Recognition of physical and psychological symptoms

No influence of GP demographic factors

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AIM
To describe the relationship between general practitioner demographic factors and the recognition of psychological and physical symptoms in consultation.

METHODS
A survey of a random sample of 70 GPs and their patients (n=3414) from the lower North Island of New Zealand.

RESULTS
No relationship was found between GP personal and practice demographic characteristics and GP identification of psychological and physical symptoms. Patients were more likely not to present psychological symptoms (62%) than not present physical symptoms (5%) in consultation. Thirteen percent of GPs wanted more formal psychiatric training, 45% wanted more contact time in consultation, and 72% thought that cost was a barrier to patients attending. No significant relationship was found between these factors and GP detection of significant psychological symptoms in consultation.

DISCUSSION
Personal and practice demographics of GPs may not predict their ability to detect physical and psychological symptoms. More research is needed to explore these findings which contradict previous work.

Psychological problems are common among patients who attend general practice.[1] The difficulty general practitioners encounter in recognising mental health problems has been explained as a response to constraints of primary care.[2] Finding the reasons why GPs prioritise recognition of physical and psychological symptoms is important in helping to address the problems of untreated mental illness.[3] We set out to study this.

Method

This article is based on data from the MaGPIe study, previously reported.[1] In summary, 70 GPs were selected randomly from the lower North Island of New Zealand. Patients who had face-to-face contact with the GP were sampled consecutively. Patients over 18 years of age were eligible for study when they had given consent and completed a general health questionnaire (GHQ). The GP completed an encounter form for 3414 patients asking two questions in each encounter: 'Today, in this consultation, to what extent are the presenting symptoms physical?' and, 'Today, in this consultation, to what extent are the presenting symptoms psychological?' General practitioners selected one response using rating scales where the level of symptom could be ranked as either 'not at all', 'somewhat', 'mildly', 'moderately', or 'completely' psychological or physical.

All GPs completed a questionnaire on their personal demographic and practice characteristics, specific experience or training in mental health, services offered to patients with psychological disorders, knowledge and experience of local mental health services, attitudes toward mental health, and their knowledge about the prevalence and symptoms of mental health problems in primary care. This questionnaire was administered during the time period when data was collected on consultations.

Definition

'Clinically significant levels of symptoms' identified in the consultation were defined as GPs responses for symptoms as being 'mildly', 'moderately' or 'completely' psychological or physical. All eligible patients completed the GHQ-12. 'Caseness for mental health problems' was defined as patients with a score of five or higher using the '0011' scoring method.[4]

Analysis

Data were weighted to adjust for differences in probability of being sampled using the Kish method.[5] Weighted prevalence estimates were derived using the SAS procedure SURVEYMEANS, which also adjusted confidence intervals for the effects of clustering within GPs. Relative risks were estimated from weighted means output from SURVEYMEANS, with 95% confidence intervals for relative risks estimated using Taylor's Expansion Estimate to account for clustering.[6] Analyses were done comparing the GP personal and practice variables with all patients defined as having clinically significant levels of symptoms. A subgroup analysis was

done on patients defined as having 'caseness' for mental health problems.

Results

GP personal demographic characteristics

Among the 70 GPs, 80% were male, and 1% were Maori. Their mean age (SD) was 48.1 (8.9, 33–73) years; 73% had their undergraduate education in New Zealand; 91% belonged to the Royal New Zealand College of General Practitioners; 33% had previous posts in mental health; and 29% had training in mental health within the previous 2 years. The mean time (SD) working in general practice was 17.5 (9.0, 1–43) years.

GP practice characteristics

Most (59%) practices had more than one full time equivalent GP in practice. The mean number (SD) of half day consultation sessions per week was 8.3 (1.8, 4–11) sessions. The mean number (SD) of patients scheduled per hour was 4.5 (0.8, 3–7) appointments: (45 GPs usually scheduled four patients per hour, 14 scheduled five, eight scheduled 6, one 7 patients, and one 3 patients per hour).

A specific contract for mental health funding was held by 37% practices, 34% practices had a computerised mental health register, and 34% of practices had used a guideline for the care of patients with mental disorders. Practices varied their services specifically for patients with mental health problems: 93% allocated a different amount of time spent on consultations, 90% had a system to help payment of consultation fees for patients who had difficulty to pay, and 54% varied the consultation fee.

Patient demographic characteristics

Among the 3414 patients, 39% were male, 3% Pacific islander, and 10% were Maori. The mean age (SD) was 48.9 (18.8) years, range 17–95 years. In the previous year, 12% of patients never consulted, 20% 1–2 times, 29% 3–4 times, and 39% five or more times.

General practitioners were asked their opinion about mental health problems in primary care (*Table 1*). They were also asked to choose the most important factor likely to increase a doctor's detection of psychological disorders: 45% chose more time in consultation, 38% more appropriate interviewing techniques, 13% more formal

Table 1. 70 GPs' opinions on barriers to care, confidence in management, and prevalence of psychological factors and symptoms of mental health problems in primary care

Questions	Response %		
Overall, please indicate whether any of the following are barriers to you in providing care for your patients with mental health problems?	**Very much**	**Somewhat**	**Not at all**
Available mental health services in your area	16	56	29
Accessibility of mental health services in your area, eg. waiting times	4	61	34
Cost of private services such as counsellors/psychiatrists/psychologists	4	34	61
Length of your consultations	16	64	20
Overall, to what extent do you think any of the following factors are barriers that may limit the ability of patients with mental health problems from coming to see you?			
Cost of coming to see you	13	59	28
Reluctance to seek help for mental health problems	3	76	21
Concerns about confidentiality	71	29	0
Overall, how well do you feel the following statement describes you?			
I am interested in providing care for patients with mental health problems	47	50	3
I have no personal difficulties in dealing with mental health patients	47	46	7
I am confident in the diagnosis of mental health problems	26	73	1
I am confident in the treatment of mental health problems	23	77	0
I am confident in the referral of mental health problems	66	33	4

In what proportion of patients attending a general practice do psychological factors play a role in the person's illness?	5 % 0 %	10 % 16 %	30 % 57 %	60 % 27 %
The most common symptom in psychological practice is?	**Depressed mood alone**	**Anxiety alone**	**Somatic symptoms alone**	**A mix of anxious, depressed, and somatic symptoms**
	9 %	4 %	6 %	81 %

training in psychiatry, and 4% the use of structured questionnaires about psychological disorders.

General practitioners ranked the extent to which patients presented with psychological symptoms on the day of consultation: 2097 patients (62%) ranked 'not at all', 544 patients (16%) ranked 'somewhat', 291 patients (9%) ranked 'mildly', 364 patients (11%) ranked 'moderately', and 90 patients (3%) ranked as 'completely' psychological symptoms (missing data 28 patients).

Similarly, for physical symptoms the rankings were: 165, patients (5%) ranked 'not at all', 119 patients (4%) ranked 'somewhat', 167 patients (5%) ranked 'mildly', 875 patients (26%) ranked 'moderately', and 2043 patients (61%) ranked as 'completely physical' symptoms (missing data 45 patients).

There was no correlation between the ranking of the patients defined as presenting clinically significant psychological and clinically significant physical symptoms (Pearson r=–1.9297, p=0.1095).

No GP personal or practice demographics were found to influence the recognition of either significant psychological symptoms or significant physical symptoms on the day of consultation (*Table 2*).

Subgroup analysis

Of the surveyed patients, 1834 (54%) had GHQ scores of 0–1, 826 (24%) had scores of 2–4, and 754 patients (22%) had scores of 5–12. There were no significant relationships found between GP demographics and symptom recognition on patients defined as having GHQ-12 'caseness' (GHQ score 5 or more).

Table 2. Comparison of common GP personal and practice characteristics influencing the recognition of significant psychological symptoms and physical symptoms in 3414 patients consulting with 70 randomly selected GPs

Variable	GP recognition, relative risk (95%CI)*			
	Psychological symptoms		Physical symptoms	
GP personal characteristics				
Age group				
65+ years	0.86	(0.35–2.06)	0.88	(0.73–1.05)
45–64 years	0.97	(0.71–1.32)	0.99	(0.95–1.02)
25–44 years (reference)	1		1	
Gender				
Male	0.86	(0.64–1.17)	0.97	(0.93–1.0)
Female (reference)	1		1	
Mental health training/experience				
No training/experience	0.86	(0.64–1.15)	1.03	(0.99–1.08)
Training/experience (reference)	1		1	
Country of graduation				
Elsewhere	1.11	(0.77–1.60)	0.98	(0.93–1.02)
New Zealand (reference)	1		1	
Confident in diagnosis				
Very	1.2	(0.9–1.7)	1.1	(0.9–1)
Somewhat (reference)	1		1	
GP practice characteristics				
Size of practice				
Solo	1.10	(0.81–1.49)	0.98	(0.94–1.02)
Group (reference)	1		1	
Practice has mental health disease register				
No	1.09	(0.81–1.48)	1.01	(0.97–1.06)
Yes (reference)	1		1	
Practice has mental health guidelines				
Yes	0.98	(0.72–1.33)	1.0	(1.0–1.0)
No (reference)	1		1	
Fee varied for mental health patients				
Doesn't vary fees	1.28	(0.96–1.72)	1.00	(0.96–1.03)
Varies fees (reference)	1		1	
Number of patients scheduled per hour				
4 or fewer	1.25	(0.9 – 1.73)	1.01	(0.96–1.02)
5 or more (reference)	1		1	

*95% CI is adjusted for clustering using STATA

Discussion

The sample size in our study was small. However it was a representative random sample of New Zealand GPs[14] and the analysis accounted for the effect of clustering that takes into account biases not considered in previous studies. Our methods did not allow us to explore the extent to which people with psychological or physical symptoms chose practices where they were most likely to have their problems recognised, nor how appropriate it was that GPs identified psychological or physical symptoms.

Nevertheless we found no relationship between GP personal demographic characteristics or practice characteristics and the identification of significant psychological or physical symptoms. Nor was there any significant relationship found in a subgroup analysis of patients with a high GHQ-12 score. This contrasts with other studies that have found GP age,[7,8] gender,[9] mental health training,[8,10–13] practice time scheduling,[2] or the number of practitioners in a practice[7] to

be positively related to the identification of patients' psychological symptoms.

Psychological problems are common among general practice patients.[1] However, our finding that 62% of patients presented no psychological symptoms to the GPs compared to 5% for physical symptoms, may be because patients present physical symptoms more readily.[15] The lack of correlation between GPs detecting psychological and physical symptoms suggests that this difference is unlikely to be attributable to differences to GP preference of physical to psychological symptoms.

Nearly all these GPs were interested in mental health care, and few lacked confidence in managing it, in contrast to previous work which showed that attitude or interest and concern is highly correlated with the propensity to diagnose mental illness,[8] and that GPs without specific training in mental health care were less likely to recognise mental health disorders.[8,11–13]

More research is needed to explain the differences between our results and previous studies, and also to reconcile other observations, suggesting factors such as the patient's social and cultural beliefs,[16] how well the patient knows the GP,[17] the GP's management of comorbid conditions,[18] and the style of the consultation[19] may influence the recognition of psychological symptoms.

Implications of this study for general practice

- Psychological problems are common among patients attending general practice.
- GPs were less likely to detect psychological symptoms than physical ones.
- There was no significant relationship between GPs' identification of psychological and physical symptoms.
- Nor was there a significant relationship between GP demographic factors (personal and practice) and their identification of psychological and physical symptoms.
- This contradicts previous research.

Conflict of interest: none.

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