Patient expectations: What do primary care patients want from the GP and how far does meeting expectations affect patient satisfaction?

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There is growing recognition of the importance of patients' expectations in general practice. This study aimed to investigate the types of expectations adult primary care patients have prior to consulting the GP, and how far meeting expectations is associated with increased satisfaction. Patients ($n = 504$) attending general practitioners ($n = 25$) at 10 London general practices were included in the study. The Patients Intentions Questionnaire (PIQ) was administered prior to the consultation to investigate patients' expectations and the Expectations Met Questionnaire (EMQ) was administered after the consultation to find out what the patient reportedly obtained. Satisfaction with the consultation was also measured using the Medical Interview Satisfaction Scale (MISS). The results of a principal components analysis of PIQ item scores indicated that the most wanted items were for 'explanation of the problem'. There was less desire for 'support' or 'tests and diagnosis'. Many of the 'support' items could potentially be provided to all patients, yet a proportion of patients reported not receiving these items from the GP. The results of one-way ANOVAs revealed that patients with greater numbers of their expectations met reported significantly higher satisfaction with the consultation than those with lower numbers met. The PIQ and EMQ could be potentially useful self-audit tools for use by general practitioners and trainee GPs.

Introduction

Good communication between doctors and their patients is an essential part of medical care. When the quality of communication with the doctor is rated highly patients are more likely to be satisfied[1] and this in turn has been found to lead to greater patient adherence to the doctors' advice or prescribed treatment plan.[2,3]

The doctor–patient relationship has been described as the 'cornerstone of general practice' and it has been stated that the most effective and productive doctor–patient relationships in general practice occur when the doctor has a clear understanding of the patients' actual concerns as well as an accurate clinical diagnosis.[4]

The expression of patients' needs is an essential dimension of the communication process and there is a growing recognition of the importance of patients' expectations in General Practice.[5-9] However in much of the literature the term 'expectations' is not clearly defined. Prior knowledge and information from previous visits may result in a patient having an 'expectation' of a short consultation and the administration of a prescription but the patient may actually desire a long consultation and the discussion of concerns. Therefore a patient can have 'expectations' about how a doctor will behave yet not necessarily desire what is expected. An example of this problem occurs in a recent British study.[6] Primary care patient expectations were measured using questionnaires which asked each patient 'How do you think the doctor will be able to help you with your problem?' and then instructed the subjects to tick as many of the following actions: 'give you a prescription', 'refer you to hospital', 'give you advice', 'help you in some other way'. By this method it would not be clear to the

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patients whether they should respond according to what they themselves want or what they merely expect that they will be given by the GP.

To avoid this problem the study described in this paper followed Levenstein and colleagues[10] definition which defines patient expectations as:

> the individuals' stated reasons for the visit . . . that often relate to a symptom or a concern, for which is anticipated an acknowledgement or a response from the physician.

Following this definition an expectation may be expressed in the form of a 'statement', a 'question' or as a 'request for a particular service'. Patient expectations are defined in terms of patients' needs, requests or desires prior to seeing the doctor.

There has been increasing recognition that more emphasis must be placed on the needs of individual patients.[11,12] Previous studies have been carried out to investigate primary care patients' expectations. A recent study was carried out to investigate the relationship between patients' expectations and GPs' actions.[6] Salmon and Quine (1989)[13] developed the Patient Intentions Questionnaire (PIQ) for use on a UK primary care patient sample as a measure of patient expectations. This scale has been used to investigate the relationship between primary care patients' expectations and their physical and psychological symptoms when attending to consult with a GP.[5]

There has been little attempt in the UK to investigate and demonstrate quantitatively how far a congruence between primary care patients' expectations and what they receive from the general practitioner affects patient satisfaction. The PIQ was used in this study to measure patient expectations and was adapted to create the Expectations Met Questionnaire (EMQ) to measure what patients reported receiving from the GP immediately after the consultation.

This study set out firstly to report on the types of needs of adult primary care attenders. The second aim was to investigate whether meeting patients' expectations by GPs leads to greater reported satisfaction in primary care patients. The third aim was to see what percentage of patients reported their expectations not being met and for which particular areas.

Methods

Subjects
The general practice surgeries were five practices in north London and five in south London. The GP sample included 25 (14 male, 11 female) GPs from the 10 practices, comprising of seven academic GPs and 13 of their partners from six practices, and five GPs from the four other surgeries. The patient sample consisted of 504 adult primary care patients, attending the 10 practices for a range of health-related concerns.

Measures

Expectations
The Patients' Intentions Questionnaire[13] (PIQ) was used to measure patients' expectations. This consists of 42 statements about what they want from the GP during the given visit (e.g. 'I want the doctor to explain what is wrong with me', 'I want the doctor to explain my emotional problems'). Patients are asked to indicate on a 3-point scale ('Agree' = 2, 'Uncertain' = 1, 'Disagree' = 0) how far they agree that they are seeking the item.

Meeting Expectations
The PIQ was also adapted to create the Expectations Met Questionnaire (EMQ) which consists of the same 42 PIQ statements about what they received from the GP during the given visit (e.g. 'The doctor explained what is wrong with me', 'The doctor explained my emotional problems') and was completed by all patients immediately after the consultation.

Satisfaction
The Medical Interview Satisfaction Scale (MISS)[14] was selected to measure patient satisfaction with the consultation, since it is one of few consultation specific measures. The MISS scale consists of 26 Likert-type items with 5-point response choices: 'strongly agree' (scored 5 if the item is positively worded and 1 if negatively worded), 'agree' (scoring 4 or 2), 'uncertain' (scoring 3), 'disagree' (scoring 2 or 4) and 'strongly disagree' (scoring 1 or 5). This scale is comprised of three sub-scales: cognitive, affective and behavioural. There are nine cognitive items (relating to the doctors' provision of explanation and information and the patients' subsequent understanding of their given problem and treatment), nine affective items (referring to the patients' feelings of trust and confidence in the doctors' attention to the patients' concerns) and eight behavioural items (measuring the patients' evaluation of the doctors' ability in diagnosing the problem and subsequent treatment of the condition). The scale can be scored by either summing the scores for the sub-scales and dividing by the number of responses for each sub-scale or by using the total score of all items.

Procedure
The GPs were invited to take part in the study and were told that the purpose of the study was to gain information on patients' needs and patient satisfaction. All GPs who were approached agreed to take part in the study. The GPs were not shown copies of the measures prior to, or during data collection.

The data collection was carried out over the period from November 1990 to October 1992. During this time 600 adult primary care patients attending for either morning or evening appointments were approached in
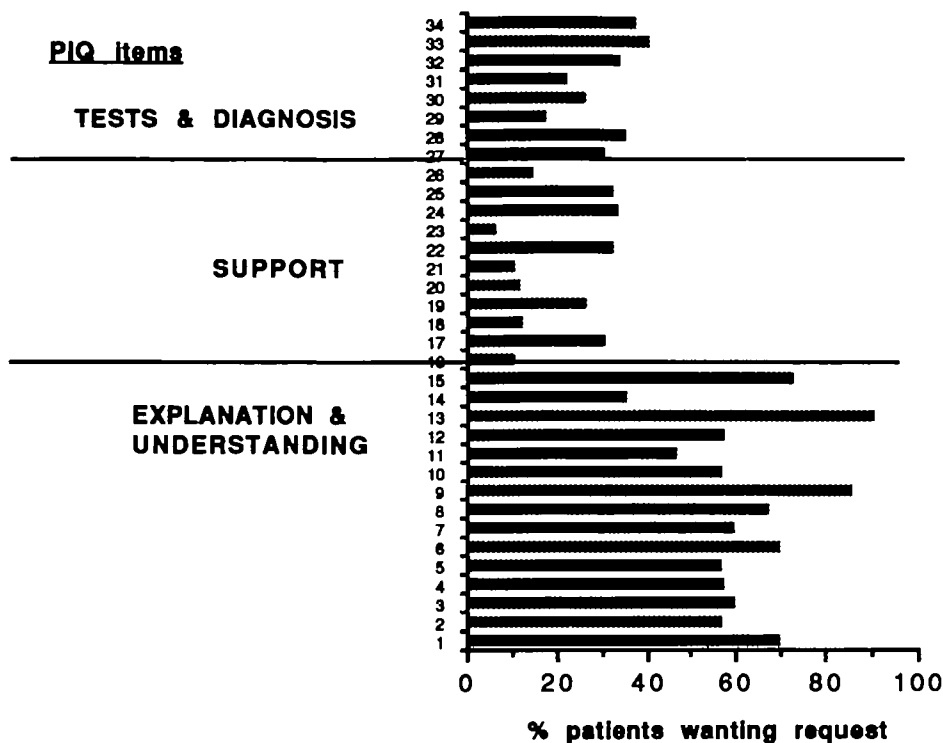
FIGURE 1 *Percentage of patients expressing a desire for each item of the Patients' Intentions Questionnaire prior to the consultation*

the waiting rooms of the 10 London general practices by one of three research assistants. Verbal consent to include each patient in the study was obtained. One practice was used as the pilot site and 20 consultations with one female GP were included in the initial pilot phase. All patients were told that the purpose of the study was to investigate patients' needs and to see how far their needs were met. It was emphasised that all responses would remain anonymous and confidential and would not be shown back to their respective GP. Patients in this study were asked to complete the Patients' Intentions Questionnaire prior to the consultation and the Expectations Met Questionnaire and Medical Interview Satisfaction Scale immediately after the consultation.

Results

Data was obtained for 504 patients, giving a response rate of 84%. The mean age of the patient sample was 40.9 years (range 17.2–85.5 years, SD = 16.6 years). The sample was composed of 193 males and 311 females.

Principal Components Analysis of PIQ Items
All data analysis was carried out using the SPSS[x] program.[15] A principal components analysis was performed on the measure of patients' expectations (PIQ scores), using the correlation matrix and Varimax rotation.[16] Loadings over 0.40 were used to interpret components. Three components were found which explained 40% of

the total variance (see Figure 1). The first component, 'Explanation of the problem', refers to requests for explanation of the cause, course and prognosis of the problem and this factor was most important accounting for 27% of the variance. The second component, 'Support', is comprised of requests for general emotional support and support in relation to emotional problems and this factor accounted for 8% of the variance. The third component was labelled 'Tests and diagnosis', referring to requests for medical tests and diagnostic related information and accounted for 5% of the variance. Six items failed to load on to any component and two loaded onto a fourth component.

Patients' Desire for PIQ Items and the Meeting of Expectations
Figure 1 displays the percentage of patients requesting each item of the three components from the PIQ scores. In general the most frequently cited expectations were 'explanation of the problem' items, with less desire for 'support' and 'tests and diagnosis' items.

The PIQ and EMQ scores were cross-tabulated. This included only cases where there was no missing value for either the PIQ or EMQ rating. Figures 2–5 show the results of the proportion of patients reporting having their expectations met by the GP, those not having their expectations met and those who did not desire but received a given item. In general, a greater proportion of patients reported not receiving 'explanation of problem' component items (Figure 2) and 'test and
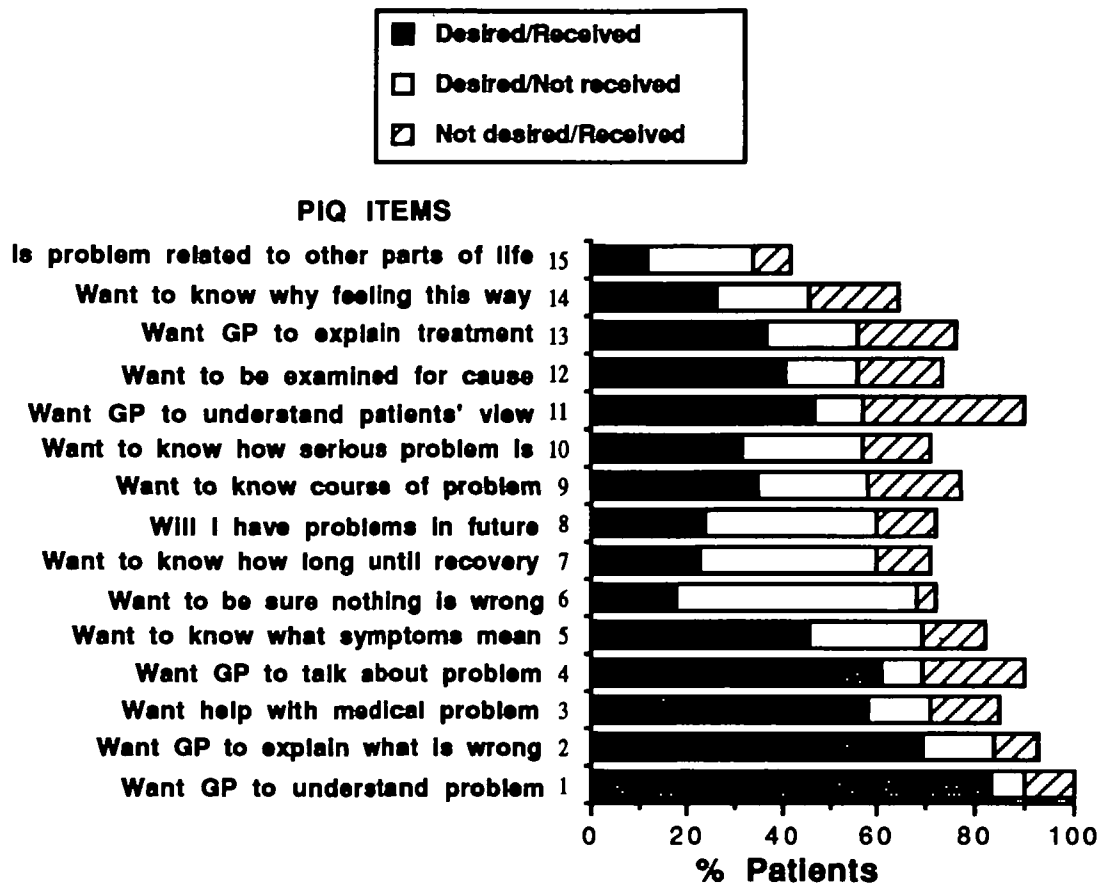
FIGURE 2   *Proportion of patient sample desiring and receiving 'explanation of problem' items from the Patients' Intentions Questionnaire (PIQ) (n = 422)*

diagnosis' items (Figure 4) than 'support' items (Figure 3) and the remaining PIQ items (Figure 5).

Explanation of Problem

Figure 2 displays the proportion of the sample receiving or not receiving 'explanation of problem' items. The expectation that was wanted by the largest percentage of the sample prior to the consultation was for the GP to understand the problem (90%). From this percentage, 83% reported that they felt that the doctor had understood their problem and 7% that the GP had not understood the problem after the consultation. The second most frequently wanted item overall by the sample was for the GP to explain what was wrong (84%). Of this proportion, 69% reported that the GP explained what was wrong, 15% that the GP did not explain what was wrong and 9% who did not express a desire for this item reported receiving an explanation from the GP.

Support

Figure 3 shows the proportion of patients receiving or not receiving 'support' items. The most frequently wanted 'support' item was to talk about their own feelings during the consultation (32% of sample). Nineteen per cent reported that they were able to do so whilst

13% stated that they did not talk to the GP in this way. Twenty-six per cent not wanting this item reported that they did talk about them with their GP during the visit.

Tests, Diagnosis and Prescriptions

Figure 4 displays the proportion of the sample receiving or not receiving 'test and diagnosis' items. The most frequently reported 'test and diagnosis' item was wanting some tests carried out (39%). From this percentage more patients reported not receiving tests (21%) than those who reported that tests were performed (18%). When looking at the expectation of receiving a prescription 55% of patients wanted a prescription, of this percentage, 37% received one and 18% reported not having one from the GP (Figure 5).

Meeting Patient Expectations and Satisfaction

The MISS scores were calculated by summing the scores for each of the sub-components and dividing by the total number of responses for the sub-scale. Most patients expressed high levels of satisfaction by the MISS scores (Table 1).

The number of expectations met was calculated by creating new variables using SPSS[x].[17] This involved summing the number of times each patient indicated wanting an item and subsequently indicating having
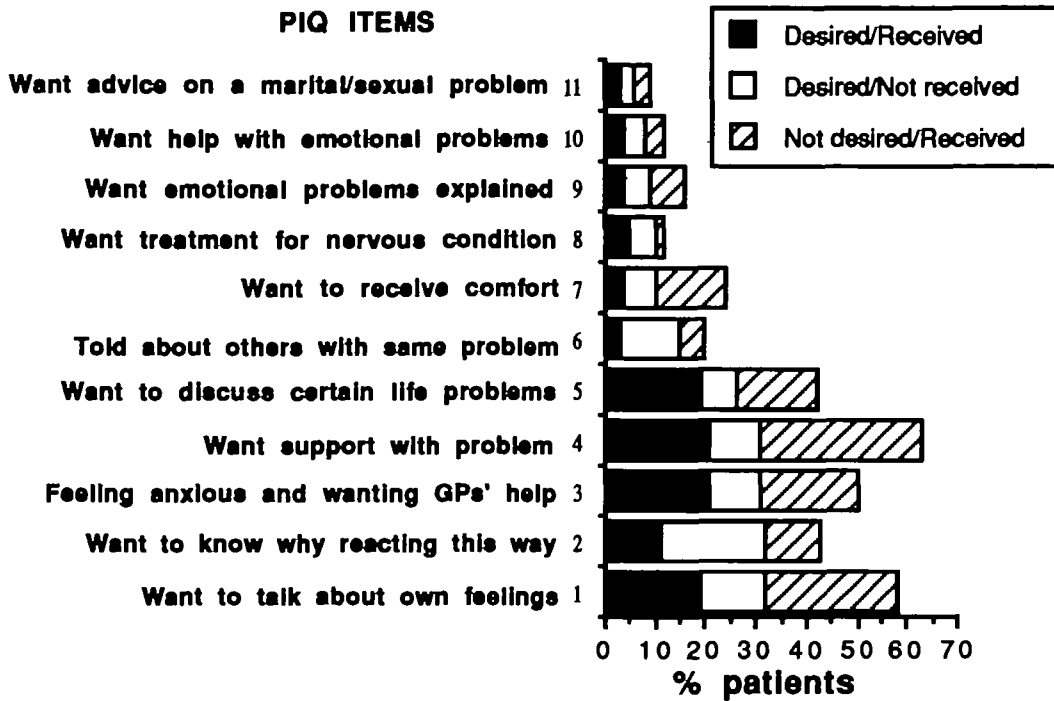
PIQ ITEMS

FIGURE 3   Proportion of patient sample desiring and receiving 'support' items from the Patients' Intentions
Questionnaire (PIQ) (n = 418)

PIQ ITEMS

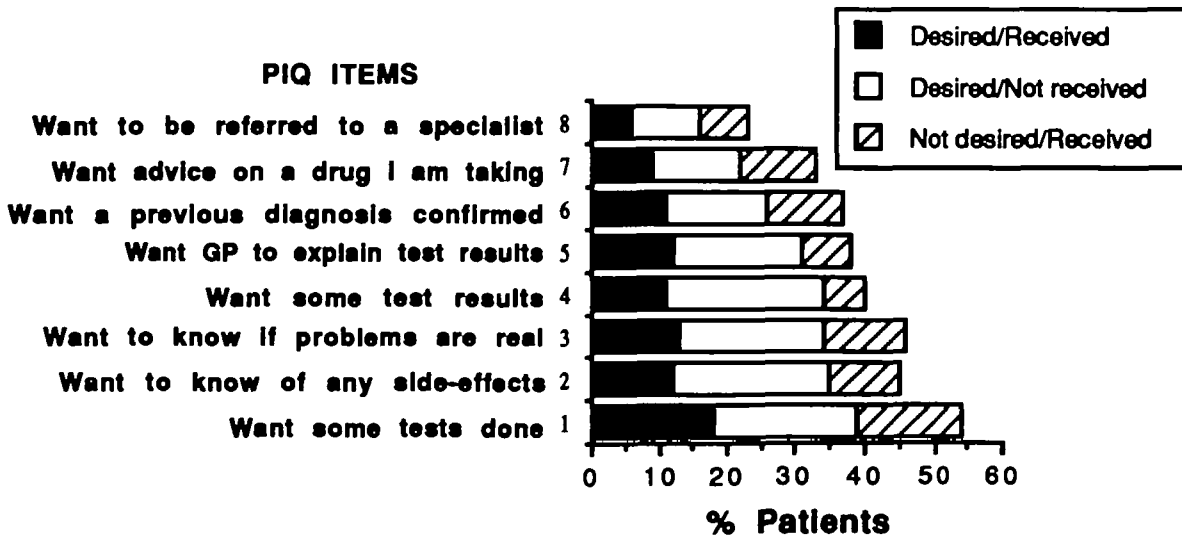

FIGURE 4   Proportion of patients desiring and receiving 'test and diagnosis' items from the Patients' Intentions
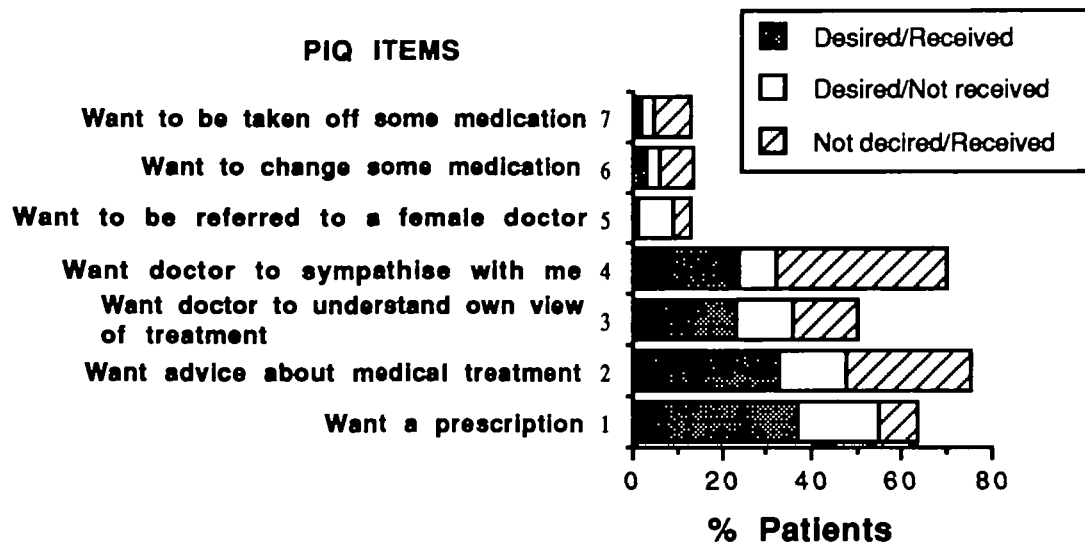Questionnaire (PIQ) (n = 420)

PIQ ITEMS

FIGURE 5   *Proportion of patient sample desiring and receiving items from the Patients' Intentions Questionnaire that did not load onto components (n = 422)*

TABLE 1   *Medical Interview Satisfaction (MISS) scores*

Sub-components of MISS	Range	Mean	SD	n
Affective	1.2–5.0	4.2	0.6	440
Behavioural	1.4–5.0	4.2	0.6	439
Cognitive	1.0–5.0	4.0	0.8	440

Possible score range 1-5, higher scores indicating higher satisfaction.

received the item (i.e. scores of '2' for the PIQ item and '2' for the corresponding EMQ item) and dividing by the total number of items wanted for each patient. Table 2 shows the mean, range and standard deviation of the percentage of expectations and expectations met for the sample. Patients were divided into three approximately equally sized groups according to the number of expectations met by the GP; 'low' (3–52% of expectations met), 'moderate' (53–74% of expectations met) or 'high' (75–100% of expectations met). One-way analyses of variance (ANOVAs) were carried out with satisfaction as the dependent variable.

Figures 6–8 show the results of the one-way analyses of variance. Group 1 (low number of requests obtained) was found to be significantly different $(P < 0.05)$ from Groups 2 and 3 (moderate and high numbers of re-

TABLE 2   *Mean percentage of expectations and expectations met for the sample*

Variable	Range	Mean	SD	n
Expectations (PIQ items)	0–38	16	8	504
Expectations met	3–100%	63%	23%	419

quests obtained). Patients with fewer numbers of their expectations perceived as being met therefore reported significantly lower rates of satisfaction with the consultation. This difference was found to be significant across all the satisfaction scores of the three MISS components (Figures 6–8).

To investigate whether these results were still found when dividing patients according to their overall number of expectations, patients were divided into three groups ('low', 'moderate' or 'high' number of PIQ items wanted overall). The 'low' number of expectations group was further sub-divided according to the number of expectations met ('low', 'moderate' and 'high'). A one-way ANOVA was carried out with satisfaction as the dependent variable. This analysis was repeated for the 'moderate' and 'high' number of expectations groups. The results indicated that the findings were maintained; patients reporting fewer of their expectations being met showed significantly lower rates of satisfaction with the consultation.

Discussion

The results of the principal components analysis indicates that the most frequently stated requests were for 'explanation of the problem' items followed by 'support' items. The least requested items were for 'tests and diagnostic related information'. This is consistent with previous evidence that medical treatment is generally a lower priority for general practice patients than the desires for information or support.[13]

In terms of meeting expectations, the majority of patients who wanted the GP to understand their problem and explain what was wrong, felt that these expectations along with many others were met. However, many of the 'support' items (e.g. 'want to talk about own feel-
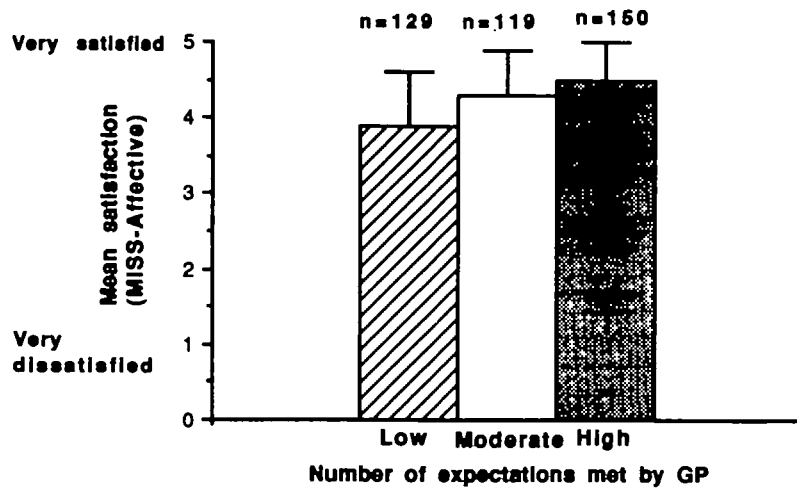
n=129   n=119   n=150

Very satisfied 5

Mean satisfaction (MISS-Affective)

Very
dissatisfied

Low   Moderate   High

Number of expectations met by GP

FIGURE 6   *Mean satisfaction (MISS-Affective) scores of patients with a low, moderate or high number of expectations met by the GP*
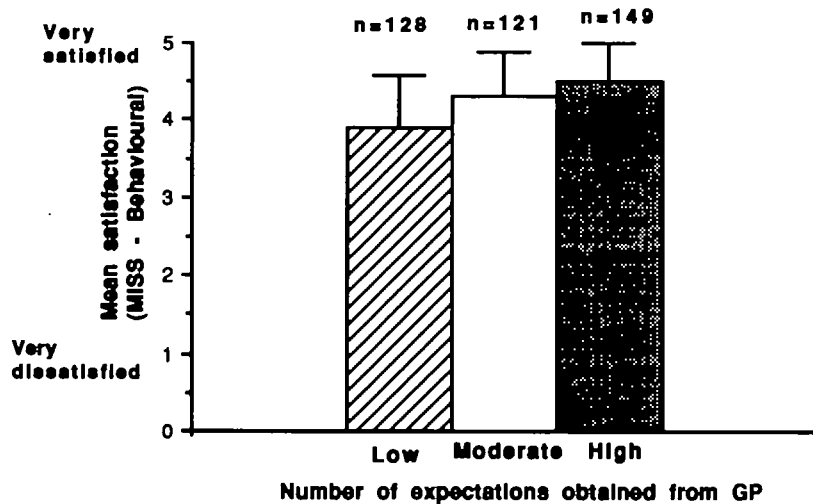
n=128   n=121   n=149

Very
satisfied 5

Mean satisfaction
(MISS - Behavioural)

Very
dissatisfied

Low   Moderate   High

Number of expectations obtained from GP

FIGURE 7   *Mean satisfaction (MISS—Behavioural) scores of patients with a low, moderate or high number of expectations met by the GP*

n=129   n=122   n=149

Very
satisfied 5

Mean satisfaction
(MISS - Cognitive)

Very
dissatisfied 1

Low   Moderate   High
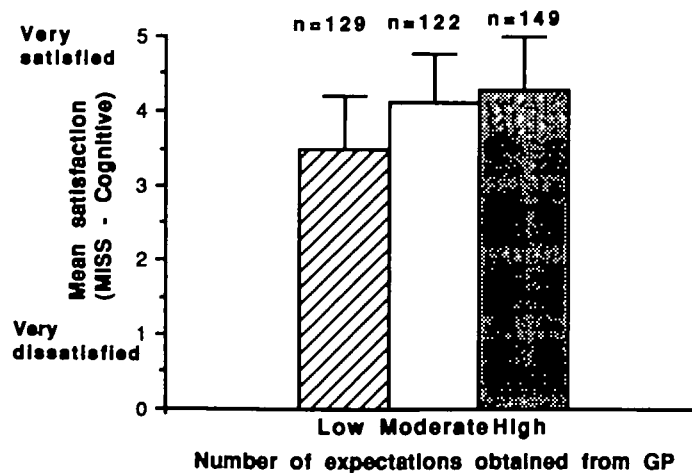
Number of expectations obtained from GP

FIGURE 8   *Mean satisfaction (MISS—Cognitive) scores of patients with a low, moderate or high number of expectations met by the GP*

ings', 'feeling anxious and wanting GPs' help', 'want support with problem', 'want to receive comfort', 'want to discuss certain life problems') and the item 'want the doctor to sympathise with me' could potentially be provided to all patients by all GPs and yet there was a proportion of patients who wanted these items stating that they were not met by the GP.

In other instances of not meeting expectations, it may be that the GP was unable to provide the information or request. For example, patients may fail to express their needs during the consultation or when expressed the patients' requests may be inappropriate for the presenting problem. Time constraints may prevent the opportunity to give long explanations to patients, the GP may not have known the diagnosis and therefore cannot provide 'explanation of problem' items. Therefore not meeting expectations in some cases may not necessarily reflect poor performance by the GP.

When looking at meeting expectations and patients' satisfaction with the consultation the results indicate that meeting patients' expectations is significantly associated with higher rates of satisfaction. Patients who reported higher numbers of expectations met were found to have significantly higher rates of satisfaction with the GP than those with a low number of desires granted during the consultation. From this, the measurement of patient expectations and the fulfilment of needs by using the PIQ and EMQ could be a useful method of self-audit for GPs and their trainees. These scales can be easily self-administered by adult patients whilst waiting to see the doctor and immediately after the consultation and therefore are potential audit tools. The data can be analysed to investigate the congruence between patient expectations and what they receive from the GP. This process could be repeated over time to investigate how far feedback on performance in this way is associated with improvement in meeting patients' expectations, especially in relation to items which are potentially applicable to all patients (i.e. 'support' items). Two modifications to the measures would be to include a section at the beginning of the PIQ for the patient to write why he or she is attending to see the GP that day and a section at the end to add any other expectations. The second modification would be to have a 'not applicable' category for all items on the PIQ and EMQ. All patients need to be told that their responses will remain anonymous to avoid the bias of socially desirable responses.

In conclusion, the findings of this study indicate that a high percentage of patients would welcome full explanations and suggests that this is a potential global need of most primary care patients, irrespective of the nature of the problem. The sample, however, has not been sub-divided according to the medical reason for the visit and for certain sub-groups the desire for 'explanation of the problem' or other categories of information may well be higher. Classification of the sample according to the presenting medical problem will be carried out in future analyses.

The results suggest that awareness by the GP of patients' expectations during consultations is vital to achieve effective communication. Such awareness can allow the GP to understand the patients' perspective, provide the desired level of information and inform patients if their desires for particular treatments/tests is inappropriate or unnecessary. For patients seeking greater explanation of a given problem, when appropriate the GP can also explain the time constraints and if necessary arrange a further appointment to see the patient or refer the patient to an appropriate agency. The fulfilment of patients' expectations and needs will depend upon the effectiveness of communication between the patient and the doctor, the appropriateness of the patients' expectations and the ability of the doctor to fulfil them or to refer the patient on if necessary.

The results presented in this paper are of the perceptions of the patient and it is therefore important to know details of the actual discourse between the doctor and patient during the consultation to gain more information about whether patients are expressing their needs and what particular communication styles lead to greater fulfilment of needs and higher satisfaction rates. The data presented in this paper is from a large scale study for which there is tape-recordings of the consultations for a large sub-sample of the patients included in the study. Future interaction analysis comparing the consultations of patients reporting high satisfaction and numbers of expectations met with patients reporting lower satisfaction and few expectations met will provide more detailed information which will be relevant for GP communication skills training.

Acknowledgements

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