

## Perceived need for mental health care: influences of diagnosis, demography and disability

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### ABSTRACT

**Background.** Recent major epidemiological studies have adopted increasingly multidimensional approaches to assessment. Several of these have included some assessment of perceived need for mental health care. The Australian National Survey of Mental Health and Wellbeing, conducted in 1997, included a particularly detailed examination of this construct, with an instrument with demonstrated reliability and validity.

**Methods.** A clustered probability sample of 10641 Australians responded to the field questionnaire for this survey, including questions on perceived need either where there had been service utilization, or where a disorder was detected by administration of sections of the Composite International Diagnostic Interview. The confidentialized unit record file generated from the survey was analysed for determinants of perceived need.

**Results.** Perceived need is increased in females, in people in the middle years of adulthood, and in those who have affective disorders or co-morbidity. Effects of diagnosis and disability can account for most of the differences in gender specific rates. With correction for these effects through regression, there is less perceived need for social interventions and possibly more for counselling in females; disability is confirmed as strongly positively associated with perceived need, as are the presence of affective disorders or co-morbidity.

**Conclusions.** The findings of this study underscore the imperative for mental health services to be attentive and responsive to consumer perceived need. The substantial majority of people who are significantly disabled by mental health problems are among those who see themselves as having such needs.

### INTRODUCTION

This paper presents findings from the Australian National Survey of Mental Health and Wellbeing (NSMHWB) (Australian Bureau of Statistics, 1998*a*; Henderson *et al.* 2000, Meadows *et al.* 2000*a*; Whiteford, 2000; Andrews *et al.* 2001) regarding perceived needs for mental health care as influenced by diagnosis, demography and disability. By way of introduction, we briefly review some relevant literature on several topic areas. These are: the influence of self-

recognition of needs on the decision to seek help from health care professionals; disparities in service utilization between different diagnostic and demographic groups; and, the epidemiological surveying of perceived needs for mental health care. We then describe the instrument used to assess perceived needs in the NSMHWB, and set out the investigation undertaken in this analysis of the data from the NSMHWB.

### Self-recognition of needs and the decision to consult

To plan for, and to improve service provision of mental health care, it is important to identify factors that influence people's decisions to consult service providers concerning their mental

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health. Self-recognition of problems and people's attitudes to treatment appear to play an important role in, first whether a need is perceived, and subsequently whether treatment is sought. From studies in different settings, it can clearly be seen that the belief system of the patient, or potential patient, can be an important determinant influencing the decision to present to a practitioner (Bayer & Peay, 1997; Jorm *et al.* 1997*a,b*). These belief systems may also influence decisions to present practitioners with mental health problems. Such decisions about help-seeking in turn alter the degree of opportunity that practitioners have to detect and respond to psychiatric problems. Where the patient's belief system is such that they do not recognize themselves as having needs for mental health care, or do not view the practitioner as an appropriately skilled provider of mental health care, the patient may be less likely to present a mental health problem. Consequently, the pattern of people's recognition of needs for mental health care is important for understanding current service utilization, as well as for identifying areas in which poor recognition should be addressed to improve service provision.

#### **Service utilization and specific disorder groups**

Several studies have found that among people with mental disorders, consultation rates differ by disorder. Katz *et al.* (1997*a*) reported from the Mental Health Supplement of the Ontario Health Survey that among the broad categories of disorder types, people with affective disorders had the highest consultation rates, whereas people with substance abuse disorder had the lowest consultation rates (Parikh *et al.* 1997). Using data from Canadian and US population surveys, Katz *et al.* (1997*b*) found the most powerful predictor of service use to be psychiatric disorder (especially affective). These authors suggested that symptoms associated with these disorders may be more important in determining service use than subjective mental health, or disability. Similarly, the Epidemiological Catchment Area study found that service use varied by disorder, from 60% for somatization, schizophrenia, and bipolar disorder, to less than 25% for addictive disorders (Regier *et al.* 1993). The findings from investigation of the NSMHWB data set have confirmed many of these disparities are also present in

Australia, with greater service utilization in the affective disorders, and in those with comorbidities (Australian Bureau of Statistics, 1998*a*; Henderson *et al.* 2000). An issue then that confronts service providers is how these disparities arise, or how they can be explained. Here, consideration of perceived need as an intermediate causal variable in the production of differences in consultation rates may be helpful.

#### **Epidemiological surveys including assessments of perceived need and expert defined need**

Despite the evident importance of perceived need for mental health care in determining service use, until recently large-scale epidemiological surveys did not routinely include needs assessment from the consumer's view at all. Hence, the epidemiological literature on consumer perceived need and where such perception can be linked with systematic psychiatric assessment is relatively sparse. In more recent surveys, the construct of consumers' perceived need for care has been sampled with brief assessment instruments (Hornblow *et al.* 1990; Katz *et al.* 1997*b*; Rabinowitz *et al.* 1999). Rabinowitz *et al.* (1999) reported demographic correlates of perceived need, finding it to be associated, among other factors, with being female (15% in females against 11% in males); older age; and with greater disability. As regards the meeting of expert defined needs, this has been assessed recently in more intensive community surveys, such as the Camberwell Needs for Care Survey (Bebbington *et al.* 1997). Here, a disparity was shown between the apparent meeting of needs within different disorder groups (Bebbington *et al.* 1997, 1999). This survey showed that needs for care of patients with psychoses are better met than the needs of people with the disorders of higher prevalence such as anxiety and depressive disorders. There was also disparity in the meeting of need between these two high prevalence disorder groups. From their study the authors estimated that for depression, 28% of 'meetable need for treatment' was met. Although this figure appears disturbingly low, the comparable figure for anxiety was even lower at 13%. High levels of unmet need have also been confirmed in recent wider scale epidemiological survey work in the UK (Bebbington *et al.* 2000). A review of work

in this area at the time of development of the NSMHWB field questionnaire suggested perceived need as an important domain for inclusion in the survey instrument. It also indicated the need for more detailed instrumentation than was available up to that time.

#### **Influence of these findings on the design of the Australian Survey**

In light of the background described above, the recent NSMHWB included assessment of consumer perceived need. In this case, more time was allotted to this assessment than in previous surveys and a specific budget from the Commonwealth of Australia provided for some reliability and validity testing to support instrument development. The instrument developed was the Perceived Need for Care Questionnaire (PNCQ) (Meadows *et al.* 2000*b, c*). The PNCQ as used in the NSMHWB assess perceived need defined as a perception that a type of intervention has been needed from a health professional. The PNCQ has demonstrated good reliability and validity (Meadows *et al.* 2000*c*). Within the PNCQ, five categories of mental health need are examined: information, medication, counselling, social intervention, and skills training. Each category of need is assigned to one of the levels of: no need, unmet need, partially met need, and fully met need. An overall needs category can also be derived as an indicator of the overall level of perceived need across all five PNCQ categories.

Data from the NSMHWB already reported (Meadows *et al.* 2000*a*) would suggest that, among the 17.7% of Australians classified as suffering with a mental disorder from one of the groups of affective, substance misuse and anxiety disorders, 9.9% have perceived need and 7.8% do not. A further 3.9% of the population have perceived need for mental health care but did not meet criteria for a mental disorder, according to the CIDI interview. The NSMHWB presents an unparalleled opportunity among recent epidemiological surveys to carry out further exploration of the determinants of perceived need because of the detailed assessment of perceived needs that featured in the survey. Specifically, the assignment of perceived need into different categories as outlined above, and the ability to combine data in the perceived need categories across those who did and did not use

services, are novel aspects of the design of this major epidemiological survey.

#### **Aims**

This paper examines the data set from the NSMHWB for the demographic and clinical determinants of perceived need. Demographic variables examined are age groups and sex; clinical variables are diagnosis including consideration of co-morbidity, and disability. Perceived needs for mental health care are described as determined by these variables.

#### **METHOD**

The overall design and conduct of the NSMHWB survey have been reported elsewhere (Australian Bureau of Statistics, 1998*a*; Whiteford, 2000). Briefly, this was a community survey of 10,641 Australians using a computerized field questionnaire, which included sections of the Composite International Diagnostic Interview (CIDI) (World Health Organization, 1994; Andrews & Peters, 1998) with additional survey modules screening for other disorders (Henderson *et al.* 2000), self-ratings of disability, and with self-reported service utilization and perceived needs for care (Meadows *et al.* 2000*b, c*). The Australian Bureau of Statistics produced a Confidential Unit Record File (CURF) (Australian Bureau of Statistics, 2000) containing the data set from this survey, and this file formed the basis for the analyses described in this paper.

As in any epidemiological survey, prevalence estimates and other derived statistics are associated with likely error ranges, which can themselves be estimated using information about the size of the survey and its design. This survey employed a clustered probability sampling strategy, so estimation of the design error for any statistic requires inclusion of the influence of this sampling strategy. For overall prevalence estimates, the Australian Bureau of Statistics has published indicative standard errors for a number of representative rates (Australian Bureau of Statistics, 1998*a*), and initial reporting of the survey relied on these tables to guide estimation of design error (Henderson *et al.* 2000; Meadows *et al.* 2000*a*). For more direct estimation of error associated with specific estimates, and for estimation of error associated with other analyses,

such as logistic regression, the ABS included in the latest release of the CURF, 30 replicate probability weights associated with each case. With specialist software, in this case the SUDAAN statistical package (Shah *et al.* 1997), these weights can be used to estimate errors associated with specific estimates. This approach has been employed for all analyses given here, so standard errors and confidence intervals, where reported, have all been derived with jackknife replication based on the provided replicate weights.

Following exploratory analyses, a number of aggregations of the data were made to make the very complex outputs from raw categories more intelligible. Subsequent analyses have included cross-tabulations of overall percentages and subgroup percentages, and logistic regression of selected variables.

## RESULTS

### Age and gender

First, we present the results of some descriptive analyses of the data for all perceived needs. As set out above, some perceived need was endorsed by 13.5% (S.E. = 0.4) of the population. However this was not equally distributed between the sexes, where 10.3% (S.E. = 0.7) of males and 16.6% (S.E. = 0.7) of females endorsed some perceived need. The detailed breakdown of the age and sex distribution of perceived need is presented in Table 1. The difference in overall perceived need between males and females is statistically significant in pair-wise comparison of rates (difference 6.3%, 95% CI 4.36 to 8.24,  $P < 0.05$ ). The increased rate of perceived need among females is consistent across the age bands; there is also evidently a substantial age effect with increased levels of perceived need in the age 25–44 group for both genders.

Table 1. *Percentage of perceived need by age and gender*

Age group	Males* % (S.E.)	Females* % (S.E.)	All persons* % (S.E.)
18–24	10.0 (1.6)	18.4 (1.7)	14.1 (1.1)
25–44	12.7 (1.0)	20.3 (1.0)	16.6 (0.6)
45–64	10.0 (0.9)	16.3 (1.0)	13.2 (0.6)
≥ 65	3.9 (0.7)	6.4 (1.2)	5.2 (0.8)

\* Percentage estimates (standard errors in parentheses).

### Diagnostic categories

The estimated 1-year prevalence from the survey for each of the major diagnostic groups are available in other reports (Australian Bureau of Statistics, 1998a; Andrews *et al.* 1999; Henderson *et al.* 2000). Table 2 presents the rates for perceived need within each of the major diagnostic categories assessed in the CIDI modules included in the survey.

The PNCQ was not administered with individuals who only met criteria for harmful alcohol use and no other disorder (Meadows *et al.* 2000a), so these survey participants did not have the opportunity to endorse a perceived need. Hence, a precise rate for perceived need among all persons with substance misuse disorders can only be given with the exclusion of those who met criteria for harmful alcohol use only and no other substance misuse disorder.

It might also appear anomalous that the overall category of anxiety disorders shows lower overall perceived need than generally do individual categories. This can arise because of multiple counting of people with co-morbidity in the individual disorder categories, which are not mutually exclusive.

### Disability

#### *The impact of disability on perceived need*

The survey included general measures of disability such as items from the SF-12 questionnaire (Ware *et al.* 1996), which encompass disability due to mental and physical health problems. More specifically, for each mental disorder, participants reporting symptoms associated with the disorder were asked about days in the last 4 weeks, on which they were 'totally unable to work or carry out your normal activities' because of their symptoms, (days fully out of role). Those with symptoms were also asked for how many days they were 'able to work and carry out your normal activities, but had to cut out what you did, or did not get as much done as usual' (days partly out of role), because of reported symptoms. The aggregation of these responses across all mental disorders gives the total of days either fully or partly out of role, and provides the most specific measure for quantifying disability associated with a mental health problem among the measures of disability used in the survey (Henderson *et al.*

Table 2. Rates of perceived need by major disorder groups and specific disorders

Disorder as identified by the CIDI	Population estimate* % (S.E.)
Any mental disorder	61.2 (1.1)
All affective disorders	83.0 (1.4)
Depression	83.3 (1.5)
Dysthymia	87.7 (2.8)
Other depression	81.1 (11.7)
All anxiety disorders	66.6 (1.4)
Panic disorder	77.6 (4.0)
Agoraphobia	71.2 (4.7)
Generalized anxiety disorder	76.2 (2.5)
Obsessive-compulsive disorder	83.8 (5.9)
Post-traumatic stress disorder	68.4 (2.8)
Substance misuse disorders (harmful alcohol use only excluded)	48.2 (2.7)
Alcohol dependence	46.9 (3.1)
Drug use disorders	51.6 (4.8)
Co-morbid mental disorders of the major groups above	84.2 (2.1)
Co-morbid mental disorders and self-reported physical health problems	63.3 (1.6)
No diagnosis: no mental disorder	4.8 (0.2)

\* Percentage estimates (standard errors in parentheses).

Table 3. Interaction between diagnosis, co-morbidity, disability and perceived need

Broad diagnostic group	Overall size of diagnostic groups: percentage of the population in each group % (S.E.)	Disability status: percentage in each diagnostic group who report associated days out of role % (S.E.)	Perceived need: percentage in each diagnostic group who report perceived need % (S.E.)	Subgroup analysis; percentages reporting perceived need, subgroups defined by disability status within diagnostic groups	
				No days out of role % (S.E.)	Any days out of role % (S.E.)
Affective only	2.4 (0.2)	26.3 (2.6)	76.2 (2.4)	70.8 (3.4)	91.4 (3.5)
Anxiety only	5.8 (0.3)	19.2 (2.2)	54.9 (2.2)	50.4 (2.4)	73.6 (4.5)
Anxiety and affective	2.4 (0.2)	47.9 (3.4)	88.0 (2.4)	84.4 (3.4)	91.9 (2.8)
Substance abuse only	3.0 (0.2)	13.6 (2.1)	29.1 (3.0)	25.8 (3.6)	50.0 (9.9)
Substance abuse and other	1.8 (0.1)	45.5 (3.3)	79.3 (3.4)	71.2 (4.7)	89.0 (4.2)

All estimates exclude diagnosis of harmful alcohol use since this group was not administered the Perceived Need for Care Questionnaire.

2000). Within the survey population as a whole, 5.6% (S.E. = 0.3) of the population reported some days either partly or fully out of role as a result of a mental health problem. Among those with a mental disorder in the three major diagnostic groups (affective, anxiety and substance misuse), for those with no days out of role attributed to a mental health problem the rate of all perceived need was 53.6% (1.4), while for those with any days partly or fully out of role it was 82.2% (2.0).

*Interaction between diagnosis and disability*

The relationship between diagnosis and disability was further explored by cross-tabulation of the major disorder groups, including major

co-morbidity categories, with the presence or absence of perceived need for mental health care, as set out in Table 3. A subgroup analysis presents perceived need for each diagnostic group as defined by disability status. Here we see that for affective disorders and the co-morbidity categories, there are at least 70% rates of perceived need, even in the absence of days out of role. These rates jump to around 90% with the additive effect of these diagnoses and days out of role. The lower base-rates of perceived need in substance misuse disorders, and in anxiety disorders are also substantially increased by the additive effect of days out of role. The presence of an anxiety disorder with days out of role indicates a comparable rate of perceived

Table 4. *Perceived needs, logistic regression including diagnosis, demographics and disability*

	Overall	Information	Medication	Counselling	Social intervention	Skills training
<b>Disorder</b>						
Affective only	1.00†	1.00†	1.00†	1.00†	1.00†	1.00†
Anxiety only	0.39* (0.27–0.56)	0.64* (0.43–0.95)	0.37* (0.26–0.53)	0.55* (0.41–0.74)	0.87 (0.54–1.40)	0.84 (0.50–1.42)
Substance abuse	0.14* (0.09–0.21)	0.24* (0.12–0.49)	0.31* (0.18–0.53)	0.22* (0.14–0.33)	0.50* (0.26–0.97)	0.49* (0.25–0.93)
Anxiety & affective	1.90* (1.05–3.44)	1.92* (1.32–2.80)	1.43 (0.99–2.07)	1.74* (1.18–2.57)	1.77* (1.16–2.69)	1.43 (0.87–2.36)
Substance abuse & other	1.02 (0.60–1.73)	1.77* (1.12–2.81)	1.26 (0.77–2.05)	1.24 (0.82–1.88)	1.41 (0.77–2.58)	1.62 (0.86–3.06)
<b>Sex</b>						
Male	1.00†	1.00†	1.00†	1.00†	1.00†	1.00†
Female	1.07 (0.82–1.40)	0.98 (0.79–1.22)	1.12 (0.84–1.50)	1.28 (0.98–1.67)	0.56* (0.39–0.81)	0.71* (0.51–0.99)
<b>Age</b>						
18–24	0.45* (0.31–0.65)	0.80 (0.50–1.28)	0.40* (0.26–0.62)	0.55* (0.41–0.74)	0.92 (0.57–1.49)	0.89 (0.60–1.32)
25–44	1.00†	1.00†	1.00†	1.00†	1.00†	1.00†
45–64	0.59* (0.40–0.88)	0.65* (0.50–0.85)	1.17 (0.85–1.60)	0.68* (0.50–0.90)	0.88 (0.58–1.33)	0.70 (0.47–1.03)
≥ 65	0.37* (0.20–0.69)	0.26* (0.12–0.53)	1.41 (0.76–2.64)	0.24* (0.11–0.49)	0.19* (0.05–0.80)	0.28* (0.10–0.75)
<b>Days out of role</b>						
None	1.00†	1.00†	1.00†	1.00†	1.00†	1.00†
Some	2.91* (2.01–4.23)	2.26* (1.63–3.12)	2.31* (1.71–3.11)	2.29* (1.70–3.08)	3.14* (2.12–4.65)	1.65* (1.15–2.37)
<i>N</i>	1731	1731	1731	1731	1731	1731
Weighted <i>N</i>	2076544	2076544	2076544	2076544	2076544	2076544

† Reference categories.

All estimates exclude diagnosis of harmful alcohol use since this group were not administered the Perceived Need for Care Questionnaire.

\*  $P < 0.05$ .

95% Confidence intervals are shown in parentheses.

need to that found in affective disorders without days out of role. People with substance misuse disorders with days out of role have a comparable rate of perceived need to anxiety disorders without days out of role.

This analysis gives us an opportunity to examine some of the properties of self-rated need for mental health care as a screen for the presence of mental health problems. Table 3 effectively includes estimates of the sensitivity of this as a measure. For instance, the final column of Table 3 can be read as tabulating the sensitivity of perceived need as a screen for the presence of mental disorder with associated days out of role. From this we can see that the sensitivity varies across diagnostic and comorbid groups, but that apart from the case of substance misuse it is above 70% in all cases, and for affective disorders it is above 90%.

#### *Group differences and confounding variables*

These above findings suggest some substantial between group differences. The group specific rates are of relevance for service planning and estimating levels of need within populations. However, these apparent differences might actually be the outcome of the action of confounders, and so not truly causal relationships. For instance, in considering the effect of sex on perceived need, the higher rate of perceived need might be an outcome of increased disorder prevalence in females. Indeed a higher rate of disorder in females than in males was found in the survey (18.0% in females, 17.4% in males; (Australian Bureau of Statistics 1998*a*)). However, the difference in perceived need rates between the sexes is much greater than this 0.6% disparity, suggesting other influences may be at work. We know that males have higher rates of substance misuse disorders and that the rates of perceived need in these disorders are lower than in other diagnostic categories. Hence, there may not be an independent effect of gender once disorder type is controlled for. We also know that rates of specific disorders have individual patterns of association with age (Australian Bureau of Statistics, 1998*a*; Henderson *et al.* 2000). Age group seems to be a strong influence on perceived need. Hence, differences in age structure of the populations within diagnostic groups might be responsible for the differentials between diagnoses in rates of perceived need,

rather than any effect of diagnosis independent of age.

With a view to examining the influence of these various exposures and potential confounders, we performed a logistic regression analysis. Through this analysis, we examined the associations between a number of diagnostic factors, demographic variables and disability to be considered as possible predictors of the presence of any perceived need for mental health care. Here we also extended the analyses to explore need for each of the five individual types of interventions assessed by PNCQ specifically.

We included in the regression the three major diagnostic categories for mental disorder and the major co-morbidity groupings. The demographic variables included here were age and sex. The presence of any days partly or totally out of role attributed to presence of a mental health problem is used as the direct measure of disability.

Perceived need is confirmed as more frequent among those with affective disorders alone than with other uni-morbid disorder groups. Comorbidity of anxiety and affective disorders significantly increases the likelihood of perceived need in all categories, except skills training. Comorbidity of substance abuse and other disorders significantly increases the likelihood of perceived need for information. Once other factors are controlled for, there is no significant finding suggesting that females have greater perceived need than males. Indeed, females have significantly less perceived need for social interventions and skills training.

Those in the age group from 25–44 generally have more likelihood of perceived need than those older or younger. The exception here is perceived need for medication, which does not decline in later years, and the findings would be compatible with some relative increase. There is a robust finding that days out of role attributed to a mental health problem increases the likelihood of having a perceived need across all categories.

## **DISCUSSION**

### **Overall rates and findings of associations**

The analyses presented here show that there are substantial differences in rates of perceived need between identified sections of the population.

This provides further information for planners in considering mental health needs in the population. While the possible causal associations suggested by direct comparisons of proportions are not all supported by more sophisticated examination of the dataset, some have indeed proved robust and some others have emerged. Each will be discussed.

### Disorder type

Affective disorders have a greater likelihood of being associated with perceived need for mental health care than anxiety disorders. There is even less perceived need associated with the substance use disorders. Co-morbidity of anxiety and affective disorders also significantly increases the likelihood of perceived need in all categories, except skills training. The above findings are consistent with studies on service utilization, which have shown increased rates of service utilization in these disorder groups (Regier *et al.* 1993; Katz *et al.* 1997b; Parikh *et al.* 1997). Disability might be an intervening variable here, with people with affective disorders finding themselves more severely affected than those with other types of problem. There are similar findings showing disability as being greater in affective disorders and with co-morbidity (Goering *et al.* 1996; Bassett *et al.* 1998). The increased symptom load in co-morbidity may be assumed to promote perceived need but increased associated disability might also be playing a role here. However, even after disability has been statistically controlled for, there is still evidence of a diagnosis specific effect independent of disability. This suggests that disability related to the psychiatric disorder alone is unlikely to be the only mediating causal factor.

The low rates of perceived need in substance misuse disorders may be assumed to be related to the issues of insight and motivation. Many people with substance misuse disorders identified through a community survey such as this will presumably be at early stages in the development of their recognition of having a 'mental health problem' as well as motivation towards having any contact with services in relation to their substance use (Prochaska & DiClemente, 1983). The position of having a perceived need for mental health care is compatible with having reached the stage of change of action, or at least

of contemplation (Prochaska & DiClemente, 1983), and this may be the exception rather than the rule among individuals detected by this community survey methodology. Consistent with this is the observation that there are somewhat higher rates of perceived needs among those with substance use disorders for social intervention and skills training, categories that are less specifically linked with experiencing a mental health problem. The low rate of treatment seeking among people with substance misuse problems in Australia has been shown from other examinations of the NSMHWB dataset (Teesson *et al.* 2000).

### Sex

Overall, females have higher rates of perceived need, and this finding is compatible with that of other examinations of perceived need for mental health care in the community (Rabinowitz *et al.* 1999). However, in this examination, once other influences are controlled for, this no longer stands out as a significant finding. Indeed, females seem to have rather less in the way of perceived need in the category of social interventions and skills training. This may reflect a real difference in pattern of need between the sexes, or alternatively, that mental health problems are conceptualized by consumers in a sex-specific way. For example, Rogers *et al.* (cited in Pilgrim & Rogers, 1999) 'found that women were more likely to identify marital stress as the source of their difficulties. By contrast, men reported work stress to be of relevance more than three times more often than did women' (p. 52). Such examples of differing conceptualization of problems may account for this observed pattern of perceived needs.

### Age

Age is confirmed as a significant influence on perceived need overall and in specific categories. The findings from examination of prevalence proved robust after controlling for other influences. Compared to those of mid-life, young adults have lower rates of perceived need for medication and counselling. Older adults have less perceived need for information, counselling, social interventions and skills training. Their perceived need for medication for mental health problems is however at least as great as for those in middle years. It is impossible here to separate

what may be cohort effects from maturational change. Low rates of perceived need among older adults may be the result of an age cohort with less acceptance of the idea of seeking help for a mental health problem, or of an increased trend towards self-reliance with age. Other researchers have also found older adults less likely to seek help (Jacomb *et al.* 1997). Medication perhaps meets with most acceptance in this age group, compared with the other need categories. It is also possible, as Snowdon *et al.* (1998) argued, that mental disorders among elderly Australians were under-reported in the NSMHWB as a result of a substantial proportion of older people being ineligible for inclusion. This may have resulted in a relative under-detection of perceived need among the older population in this survey.

### **Disability**

Disability associated with mental health problems is one measure available in the survey data regarding the severity of impact of disorder on the life of the person. With the measure chosen here, 5.6% of the total population were found to have some disability associated with a mental health problem. We may compare these results with the spread of frequencies found when other measures are used. Bassett *et al.* (1998) examined part of the ECA data in this way and found that seven different measures classified between 2.5% and 19.5% of the adult population as having a disability, with a median of 7.2%. Hence, the measure chosen here seems to perform within the central area of this range. Disability associated with a mental health problem is confirmed as a significant determinant of perceived need for all types of mental health problems studied here, and for all categories of intervention for mental health problems considered. The associations here are strong and consistent. Thus, it would not be surprising if the impact on life conditioned by days out of role also encouraged help-seeking for a mental health problem. This is compatible with findings from other work (Rabinowitz *et al.* 1999). As noted above, however, the effect of specific diagnosis groups on perceived need remains, even after statistically controlling for days out of role. At least one other study has examined the role of various measures of disability in relation to variables such as service utilization (Bassett *et al.* 1998).

The newly available dataset from the NSMHWB presents the possibility of further examining the way in which different measures of disability, and the constructs they reflect, have a bearing on help-seeking, in particular the expression of perceived need for various types of intervention. This could be a useful direction for further exploration of this dataset.

### **Perceived need for mental health care as a screening tool**

There are many ways of screening for mental health problems, and symptom questionnaires are widely used for this process. Here we examine the function of the PNCQ as a screening instrument. As an example, we consider the specific context of disorder associated with days out of role, and the findings reported in Table 3. We focus on this group since mental health services must make some prioritization of people to whom they provide services. A reasonable basis for this would seem to be the degree of associated disability, so we might regard the key target groups for intervention by mental health services as being those people with identifiable disorders who also have associated days out of role. A limitation of the survey for this purpose is that the PNCQ was not administered to all participants so its specificity as a measure cannot be calculated from this dataset. Additionally, positive predictive values (PPV) might be distorted by the effect of treatment. If perceived need, and associated help-seeking has prompted effective intervention, then symptoms may have been ameliorated. In this context, the self-report measure of CIDI might fail to identify treated cases, which should properly be considered within an estimate of PPV. Hence, the information available from this study on PNCQ as a screen concerns its sensitivity. With these above qualifications, for some of the priority groups, the sensitivities are impressive, being above 90%. Further development of screening measures for mental health problems might usefully combine symptom report measures with self-reported perceived need.

### **Conclusions**

Perceived need for mental health care is increased by being of female sex, by being in the middle years of adulthood, by disability associated with mental health problems, and by having affective

disorders or co-morbidity. Logistic regression with perceived need as a dependent shows that the effects of diagnosis and disability can account for the increased perceived need in females. With these effects corrected for, there is less perceived need for social interventions and skills training in females. Perceived need for mental health care is found to be a sensitive screen for mental health problems with associated disability.

The consumer is a critically important influence in the delivery of health care by the exercise of discretion in help-seeking behaviour. The findings of this study underscore the imperative for mental health services to be attentive and responsive to consumer perceived need. The substantial majority of people who are significantly disabled by mental health problems are among those who see themselves as having such needs.

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