolf, C., Mhyr, C., & Black, T. (2000). Community treatment orders: relationship to clinical care, medication compliance, behavioural disturbance and readmission. *Australian and New Zealand Journal of Psychiatry*, *34*, 801-808.

- Walker, N. (1968). *Crime and insanity in England. The historical perspective* (Vol. I). Edinburgh University Press.
- Wall, S., Hotopf, M., Wessely, S., & Churchill, R. (1999). Trends in the use of the Mental Health Act: England, 1984-96. *British Medical Journal*, *318*(7197), 1520-1521.
- Walsh, D. (2010). Do we need community treatment orders in Ireland? *Irish Journal of Psychiatric Medicine*, *27*(2), 90-96.
- Webber, M., & Huxley, P. (2004). Social exclusion and risk of emergency compulsory admission. A case-control study. *Social Psychiatry and Psychiatric Epidemiology*, *39*(12), 1000-1009.
- Weed, D. L. (2001). Theory and practice in epidemiology. *Annals of the New York Acadamey of Science*, *954*(1), 52-62.
- Weisstub, D. N. (1978). The theoretical relationship between law and psychiatry. *International Journal of Law & Psychiatry*, *1*(1), 19-36.
- Wexler, D. (1995). Reflections on the scope of therapeutic jurisprudence. *Psychology, Public Policy, and Law*, *11*(1), 220-236.
- Wheeler, A., Robinson, E. Robinson, G. (2005). Admissions to acute psychiatric inpatient services in Auckland, New Zealand: a demographic and clinical review. *The New Zealand Medical Journal*, *118*(1226), 1-15.
- Wierdsma, A. I., & Mulder, C. L. (2009). Does mental health service integration affect compulsory admissions? *Journal of Integrated Care*, *9*. Retrieved from <http://www.ijic.org/index.php/ijic/article/viewArticle/324>
- Woolley, S. (2010). Involuntary treatment in the community: role of community treatment orders. *The Psychiatrist*, *34*(10), 441-446.
- Wright, D. (1998). The certification of insanity in nineteenth-century England and Wales *History of Psychiatry*, *IX*, 267-290.
- Wynn, R., Myklebust, L., & Bratland, T. (2007). Psychologists and coercion: Decisions regarding involuntary psychiatric admission and treatment in a group of Norwegian psychologists *Nordic Journal of Psychiatry*, *61*, 433-437.
- Zanni, G. R., & Stavis, P. F. (2007). The effectiveness and ethical justification of outpatient commitment. *The American Journal of Bioethics*, *7*(11), 31 - 41.
- Zinkler, M., & Priebe, S. (2002). Detention of the mentally ill in Europe - a review. *Acta Psychiatrica Scandinavica*, *106*(1), 3-8.