Doctors' health-seeking behaviour: a questionnaire survey

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ABSTRACT

Objectives: To explore doctors' perceptions of the acceptable limits to self-treatment and to identify barriers to doctors seeking appropriate healthcare.

Design: Self-completion, postal survey using three hypothetical case vignettes.

Setting and participants: 896 Australian doctors randomly selected from the Health Insurance Commission database and stratified by sex, discipline (general practitioner or specialist) and location (urban or rural). Data were collected between May and July 2001.

Main outcome measures: Doctors' self-reported attitudes on illness behaviour and choice of medical care in response to case vignettes.

Results: 358 (40%) doctors returned questionnaires. More participants believed it was acceptable to self-treat acute conditions (315/351; 90%) than to self-treat chronic conditions (88/350; 25%). Nine per cent (30/351) of participants believed it was acceptable to self-prescribe psychotropic medication. A greater proportion of GPs (206/230; 90%) than specialists (101/121; 83%) believed doctors are reluctant to attend another doctor, especially if the problem is psychological. Women and GPs were significantly less likely to report that it was easy to find a satisfactory treating doctor (women, 58/140 [41%]; men, 128/211 [61%]; GPs, 106/231 [46%]; specialists, 80/120 [67%]). Being a specialist was predictive of seeking appropriate healthcare for all three vignettes.

Conclusion: Doctors have varying opinions regarding the acceptability of self-treating chronic conditions, and perceive considerable barriers to seeking appropriate medical care. Strategies are needed to challenge the culture of self-reliance.

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MANY STUDIES show that, when doctors experience ill health, they disregard the advice they give their patients.[1,2] The medical community has developed a culture in which working through illness and self-treating is the norm.[3,4]

Although doctors have lower overall rates of mortality than the general population, they are at higher risk of certain physical and psychological problems.[5,6] The impact of these illnesses may be exacerbated by a culture that discourages admission of health vulnerabilities.[7] Personal testimonies of doctors who have experienced major illness suggest that the "pull yourself together and just get on with it" mentality is a significant barrier to seeking appropriate treatment.[8] A New South Wales study found that 26% of doctors experienced a condition warranting medical consultation, but felt inhibited about consulting a doctor.[9] When doctors do seek external care, evidence suggests they receive a lesser quality of care than lay patients.[7,8]

Self-treatment for doctors includes diagnosing and treating one's own illness and prescribing for oneself. It also includes undertaking informal, or "corridor", consultations and self-referring to a specialist. Self-treatment is inappropriate because of its lack of objectivity.[10]

We aimed to describe doctors' perceptions of the acceptable limits to self-treatment, and to determine whether selected attitudinal or demographic variables predict doctors' decisions to self-treat in three hypothetical situations.

METHODS

A stratified, random sample of doctors was drawn from the Health Insurance Commission (HIC) database using their modified synchronised sampling system. General practitioners who claimed more than 375 consultations and specialists who claimed more than 200 consultations in the March quarter of 2001 were eligible for selection. From a population of 26 765, a sample of 896 doctors was randomly selected. The sample was stratified by sex, urban or rural practice, and GP or specialist. Data were collected from May to July 2001.

We developed a 31-item questionnaire. Twelve items asked participants about their attitudes to self-treatment, and four items asked about their own experience of formal healthcare. Responses were provided on a five-point Likert scale. There were 12 demographic questions, including whether respondents had their own GP. The questionnaire ended with three hypothetical case vignettes describing a scenario in which participants experience anxiety, hypertension, or severe asthma. The dependent variable for each vignette was the doctor's decision to self-treat or to seek appropriate care.

Four elements identified in a preceding qualitative study and a literature review as being potential barriers to seeking formal healthcare were embedded as independent variables in each vignette. The variables were concerns over confidentiality, heavy workload, embarrassment, and confidence in treating the condition. Each variable was included in the vignette either as a concern for the participant, or as not a concern (Box 1). To evaluate the effect of these variables on the decision to seek appropriate care,

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1: Examples of vignettes used in the questionnaire

Hypertension

You realise that your BP has been elevated on three separate occasions recently. Your overall health is good. Your BMI is 26, you're a non-smoker, do minimal exercise and have one or two glasses of wine a day. Your total cholesterol is slightly elevated. Although you may be confident managing this condition in your patients you are hesitant to manage it yourself. There is a competent doctor you know and trust to maintain your confidentiality but you are worried about what the doctor you could consult would think of you. Your workload is very manageable and you can take time off if you need to.

In this vignette, embarrassment and confidence in treating the condition are concerns and confidentiality and workload are not.

Anxiety

Over the last 6 months you've noticed that you have become increasingly anxious. You find yourself constantly worrying about everyday events that never used to bother you. You are having difficulty sleeping and often wake up during the night. Having a few drinks seems to help you relax. Although your general health is quite good you are experiencing a lot of muscle tension and headaches. You're also confident in managing this condition with your patients and feel that you could manage it for yourself. You know a competent doctor you could see whom you're comfortable would be understanding of you, but you are unsure whether you can trust them to maintain your confidentiality. Your practice is so busy it would be hard to find the time.

In this vignette, workload and confidentiality are concerns, while embarrassment and confidence in treating the condition in oneself are not.

each variable was fully crossed with the other three variables at both levels, producing 48 possible combinations. A fractional factorial design[11] was used to reduce this to 18 combinations: six each for anxiety, hypertension and asthma, in an even distribution. Six versions of the questionnaire were produced, each consisting of one version of the anxiety, hypertension and asthma vignettes.

Versions 1 and 2 of the questionnaire were each sent to 150 participants and versions 3 to 6 were each sent to 149 participants. Questionnaires were anonymous but coded so nonresponders could be followed up. Administrative staff recorded receipt of questionnaires and then gave them to the researchers. A second mail-out was conducted after three weeks. Two weeks later, a random sample of 200 nonresponders was contacted by phone and encouraged to complete and return the questionnaire.

Data analysis

Frequency analysis was conducted on the attitudinal data, and independent samples *t* tests were used to identify differences between GPs and specialists and between men and women.

Logistic regression analysis was performed on the vignette data to determine whether any of the four independent variables or selected demographic variables predicted respondents' decisions to seek appropriate care. The dependent variable for the logistic regression analysis was the treatment choice (ie, appropriate or inappropriate choice of treatment). Inappropriate treatment was defined as self-treatment, corridor consultation, direct referral to a specialist, or no treatment. Appropriate treatment was defined as consulting a GP. The following 11 variables were entered into the equation: confidentiality, workload, embarrassment, confidence in treating the condition, having one's own GP, receiving specialist treatment, having attended a GP in the past two years, GP or specialist registration (discipline), sex, age, and practice location.

Ethical approval and consent

This study was approved by the Monash University Standing Committee on Ethics in Research Involving Humans.

RESULTS

Demographic profile

Of the 896 questionnaires, 358 were returned (response rate, 40%). Five questionnaires had a substantial amount of missing data and analysis was generally conducted on between 351 and 353 respondents. Urban male GPs were slightly underrepresented and rural female GPs were overrepresented (Box 2). Fifty-five per cent of respondents were aged 40–55 years. Forty-four per cent of respondents indicated they had long-term health problems, which is much lower than the 87% prevalence of long-term conditions reported in the community.[12]

Attitudes

Box 3 shows attitudes regarding self-treatment, barriers to seeking formal care, and respondents' experiences of medical care. Most considered self-treatment of acute minor illnesses acceptable, but there was more disagreement as to the acceptability of self-treating chronic conditions and ordering blood tests on oneself. Most respondents (especially GPs) felt that doctors often feel embarrassed to attend another doctor, especially for psychological problems.

Predictors of appropriate treatment

Being a specialist was a highly significant predictor of choosing appropriate treatment (Box 4). Having one's own GP was a significant predictor of appropriate treatment choice in the hypertension and asthma vignettes only. Concern over confidentiality was a sig-

2: Representativeness of 353 respondents compared with Health Insurance Commission (HIC) sample of 896 doctors

		Urban		Rural	
		HIC	This study	HIC	This study
General practitioners	Women	136 (15%)	55 (15%)	64 (7%)	49 (14%)
	Men	280 (31%)	77 (22%)	104 (12%)	50 (14%)
Specialist	Women	48 (5%)	24 (7%)	16 (2%)	12 (3%)
	Men	184 (21%)	59 (16%)	64 (7%)	27 (8%)
Total		648 (72%)	215 (61%)	248 (28%)	138 (39%)

3: Participants who "agree" or "strongly agree" to attitudes on seeking healthcare: comparisons between disciplines and sexes

	Total (*n*=350–352)*	GPs (*n*=229–231)*	Specialists (*n*=120–121)*	*P*	Men (*n*=210–212)*	Women (*n*=139–140)*	*P*
It is acceptable to:							
Self-treat acute, minor illness	315 (90%)	205 (89%)	110 (91%)	0.175	193 (91%)	122 (87%)	0.517
Self-treat chronic conditions	88 (25%)	63 (28%)	28 (21%)	0.139	57 (27%)	31 (22%)	0.770
Order blood test on self for diagnostic purpose	179 (51%)	112 (49%)	67 (55%)	0.192	112 (53%)	67 (48%)	0.201
Order blood test on self for monitoring purpose	162 (46%)	112 (49%)	50 (42%)	0.177	102 (49%)	60 (43%)	0.166
Self-prescribe psychotropic medication	30 (9%)	22 (10%)	8 (7%)	0.136	18 (9%)	12 (9%)	0.995
Opinions on doctors' behaviour in seeking healthcare							
Embarrassed to attend another doctor	250 (71%)	174 (76%)	76 (63%)	0.003	146 (69%)	104 (74%)	0.074
Reluctant to consult for psychiatric problems	307 (87%)	206 (90%)	101 (83%)	0.027	177 (84%)	130 (93%)	0.015
Doctors make few errors when treating self	24 (7%)	19 (8%)	5 (4%)	0.051	15 (7%)	9 (6%)	0.181
Doctors' symptoms are under-investigated	88 (25%)	54 (23%)	34 (28%)	0.864	59 (28%)	29 (21%)	0.224
Doctors down-play their symptoms	251 (72%)	166 (72%)	85 (70%)	0.370	149 (71%)	102 (73%)	0.074
Doctors present late	270 (77%)	180 (78%)	90 (74%)	0.568	157 (74%)	113 (81%)	0.067
Doctors are more likely to work when sick	332 (95%)	219 (95%)	113 (93%)	0.259	197 (93%)	135 (96%)	0.006
Attitudes regarding own healthcare							
Embarrassed if problem turned out to be minor	95 (27%)	72 (31%)	23 (19%)	0.003	48 (23%)	47 (34%)	0.016
Easy to find treating doctor	186 (53%)	106 (46%)	80 (67%)	< 0.001	128 (61%)	58 (41%)	0.000
Satisfied with own healthcare	297 (85%)	191 (83%)	106 (88%)	0.417	185 (88%)	112 (81%)	0.048
Concerned about confidentiality	68 (19%)	45 (20%)	27 (21%)	0.716	34 (16%)	34 (24%)	0.054

* Denominators vary because of missing data.

nificant predictor of not choosing appropriate treatment in the anxiety vignette alone. Workload, embarrassment and confidence in treating the condition were not predictors of treatment choice in any of the vignettes.

DISCUSSION

The response rate for our study is rather low, so caution is needed in generalising the results. However, it is comparable to other Australian surveys investigating doctors' own medical care.[9,13] It has been suggested that the personal nature of the topic contributes to low response rates.[9]

Our study described doctors' opinions and attitudes, rather than their actual behaviour in managing their medical conditions. Given that recommendations against self-treatment are well known in the profession, responses may have been influenced by social desirability factors, and it is possible that more respondents would actually support self-treatment, including the self-prescribing of psychotropic medicines, in real situations.

Previous studies have found differences between GPs and specialists in their patterns of health-seeking behaviour,[1,9] but this is the first study to show that GPs are significantly less likely than specialists to seek appropriate treatment across several situations. The attitudinal data suggest that GPs' preferences for self-treatment may be associated with their perception that doctors are embarrassed to attend a colleague and that it is difficult to find a good treating doctor.

Our results support previous assertions that the culture of medicine is a barrier to doctors seeking healthcare.[1,3,7] The perception that doctors are more likely than other professionals to work through illness may be symptomatic of a culture in which an image of invincibility is encouraged and vulnerability is denied.[3] The direct result of this phenomenon is likely to be delayed presentations even for serious conditions.

Fifty-five per cent of respondents had their own GP. This is higher than the 42% reported by Pullen,[9] but is considerably less than the New South Wales Doctors Mental Health Policy recommendation that all doctors have their own GP.[14] Having one's own GP was a significant predictor of seeking appropriate care in the hypertension and asthma vignettes, but not in the anxiety vignette. The reason for this discrepancy is unclear, but the emergence of confidentiality as a significant predictor in the anxiety vignette suggests that

4: Significant factors predicting appropriate treatment choice in case vignettes (logistic regression analysis)

	Odds ratio	95% CI
Anxiety		
Is a GP	0.38	0.22–0.68
Attended GP in last 2 years	2.56	1.31–5.00
Concerned about confidentiality	1.87	1.01–3.45
Hypertension		
Is a GP	0.38	0.19–0.74
Has own GP	3.57	1.76–7.23
Asthma		
Is a GP	0.42	0.25–0.72
Has own GP	2.84	1.55–5.21
Male	2.33	1.38–3.93

issues of trust are involved in the more sensitive psychological conditions. This is consistent with a previous study,[3] in which concerns about confidentiality were a barrier to seeking psychiatric services. Similarly, confidentiality breaches, combined with professional attitudes discouraging admission of vulnerabilities, have been reported to influence doctors' reluctance to seek mental healthcare.[7]

One of the most disturbing findings was that, in spite of professional recommendations to the contrary,[14,15] a quarter of respondents thought it was acceptable to self-treat chronic conditions and an even higher proportion thought it was acceptable to order blood tests on oneself to monitor a chronic condition. Other studies have examined self-treatment in relation to specific medications or symptoms, and have not grouped self-treatment into acute conditions, chronic conditions, diagnostic procedures and monitoring categories as we did. Therefore, although it is not possible to directly compare across studies, our results are consistent with a previous finding that doctors would self-treat for seven out of 10 sets of acute and chronic symptoms for which they would recommend other doctors seek care.[1] The finding of little consensus regarding acceptability of self-treatment is also consistent with the earlier study.[1] Although most respondents were satisfied with the care they had received from other doctors, many thought it was difficult to find a doctor with whom they were comfortable. Reasons for this may include embarrassment or concern about confidentiality for sensitive health issues. This highlights the need for doctors to be appropriately trained for consultations in which the patient is also a doctor.[15]

Our results indicate that there are significant barriers to doctors seeking formal medical care, and that this may be particularly true for GPs. It is important that this be addressed in medical school, as such attitudes are already in place among many junior doctors.[13] Strategies aimed at doctors' self-treatment should focus on challenging the culture of doctors' self-reliance.

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COMPETING INTERESTS

None identified.

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