Examination of the effects of emotional disturbance and its detection on general practice patients' satisfaction with the consultation

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SUMMARY

Background. *A patient's satisfaction with a consultation may be influenced by many factors relating to both patient and doctor.*

Aim. *This study set out to examine the effects of emotional disturbance and its detection on general practice patients' satisfaction with the consultation.*

Method. *A prospective study involving 893 adult patients attending 12 general practitioners in Glasgow was carried out. Questionnaires were completed by general practitioners after consecutive surgery consultations. Patients completed forms assessing mental state and satisfaction with inter-personal aspects of the consultation.*

Results. *Patients reporting frank psychological disturbance tended to express more dissatisfaction with the inter-personal aspects of the consultation. This effect was alleviated in the majority by recognition of the disturbance by the general practitioner. General practitioners differed markedly in their assessment of the psychological component of consultations. Fewer dissatisfied patients were found in the surgeries of doctors who tended to rate the psychological component of consultations more highly. In contrast, the general practitioner's overall accuracy of diagnosis of psychological distress was a poor predictor of the proportion of dissatisfied patients.*

Conclusion. *This preliminary study suggests that a tendency among doctors to assign importance to the psychological component of consultations may enhance elements of patient satisfaction. It is not clear whether this 'psychological-mindedness' is an attribute which can be learnt. To resolve this uncertainty, studies are needed of the effects on patients of educational interventions designed to increase general practitioners' sensitivity to psychological distress.*

Keywords: emotional problems; psychological factors; diagnosis; patient satisfaction; doctor–patient relationship.

Introduction

GENERAL practitioners see many patients with emotional disturbance: most estimates of the proportion of psychiatric cases in routine surgeries lie between 11% and 36%.[1] There is no universally accepted criterion for recognition of psychological disturbance by general practitioners. Nevertheless, a large proportion of the cases of anxiety and depressive neuroses (which constitute most diagnosable psychopathology in general practice) are missed.[2,3] Furthermore, general practitioners appear to vary greatly in their sensitivity to psychological problems[2] and in their diagnostic approaches.[4]

There are several possible reasons for non-recognition of psychological disturbance in general practice.[1,5] Patients may have been conditioned to under-report emotional distress to physicians; others may unconsciously somatize their psychological problems.[6] There are also factors related to the doctor: many general practitioners are poorly trained in psychiatric diagnosis or have little interest in, or time for, psychological problems; some doctors may collude with non-recognition because of doubts about the objective reality of psychiatric disorder; and collusion may also occur because of the doctor's fear of antagonizing a patient with a somatic complaint by offering a 'less acceptable' psychiatric formulation of the problem.[7]

Arguments in favour of accurate psychiatric diagnosis in general practice include: reduction in unnecessary physical investigation and treatment; reduction in morbidity and mortality directly related to psychiatric illness;[5] and the psychodynamic view that patients wish to be understood, even if this insight causes pain.[8]

This study examines the effects of accurate diagnosis of emotional disturbance on patient satisfaction among general practice patients in Scotland. Patient satisfaction is considered by many to be intrinsically valuable[9] as well as being associated with better compliance with the doctor's recommendations.[10] It is also considered as a valuable outcome measure in its own right. May reported on the association between detection of psychiatric morbidity and patient satisfaction.[11] She failed to demonstrate a significant difference in overall satisfaction scores between those patients recognized and not recognized as emotionally disturbed. There may be three reasons for this negative finding. First, there may be uncertainty about the validity of the instrument used to measure patients' satisfaction. Secondly, data from participating general practitioners, who probably vary in their assessment of psychological factors, were pooled. Finally, the sample size was small. This study has attempted to address these problems by using a larger sample, questionnaires which allow a more detailed analysis of the diagnostic strategies of individual general practitioners, and a validated satisfaction questionnaire.

Method

A total of 20 Glasgow general practitioners, each from a different practice, were asked by P W or F S to participate in the study, which was carried out in 1992. Eight of the general practitioners were members of a local Balint group and the remainder were general practitioners with no Balint training who were age and sex matched to the Balint group members using the health board list. Fifteen doctors agreed to participate in the study. Information on the diagnostic strategies of these doctors was obtained by asking them to complete a general practitioner rating questionnaire after each consultation. This questionnaire was developed for the present study.

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Each participating general practitioner was given 125 rating questionnaires for completion after surgery consultations with all patients aged 16 years and over. The questionnaire asks for the patient's initials, details of the patient's age and sex, and ratings on visual analogue scales (range 0–50) of: the perceived significance of psychological factors in the consultation, regardless of physical factors (from not significant to significant); perceived patient anxiety (from not at all anxious to very anxious), and perceived patient depression (from not at all depressed to very depressed). The questionnaires were analysed if all analogue scales and the patient code were completed.

As patients arrived at reception they were given a set of questionnaires, a consent form and a numbered envelope. The number of the envelope was marked on the surgery list. After the surgery, the doctor marked the number of the patient on the general practitioner rating questionnaire by comparing the initials, sex and date of birth on the questionnaire with the surgery list. In one case the doctor handed out the questionnaire instead of the receptionist, but the procedure was otherwise identical. The consent form had the letterhead of the department of general practice at Glasgow University.

One general practitioner did not write coding numbers on the questionnaires, so matching of patients and questionnaires was impossible. A further two doctors completed fewer than half the questionnaires. The results from these three doctors were therefore discarded, and data from 12 general practitioners (five Balint group members) were analysed further. All participating general practitioners attempted to complete data for consecutive consultations. This appeared to be achieved in most cases, although one general practitioner reported a gap of several days between completion of two batches of questionnaires.

Patients attending the 15 study doctors were asked to complete two questionnaires after the consultation: the 28-item general health questionnaire which assesses psychological disturbance;[12] and a shortened form of Baker's consultation satisfaction questionnaire which assesses patient's satisfaction with the inter-personal aspects of the consultation.[13] Patients were assured of anonymity in a covering letter, and questionnaires were collected in the waiting room.

The 28-item general health questionnaire is a widely-used measure of emotional disturbance.[14] It has subscales for anxiety, severe depression, somatic symptoms and social functioning. The 0,0,1,1 method was used for scoring, a score of one signifying the presence of a symptom in the past few weeks. Scores therefore ranged from zero to 28. Questionnaires were analysed if at least 26 of the 28 questions were completed. Missing question scores were estimated from the relevant subscale means.

The shortened version of the consultation satisfaction questionnaire has eight questions, with scores in the range 1–5 for each question (Appendix 1); higher scores are given for greater expressed satisfaction. The full version of the questionnaire has good content and face validity,[15] and good reliability (Cronbach's alpha[16] for the complete questionnaire 0.91, subscales 0.67–0.87). Relevance to the psychological component of the consultation was the criterion for selection for this study of the eight questions from the 18 in the original instrument. Cronbach's single item alpha statistic[16] for the consultation satisfaction questionnaire as used here was 0.78. Values of 0.5 or greater are generally deemed acceptable.[17] Questionnaires were analysed if at least seven of the eight questions had been completed. If single items were missing, values were estimated from the mean for the questionnaire.

Statistics

The results were analysed using the *EPI INFO* statistical package[18] and standard computer spreadsheets. Where samples were approximately normally distributed (for scores on the consultation satisfaction questionnaire), and variances were homogeneous using Barlett's test, comparisons of matching sets of data were performed using analysis of variance or Student's *t*-test; otherwise the Kruskal–Wallis one-way analysis of variance or Wilcoxon's two sample test were used (for ages, and scores on the general practitioner rating questionnaire and the general health questionnaire). Correlations were performed within *EPI INFO* on both raw questionnaire scores (Pearson's correlation coefficient) and on ranked data (Spearman's rank correlation coefficient). As results obtained by each method did not differ materially, correlation coefficients using the former method are reported. Proportions were compared using the chi square test with Yates' correction.

Diagnostic sensitivity and specificity of general practitioners was measured using the general health questionnaire as the 'gold standard' for diagnosis of psychological disturbance. Scores of greater than eight were taken to signify psychological distress since this cut-off point has been shown previously to represent an optimal trade-off between sensitivity and specificity for psychological distress in a general practice population in Glenrothes, Scotland.[19] Agreement between the results of the general health questionnaire and the general practitioner rating questionnaire was determined in individual cases for each doctor.

Correlation coefficients between variables grouped at the general practitioner level were weighted according to the number of patients the general practitioner contributed to the study. Correlation coefficients between patient response variables were calculated for each general practitioner and pooled using the inverse of the variance of the coefficients as weights, using the transformation $z = [1n((1+r)/(1-r))]/2$.[20] This transformation has the property that z is normally distributed with variance $1/(n-3)$. The z values were then pooled using the inverse of the variance and then inverted using the formula $r = (y-1)/(y+1)$ where $y = \exp(2z)$. Confidence intervals were calculated on the z scale and then back-transformed.

Results

Of the 1500 general practitioner rating questionnaires issued to the 12 doctors, 1402 (93.5%) usable questionnaires were returned. The median age of the 1402 patients was 45 years (interquartile range 31–61 years) and 31.0% were men.

The consultation satisfaction questionnaire was completed adequately by 982 patients (70.0% of the 1402 for whom matching general practitioner data were available) and the general health questionnaire by 908 patients (64.8% of 1402). A total of 59 missing consultation satisfaction questionnaire responses and 114 missing general health questionnaire responses were estimated from the mean values. Adequate sets of both general health questionnaire and consultation satisfaction questionnaire responses were obtained from 893 of the 1402 patients (63.7%). Age data were missing from six general practitioner rating questionnaires: analyses involving ages of patients were therefore based on 887 patients but other analyses were based on the 893 patients for whom adequate data from all three questionnaires were available. The 887 respondents were significantly younger than the 509 non-respondents (median age (interquartile range) 44 (30–59) years versus 48 (32–63) years; $P<0.05$) and were given lower scores on the general practitioner rating questionnaire for significance of psychological factors in the consultation (median 16 (5–36) versus 20 (6–37); $P<0.05$), anxiety (15 (4–34) versus 18 (6–36); $P<0.01$) and depression (5 (2–17) versus 6 (2–22); $P<0.05$).

Questionnaire responses

There were strong positive correlations between the general prac-

titioner rating questionnaire scores for the perceived general psychological contribution item and those for perceived anxiety (r = 0.82: 95% confidence interval (CI) 0.80 to 0.84) and those for perceived depression (r = 0.62: 95% CI 0.58 to 0.66). Further data reported relating to the general practitioner rating questionnaire represent the perceived general psychological contribution score only: results obtained using the anxiety or depression scales on their own were not substantially different.

There were significant differences between doctors: in their tendency to consider psychological factors important in consultations and in the satisfaction and psychological morbidity of their patients (Table 1). The sensitivity and specificity figures for each doctor were positively correlated (r = 0.69 for the 12 pairs of data).

A strong positive correlation between the general practitioner rating questionnaire general psychological rating and general health questionnaire score was seen for each doctor, as well as for the total population. However, there was a weak positive association between the general practitioner rating questionnaire and consultation satisfaction questionnaire scores and no significant correlation between the consultation satisfaction questionnaire and general health questionnaire scores (Table 2).

A separate analysis was carried out for the 89 patients (10.0%) who scored less than 24 points on the consultation satisfaction questionnaire (a mean of less than three points for the eight items). These dissatisfied patients were significantly younger than the 804 patients in the more satisfied group (median age (interquartile range) 35 (27–45) years versus 45 (30–61) years; P<0.001). Nevertheless, correcting scores for age made no material difference to the comparisons. The dissatisfied group had significantly higher general health questionnaire scores than the more satisfied group (mean (interquartile range) 8 (3–12) versus 3.5 (0–9); P<0.001), and lower general practitioner rating questionnaire scores (9 (2–27) versus 17 (5–36); P<0.001).

There was a positive correlation between consultation satisfaction questionnaire score and patient age (Figure 1). Overall, only one of the 145 patients aged over 64 years (0.7%) expressed net dissatisfaction (score <24) compared with 86 of the 742 patients aged 64 years or less (11.6%) (P<0.001). Men tended to express more satisfaction than women: the mean consultation satisfaction questionnaire score being 29.5 (95% confidence interval 29.1 to 29.9) for the 600 women and 30.3 (29.8 to 30.8) for the 281 men (P<0.05).

Further analysis used categorization according to high or low general health questionnaire scores. Of the 893 respondents 29.1% had general health questionnaire scores of nine or more. As there was marked variation in general practitioner rating strategies, high general practitioner rating questionnaire scores were defined as those above the upper quartile of the general practitioner rating questionnaire scores for each general practitioner. Consultation satisfaction questionnaire scores for patients according to whether they were in the high or low general health questionnaire and general practitioner rating questionnaire categories were then determined. The mean scores (95% CI) were as follows: true positive group (high general health questionnaire and general practitioner rating questionnaire scores, 118 patients) 30.4 (29.4 to 31.3), false positive group (low general health questionnaire score, high general practitioner rating questionnaire score, 94 patients) 30.5 (29.6 to 31.4), true negative group (low general health questionnaire and general practitioner rating questionnaire scores, 539 patients) 29.7 (29.3 to 30.1) and false negative group (high general health questionnaire score, low general practitioner rating questionnaire score, 142 patients) 28.9 (27.9 to 29.8). Patients in the false negative group had a significantly lower mean satisfaction score than patients in the true positive group (P<0.05). The least satisfied group were patients with psychological disorder (as defined by the general health questionnaire score) which was not recognized by the general practitioner (false negative group).

General practitioner characteristics

Taking the median values for general practitioner rating questionnaire, general health questionnaire and consultation satisfaction questionnaire scores for each doctor (Table 1) allowed correlations (weighted for patient numbers) between these variables to be computed across the 12 doctors. The correlations were all large (0.55 for the general practitioner rating questionnaire/consultation satisfaction questionnaire comparison, 0.48 for general practitioner rating questionnaire/general health questionnaire and –0.44 for general health questionnaire/consultation satisfaction questionnaire). None of these correlations reached conventional levels of significance, possibly because of the small sample size,

Table 1. Diagnostic data for the 893 patients with adequately completed questionnaires.

GP	Median (interquartile range) GPRQ score	GHQ score	CSQ score	% of patients dissatisfied[a]	Sensitivity (%)[b]	Specificity (%)[b]
1 (n = 92)	19.5 (9–40)	4 (0–10)	32 (29–35)	*3.3*	*47*	*85*
2 (n = 62)	26 (14–42)	5 (1– 9)	32 (29–34)	*4.8*	*47*	*91*
3 (n = 83)	18 (11–29)	2 (0– 8)	30 (26–34)	*3.6*	*44*	*83*
4 (n = 73)	5 (2–16)	2 (0– 8)	30 (27–34)	*9.6*	*28*	*76*
5 (n = 70)	11 (3–25)	3 (0– 8)	28 (24–31)	*24.3*	*35*	*81*
6 (n = 95)	0 (0–22)	3 (0– 9)	29 (26–32)	*16.8*	*58*	*87*
7 (n = 67)	35 (9–42)	8 (2–12)	32 (27–35)	*3.0*	*31*	*87*
8 (n = 56)	0 (0–34)	5 (0–14)	29 (26–32)	*16.1*	*43*	*88*
9 (n = 68)	34 (14–47)	3 (0–10)	30 (27–32)	*7.4*	*53*	*86*
10 (n = 81)	14 (6–35)	4 (0–10)	31 (27–33)	*2.5*	*57*	*90*
11 (n = 65)	19 (6–36)	3 (0– 9)	29 (26–32)	*15.4*	*61*	*89*
12 (n = 81)	14 (8–27)	4 (1– 9)	28 (25–32)	*14.8*	*41*	*81*
	P<0.001	P<0.01	P<0.001	P<0.001	NS	NS

n = number of cases. GPRQ = general practitioner rating questionnaire. GHQ = general health questionnaire. CSQ = consultation satisfaction questionnaire. NS = not significant. [a]Denotes those patients scoring less than 24 on the consultation satisfaction questionnaire. [b]Sensitivity and specificity refer to the identification of 'cases' (those patients with general health questionnaire scores above 8) accorded a general practitioner rating questionnaire score above the upper quartile for each doctor's patient.

Table 2. Correlation coefficients between the scores for the three questionnaires used.

GP	Correlation coefficient (*r*) (95% confidence interval)		
	GPRQ vs GHQ	GPRQ vs CSQ	CSQ vs GHQ
1 (*n* = 92)	0.5 (0.33 to 0.64)	0.1 (–0.1 to 0.3)	–0.11 (–0.31 to 0.09)
2 (*n* = 62)	0.43 (0.20 to 0.61)	–0.21 (–0.44 to 0.04)	–0.35 (–0.55 to –0.11)
3 (*n* = 83)	0.26 (0.05 to 0.45)	0.15 (–0.07 to 0.36)	0.02 (–0.20 to 0.24)
4 (*n* = 73)	0.16 (–0.07 to 0.38)	0.08 (–0.15 to 0.31)	–0.19 (–0.41 to 0.04)
5 (*n* = 70)	0.19 (–0.04 to 0.41)	0.21 (–0.03 to 0.42)	0.13 (–0.10 to 0.36)
6 (*n* = 95)	0.58 (0.43 to 0.70)	0.09 (–0.11 to 0.29)	–0.02 (–0.22 to 0.18)
7 (*n* = 67)	0.15 (–0.09 to 0.38)	0 (–0.24 to 0.24)	–0.03 (–0.27 to 0.21)
8 (*n* = 56)	0.60 (0.40 to 0.74)	0.12 (–0.15 to 0.37)	0.05 (–0.21 to 0.31)
9 (*n* = 68)	0.38 (0.16 to 0.57)	0.08 (–0.16 to 0.31)	–0.01 (–0.25 to 0.23)
10 (*n* = 81)	0.44 (0.25 to 0.60)	–0.06 (–0.28 to 0.16)	0.01 (–0.21 to 0.23)
11 (*n* = 65)	0.49 (0.28 to 0.66)	0.08 (–0.17 to 0.31)	0.03 (–0.22 to 0.27)
12 (*n* = 81)	0.21 (–0.01 to 0.41)	0.40 (0.20 to 0.57)	–0.09 (–0.30 to 0.13)
Pooled data (*n* = 893)[a]	0.38 (0.32 to 0.43)	0.10 (0.03 to 0.16)	–0.05 (–0.11 to 0.02)

n = number of cases. GPRQ = general practitioner rating questionnaire. GHQ = general health questionnaire. CSQ = consultation satisfaction questionnaire. [a]Pooled correlations for each doctor. The correlation coefficient for GPRQ vs GHQ scores across the total population of 893 patients is 0.38 (95% CI 0.32 to 0.44), for GPRQ vs CSQ 0.15 (95% CI 0.08 to 0.21) and for CSQ vs GHQ –0.03 (95% CI –0.09 to 0.04).

but nevertheless, these data suggest that the tendency of the doctor to assign importance to psychological factors may be an important factor in determining the relation between the variables.

The major outcome measure of interest in this study is the consultation satisfaction questionnaire score, and in particular the 'dissatisfied' group of patients. In order to analyse whether there might be factors, such as age, associated with the proportion of 'dissatisfied' patients of each doctor, doctors were divided equally into those with higher and lower proportions of such patients. The 453 patients attending the six doctors with the lower proportions of dissatisfied patients were significantly older than the 440 patients attending the other six doctors (median age (interquartile range) 47 (30–63) years versus 40.5 (30–56) years; $P<0.01$). The score on the general practitioner rating questionnaire was significantly higher for the former group (median score (interquartile range) 24 (9–40) versus 10 (1–26); $P<0.001$).

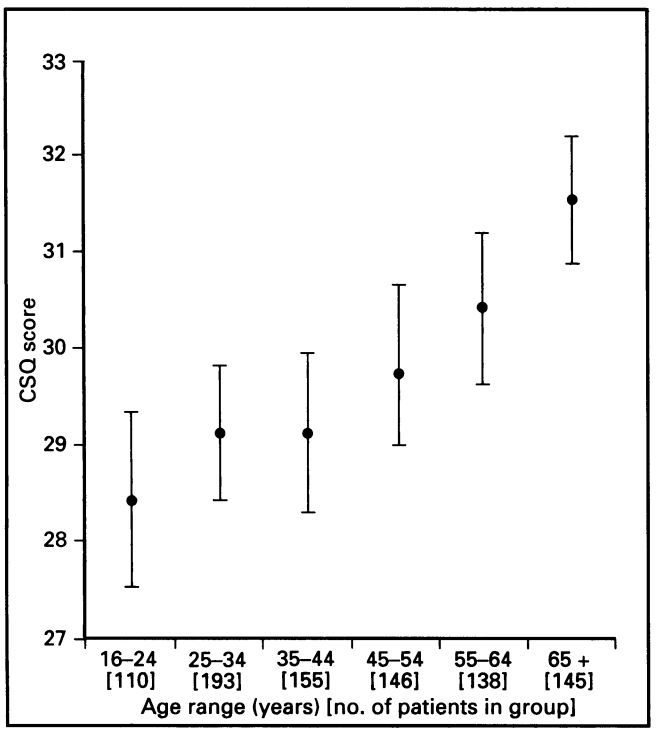

Figure 1. *Satisfaction ratings by age (mean consultation satisfaction questionnaire (CSQ) scores with 95% confidence intervals).*

The six doctors who assigned higher general practitioner rating questionnaire scores than the median had patients who scored more highly on the consultation satisfaction questionnaire than those patients of the general practitioners who tended to rate the psychological contribution to the consultation lower (mean 30.7 for 437 patients (95% CI 30.3 to 31.1) versus 28.9 for 456 patients (28.4 to 29.4); $P<0.001$). This same association was seen even when those patients who scored above the general health questionnaire threshold of eight were excluded (mean 30.8 for 304 patients (30.3 to 31.3) versus 28.9 for 329 patients (28.4 to 29.4); $P<0.001$).

There was no significant correlation between sensitivity or specificity (as defined on Table 1) of diagnosis of psychological disturbance by each doctor, and the proportion of dissatisfied patients: the correlation coefficients were –0.03 (95%CI –0.59 to 0.55) and –0.27 (–0.73 to 0.36), respectively.

Discussion

The age–sex distribution of the overall sample in this study was approximately representative of general practice consultations involving adults in the United Kingdom.[21]

The correlation between general practitioner rating questionnaire and general health questionnaire scores was reasonably high. Clearly, it is not possible to assign an absolute figure for the accuracy of diagnosis by this group of general practitioners (who are unlikely to be representative of general practitioners as a whole; five of the 12 doctors were members of a Balint group, and participation was incomplete). An approximate idea can, however, be obtained from the data presented — a mean of 85% for specificity and 45% for sensitivity in the assessment of psychopathology. Thus, it appears that about half the 'cases' as assessed by the 28-item general health questionnaire were missed. This finding accords with previous research.[2,3]

The data suggest that there are real differences between doctors in accuracy of detection of psychopathology. If the differences were simply explained by variations in threshold for diagnosis, it would be expected that sensitivity and specificity of detection by the general practitioners would vary inversely. In fact the opposite was found to be the case: there was a strong positive correlation ($r = 0.69$) between sensitivity and specificity,

suggesting that some doctors habitually make more accurate diagnoses than others.

Two previous studies have found that dissatisfaction is more prevalent in patients experiencing greater psychological distress.[22,23] Although there was no significant overall correlation between general health questionnaire and satisfaction scores in the present study, the least satisfied 10% of patients had significantly higher general health questionnaire scores than the more satisfied group. On the other hand, these same dissatisfied patients were assigned significantly lower general practitioner rating questionnaire scores by their general practitioners. This observation, taken together with the finding that patients with high scores on the general health questionnaire scale have significantly higher levels of satisfaction if the general practitioner rating questionnaire score was also high, suggests that there may be an important relationship between the recognition of psychopathology by the general practitioner and patient satisfaction.

The figure of 0.10 for the correlation coefficient between general practitioner rating questionnaire and consultation satisfaction questionnaire scores pooled across the 12 doctors is lower than the correlation coefficient of 0.15 derived from the total patient population. In other words, if the doctor is taken as the unit of analysis, the correlation between the general practitioner rating questionnaire scores and the consultation satisfaction questionnaire scores is weaker than if the patient is used as the unit of analysis. The doctor as an individual therefore appears to contribute to the relation between perceived psychological distress and patient satisfaction. This observation is supported by the positive correlation between the general practitioner rating questionnaire and consultation satisfaction questionnaire scores obtained for each general practitioner's patients. It may be, therefore, that there are factors relating to the doctor's style as well as to accuracy of diagnosis which affect satisfaction.[24]

Patient satisfaction depends upon many factors beyond the actual occurrences within a consultation: they include previous experience, entitlement and expectation.[25] It should also be borne in mind that the 'satisfaction' scores obtained here do not take into account other reported dimensions of satisfaction such as patients' perception of the efficiency of the surgery organization, thoroughness of the doctor's physical examination, or comprehensibility of explanations.[13,26]

The results presented here support the findings of Hopton and colleagues[23] of a relationship between age and satisfaction ratings: in particular, patients aged 65 years or over were very unlikely to express dissatisfaction. It should be noted that older patients (as well as those assigned higher ratings on the anxiety scale of the general practitioner rating questionnaire) were also somewhat less likely to complete the questionnaires.

It was decided to administer the general health questionnaire following, rather than prior to, the consultation. The argument in favour of this was that as well as simplifying administration of the survey, patients were not primed to the psychological aspects of their problems before seeing the doctor. It is, however, possible, that the consultation itself may have altered the general health questionnaire responses.

It may be that the relationship described here between detection of psychological distress and patient satisfaction was not directly causal. For example, hostile (and therefore more dissatisfied) patients might be more difficult to diagnose accurately. Against this explanation is the observation that mean general health questionnaire scores did not differ significantly between the patients of the six doctors with the highest proportions of dissatisfied patients and the six with the lowest proportions. On the other hand, general practitioner rating questionnaire scores for the patients of the six general practitioners with more dissatisfied patients were significantly lower than for those of the six general practitioners with the more satisfied patients.

Another explanation may be that a third variable, for example above average communication skills on the part of the general practitioner,[27] leads to both an increased tendency to formulate consultations in psychological terms and to increased patient satisfaction. Such an explanation still supports the notion that there are characteristics which influence both the 'psychological mindedness' of the doctor and patient satisfaction with the human relationship aspects of the consultation. This contention is supported by the finding that satisfaction ratings were higher among the patients of doctors who habitually ascribed greater importance to psychological factors: both among the whole patient population and when patients with high general health questionnaire scores were excluded. Although only 12 doctors were studied, it appears to be the overall willingness of the general practitioner to ascribe greater importance to psychological factors, rather than overall diagnostic accuracy, which predicts the proportion of patients dissatisfied with the inter-personal aspects of the consultation.

It is plausible, therefore, that raising general practitioners' willingness to rate psychological factors in the consultation more highly will lead to increased patient satisfaction, at least with those aspects of the consultation directly concerned with the relationship between patient and doctor. Since patient satisfaction is being increasingly recognized as an important medical outcome, studies of educational interventions aiming to increase doctors' awareness of psychological factors should be performed to clarify this issue. Broader measures of satisfaction than that used in the present study would give a clearer overall picture of the value of recognition of psychological distress.

Appendix 1. Patient satisfaction questionnaire (based on Baker[13]).

Patients were asked to respond to each question by marking one of the following choices: 'agree strongly', 'agree', 'no opinion', 'disagree' or 'disagree strongly'.

1. This doctor was interested in me as a person, and not just my illness.
2. I understand my illness much better after seeing this doctor.
3. There are things this doctor does not know about me.
4. This doctor knows all about me.
5. I felt this doctor really knew what I was thinking.
6. I felt able to tell this doctor about very personal things.
7. I would find it difficult to tell this doctor about some private things.
8. The time I was allowed to spend with the doctor was not long enough to deal with everything I wanted.

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