A cross-sectional survey of patients' beliefs about stress and their help-seeking behaviour

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ABSTRACT

Background
Stress has become an increasingly common presentation in general practice. This may relate to an increase in stress in people's lives or a change in the meaning of stress and its conceptualisation as a legitimate problem for the GP.

Aim
To explore patients' beliefs about stress, their association with help-seeking behaviour, and to examine differences by ethnic group.

Design of study
Cross-sectional survey of general practice patients attending to see their GP.

Setting
An inner-city London practice.

Method
Consecutive general practice patients completed a questionnaire, which involved rating a series of symptoms for the extent to which they were associated with stress and describing their help-seeking behaviour. In total, 548 patients completed the questionnaire. Most patients described themselves as black Caribbean (*n* = 163), black African (*n* = 48), or white British (*n* = 187).

Results
The symptoms most frequently associated with stress were sleeping problems, feeling depressed, feeling panicky, having high blood pressure and feeling anxious; feeling ashamed, experiencing indigestion, having diarrhoea, feeling hot or cold, and suffering from constipation were least commonly associated to stress. This model of stress did not vary by ethnic group. Ethnic group differences were found for the association between the model of stress and help-seeking behaviour. Although white British patients consistently reported that the more a symptom was seen as indicative of stress, the more likely they would be to visit the doctor for that symptom, this association was not found for either black Caribbean or black African patients.

Conclusions
The belief that stress-related symptoms are a legitimate problem for the GP is not universal and varies according to ethnic group. Stress is used by different patients in different ways and offers a variable pathway to the doctor.

Keywords
help-seeking behaviour, stress, symptom survey.

INTRODUCTION

In 1981 Cartwright and Anderson reported that the numbers of patients visiting their GP with stress had almost doubled over a 10-year period.[1] The experience of GPs suggests that this increase has continued into recent years.[2] This increase may illustrate the rise in stress in the population due to the changing demands placed upon individuals by their environment and by themselves. Alternatively, it may reflect a change in the way stress is perceived and understood.

Researchers use the term 'stress' in different ways according to their theoretical perspective. For example, stress can be regarded as a transaction between people and environment,[3] a process of adaptation to change,[4] or as a combination of psychological factors, such as tension and anxiety, and physiological changes, such as arousal and heightened sympathetic activity.[5] Stress has also entered lay terminology and has many different meanings for different people. For example, stress can be associated with unpleasant experiences such as feelings of prejudice, multitasking, defeat, entrapment, neurotic perfectionism, self-esteem, unwelcome change, confrontation, or even personal crisis.[6-8]

The increase in stress-related presentations in general practice might reflect a shift in patients' beliefs about stress. In particular, it may illustrate a shift towards a sense that stress is a problem that should be managed by the doctor.[9] However, in the

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same way that beliefs about stress have been shown to vary according to age, sex, education, financial status, and ethnicity,[10] it is likely that a belief that stress is a legitimate general practice problem is similarly variable. To date this possibility remains unexplored. In line with this, this study explored general practice patients' beliefs about stress in terms of its associated symptoms and examined differences in these beliefs by ethnic group. In addition, the study aimed to explore the association between beliefs about stress and patient's help-seeking behaviour and whether the association differed according to ethnic group.

How this fits in

Evidence suggests that patients are increasingly coming to their GP with symptoms of stress. This study suggests that patients associate a range of symptoms with the term stress including sleeping problems, feeling depressed, feeling panic, feeling anxious and 'high blood pressure'. This model of stress was consistent across ethnic groups. Ethnic group differences were found for the association between the model of stress and help-seeking behaviour. While white British patients consistently reported that the more a symptom was seen as indicative of stress, the more likely they would be to visit the doctor for that symptom, this association was not found for either black Caribbean or African patients. The belief that stress-related symptoms are a legitimate problem for the GP is not universal and varies according to ethnic group.

METHOD

Design

The study involved a cross-sectional survey of general practice patients in an inner-city London practice.

Sample

Reception staff invited consecutive patients to complete a questionnaire. Exclusion criteria were those aged less than 16 years, patients who could not speak or read English, and patients too ill or distressed to take part.

The questionnaire

The questionnaire was designed to assess patients' beliefs about stress in terms of which symptoms they considered to be indicative of stress and their help-seeking behaviour. To this end a questionnaire was devised based upon two pilot studies:

- Pilot 1. Thirty-eight patients were asked to describe what symptoms they experienced when feeling stressed. Based on these answers, an initial list of 42 symptoms was developed, which formed the basis of the first questionnaire.
- Pilot 2. The questionnaire asked patients to rate each of the 42 symptoms for how much they believed they were indicative of stress and how likely they would be to see a doctor for each of them using a five-point Likert scale ranging from 'not at all' (1) to 'totally' (5). Ten patients completed and commented on this questionnaire. Some symptoms were deleted and some words were changed resulting in the make-up of the final questionnaire.

The final questionnaire consisted of 25 symptoms and patients were asked to rate each of these for whether they were indicative of stress (beliefs about stress) and whether they would seek help for them (help-seeking behaviour). Although each symptom was examined individually, for ease of analysis symptoms groupings were also created. The symptoms were grouped into four conceptual areas and the reliability of the grouped symptoms was assessed using Cronbach's α:

- negative mood symptoms (for example, feeling depressed, feeling anxious, feeling angry, feeling sad), $\alpha = 0.8$,
- specific somatic symptoms (for example, high

Table 1. Profile characteristics.

Variable	*n* (%)
Sex (*n* = 481)	
Male	135 (28.07)
Female	346 (71.93)
First language (*n* = 480)	
English	414 (86.25)
Other	66 (13.75)
Type of property (*n* = 480)	
Own	236 (49.17)
Rented (private)	123 (25.63)
Rented (council)	121 (25.21)
Visits to the GP in 1 year (*n* = 480)	
0–2	144 (30.00)
3–5	204 (42.50)
≥6	132 (27.50)
Visits due to stress (*n* = 480)	
Never	314 (65.42)
Sometimes	143 (29.79)
Often	23 (4.79)
Ethnicity (*n* = 480)	
Black Caribbean	163 (33.96)
Black African	48 (10.00)
Asian	16 (3.33)
White British	187 (38.96)
White Irish	10 (2.08)
Other	56 (11.67)

Table 2. Beliefs about stress and signifying symptoms.

	Response to variable as signifier of stress			
Variable	No *n* (%)	Not sure *n* (%)	Yes *n* (%)	Rank
Sleeping problems (*n* = 495)	53 (10.71)	107 (21.62)	335 (67.68)	1
Feeling depressed (*n* = 492)	62 (12.60)	109 (22.15)	321 (65.24)	2
Feeling panic (*n* = 485)	96 (19.79)	101 (20.82)	288 (59.38)	3
High blood pressure (*n* = 482)	71 (14.73)	149 (30.91)	262 (54.36)	4
Feeling anxious (*n* = 495)	93 (18.79)	133 (26.87)	269 (54.34)	5
Feeling tearful (*n* = 485)	89 (18.35)	137 (28.25)	259 (53.40)	6
Feeling angry (*n* = 474)	78 (16.46)	147 (31.01)	249 (52.53)	7
Feeling that nobody cares (*n* = 483)	126 (26.09)	147 (30.43)	210 (43.48)	8
Feeling sad (*n* = 496)	132 (26.61)	157 (31.65)	207 (41.73)	9
Tired all the time (*n* = 494)	123 (24.90)	167 (33.81)	204 (41.30)	10
Palpitations (*n* = 469)	93 (19.83)	184 (39.23)	192 (40.94)	11
Eating problems (*n* = 473)	95 (20.08)	188 (39.75)	190 (40.17)	12
Having a headache (*n* = 503)	105 (20.87)	198 (39.36)	200 (39.76)	13
Can't have fun (*n* = 478)	134 (28.03)	156 (32.64)	188 (39.33)	14
Weight loss (*n* = 474)	111 (23.42)	193 (40.72)	170 (35.86)	15
Chest pain (*n* = 475)	154 (32.42)	187 (39.37)	134 (28.21)	16
Feeling lonely (*n* = 500)	214 (42.80)	159 (31.80)	127 (25.40)	17
Feeling breathless (*n* = 478)	154 (32.22)	205 (42.89)	119 (24.90)	18
Feeling dizzy (*n* = 485)	175 (36.08)	211 (43.51)	99 (20.41)	19
Being sick (*n* = 488)	204 (41.80)	195 (39.96)	89 (18.24)	20
Feeling ashamed (*n* = 478)	238 (49.79)	155 (32.43)	85 (17.78)	21
Having indigestion (*n* = 487)	251 (51.54)	153 (31.42)	83 (17.04)	22
Having diarrhoea (*n* = 468)	214 (45.73)	178 (38.03)	76 (16.24)	23
Feeling hot or cold (*n* = 472)	228 (48.31)	172 (36.44)	72 (15.25)	24
Having constipation (*n* = 481)	256 (53.22)	170 (35.34)	55 (11.43)	25

blood pressure, having a headache, weight loss, and chest pain), $\alpha = 0.71$,

- non-specific somatic symptoms (for example, feeling panic, tired all the time, breathless, dizzy), $\alpha = 0.81$,
- social symptoms (for example, inability to have fun, feeling lonely, feeling that nobody cares), $\alpha = 0.76$.

Profile characteristics

Subjects were also asked to detail their age, sex, ethnic group, whether their first language was English, and how many times they had visited the doctor for stress.

Data analysis

The data was analysed to describe subjects' profile characteristics and which symptoms were associated to stress using descriptive statistics, to examine the impact of ethnic group on beliefs about stress using ANOVA, and to assess the association between beliefs about stress and help-seeking behaviour for all subjects and for each ethnic group using correlations. α was set at 0.01 due to multiple comparisons.

RESULTS

Profile characteristics

A total of 548 questionnaires were returned. Of these 67 (12.6%) did not include answers for all profile questions, 80 participants did not complete all questions relating to beliefs about stress (14.6%), and up to 146 did not complete all help-seeking questions (26.6%). All questionnaires were included in the analysis with list-wise deletion used for each set of analyses. The subjects' profile characteristics are shown in Table 1.

The majority of participants were women, with English as their first language. A third had visited the doctor because of stress; almost three-quarters

described themselves as white British, black Caribbean or black African. Only a small minority were Asian or described themselves as 'other' or white Irish. The mean age of participants was 41 years.

Beliefs about stress

The individual symptoms ascribed to stress were recoded using a three-point scale: 'no' (1, 2), 'not sure' (3) and 'yes' (4, 5). These are illustrated in Table 2. The results showed that the symptoms most frequently associated to stress were sleeping problems, feeling depressed, feeling panic, high blood pressure and feeling anxious. Those symptoms least commonly attributed to stress were feeling ashamed, having indigestion, having diarrhoea, feeling hot or cold, and having constipation.

Ethnic group and beliefs about stress

The individual symptoms were grouped according to whether they were mood symptoms, specific somatic symptoms, non-specific somatic symptoms or social symptoms. Differences in whether these grouped symptoms were perceived as stress were assessed according to ethnic group. As most patients described themselves as white British, black African, or black Caribbean, the analysis by ethnic group was confined to these three groups. Differences in beliefs about stress by ethnic group are shown in Table 3.

The results showed that the three ethnic groups were comparable in their beliefs regarding which symptoms indicated stress.

The association between beliefs about stress and help-seeking behaviour

The results showed a consistent association between a greater belief that symptoms were associated to stress and seeking help for mood symptoms (r = 0.229, $P<0.0001$), specific somatic symptoms (r = 0.189, $P<0.0001$), non-specific somatic symptoms (r = 0.228, $P<0.0001$), and social symptoms (r = 0.241, $P<0.0001$) indicating that the more a symptom is seen as stress, the more patients state that they will visit the doctor.

Table 3. Ethnicity and beliefs about stress.

Variable	Black Caribbean	Black African	White British	F	*P*-value
Negative mood					
n	131	47	167		
Mean (+/- SD)	3.51 (0.79)	3.55 (0.74)	3.52 (0.78)	0.04	0.96
95% CI	3.38 to 3.65	3.33 to 3.77	3.40 to 3.64		
Specific somatic symptoms					
n	131	46	164		
Mean (+/- SD)	2.86 (0.69)	2.85 (0.740)	2.83 (0.64)	0.09	0.92
95% CI	2.74 to 2.98	2.63 to 3.07	2.73 to 2.93		
Non-specific somatic symptoms					
n	130	46	165		
Mean (+/- SD)	3.07 (0.76)	3.28 (0.83)	3.08 (0.67)	1.60	0.20
95% CI	2.94 to 3.21	3.04 to 3.53	2.97 to 3.18		
Social symptoms					
n	136	47	166		
Mean (+/-SD)	2.85 (0.93)	3.04 (0.86)	2.87 (0.87)	0.81	0.45
95% CI	2.70 to 3.01	2.78 to 3.29	2.73 to 3.00		

SD = standard deviation.

Ethnic group differences in the association between beliefs about stress and help-seeking behaviour

The results were further analysed by assessing whether the association between beliefs about stress and help-seeking behaviour differed according to ethnic group. The results are shown in Table 4.

For black Caribbean patients the results showed no association between beliefs about stress and help-seeking behaviour for mood symptoms and specific or non-specific somatic symptoms. However, a significant association was found for social symptoms. For black African patients the results showed no significant association between

Table 4. Ethnic group differences in the association between beliefs about stress and help seeking behaviour.

	Meaning of stress and reason for help-seeking behaviour							
	Mood symptoms		Specific somatic symptoms		Non-specific somatic symptoms		Social symptoms	
Ethnic group	r	*P*-value	r	*P*-value	r	*P*-value	r	*P*-value
Black Caribbean	0.147	0.12	0.16	0.09	0.18	0.55	0.25	0.005
Black African	0.40	0.02	0.10	0.55	0.20	0.24	0.27	0.10
White British	0.34	0.0001	0.30	0.0001	0.24	0.0003	0.29	0.0001

any symptom group and help-seeking behaviour. For the white British patients the results showed a significant association between all four symptom groups and help-seeking behaviour. These results indicate that for white British patients, the more they regard a symptom as associated with stress the more likely they are to seek help; however, this is not the case for both black Caribbean and black African groups of patients. Apart from an association for social symptoms for black Caribbean patients, believing that a symptom is indicative of stress does not seem to prompt a visit to the doctor in these two ethnic groups.

DISCUSSION

Summary of main findings

The study aimed to explore beliefs about stress and help-seeking behaviour, and to assess the impact of ethnicity on these factors. The results showed that the symptoms most commonly associated with stress were sleeping problems, feeling depressed, feeling panicky, having high blood pressure and feeling anxious. This model of stress was consistent across ethnic groups. The results also showed that although the belief that a symptom was associated with stress was linked to help-seeking, when all patients were examined this association between the patients' model of stress and their help-seeking behaviour was not consistent across ethnic groups. In particular, while white patients reported a propensity to take stress-related symptoms to the doctor, suggesting that this patient group believed that stress is a legitimate problem, this was not found in either black African or black Carribean patients.

Strengths and limitations of this study

There are several problems with this study that need to be considered. First, the study is based upon self-reported help-seeking behaviour rather than actual help-seeking behaviour. However, this was necessary as a means to assess the direct impact of specific symptoms on patients' intended visits to the doctor. Second, the study was based in one general practice. However, this practice provided access to an ethnically diverse patient group which enabled group differences to be assessed.

Comparison with existing literature

Overall, the results indicated that only one-third of subjects reported having ever visited the doctor for a stress-related problem. This would seem low given reports of increased stress presentations at the GP.[1,2] There are several possible explanations for this. First, research indicates that many symptoms are managed outside of medicine and that many patients do not take all their problems to the doctor.[11] This may also be the case with stress, with patients seeking alternative sources of help. Alternatively, it may be that, in line with other problems, patients underestimate how many times they visit their doctor. It may also be that only a third of patients go to the doctor but that these patients go often enough to make GPs feel that stress presentations are on the increase. Finally, it may relate to whether patients see stress as a legitimate problem to take to the doctor. This question directly asked whether patients would see the doctor for stress and received a fairly low response. In contrast, the results from the questions, such as whether patients would see a doctor for specific symptoms, received a more definite response. If stress is not seen as a legitimate point of access for some patients, they may be reluctant to label their consultations as stress related when asked directly.

In this study, most of the symptoms particularly associated with stress reflect the experience of heightened arousal levels described in the stress literature and echo the physiological changes described by stress researchers.[5] Previous research has indicated that beliefs about stress vary according to a range of demographic factors.[8] The results from this study did not support this and showed a consistent model of stress regardless of ethnic group.

The study also aimed to explore help-seeking behaviour. The results showed that when examining all patients, regardless of ethnic group, a belief that a symptom was indicative of stress was consistently related to help-seeking behaviour. This provides some explanation for the increase in stress-related presentations in general practice,[1] suggesting that patients believe that stress is a legitimate problem for the GP and that when symptoms are regarded as a sign of stress, the GP is seen as an appropriate source of help. However, this association between beliefs about stress and help seeking was not consistent across all ethnic groups and was only found in white British patients. Therefore, although ethnicity does not influence the symptoms attributed to stress, the propensity of such symptoms triggering help seeking from a GP does vary by ethnic group; black Caribbean and black African patients showed a more selective use of stress-related symptoms as a means to gain access to the doctor.

In summary, the increasing presentation of stress in the consultation may reflect the belief that stress-related symptoms are a legitimate problem for the GP. However, this belief is not universal, with stress

being used by different patients in different ways and offering a variable pathway to the doctor.

Implications for future research and clinical practice

The results from the present study have implications for both research and practice. In terms of research, future studies could explore what patients want from their doctor when their visit is motivated by stress and what they believe their doctor's role is. In terms of practice, doctors need to be aware that the term 'stress' may reflect a range of symptoms for different patients. Furthermore, while some patients may be open to discussions of stress as part of the consultation, others may feel that stress is not a legitimate problems for their doctor to manage.

Ethics committee

Ethical approval was obtained from Lewisham Research Ethics Committee

Competing interests

None

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