



Ethnic differences in mental health and lifestyle issues: results from multi-item general practice screening

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Abstract

Aim To determine ethnic differences in response, acceptance and desire to address problems identified by the multi-item screening tool (MIST).

Methods Patients were assessed using the MIST in urban Auckland. Fifty consecutive adult patients from 20 randomly selected practices completed the MIST and evaluation sheet before their consultation. All patients and general practitioners (GPs) completed feedback forms. Analysis adjusted for the clustered nature of the data.

Results Participants were 1000 patients and 20 urban GPs. The participation rate was 87% of GPs and 97.75% of patients. Compared with New Zealand Europeans, Pacific Island people were significantly more likely to be concerned about abuse and anger control. Maori were significantly more likely to want help with cutting down their alcohol use. The screening tool was accepted by all patients (<1% objection rate) regardless of ethnicity.

Discussion This is the first study to examine possible ethnic differences between primary care patients' response to screening on lifestyle behaviours and mental health issues.

Within general practice and primary healthcare, there has been an increasing drive towards preventive medicine and early detection of treatable conditions. Initially this has focused on biomedical components to health, such as immunisation schedules and cervical and breast cancer screening programmes. More recently the need has been identified to screen for lifestyle risk factors and mental health. This screening facilitates early detection and intervention for problematic behaviours and mood disorders, which negatively impinge on health.

Several screening tools are available, including the Alcohol Use Disorders Identification Test (AUDIT);¹ the Drug Abuse Screening Test (DAST)² the South Oaks Gambling Screen instrument (SOGS) for the identification of problem gambling;³ the Beck Depression Inventory;⁴ the Partner Violence Screen,⁵ and the Conflict Tactic Scale (measuring use of reasoning, verbal aggression and physical violence in resolving conflict).⁶ However, these tools are generally too lengthy for routine use in general practice.^{7,8}

Routine screening by invitation is likely to be more effective than opportunistic screening,⁹ but, if it is too time-consuming, compliance with routine screening regimes are likely to be low for patients and practitioners.^{7,8} A recent study indicates that non-recognition of psychological problems is at a problematic level with patients with little recent contact with a regular general practitioner (GP), and this is a patient population who might be most advantaged by screening.¹⁰

Primary care screening for cigarette smoking, alcohol, and other drug misuse meets World Health Organization (WHO) criteria, as do the mental health conditions of depression and anxiety.¹¹ Recent court rulings in New Zealand highlight the need for employers to attend to the psychological safety of the workplace and the role of GPs in assessing the 'stress' levels of their patients is likely to increase. Problem gambling is an identified increasing social problem which can impact negatively on health. The development of screening tools and effective interventions supports primary care screening. Interpersonal violence is a growing concern, including spousal abuse. Partner abuse currently does not meet the internationally-recognised criteria for screening,¹² particularly in regard to its unacceptability to many women patients.¹³

However, medical organisations in New Zealand and internationally advocate routine screening.¹⁴ By embedding a generic question about violence and threats and offering patients opportunity to address their own issues with anger management, it was hoped to increase the acceptability of screening for these issues.

Physical inactivity has been associated with an increase in risk of several disease states, as well as lower quality of life compared with an 'active' lifestyle. Indeed, interventions aimed at improving the physical activity of sedentary patients can help to reduce cardiovascular disease, diabetes, obesity, osteoporosis, and symptoms of depression as well as improve quality of life.¹⁵ Given the high health burden due to physical inactivity, and that this is an area of significant health gain potential, screening and intervention should be effective.¹⁵ Similarly, 'overweight' poses a health burden at all ages, being associated with a number of diseases caused by metabolic complications and/or the excess weight itself, and there is justification in screening for eating disorders and obesity.¹⁶

For some people, asking about sensitive lifestyle behaviours is embarrassing or objectionable. For example, studies looking at women's acceptability of domestic violence show that the percentage of women who object ranges from 15 to 57%,^{5,17-26} Similarly, most studies indicate that the majority of GPs and other primary health care workers do not favour screening for partner abuse.^{20,27-30}

With these issues in mind, we have developed a multi item, short (two-sided A4 page) screening tool (MIST) for lifestyle and mental health risk factors (smoking, alcohol use, other drug use, problem gambling, depression, anxiety, stress, abuse, anger, physical inactivity, and eating disorders). Adults can self-administer this tool or have it administered to them by their GP or practice nurse (PN).³¹

It was anticipated that generic screening for several potentially sensitive issues would reduce the likelihood of people feeling 'singled out' and offended, and hence would enable them to feel comfortable providing this information. The MIST also contains a section for patients to indicate whether they would like any assistance, either immediately or at a later date, with any problem area they have identified.

This paper aims to determine any ethnic differences between Maori, Pacific Island people and NZ Europeans in their

- 'Felt needs' to address any problem areas identified by the MIST, and their
- Rate of objection to any question in this screening tool.

Methods

The MIST tool was designed in collaboration with a team including general practitioners, university researchers, a psychologist, and a community-based brief intervention educator of primary health care providers. Where possible, the MIST was developed from existing short screening tools or key questions from longer tools (for example, the AUDIT32) identified from the literature. Many of the questions have been validated within primary care (for example, the two-question depression screen³³ and the question assessing sedentary behaviour¹⁵).

The tool was assessed by 20 Auckland GPs who were randomly selected from a database of all GPs in the Auckland region. Fifty consecutive patients (aged 16 years and over) attending their practice were recruited by a research assistant in the waiting room. Patients were invited to complete the lifestyle assessment screening tool and evaluation sheet. Exclusion criteria were patients unable to understand English or with mental impairment precluding meaningful participation.

Patients self-identified their ethnicity on the form, using the standard 2001 Census format. Those identifying with multiple ethnicities were allocated a single ethnicity on the basis of the priority system of Statistics New Zealand. For example, a patient identifying as Maori and New Zealand (NZ) European would be classified as Maori.

Lifestyle screening forms were completed by patients before their consultation, either by themselves in the waiting room or with assistance. Where patients identified issues they wanted addressed, GPs could either deal with the problem immediately or reschedule a further consultation. All patients and GPs completed feedback forms, which elicited their positive and negative responses to the tool and recorded any objections to the questions asked. Data from this feedback were used to determine the acceptability and feasibility of use of the tool.

Data included demographic information; positive responses to each screening question; number of patients requesting assistance from their doctor or nurse concerning risk factors; patients' objections to questions; and estimation of patient and practitioner satisfaction with the resource. For each lifestyle issue, we calculated differences, by ethnicity, between the proportions of patients requesting assistance from their doctor. Using the STATA V7 statistical software package, the confidence intervals were adjusted for clustering within GP. This analysis adjusts for the possibility that patients within individual practices are more likely to respond in a similar manner than are patients in different practices.

Results

1000 consecutive Auckland patients from 20 GPs participated in the study. The practitioner participation rate was 87% (20/23). The patient response rate was 98% (1000/1023).

The sample comprised 67.6% NZ European; 7.1% Maori; 14.4% Pacific Island people, and 10% 'other' (with 1% missing ethnicity data). According to the New Zealand Census,³⁴ the Auckland region population in 2001 was about 68% NZ European; 10% Maori, and 14% Pacific Island people. The gender of patients was approximately two-thirds female with an age range from 16 to 91 years (mean of 47 years). The gender balance of patients was similar for NZ European, Maori, and Pacific Island people (between 67.0% and 67.8% female).

Taking clustering into account, no significant differences were found between NZ European and Maori in their responses to the screening questions (Table 1). At the 5% level of statistical significance, NZ European and Pacific Island people differ with respect to their expressed exposure to abuse and their difficulty controlling anger.

Overall, only a small percentage of people who responded positively to the screening questions signalled they wanted help with these problems (Table 2). Maori were significantly more likely than New Zealand Europeans to indicate they would like help with cutting down their alcohol consumption. Pacific Island people were similar

to New Zealand Europeans in their expressed interest in receiving help with specific problems. For example, the questions on depression and anxiety yielded high positive responses, some of whom requested assistance. It is not known whether these were newly detected problems or whether patients' consultations were for ongoing care of these pre-existing conditions. A study is currently underway to determine whether those requesting help are those with moderate or severe depression in greatest need of intervention.

Table 1. Comparison of NZ European with Maori and Pacific Island people's responses for lifestyle concerns

Variable	NZ Europeans (%) (a)	Maori (%) (b)	Absolute difference (95% CI) (a-b)	Pacific Islanders (%) (c)	Absolute difference (95% CI) (a-c)
Need to cut down smoking	14.7 (57/389)	37.0 (10/27)	22.4 (-48.1–92.9)	18.2 (6/33)	3.5 (-38.7–45.7)
Need to cut down alcohol	11.2 (76/676)	8.5 (6/71)	2.8 (-6.9–12.5)	14.6 (21/144)	3.3 (-4.2–10.8)
Need to cut down other drug use	1.1 (7/628)	0 (0/66)	1.1 (-3.4–5.6)	2.9 (4/139)	1.8 (-15.0–18.6)
Unhappy after gambling	1.9 (13/674)	4.2 (3/71)	2.3 (-3.0–7.6)	3.5 (5/144)	1.5 (-1.6–4.6)
Depression (both questions)	24.4 (164/673)	26.1 (18/69)	1.7 (-16.8–20.2)	26.4 (38/144)	2.0 (-12.9–16.9)
Anxiety: worrying about everyday problems	40.4 (272/674)	47.1 (33/70)	6.8 (-22.7–36.2)	56.2 (81/144)	15.9 (-1.9–33.7)
Abuse: hurt, threatened, controlled	4.4 (30/675)	5.9 (4/68)	1.4 (-4.4–7.2)	11.3 (16/141)	6.9 (1.4–12.4)
Problem controlling anger	12.0 (81/676)	22.5 (16/71)	10.6 (-12.4–33.6)	29.2 (42/144)	17.2 (1.6–32.8)
Physically inactive	53.5 (361/675)	52.1 (37/71)	1.4 (-14.4–17.2)	58.3 (84/144)	4.9 (-9.3–19.1)

CI=confidence interval; NZ=New Zealand.

The screening tool was accepted very well by patients, with a minimal (<1%) objection rate to any of the questions. The greatest objection was to the question on recreational drug use (0.8%). There were no ethnic differences in the acceptance of the tool.

Conclusion

This is the first study to look at differences between NZ European, Maori, and Pacific Island patients' responses in primary care to screening questions on risky lifestyle behaviours and mental health issues. After adjustment for clustering by practitioner, Pacific Island patients expressed more concerns than NZ Europeans about being abused and expressing their anger. No other ethnic differences were found in patients' expressed need to reduce their own lifestyle risk factors—despite ethnic differences in prevalences of risky lifestyle behaviours such as smoking³⁵ and drinking³⁵—although such data are limited for general practice patients.

Table 2. Comparison of NZ European with Maori and Pacific Island patients wanting help (today or later) for specific problems

Variable	NZ Europeans (%) (a)	Maori (%) (b)	Absolute difference (95% CI) (a-b)	Pacific Islanders (%) (c)	Absolute difference (95% CI) (a-c)
Smoking	4.9 (33/673)	9.9 (7/71)	5.0 (-17.1–27.1)	9.7 (14/144)	4.8 (-8.5–18.1)
Alcohol	0.7 (5/676)	0.0 (0/71)	0.7 (0.1–1.3)	1.4 (2/144)	0.7 (-1.5–2.9)
Other drugs	0.0 (0/676)	0.0 (0/71)	0.0 (0.0–0.0)	0.7 (1/144)	0.7 (-0.8–2.2)
Gambling	0.3 (2/675)	0.0 (0/71)	0.3 (-0.1–0.7)	0.0 (0/144)	0.3 (-0.1–0.7)
Depression	11.0 (74/674)	15.7 (11/70)	4.7 (-20.9–30.3)	13.9 (20/144)	2.9 (-12.3–18.1)
Anxiety	7.9 (53/674)	10.9 (7/64)	3.1 (-11.2–17.4)	13.2 (19/144)	5.3 (-2.3–12.9)
Abuse	1.2 (8/675)	0.0 (0/71)	1.2 (-12.7–15.1)	3.5 (5/144)	2.3 (-1.7–6.3)
Anger	1.2 (8/675)	2.8 (2/71)	1.6 (-6.3–9.5)	8.3 (12/144)	7.2 (-0.9–15.3)
Exercise	1.3 (9/674)	1.4 (1/71)	0.1 (-2.8–3.0)	0.7 (1/144)	0.6 (-1.0–2.2)

CI=confidence interval; NZ=New Zealand.

The study reports findings in relation to ethnic differences and further validates a new collection of screening questions for use in primary care by establishing its 'acceptability'.

Ethnic differences are known to characterise the prevalence of risky lifestyle behaviours such as smoking³⁵ and drinking,³⁵ but such data are limited for general practice patients. Community-wide, and compared with non-Maori, Maori have an increased risk of smoking,³⁵ hazardous use of alcohol,³⁵ use of cannabis,³⁶ problem gambling,³⁷ and being victims of violence.³⁸ Maori are also more likely to be sedentary than New Zealand European and other ethnic groups.³⁹ Information on the use of mental health and related services indicates that Maori have more mental health problems than the general population.^{40–42} Furthermore, Maori also have increased rates of hypertension, combined cardiovascular risk factors, diabetes, and obesity.³⁵

In 1994, Pacific Island people were identified as the fastest and youngest growing population in NZ with a large percentage aged under 20 years.⁴³ There are less data for some of these issues relating to Pacific peoples, such as recreational drug use. Given the growing number of youth, they warrant attention with respect to risky lifestyle behaviours and mental health issues. Pacific smokers report that they smoke less heavily compared with NZ European or Maori smokers.³⁵ However, smoking is a leading cause of disability adjusted life years (DALYs) lost among Pacific males.⁴⁰ Pacific people overall are less likely to drink alcohol than NZ Europeans, but those who do drink tend to drink more on a typical day when drinking than NZ European

drinkers.³⁵ Pacific people are more than twice as likely to have been diagnosed with diabetes than NZ European people, and to be diagnosed at a younger age.

Certain population groups have higher problem gambling prevalence rates. Maori and Pacific peoples are over-represented with respect to access to treatment services, and youth as a population group are becoming more visible in problem gambling studies.³⁷

Only a small percentage of patients admitting to a particular problem requested professional help with it. With issues such as gambling, patients noted on their feedback evaluation forms that they did not realise that this was a problem for which they could seek help from their GP. Previous research has indicated that structural characteristics of services such as cost, times open, and travel distance are seldom reasons for not seeking care for mental health problems; rather, reasons were mainly attitudinal, such as believing they should be strong enough to cope without professional help.⁴⁴

Even in circumstances where patients have positive lifestyle risk behaviours but do not indicate they want help to change, the practitioner still has the opportunity to raise the issue. For example, the GP could acknowledge 'I see that sometimes you feel the need to cut down on your drinking but right now you are not seeking help with this' and then explain that if at some stage the patient does want assistance, several possible interventions are available. Patients with gambling problems may not see this as an issue with which the GP can help. This allows pre-contemplative patients (patients not yet ready to make changes) the chance to return to address issues should they contemplate behaviour change at a later date.

Mason Durie has identified that Maori rates of mental illness have been increasing since 1975, and he thinks that Maori have a different mental illness profile compared with non-Maori;⁴² reasons include the late presentation for treatment. The te Puawaitanga Maori Mental Health National Strategic Framework identifies that 'primary, early intervention and mental health services need to be more accessible and appropriate to the needs of Maori to mitigate entry of Maori into crisis and forensic services.'⁴¹

International indigenous youth suicide literature introduces the concept of cultural depression, considered to be related to trying to live in two worlds but fitting in neither, coupled with a history of cultural destruction over which indigenous peoples not had control.⁴⁵ The anger identified by Maori patients may be a reflection contemporary Maori society's loss of power over their destiny.

A limitation of the study is that it does not demonstrate what additional knowledge is gained over what the GP or practice nurse already knows about the patient. Some of the needs expressed by individual patients may already be known to their healthcare providers or be self-limiting. Nevertheless, in contributing to an assessment of ethnic differences in patient-defined health needs, this study indicates that Pacific peoples warrant particular attention with respect to at least two risky lifestyle behaviours and mental health issues: being abused and expressing anger.

A further caveat is that when people report more than one ethnicity, the priority system for coding them to one ethnic group gives special priority to Maori and, to a lesser extent, Pacific Island people. This loses detail and makes assumptions, which may be false, about the ethnic group with which people most strongly identify.

Nevertheless, the priority system is one of the ways used by Statistics New Zealand to report ethnic data.

The acceptability of the MIST by patients and clinicians has been well established, and is now undergoing validation as a single tool. Systematic screening of primary care patients may uncover lifestyle and mental health problems, which some patients would like addressed. While in some practices the GP may already know lifestyle details and mental health issues of their patients,¹⁰ in our research experience, screening may increase the practice workload. Possible solutions include providing for a subsidised or free extra consultation (as is now available under some primary health organisation protocols) or having a trained and dedicated person available. This could be a GP, PN, or a primary mental health co-ordinator who has appropriate brief intervention and problem-solving skills; can provide relevant patient education including the use of written resources, and has knowledge of appropriate referral agencies and individuals for patients requiring external referral.

Telephone monitoring has been shown to enhance the effectiveness of management of depression⁴⁶⁻⁴⁸ and has been advocated as a model for serving vulnerable populations, to co-ordinate and integrate community services.⁴⁹

A primary mental health co-ordinator could work with the individual and family and assist them to acquire social supports they may lack. It is important that any intervention is culturally appropriate and meets the needs of the ethnic populations served by a practice. This might include translated resources or referral to suitable external providers.

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Acknowledgements: Funding for this study was provided by the Charitable Trust of the Auckland Faculty of the Royal New Zealand College of General Practitioners.

The study involved initial collaboration between primary health care researchers (with specific lifestyle or mental health interests and expertise) at the Department of General Practice and Primary Health Care, University of Auckland who assisted us in the development of the tool. In particular, considerable input into the tool development and evaluation was undertaken by Dr Raina Elley, Dr Sean Sullivan, and Ms Barbara Docherty. We also thank the research assistants, GPs, and especially the patients who contributed to this study.

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