Access to general health care services by a New Zealand population with serious mental illness

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ABSTRACT

INTRODUCTION: Literature suggests that good quality health care access can have a positive impact on the health of people with serious mental illness (SMI), but literature relating to patterns of access by this group is equivocal.

AIM: This study was designed to explore health care access patterns in a group of people with SMI and to compare them with a general New Zealand population group, in order for health providers to understand how they might contribute to positive health outcomes for this group.

METHODS: The study surveyed 404 mental health consumers aged 18–65 years receiving care from one district health board in Auckland about their patterns of health care access. Results were compared with those from the New Zealand Health Survey of the general population.

RESULTS: Findings suggest that the SMI consumer respondents had poorer physical health than the general population respondents, accessed health care services in more complex ways and were more particular about who they accessed for their care than the general population respondents. There was some concern from SMI consumers around discrimination from health care providers. The study also suggested that some proactive management with SMI consumers for conditions such as metabolic syndrome was occurring within the health care community.

DISCUSSION: The first point of access for SMI consumers with general health problems is not always the family general practitioner and so other health professionals may sometimes need to consider the mental and physical health of such consumers in a wider context than their own specialism.

KEYWORDS: General practice; health services accessibility; mental disorders; mental health; primary health care

Introduction

People with serious mental illness (SMI) have an increased risk of premature death and lower life expectancy than the general population. This excess mortality cannot be explained solely by suicide or injury. The prevalence of somatic disease is higher among people with SMI and accounts for more than two-thirds of the excess mortality seen in these people.[1–8]

As well as poor health behaviours and treatment-related risks, one explanation for the greater burden of somatic diseases in SMI consumers is that they have inadequate access to health care and poorer utilisation of family physicians for management of somatic illness. If physical ill health is not treated, it has been shown that health status, satisfaction, and quality of life are lower among SMI consumers.[9–13]

Some research evidence supports that preventive care is affected by patients having an SMI. For example, an inverse relationship between numbers of mental health contacts and prescriptions for preventive cardiovascular treatments has been

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shown.[12] The published literature also shows that people with schizophrenia have lower attendance at their general practitioner (GP) compared to the general population,[14] as do people with depression and comorbid disease.[15] However, other studies have shown similar attendance, or even more frequent attendance, at both primary and secondary care services by this consumer group.[16-18]

Given the equivocal background literature and the potential for improved health care access to impact on the health of people with SMI, this study was designed to explore patterns of health care access by a group of consumers with SMI (SMI consumers) and to compare these patterns with those of a New Zealand (NZ) general population sample, in order for health care providers to understand how they might contribute to positive health care outcomes for this group.

Methods

Study setting and participants

This study aimed to survey 500 SMI consumers aged 18–65 years receiving care from one district health board (DHB) in Auckland. Consumers engaged with general adult, early psychosis, forensic, and culturally specific Maori and Pacific community mental health services were invited to take part.

Collectively, these teams have around 2500 open cases at any point in time. However, fewer people are likely to be actively and regularly using these services. For example, just over 1400 people had a face-to-face contact with their mental health team from September to October 2009 (Mr C Southen, Mental Health Services, Waitemata DHB, personal communication, 2009).

Information packs (including questionnaire) were distributed through community mental health team (CMHT) reception areas, directly to consumers by their mental health clinician and via non-government organisations (NGOs). In addition, researchers presented information about the study at consumer group meetings. Questionnaires could be self-completed or completed with the support of a researcher, a consumer researcher, or their mental health

support worker. Participants were also eligible to enter a separate prize draw to win one of five $100 gift vouchers.

Response rates from consumers receiving the services of non–culturally specific (mainstream) adult CMHTs were lower than anticipated and, to improve participation of this group, a postal survey was also conducted. Consumers aged 18–65 years with a minimum of one recorded face-to-face contact with these teams in the previous four weeks and three face-to-face contacts in the previous six months met the inclusion criteria (n=880).

It was not possible to know exactly how many consumers were asked to take part by CMHTs. However, based on numbers of unused questionnaires returned, we know that a maximum of 543 questionnaires were handed out, meaning a minimum response rate of 51.6% (280 out of 543). The response rate to the postal survey was 14.1% (124/880), meaning there was a minimum response rate of at least 28.4% (404/1423) for the whole study.

The final respondent sample consisted of 404 adults currently engaged with CMHTs at the participating DHB. Ethical approval for this study was granted from the Ministry of Health Northern Region Ethics Committee (Ref. NTX/09/44/EXP).

Survey

The survey consisted of five parts in total. This article is concerned with Parts Three and Five. Part Three asked SMI consumers about access to health care services, including types of health practitioner visited and reasons for these visits, frequency of engagement, barriers to access, solutions to these issues, and quality of care received. Part Five asked about sociodemographic information. Questions in Part Three were aligned with those asked in the NZ Health Survey (NZHS).[19] Major findings were compared to those of the NZHS.[20] The results from two questions from Part Two of the survey are also described, which relate to Body Mass Index (BMI) and smoking. Findings from other parts of the survey are reported elsewhere.[21,22]

Analysis

Survey data were analysed with SPSS (Version 13) using descriptive statistics, Spearman's correlations, Chi-squared, Mann-Whitney and ANOVA tests to compare the two survey populations.

Results

Table 1 shows the demographic characteristics of the SMI consumer respondents (n=404) compared with NZHS respondents (n=12 488).[20]

Table 1 shows that over half of the SMI consumer group was female and the majority were ≥25 years. The demographic characteristics of the SMI consumer respondents are comparable with NZHS respondents in terms of gender and age (Table 1). Maori and Asian consumers were under-represented in the SMI consumer sample compared to NZHS respondents, and Pacific consumers were over-represented. In both our survey and the NZHS, respondents indicating more than one ethnic group were included in all relevant ethnic groups. That is, individual respondents could be counted more than once in results relating to ethnicity.

WHAT GAP THIS FILLS

What we already know: Mental health consumers internationally have been reported to have poorer physical health and shorter life expectancy than the general population. Poorer physical health is associated with reduced health status, satisfaction and quality of life among people with serious mental illness.

What this study adds: The physical health of people with serious mental illness in New Zealand is frequently poorer than that of the general population. Mental health consumers access physical health care in more complex ways than the general population. Mental health consumers' first point of health care access is not always a family general practitioner.

Health conditions

Table 2 shows the proportions of SMI consumers who reported that they had any of the health conditions listed, the corresponding proportions of NZHS respondents who reported in their lifetime experiencing the same conditions, and significant differences between them. Diagnosis relied on self-report and not every respondent included a response.

SMI consumers were more likely than NZHS respondents to have had mental disorders, includ-

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Table 1. Mental health consumer survey and corresponding New Zealand Health Survey respondent demographics

Demographic characteristic	Mental health consumer survey (n=404 respondents)		New Zealand Health Survey (n=12 488 respondents)	
	n	%	n	%
Gender				
Male	164	40.6	5273	42.2
Female	224	55.4	7215	57.8
Unknown	16	4.0	–	–
Age				
Under 25 years	47	11.6	1663	13.3
25 years and older	341	84.4	10 825	86.7
Unknown	16	4.0	–	–
Ethnicity*				
European/other	284	63.5	8593	68.8
Maori	62	13.9	3160	25.3
Pacific	57	12.8	1033	8.3
Asian	24	5.4	1513	12.1
Unknown	20	4.5	–	–

*   Respondents indicating more than one ethnic group were included in all relevant ethnic groups

*Table 2. Self-report data on physical and mental health conditions**

Condition	Mental health consumer survey (n=404 respondents)			NZ Health Survey (n=12 488 respondents)	Comparison between mental health consumer survey and NZ Health Survey respondents
	Yes n	Total n	%	%	
Mental health conditions					
Depression	204	372	54.8	10.5	Z=26.14, p<0.0002
Anxiety disorder	120	371	32.3	4.3	Z=24.18, p<0.0002
Schizophrenia	116	370	31.4	0.3	Z=54.292, p<0.0002
Bipolar disorder	69	371	18.6	0.7	Z=31.04, p<0.0002
Physical health conditions					
High cholesterol (hyperlipidaemia)	98	370	26.5	18.2	Z=4.05, p<0.0002
High blood pressure (hypertension)	75	371	20.2	21.4	No difference
Asthma	58	372	15.6	17.9	No difference
Diabetes: Type 2	34	359	9.5	4.5	Z=4.41, p<0.0002
COPD[†]	9	225	4.0	6.6	No difference
Kidney disorders	9	372	2.4	0.4	Z=5.678, p<0.0002
Angina (ischaemic heart disease)	8	372	2.2	3.8	No difference
Heart attack	7	372	1.9	2.9	No difference
Diabetes: Type 1	5	358	1.4	0.5%	Z=2.33, p=0.02
Heart failure	5	372	1.3	2.0	No difference
None of those listed	16	375	4.3	Not specified	–

COPD Chronic obstructive pulmonary disease

*   Respondents could tick as many as applied

†   Only those aged 45 years or older

ing depression, anxiety disorder, bipolar disorder, and schizophrenia, as expected. However, they were also more likely than NZHS respondents to have had high cholesterol, diabetes and kidney disorders.

The mean BMI for the SMI consumer group was 29.2 (n=274). The proportion that was overweight was lower than for the NZHS but a higher proportion was obese (Table 3). Smokers made up a greater proportion of the SMI consumer group than the NZHS group (Table 3).

Primary health care provider

While the majority of respondents in both survey groups had a health practitioner/service that they went to first when feeling physically unwell, this was significantly lower in the SMI consumer group (89.0%) than the NZHS group (93.8%) (Table 3). Respondents to both surveys were asked what sort of health care service this was, from an option list. Of the 404 SMI consumers who responded, 63 erroneously included more than one response to this question and these results were removed from the analysis. There were also 63 respondents who did not include an answer to this question.
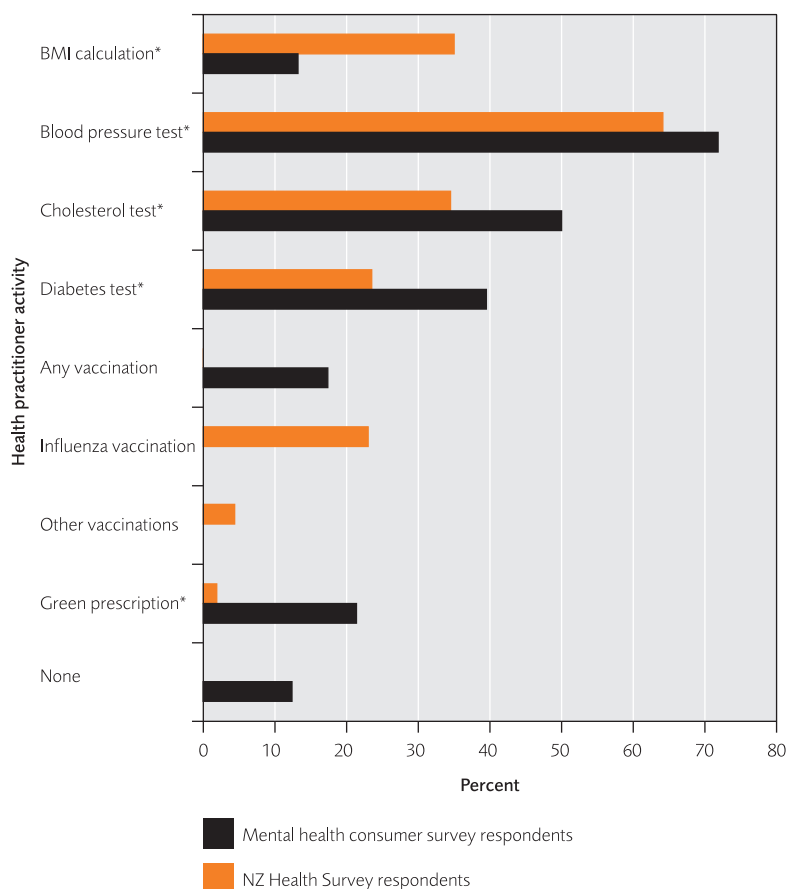
A significantly lower proportion of the SMI consumer respondents (82.7%) than the NZHS respondents (97.2%), indicated that they visited a GP, medical centre or family practice first when they were physically unwell. Other types of

Table 3. Health care provider and service access comparison

	Mental health consumer survey			NZ Health Survey	Comparison between mental health consumer survey and NZ Health Survey respondents
	n	Total n	%	%	
BMI					
Overweight	63	275	23.0	36.2	Z=-4.51, p<0.0002
Obese	112	274	40.9	26.5	Z=5.32, p<0.0002
Smoking	165	397	41.6	19.9	Z=10.513, p<0.0002
Have a primary health care provider	348	391	89.0	93.8	Z=3.83, p<0.0002
Visit a GP or similar first	230	278	82.7	97.2	Z=-13.72, p<0.0002
Reasons for choosing provider					
Closest	121	337	35.9	46.6	Z=-3.884,p<0.0002
Referred by someone else	48	337	14.2	28.8	Z=-5.848,p<0.0002
Spend more time discussing health	76	335	22.7	8.5	Z=9.017, p<0.0002
Cheaper	64	336	19.0	6.0	Z=9.687, p<0.0002
Understand culture	33	336	9.8	5.7	Z=3.186, p=0.001
Offer specialist services	80	336	23.8	–	–
Provider interested in family/whanau/aiga	44	336	13.1	–	–
Seen a GP within 12 months	333	388	85.8	81.3	Z=2.257, p=0.024
Reason for last visit to a GP					
Injury or poisoning	75	274	27.4	10.6	Z=8.789, p<0.0002
Routine check-up or health service	61	274	22.3	29.6	Z=-2.635, p=0.008
Mental or emotional health	54	274	19.7	3.5	Z=13.799, p<0.0002
Subjects discussed with provider					
Smoking	70	333	21.0	9.5	Z=6.98, p<0.0002
Health food/nutrition	120	333	36.0	11.4	Z=15.80, p<0.0002
Weight	112	332	33.7	11.9	Z=11.89, p<0.0002
Exercise/physical activity	112	333	33.6	12.5	Z=11.30, p<0.0002
Teeth/oral health	38	333	11.4	2.0	Z=11.44, p<0.0002
Mental/emotional health	225	334	67.4	6.9	Z=39.15, p<0.0002
Alcohol	46	333	13.8	3.2	Z=10.43,p<0.0002
No health issues discussed	40	331	12.1	71.2	Z =-23.09, p<0.0002
Access to GP within 24 hours					
Unable to see a GP because of GP	100	340	29.4	17.7	Z=5.547, p<0.0002
Unable to see a GP because of patient	94	339	27.7	6.3	Z=15.391, p<0.0002
Reasons for being unable to see GP					
Cost	105	321	32.7	26.6	Z=2.441, p=0.015
Lack of transport	56	322	17.4	4.1	Z=11.44, p<0.0002
After hours	39	322	12.1	7.5	Z=3.078, p=0.002
Not able to get in touch with doctor	22	323	6.8	3.3	Z=3.445, p=0.0006
Did not feel comfortable with doctor	20	322	6.2	–	–
Could not spare the time	11	323	3.4	16.5	Z=-6.31, p<0.0002
Did not want to make a fuss	49	323	15.2	23.0	Z=-3.311, p<0.0001
Alternatives to seeing GP					
Did nothing	128	327	39.1	45.8	Z=-2.384, p=0.0171
Went to doctor later	93	328	28.4	13.1	Z=7.988, p<0.0002
Phoned health line for advice	20	327	6.1	0.8	Z=-31.895,p<0.0002
Phoned an ambulance	14	327	4.3	–	–
Went to emergency department	23	327	7.0	3.9	Z=2.862, p=0.0042
Went to after-hours medical centre	21	327	6.4	2.9	Z=3.694, p<0.0002
Went to a pharmacy/chemist	29	327	8.9	13.7	Z=-2.515, p=0.0119

BMI Body mass index

Figure 1. Health practitioner activities

Legend:
- ■ Mental health consumer survey respondents
- ■ NZ Health Survey respondents

* Indicates significant difference between mental health consumer survey respondents and NZ Health Survey respondents

ers, they were cheaper, or because they felt more comfortable with someone who understood their culture (Table 3). Pacific people especially were more likely than those from other ethnic groups to choose a practitioner/service for cultural reasons (26.8%; n=11/47; $\chi^2_{(4)}$=12.82, p=0.012).

Finally, nearly a quarter of SMI consumers chose their health practitioner because they offered specialist services that met their needs and 13.1% because the provider was interested in the impact that health/treatment had on family/whanau/aiga (Table 3). There were no comparative figures from the NZHS for these variables.

A total of 58 SMI consumers also included free text responses indicating why they chose their health practitioner. Almost two-thirds of these responses related to having a trusting or long-term relationship.

Visits to a health practitioner

SMI consumer respondents were more likely to have seen a GP/family doctor in the last year compared to the NZHS respondents (85.8% versus 81.3%). The SMI consumer's last visit to a GP was more likely to be for mental or emotional health, or injury or poisoning, and less likely to be for a routine check-up or health advice than was the case for the NZHS group (Table 3).

The range of activities reportedly undertaken by their health practitioner in the last 12 months are presented in Figure 1. Calculation of BMI occurred for 13.1% (n=44/336) of SMI consumers, with a significantly higher proportion of the NZHS respondents having their BMI calculated (35.0%; Z=-8.34, p<0.0002). Seventy-two percent (n=242/336) of SMI consumer respondents had a blood pressure test and the corresponding proportion for the NZHS respondents was significantly lower (64.4%; Z=2.885, p=0.004). Half of the SMI consumer respondents (49.6%; n=167/337) had a cholesterol test arranged for them. The corresponding proportion of the NZHS group was again significantly lower at 34.7% (Z=5.639, p<0.0002). Finally, 39.6% (n=133/336) of the SMI consumer sample had a diabetes test arranged and the corresponding NZHS proportion was again significantly lower at 23.6% (Z=6.768, p<0.0002).

health care practitioner/service visited by SMI consumers when physically unwell included a mental health service (15.5%; n=43/278), a student health service (n=2), an after-hours Accident and Medical centre (n=1), a support worker (n=1), and another health practitioner (n=1).

There were a number of differences between SMI consumer and NZHS respondents in their reasons for selecting health care providers when physically unwell. A smaller proportion of SMI consumers indicated close proximity or because they were referred by someone else as selection reasons, compared with NZHS respondents (Table 3).

SMI consumers were more likely to select a practitioner for other reasons: because they spent more time discussing health than other provid-

Over the last year, 17.6% (n=59/336) of SMI consumer respondents had a vaccination (including the influenza vaccine) arranged for them, while in the NZHS group 23.0% had an influenza vaccination in the past year, and 4.4% had other immunisations or vaccines. It is likely that some of those in the NZHS group who received the influenza vaccine were also part of the group that also had other vaccines, and so it is not possible to make a clear comparison between the SMI consumer and NZHS respondent groups. However, even if only the group from the NZHS that had an influenza vaccination is considered, a significantly greater proportion of this population had vaccinations arranged for them than did SMI consumer respondents (Z=-2.343, p=0.01).

Over the last 12 months, 21.4% (n=72/336) of SMI consumer respondents had a 'green prescription' (health professional's written advice to be physically active as part of health management) arranged. The corresponding proportion for the NZHS group was significantly lower at 2.1% (Z=21.954, p<0.0002). Finally, 12.5% (n=42/335) of the SMI consumer group had no services arranged for them.

SMI consumer respondents had more frequently discussed a range of subjects with a health practitioner in the last year than NZHS respondents (Table 3). These included mental health, smoking, alcohol, nutrition, weight, exercise, oral health and mental health.

Ability to access GP/family doctor

A higher proportion of SMI consumer respondents than those in the NZHS group had needed to see a GP within 24 hours in the last year, but the GP had been unable to see them. Similarly, a higher proportion of the SMI consumers than the NZHS respondents had needed to see a GP about their health but had been unable to attend (Table 3).

A greater proportion of SMI consumer respondents than NZHS respondents indicated that they had been unable to see a GP when they had last needed to because it cost too much, they did not have the transport to get there, it was after hours, or because they were not able to get in

touch with the doctor. A small proportion of SMI consumer respondents indicated that they were not able to see a GP because they did not feel comfortable with the doctor; there was no corresponding NZHS data. Smaller proportions of the SMI consumer group than the NZHS respondents indicated that they were not able to see a GP when they had last needed to because they could not spare the time or because they did not want to make a fuss (Table 3).

Alternatives to GP/family doctor

The range of alternatives respondents chose when they were unable to see their GP is presented in Table 3. Higher proportions of SMI consumer respondents indicated that they went to the doctor later, phoned a health line or another phone number for advice, went to an emergency department, or went to an after-hours or 24-hour Accident and Medical centre. In comparison, more NZHS respondents went to a community pharmacy when they couldn't see their GP than did SMI consumer respondents.

> Mental health consumer respondents were more likely to select a practitioner... because they spent more time discussing health than other providers, they were cheaper, or because they felt more comfortable with someone who understood their culture

A total of 29 SMI consumers included free-text responses indicating they did something else when unable to see their GP. Twenty-two of these (81.4%) gave responses that could be categorised as follows: five contacted mental health services, eight used some kind of self-help strategy, six saw another doctor, two talked to a nurse, and one took an overdose.

Quality of care

Overall, 18.4% of SMI consumer respondents (n=68/369) thought that they received less care

for their physical health because they had a mental illness. They usually attributed this to discrimination, suspecting that their physical symptoms were attributed to mental illness either because the interaction between mental health and physical health was too complex for doctors to understand, or because people with mental health issues have trouble communicating about their physical health issues.

Discussion

Findings from this study suggest that consumers with SMI have a greater complexity of health needs than the general population, and consequently access health care in different ways. For example, SMI consumers were less likely than the NZHS respondents to visit a GP as their first port of call, were more likely to see medical

Findings also suggest that NZ SMI consumers have poorer physical health than the general population. Not only were conditions such as high cholesterol, diabetes and kidney disorders more prevalent, but SMI consumers were more likely to discuss smoking, nutrition, weight, exercise, oral health, mental/emotional health and alcohol use with their GP. Poorer physical health is also suggested by the fact that SMI consumers were less likely to visit their health practitioner for more routine purposes, such as BMI calculations and vaccination, but more likely to visit for blood pressure and cholesterol, diabetes, and green prescriptions. This is encouraging because it suggests that when the SMI consumer respondents contacted their GP, there was awareness of their physical health needs and some proactive response to monitoring for potential risks.

Overall, 18.4% of mental health consumer respondents thought that they received less care for their physical health because they had a mental illness. They usually attributed this to discrimination, suspecting that their physical symptoms were attributed to mental illness

specialists, and slightly less likely to have one specific health practitioner that they go to first when unwell. However, SMI consumers were also more likely to have seen a GP within the last year, although GP visits were less likely to be for routine check-ups and more likely to be for injuries or mental/emotional health problems.

Moreover, findings showing that SMI consumers more often needed to see a GP at short notice, and were less often able to get in touch with a health care provider because it was after hours. This may reflect a greater number of crisis incidents within the mental health consumer group. As crisis incidents can occur at any time of the day, this group may demand more urgent care at unusual times. The complexities in the results perhaps explain the previous lack of a coherent picture of mental health consumer engagement with health care services as presented by the literature.[12,14–18]

The results may also suggest that active management of mental health populations for metabolic syndrome is occurring. Metabolic syndrome is a group of risk factors that increase the risk of cardiovascular disease, diabetes and stroke. SMI consumers were more likely than the NZHS respondents to smoke or to be obese, which are two modifiable risk factors relating to metabolic syndrome. With this in mind, it is encouraging that SMI consumers were more likely to have blood pressure tests, cholesterol tests, and diabetes tests arranged for them.

Another positive finding was that the SMI consumer group was less likely than the NZHS group to let concerns about 'making a fuss' stop them from accessing health care, which may reflect that they are generally more used to accessing the health care system. In addition, the SMI consumer group were less likely than the NZHS

group to do nothing when they were unable to see a GP or family doctor, and more likely to say that they sought medical help later, or through another avenue. However, these findings may also reflect that mental health consumers tend to have more serious health conditions than the general population.

This study also suggests that the complex health needs of people with SMI makes them more particular about who they access for their care. Consumers were less likely to select a provider based on proximity or because of the recommendations of others, instead preferring providers who spend more time with them. The study also highlighted some concern from SMI consumers around discrimination from health care providers, which reflects the particular importance they place on feeling understood. Cultural issues may also be of particular importance to some mental health consumers when selecting a health care provider, especially those of Pacific ethnicity.

Limitations

This study has some limitations. Firstly, how well the sample represented the overall population of consumers with SMI who regularly access community mental health services in the region is unknown, due to the lack of official statistics available for this group. Recruitment was driven by consumer responsiveness, rather than a representative sample being selected, because we wanted to encourage participation in this often hard to reach population. The present study also suffers from a potential response bias, as individuals who were more unwell may not have responded to the survey.

Reliance on self-report data may reduce the validity of the findings. It has been argued that the meaning of results from self-report measurement in the population with SMI should be interpreted with caution, as they may contain biases due to cognition, periodic affective swings, and recent life events that may better reflect psychopathology and symptoms than actual life conditions or functions.[23] The present study, however, surveyed a community sample of people with SMI who were not acutely unwell. Finally, it is possible that an unknown number of NZHS

sample respondents were consumers engaged with a community mental health service. Whilst this group has the potential to bias the findings, the effect would be to reduce the size of any difference we have found between the SMI consumer and general population (NZHS) groups. The fact that the differences between the two groups were statistically significant suggests that this bias was not substantial.

Implications

The results of this study suggest some encouraging findings in the proactive management of the physical health of mental health consumers, especially for metabolic syndrome. However, it also suggests that the physical health of people with SMI in NZ is frequently poorer than that of the general population, and that their health care access patterns are more complex. The first point of access for mental health consumers with physical health problems may not always be the family doctor. Health professionals may sometimes need to consider the health of consumers with SMI in a wider context than their own specialism. Health professionals should also be aware of the particular importance to people with SMI of discrimination issues and build trusting relationships with them.

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COMPETING INTERESTS
None declared.