The elderly population of New Zealand constitutes 11.5% of the total, and this proportion is increasing. By the year 2030, 18% of the population will be over 65 years, with the greatest growth in the over-80 years age band.\(^1\) Whereas this predicts greater demand for mental health services for older people in the future, New Zealand has not formulated a national strategic plan for mental health care to meet this need.

A major difficulty for planning is lack of knowledge about current resource levels and the range of patient problems assessed and treated by old age psychiatry services. Other difficulties which hinder planning are the ideological and idiosyncratic differences of opinion on what is the ‘core business’ of old age psychiatry. For example, one perception is that ‘psychogeriatrics’ is about care of people with dementia,\(^2\) separate from other mental health problems in late life. Another is that age-related disorders, such as dementia, belong to geriatric medicine, and old age psychiatry services should be responsible only for non age-related mental health disorders such as depression, anxiety disorders, and psychoses. Such neat divisions into age-related (dementia) and non-age-related disorders may make perfect accounting sense to policy advisors, who have concerns about the high cost of dementia care and the low level of funding in Mental Health. However, this concept is difficult to apply to patients, who often have co-morbidity. Virtually all psychiatrists specializing in mental health of old age consider that their expertise covers the full range of functional and organic brain diseases in late life.\(^3\)

Just as there are varying ideological perspectives on which clinical problems old age psychiatry should deal with, so are there different perspectives on configuration of services. One viewpoint is that there is only a need for services for people with organic disorders, and those with functional disorders can be ‘mainstreamed’ into adult psychiatry units.\(^4\) This idea persists, despite reports discrediting such services.\(^5,6,7\) An alternative view, is that the physical, cognitive, spiritual and mental health needs of the older person should be managed in comprehensive services that respond to problems in an age-appropriate style.\(^3,5,8\) This type of service provision is endorsed by the World Health Organization (WHO),\(^9\) the Faculty of Psychiatry of Old Age of the Royal Australian and New Zealand College of Psychiatrists (FPOA, RANZCP)\(^9\) and the International Psychogeriatric Association (IPA).

There is an urgent need to resolve these ideological differences and formulate a coherent, national strategic plan to guide future provision of mental health care that can meet older patients’ needs. To assist this process, the New Zealand branch of the Faculty of Psychiatry of Old Age initiated a national survey to obtain an objective overview of clinical work done by older people’s mental health services.

**Methods**

Eleven units participated in the survey, covering a total catchment of 2 800 000 New Zealanders. These services were Auckland Central, South Auckland, Waitemata, Christchurch, Dunedin, Hutt Valley, New Plymouth, Palmerston North, Waikato, Wellington and West Coast. Survey data were collected for the four week period August 8 1998, to September 5 1998, and collated and analyzed in 1999. Clinicians provided information on age, gender, setting of consultation, patient episodes (see below), contacts, diagnoses, current clinical problems, co-morbidity and perceived service gaps. Unit managers provided data on beds, day treatment places, administrative arrangements, and full time equivalents (FTE) of staff in each discipline employed.

**Results**

**The patients.** Data were received on 2022 patients from ten of the eleven services surveyed and on resources from all eleven. Females (1338, 66%) outnumbered males (684, 33%) by 2:1, with sixteen (1%) unspecified. 82% were over 70 years and 87 (4%) were less than 65 years.

61% were assessed or treated in the patient’s place of residence, but outpatient clinics, day wards and day groups contacted 19% of patients. Old Age Psychiatry in-patient units treated 13% of patients. The majority of consultation and liaison patients were assessed in geriatric medicine wards (6%). In regard to ‘patient episodes’, 26% of patients (526) were classified as new ie previously unknown to the assessing service. 13% were re-referrals, (270) ie new episodes in patients previously seen by the service but discharged. 60% of patients (1219) were follow-ups.

Community and day ward respondents reported 4015 contacts during the four weeks. Nationally, the average number of contacts for each patient in the survey month, in non in-patient settings, was 2.32 (range 1.5-4.52). More contacts were made with high acuity patients, and those assessed in specialized outpatient anxiety, memory or day clinics (average 3.5). In-patients received daily contacts.
Respondents considered that antipsychotic medication was considered met, the greatest perceived gap was a lack of clinical needs. For the 30% of patients whose needs were not services could meet only 70% of the individual patients’ needs were not services could meet only 70% of the individual patients’ needs. Psychiatrists managed 807 patients (30%) required a consultation with a medical specialist from another discipline during the patient episode. Over half (61%) of the other specialists involved were geriatricians. Significant medical problems impinging on the patient’s psychiatric treatment were recorded for 1046 patients (52%), with many having more than one medical problem, the commonest cerebrovascular disease, followed by chronic inflammatory disorders and of over 110 000 had only nine day places. Facilities provided by Mental Health Services for older people. All services provided in-patient acute assessment, treatment, and rehabilitation, along with community assessment and treatment in the patients’ place of residence. Nine of eleven services had outpatient clinics and liaison services to geriatric medical wards. Four had memory or anxiety and depression day treatment clinics. Three services had rural outreach clinics. Human Resources. Mental health services for older people were mostly composed of multidisciplinary teams. The survey noted national variations in discipline mix within teams. Over the country, there were nineteen FTE specialist psychiatrists. Other medical staff included eleven psychiatry trainees (registrars) and 8.5 house surgeons (mainly working in in-patient units). Most nursing staff were registered comprehensive or psychiatric nurses (152.5 FTE). The remainder were enrolled nurses (51.1) and care assistants (32.8). The majority of nurses (193.9) are employed in the in-patient units. Community team nurses were 570) and West Coast (35000). 45% of services were managed with geriatric medicine as formally conjoined services. The remainder were separate and administered by Mental Health. National Resources and service configurations. Only 33 three services (Auckland Central, Hutt Valley and Wellington City) confined their activities to urban areas. Most were serving large rural areas. The largest population catchment was Waitemata Health, Auckland, followed by Christchurch (370 000), Auckland Central and Waikato (345 000 each). The smallest were Hutt Valley (132 570) and West Coast (35000). 45% of services were managed with geriatric medicine as formally conjoined services. The remainder were separate and administered by Mental Health. National Bed Resources for acute beds. Auckland and Wellington had a bed to catchment ratio of 4-5/100 000 total population. Christchurch, Dunedin, and West Coast had ratios of 10-16/100 000 total population. At the time of the 1998 survey, these three services had their in-patient units located in psychiatric hospitals. In 1999, the Dunedin and Christchurch services moved to general hospital sites, with loss of bed numbers in Dunedin. The national average during the survey month was 6.8 acute beds per 100 000 total population. Only Palmerston North (10) and West Coast (20) now have long stay beds in public hospitals. Only five units surveyed had day treatment places, with West Coast having only one place. Nationally, the ratio was 1/100 000 population. Auckland with an elderly population of over 110 000 had only nine day places.

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Table 1. Psychiatric diagnoses reported in 2022 patients.

<table>
<thead>
<tr>
<th>Psychiatric Diagnoses</th>
<th>Number of incidences</th>
<th>No of patients</th>
<th>Percentage of total patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Functional Disorders (depression, psychosis, bipolar disorder, anxiety disorder etc)</td>
<td>1596</td>
<td>1254</td>
<td>62%</td>
</tr>
<tr>
<td>Other Functional Disorders (adjustment disorders, DSM IV V codes, grief carer stress, interpersonal problems etc)</td>
<td>938</td>
<td>662</td>
<td>33%</td>
</tr>
<tr>
<td>Organic Disorders (dementia delirium, organic mood or psychotic disorders, etc)</td>
<td>1312</td>
<td>1010</td>
<td>50%</td>
</tr>
<tr>
<td>Drug and Alcohol (prescription drug dependency, addiction or alcohol withdrawal delirium, etc)</td>
<td>164</td>
<td>152</td>
<td>8%</td>
</tr>
<tr>
<td>Iatrogenic (tardive dyskinesia, drug induced psychosis, etc)</td>
<td>87</td>
<td>84</td>
<td>4%</td>
</tr>
<tr>
<td>Co-morbid organic and functional disorders</td>
<td>-</td>
<td>531</td>
<td>26%</td>
</tr>
<tr>
<td>Organic disorder with behavioural disturbance</td>
<td>-</td>
<td>240</td>
<td>12%</td>
</tr>
</tbody>
</table>

Respondents considered that antipsychotic medication was required for 677 patients, including 281 for whom the newer ‘atypical’ antipsychotic medications (risperidone, clozapine or olanzapine) were indicated. Treatment issues. Respondents considered that their services could meet only 70% of the individual patients’ clinical needs. For the 30% of patients whose needs were not considered met, the greatest perceived gap was a lack of community programmes and caregiver support (351, 17.5%). Gaps were also identified in provision of psychotherapy, particularly cognitive, behavioral and marital therapies (153, 7.5%). Some services reported inability to provide basic assessments such as social work, clinical psychology, neuropsychology, brain imaging, and even second psychiatric opinions for electroconvulsive therapy (ECT), (116, 6.5%). Several services reported inability to access drug and alcohol services, forensic psychiatry, cultural services or the newer antipsychotic medications (71, 3.5%).
people need mental health services appropriate to their life stage and circumstances. They have different patterns of mental illness, which are often accompanied by loneliness and physical frailty or illness.\textsuperscript{7} The Commission states that “Older people will have specific needs associated with aging and need to be assessed by people with special skills in the psychiatry of older people”. FPOA-New Zealand endorses these sentiments.

Whilst the survey illustrates some of the complexities of these “specific needs”, it cannot be regarded as an epidemiological study, since it was impossible to verify or standardize diagnoses. It provides a ‘ballpark’ estimate of clinical problems and highlights issues important for service planning. There were a number of observations.

First, patients were mostly over 70, the majority 70-85 years. This age group has different physical, cultural and psychological needs to younger adults with psychiatric disorders. The idea that older patients are manageable within mainstream adult mental health services\textsuperscript{4} is not tenable. Women were in the majority in the older age groups due to their relative longevity. Not only are they more susceptible to Alzheimer’s disease and chronic physical disabilities, but they are also more likely to be bereaved and have issues of loss and social isolation.

Second, the strong association between medical disorders and mental health problems in both community\textsuperscript{31} and hospitalised older patients\textsuperscript{12} needs acknowledgment. In the surveyed sample, disorders that are often triggers for depression and suicide in older people, such as cerebrovascular disease, chronic pain and physical disability,\textsuperscript{31} featured prominently. The frequency of medical problems listed in these mental health patients clearly indicates that mental health and geriatric medicine should be closely aligned with ready cross consultation.

Third, services need to recognize complex co-morbidity. The important question as to whether age-related and non age-related disorders are separable would appear to be answered in the negative by the survey data. Geriatric medical services usually assess and manage the majority of patients with age-related dementia, uncomplicated by psychiatric or behavioural pathology. However, 50% of the mental health patients had age-associated organic diagnoses. More than half of these had functional psychiatric symptoms. This co-morbidity was expected in view of the epidemiological literature. It is common for patients with chronic schizophrenia to develop dementia, and for psychotic phenomena (hallucinations and delusions for example) to complicate primary dementia.\textsuperscript{14-16} Furthermore, depression or anxiety in older people can be the presenting symptoms of lithium unsuspected cognitive impairment. These ‘functional’ disorders can complicate dementia, particularly in the early stages when some insight is retained.\textsuperscript{19,21} Behavioural problems are common in dementia,\textsuperscript{22-24} leading to referral to psychiatric services and also to caregiver stress and ‘burnout’. They may also necessitate special accommodation such as in Stage III facilities, for which psychiatric services are the gatekeepers. Overall, half the patients presenting to old age psychiatry services require assessment, diagnosis, treatment and behavioural management for age-related cognitive impairment or dementia.

Fourth, the issue of whether old age psychiatry services are appropriate for under-age patients with neuropsychiatric symptoms needs addressing. 5% of patients seen by older person’s services were aged under 65 years. These patients presented with premature dementia, brain injury or post stroke, or were older intellectually handicapped people with behavioural problems. Currently, adult and geriatric medicine serve this group’s needs inadequately. They require specialized neuropsychiatry services. Such services do not exist in New Zealand and funding contracts have failed to clarify which services should have clinical responsibility. These patients are increasingly referred to Older Person’s services on the grounds they are ‘like in age and interest’, often without resources being provided for their care.

Fifth, alcohol and drug related problems in older people need to be addressed. 8% of patients surveyed had such problems, but access to specialized services was limited. In most areas, there was no provision for treatment of drug and alcohol problems for the over 65 year age group. Alcohol related problems occur in about 3% of elderly people in the general population but can reach 7-8%.\textsuperscript{25} In addition, despite many reports that benzodiazepines have adverse effects in frail elderly, overseas experience indicates that new prescriptions have increased.\textsuperscript{6} The New Zealand experience is likely to be similar.

87 patients (4.3%) had iatrogenic consequences of long term use of older antipsychotic drugs. Older people develop antipsychotic related tardive disorders more readily than younger adults. These distressing disorders can be minimized by use of the newer antipsychotic medications. Unfortunately, they are rationed due to cost. Our survey conservatively estimates that nationally, 900 new patients per annum would benefit from the newer antipsychotic medicaitons.

Sixth, services need to be configured to respond to both high and low acuity patients. Whilst considerable work involved follow-up of chronic disorders, a third involved new episodes. Teams continually juggle the need to see scheduled patients and yet be free to respond to acute presentations. They must provide community assessment, consultation-liaison and in-patient facilities appropriate for frail elderly people. The survey indicates that most older person’s Mental Health teams incorporate elements of mental health continuing care and crisis work, in addition to assessment, treatment and rehabilitation, without this being appreciated by health funding contracts.

The survey was unable to assess the appropriateness of care for individuals, but did assess resources available for assessment and treatment. The current national average was 6.8 dedicated acute in-patient beds per 100 000 population, inclusive of beds for patients with mixed organic and psychiatric disorders. The New Zealand in-patient units had a faster turnover than in equivalent Australian or United Kingdom units.\textsuperscript{27,28} This might reflect pressure on fewer acute beds, rather than a measure of efficiency. Early re-referral may be the result of too-early discharge. Units operating at 3-5 beds/100 000 population considered they were under considerable pressure, with too few beds for the needs.

The Mental Health Commission Blueprint\textsuperscript{10} recommended a national guideline of four acute in-patient beds per 100 000 total population and 1.3 beds per 100 000 in adult mental health units. But the Blueprint authors had inadequate resource information on which to base their assumptions.\textsuperscript{27} Snowdon\textsuperscript{28} advocated much higher figures at 22 beds per elderly population of 30 000 or 8/100 000 of total population. The UK recommendations are even higher at 15/100 000.\textsuperscript{29} These figures include assessment beds for patients who have both age-related organic illness and psychiatric or behavioural complications.

Adequate day hospital places may reduce the need for acute beds. The Mental Health Commission recommended four per 100 000 total population.\textsuperscript{19} Our current resource falls far short of this at one per 100 000 total population and many areas having no day facilities at
all. An important issue is where day wards should be physically located, and whether they should be hospital based or mobile.

Most services surveyed covered geographically large, rural and urban districts, whilst also providing community assessment in the patient’s place of residence. However, lack of treatment programmes in the community were identified as the major gap in service provision, as teams lacked both personnel and time to meet the needs. There is a trade off between time available for consultation and time lost in travelling. Future planning needs to consider how elderly people with physical limitations can access therapy programmes and caregivers support.

Increasing the number of community staff could solve some of these problems. The survey indicated that community teams assess the majority of patients, but the majority of personnel employed in old age psychiatry services work in the in-patient units. The recommendation for community team personnel nationally is 321, plus 151.1 FTE for day treatment support.27 As most of the larger teams had community caseloads of 200-400, with individual nursing caseloads between 30-50 patients, considerable expansion in community personnel is needed.

Most old age psychiatry services had strong relationships with geriatric medicine services, and 45% of old age psychiatry services nationwide have amalgamated. Whilst such arrangements have considerable advantages, disadvantages include under representation of mental health issues at policy and planning levels, lack of access to special mental health funding streams and inadequate professional supervision of mental health personnel. Survey respondents commonly raised these as issues requiring attention in future planning.

In conclusion, this survey indicates that patients accessing old age psychiatry services are not suitable for treatment within adult mental health units. They are too old and medically frail. Old age psychiatry needs to be closely aligned with geriatric medicine services to ensure adequate assessment and treatment of co-morbidity. The concept that age-related disorders are not a ‘core business’ of mental health services for older people is confounded by the data. The complex interplay between organic brain disease and the ensuing psychiatric and/or behavioural complications accounts for the majority of referrals to old age psychiatry services.

Current bed numbers and available psychiatrists are too few by international standards. There is major underservicing in provision of day hospital places. Personnel working in the community sector need to be increased. Whilst recent resource recommendations move in the right direction, these would be strengthened by resolving the issue of ‘core business’.

Shulman noted that whilst there may be debate on the effectiveness of different models of service delivery, there is wide consensus about service objectives.10 These are: 1) emphasis on community care and de-institutionalization, 2) services configured to meet the full range of mental disorders seen in the elderly, and 3) a multidisciplinary service including collaboration with geriatric medicine services.

Despite differences in configurations across the nation and inadequate resources, it was gratifying to find that most services had adopted these objectives. Services in New Zealand have de-institutionalized and do have a strong community focus for service delivery. They do have a close relationship with geriatric medicine services and they provide a range of assessment and treatment services that meet the full range of disorders. Planning of future services needs to build on the strong foundation of care provision that has been established.

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