

# Patient expectations and their satisfaction in the context of public hospitals

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**Background:** Patient expectations have been recognized as a factor for patient satisfaction in medical consultations. Although various studies explored the relationship between patient expectations and patient satisfaction in developed countries, there is a lack of research evidence in Ethiopia where the meeting of patient expectations could relate to satisfaction.

**Objective:** To assess the relationship between patients' expectations and their satisfaction in the consultation of patients at the outpatient department.

**Study design:** Data were collected regarding preconsultation expectations and postconsultation experiences of adult patients attending nine public hospitals. A systematic random sampling method was used where every fifth patient attending an outpatient department was selected. The patients were interviewed before consultation and after consultation to assess whether their pre-consultation expectations were met and to assess how satisfied they were with the consultation. Cronbach's alpha statistic was used to assess the reliability of the expectation questionnaires, and paired *t*-test was used to assess any differences between previsit expectations and postvisit experiences. Logistic regression techniques were used to assess variables considered as independent factors for patient satisfaction.

**Results:** A total of 776 patients were interviewed, giving a response rate of 92.3%. About 93.7% mentioned a diagnosis for their condition as a reason for their current hospital visits. There is a significant difference between preconsultation expectation and postconsultation expectation. Postconsultation expectation, perceived health status, and perceived control on health were factors identified as increasing patient satisfaction. In addition, the presence of any disappointments or worries, previous experience in health care, and extent of influence on the consultation had a negative influence on satisfaction.

**Conclusion:** Postconsultation expectation impacts patient satisfaction. Health care service providers should emphasize the actual experience of consultation.

**Keywords:** patient expectation, patient satisfaction, hospital health care, Ethiopia

## Introduction

Patients have a specific agenda when visiting the health service providers, which usually reflects concerns and problems they want the health service providers to address during consultation; it might also include their desires for specific services.<sup>1</sup> Many studies were concerned with measuring patients' expectations in diverse viewpoints going from the general expectations about health care accessibility and facilities to the more particular expectations related to health care providers' interpersonal and clinical skills. Interestingly, most of the patients' expectations are mainly focused on the health care provider's ability to show interest, ie, listening to patients' concerns, which is reported to be the general nature of expectation.<sup>2</sup> Other studies suggested that the most common expectations were health care providers'

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understanding, showing interest, and discussing problems or doubts.<sup>2,3</sup>

In addition, expectations are related to receiving information on pain management and advice on how to return to normal life,<sup>4</sup> or information about prognosis and prevention.<sup>5</sup> Generally, particular expectations for prescriptions, tests, or referrals appear to be far fewer than those for diagnosis, information, listening, or understanding.<sup>2</sup> Although it might appear that technical aspects (eg, prescriptions or tests) are of high importance for patients, it is reported that needs for support or information are more valued than technical interventions.<sup>2,6</sup>

Some studies used the concept of met expectations as a valid measure of satisfaction with the provided service, suggesting a direct relationship between unmet expectations and dissatisfaction, and vice versa.<sup>6-9</sup> However, other studies showed controversial results regarding this relationship,<sup>10-12</sup> while others related fulfilled expectations to a more important consultation outcome than satisfaction, for instance, seeking further medical care and adherence.<sup>2,13</sup>

It seems that some form of relationship exists between perceived service quality, patient expectations, and satisfaction.<sup>14</sup> However, the high satisfaction ratings reported cannot be considered to point to the fact that patients had a good experience in relation to particular services, for example, experiences do not necessarily correlate with the user's evaluations of the services.<sup>15</sup> Thus, valuing the quality of the service in terms of met expectations and higher patient satisfaction is tricky, as a previous review of the literature revealed that only 20% of studies considered expectations as determinants of satisfaction.<sup>16</sup> In that review,<sup>16</sup> patient's satisfaction is shaped by prior satisfaction with the health care, health status, age, and personal predisposition, which make it a very subjective evaluation of the service that would considerably vary according to the individual. Studies have defined patient satisfaction as an expression of the gap between the expected and perceived characteristics of a service,<sup>17,18</sup> whereas patient expectation is defined as the aspects of the hospital characteristics anticipated by prospective patients, regardless of preference, or what could be considered ideal.<sup>19</sup>

A previous study demonstrated that patient-reported experiences and fulfillment of expectations were the most important predictors of overall patient satisfaction.<sup>18</sup> Meeting patients' expectations is one measure of the quality of health care systems.<sup>20</sup> The evidence base in this area has been growing, but there is still a relative scarcity of studies, leading to some difficulties.<sup>2,21</sup> For example, there are a number of

expectations, different ways of communicating them, and a discrepancy in the literature concerning methods to ascertain, draw, and monitor patient expectations.<sup>2</sup>

Little is understood from the patient's perspective of health care experiences, especially in the developing country context. Thus, this study was intended to assess the relationship between patients' expectations and their satisfaction with the consultation provided by health care providers in the outpatient department of public hospitals in Ethiopia. It also aims to describe patients' perceptions of health care and their health conditions.

## Methods

### Study design and patients

A cross-sectional study that used interviewer-administered questionnaires was carried out to assess patient expectation and its relation to patient satisfaction on outpatient services. Adult patients who received care from outpatient clinics (general, medical, and surgical) were the subjects of the study.

### Sampling and data collection method

#### Sample size determination

A single population proportion sample size determination formula was used with the following assumptions: Proportion of patients satisfied with hospital care services was taken to be 53%, according to a study done in Amhara Region,<sup>22</sup> margin of error of 0.05, nonresponse rate of 10%, the desired confidence level of 95%, and design effect of 2. Thus, the required sample size calculated was 841.

#### Sampling procedure

Proportional allocation of sample was done to each hospital and department by considering the average patient flow of the outpatient departments in the same month of the preceding year and the month prior to the actual data collection period. The sample is regarded as a multistage systematic random sample because we had used a sampling frame of selecting hospitals as estimating average daily patient flow, which was estimated using the patient registration book in the outpatient departments. We used a systematic sampling technique to select respondents among outpatients every day from Monday to Friday of the week. For the purpose of this study, every fifth patient attending an outpatient department was selected.

#### Data collection procedure

The study was approved by the Institutional Review Board of College of Health Sciences, Addis Ababa University, Ethiopia. Written permission from the Amhara Regional

Health Bureau and respective study hospital administrators was also sought. Verbal informed consent was obtained from all participants prior to the interview. The information was gathered on two occasions. Right after being selected, the aims of the study were explained to the patient, their participation was requested assuring them the confidentiality of the information they would be providing, and the first questionnaire was administered and the preconsultation data were filled; then, the second questionnaire was administered after they completed their consultation and treatment (ie, at their exit). Because of low literacy among the study population, the research assistants did the interviewing using a structured interview guide. The data were collected in the local language – Amharic.

### Questionnaire

A structured questionnaire was adapted from a previous study that intended to assess realistic patient expectations in the processes of health care,<sup>17</sup> and questions were prepared by the investigator. To customize and adapt the tool to the local situation, we initially pretested it among 50 patients in the hospital. On the basis of the findings, minor modifications were made to the questionnaire.

### Preconsultation questionnaires

Information was gathered concerning the patient's realistic expectations about a specific consultation. The questionnaire included questions from the perspective of the patient's expectations in these terms: "Regarding today's consultation with your health care provider, to what extent do you agree with the following in relation to your visit?" They had to answer 20 items scored on a five-point scale: "strongly agree =1, agree =2, neither agree nor disagree =3, disagree =4, and strongly disagree =5" (Figure S1). The 20 items were comprised into four categories: Four items were related to finding their way around, 5 items were categorized under health care provider-patient communication style, five items were categorized under treatment/procedures performed and 6 items explored health care provider approach to information. Data were also obtained on health care experiences in the past 12 months.

### Attitudes and characteristics

In this section of the questionnaire, questions related to preferences about making decisions about medical care using Degner scale,<sup>23</sup> extent of feeling to influence the consultation, extent of agreement to take a positive attitude toward oneself, extent of control over health, perceived health status, and presence of any long-standing illness, disability, or infirmity were included.

Data on sociodemographic characteristics (age, sex, marital status, educational status, occupation, residence, and payment status) were also collected.

### Postconsultation questionnaire

As soon as the patient left the health care provider's room after completing their treatment, an exit questionnaire was administered to assess the extent to which patients' expectations of their visit and consultation were met. This questionnaire contained 20 items to assess patients' extent of agreement in relation to their visit and consultation, which had been scored on a five-point scale: "strongly agree =1, agree =2, neither agree nor disagree =3, disagree =4, and strongly disagree =5" (Figure S2). The highest expectation could be represented by a value of 1. Hence, higher expectations are reflected by lower scores.

### The visit overall

Questions that show extent of influence in the consultation, things that needed to be done at this consultation but were not done, or things that disappointed, worth of the consultation, and overall satisfaction with their visit were included. In this study, overall patient satisfaction was measured with a single Likert-type item question asking respondents to rate their overall satisfaction with their consultation, on a five-point Likert rating item ranging from "very satisfied" to "very dissatisfied." The single Likert-type global patient satisfaction measurement has been validated and used in other studies.<sup>17,18,24,25</sup>

### Statistical analysis

The pre- and postconsultation expectation Likert data were analyzed using the interval measurement scale.<sup>26</sup> Overall pre- and postconsultation expectation mean scores were calculated by summing scores for each of the individual domains. Paired-samples *t*-test was used to compare the mean difference between pre- and postconsultation expectation scores. Satisfaction was dichotomized into satisfied and dissatisfied. The very satisfied and satisfied were categorized under the satisfied group, and neither satisfied nor dissatisfied, dissatisfied, and very dissatisfied were categorized as dissatisfied group. Multivariable logistic regression was performed with predictive variables with patient satisfaction. Variables were selected if their bivariate significance showed  $P \leq 0.1$  to enable the likelihood of variables attaining statistical significance when the confounding effect of another variable was controlled. *P*-values of  $< 0.05$  were considered significant.

We used SPSS version 17.0 (SPSS, Inc., Chicago, IL, USA) for data analyses. Internal reliability for each scale was evaluated by Cronbach's alpha. Cronbach's alpha for the preconsultation expectation scale was 0.86, and Cronbach's alpha for postconsultation scale 0.94, which suggest that the scales showed good to excellent internal consistency.<sup>27</sup>

## Results

### Sociodemographic characteristics of respondents

Of the target number of 841 patients, 776 participated in the study, giving a response rate of 92.3%. A higher proportion of the respondents were males (468 [60%]). The median age of the respondents was 31 years, with a range of 18–80 years. Approximately 21% of patients reported themselves as illiterate, and two-thirds were rural inhabitants. A higher proportion of respondents were farmers, 474 (61%) and paying patients, 753 (97%) (Table 1).

### Health care visits by respondents

Table 2 shows that 172 (22.2%) respondents had previous experience in the medical health care services. In addition,

**Table 1** Sociodemographic characteristics of respondents (N=776)

Characteristics	Frequency	Percent
Age, years		
Median age	31	
Sex		
Female	308	39.7
Male	468	60.3
Marital status		
Married or cohabiting with partner	543	70.0
Divorced or separated	54	7.0
Widowed	19	2.4
Single	160	20.6
Educational status		
Illiterate	162	20.9
Read and write	152	19.6
Grade 1–8	196	25.3
Grade 9–10	114	14.7
Grade 11–12	4.3	5.5
Higher education	109	14.0
Occupation		
Employed	101	13.0
Merchant	125	16.1
Farmer	474	61.1
No job	43	5.5
Other	33	4.3
Residence		
Urban	255	32.9
Rural	521	67.1
Payment status		
Paying	753	97.0
Free	23	3.0

**Table 2** Health care visits and reasons for the current visit (N=776)

Characteristics	Frequency	Percent
Previous experience of health service utilization		
Yes	172	22.2
No	604	77.8
Reasons for the current health service visit*		
To get diagnosis	727	93.7
For reassurance	57	7.3
To get the results of test	41	5.3
Treatment	384	49.3
For a health checkup/appointment	43	5.5
To ask for a referral	36	4.6
Duration of symptom/problem for the current visit		
One week or less	240	30.9
Between 1 week and 1 month	359	46.3
1–6 months	91	11.7
6–12 months	42	5.4
≥12 months	44	5.7

**Note:** \*Multiple response question.

240 (30.9%) of the respondents mentioned their symptoms (health problem) lasted 1 week or less. Three hundred and fifty nine (46.3%) patients reported symptom duration between 1 week and 1 month. Of the total 776 participants, 93.7% visited hospitals for the diagnosis of their health conditions, while 49.3% mentioned prescription refill and/or in need of medical or surgical procedure as reasons for their current consultation.

### Respondents' perception toward decision-making in health care and their health conditions

As shown in Table 3, only one-fifth of the respondents preferred to take an active role in treatment-related decisions; eleven (1.4%) and 145 (18.7%) of participants preferred to make final decisions about medical care and final selection of the treatment after considering health care provider's opinion, respectively.

About 488 (62.9%) respondents perceived that they could moderately influence the consultation to achieve the outcome they wanted. About a quarter of respondents strongly agree to take a positive attitude toward themselves, whereas fewer (18%) perceived that they had a lot of control over their health. Regarding self-perceived health status, approximately two-thirds of patients perceived that their health status ranged from good to very good, relative to their age. About 87% of patients perceived that they did not have long-standing illness, disability, or infirmity. In those respondents with chronic illness, hypertension, diabetes, heart problem, back pain, and headache were mentioned as the most common long-standing health problems.

**Table 3** Respondents' perception toward decision making in health care and their health conditions

Perceptions	Number (N=776)	Percent
Preference in making decisions about medical care		
I prefer to make the final decision about which treatment I will receive	11	1.4
I prefer to make the final selection of my treatment after seriously considering my doctor's opinion	145	18.7
I prefer that my doctor and I share responsibility for deciding which treatment is best for me	412	53.1
I prefer that my doctor makes the final decision about which treatment will be used, but seriously considers my opinion	138	17.8
I prefer to leave all decisions regarding my treatment to my doctor	70	9.0
Influence the consultation to achieve the outcome you want		
A lot	152	19.6
A moderate amount	488	62.9
A little	113	14.6
Not at all	23	3.0
Extent of agreement to take a positive attitude toward him/herself		
Strongly agree	200	25.8
Agree	464	59.8
Neither agree nor disagree	26	3.4
Disagree	86	11.1
Strongly disagree	0	0
Extent of control over your health		
A lot of control	141	18.2
Some control	427	55.0
A little control	92	11.9
No control	116	14.9
Perceived health status		
Excellent	0	0
Very good	227	29.3
Good	283	36.5
Fair	164	21.1
Poor	76	9.8
Very poor	26	3.4
Presence of longstanding illness, disability or infirmity		
Yes	104	13.4
No	672	86.6

## Respondents' perception of the overall health care visit

About two-thirds of the respondents were able or attempted to influence the consultation to get the outcome they wanted. About 211 (27.2%) respondents said that they were disappointed with the consultation. Some of the things that needed to be done at this consultation that were not done were: patients perceived that the health care provider did not know their real health problem, the provider did not give enough time for discussion, the provider did not reassure them about their health condition, the provider did not use diagnostic equipment and/or laboratory investigations, the provider did not conduct physical

examination, and the provider gave short consultation time. About 116 (14.9%) of respondents believed that the consultation was not worthwhile. When we evaluated respondents' global satisfaction level, 243 (31.3%) and 351 (45.2%) were very satisfied and satisfied, respectively (Table 4).

## Differences in preconsultation expectation and postconsultation experience

Paired sample *t*-test was performed to assess the mean differences between the patient's expectations before consultation and his/her experiences after consultation. The results revealed a significant difference in overall expectation from preconsultation to postconsultation ( $\bar{x}_1=39.62\pm 10.27$ ) to ( $\bar{x}_2=47.34\pm 14.45$ ) with ( $t=-12.95$ ,  $P<0.001$ ). This mean expectation score increase from preconsultation to postconsultation indicated that patients expectations in the preconsultation were not met. Among the subscales, all subscales except the health care provider-patient communication style subscale had significant difference between preconsultation and postconsultation expectations (Table 5).

## Predictors of patient's satisfaction

Table 6 lists independent predictors of patient satisfaction. The logistic model fit well (Hosmer-Lemeshow test,  $P>0.05$ ) and was statistically significant,  $\chi^2=86.72$ ,  $P<0.0001$ . The model explained 14.9% (Nagelkerke  $R^2$ ) of the variance in patient satisfaction and correctly classified 71.6% of cases.

The multivariable logistic regression showed that the probability of patient satisfaction is contingent on postconsultation expectation score level. The higher the score

**Table 4** Postvisit perceptions and patient's satisfaction of consultation in the outpatient department

Postvisit perceptions	Number (N=776)	Percent
Extent of influence on the consultation		
A lot	72	9.3
A moderate amount	510	65.7
A little	126	16.2
Not at all	68	8.8
Are there things that disappointed you in the current consultation?		
No	565	72.8
Yes	211	27.2
Perceived worthiness of the consultation		
Worth it	267	34.4
Too early to say	393	50.6
Not worth it	116	14.9
Overall, how satisfied are you with your visit this time		
Very satisfied	243	31.3
Satisfied	351	45.2
Neither satisfied nor dissatisfied	123	15.9
Dissatisfied	41	5.3
Very dissatisfied	18	2.3

**Table 5** Mean differences between pre- and postconsultation expectation

Expectations	Preconsultation	Postconsultation	t	P-value
	Mean ± SD	Mean ± SD		
Receiving instructions from health care provider	7.9±2.51	8.80±3.06	-6.36	<0.001
Health care provider-patient communication style	11.24±3.55	10.92±3.78	1.71	0.087
Treatment given/procedures performed	9.20±2.53	11.77±3.09	-18.23	<0.001
Health care provider approach to information	11.24±3.57	15.85±6.67	-17.66	<0.001
Overall expectation	39.62±10.27	47.34±14.45	-12.95	<0.001

**Note:** Low mean values = high expectations and vice versa.

**Abbreviation:** SD, standard deviation.

of postconsultation expectation, less likely the patients are satisfied. Participants with excellent to good self-perceived health status were 3.5 times (OR, 3.53, 95% CI; 2.27–5.49) more likely satisfied than fair to very poor self-perceived health status. Similarly, the odds of satisfaction were higher among participants who had a lot of perceived control on health compared to their counterparts. The odds of satisfaction were significantly lower among patients who were disappointed (OR, 0.32, 95% CI; 0.22–0.47) compared to patients who were not disappointed. Similarly, the odds of satisfaction were lower among participants who had previous health care service experience compared to their counterparts. On the other hand, compared to patients who felt a lot of influence on the consultation, the odds of satisfaction for those with no influence was significantly lower (OR, 0.58, 95% CI; 0.37–0.91).

## Discussion

To the best of our knowledge, this is the first pre- and post-consultation study aimed to assess the relationship between patients' expectations and their satisfaction in the consultation of patients at the outpatient department across nine public hospitals in Ethiopia.

The reasons for hospital visits mentioned by the majority of the participants were either to get a diagnosis for their

health condition or for prescription refill, medical, or surgical procedure.

When we compared the summed mean values of pre- and postconsultation, there was an increment in mean values during postconsultation. This was also shown in all expectation subcategories. This indicates that patients had high expectations before consultation but faced difficulty in the actual medical setting in fulfilling these expectations. The results of this study pointed out that there were differences between preconsultation expectation and postconsultation expectation/experience. Among the subscales, receiving instruction, treatment given/procedures performed, and health care provider approach to information showed significant difference, but health care provider-patient communication style did not show significant difference.

Multivariable regression analysis illustrated that postconsultation expectation, perceived control on health, perceived health status, perceived extent of influence on the consultation, any disappointments, and health care experience were determinants of patient satisfaction.

Our result indicates that preconsultation expectation was not a predictor for patient satisfaction. Patient satisfaction was determined by the postconsultation expectations, but these expectations were not fulfilled. This result is inconsistent with prior studies, which underlined the importance

**Table 6** Results of the logistic regression analysis showing independent association of global patient satisfaction

Variables	$\beta$	P-value	Odds ratio	95% CI for Exp(B)	
				Lower	Upper
Post-consultation expectations mean score	-0.012	0.038	0.988	0.976	0.999
Pre-consultation expectations mean score	-0.011	0.188	0.990	0.974	1.005
Perceived control over health (does not =0, A lot of control =1)	0.749	<0.001	2.115	1.343	3.329
Perceived health status (fair to very poor =0, excellent to good =1)	1.263	<0.001	3.538	2.277	5.496
Felt extent of influence to the consultation (moderate to not at all =0, a lot =1)	-0.538	0.019	0.584	0.372	0.917
Disappointed (no =0, yes =1)	-1.121	0.000	0.326	0.223	0.476
Experience (no =0, yes =1)	-0.531	0.021	0.588	0.374	0.924
Constant	0.908	0.106	2.480		

**Notes:** N=776. Nagelkerke's  $R^2=0.149$ .  $\chi^2=86.72$ ,  $P<0.0001$ . Negative  $\beta$ -values for the Pre-consultation expectation and for the Post-consultation expectation indicate higher odds to be included in the satisfied group. For other variables with positive  $\beta$ -values, there is a higher odds to be included in the satisfied group.

**Abbreviation:** CI, confidence interval.

of fulfilled expectation for patient satisfaction.<sup>28,29</sup> This relationship between postconsultation expectations and high patient satisfaction is supported by other studies.<sup>6-9,17,30</sup>

Among the sociodemographic variables, age was significantly associated with patient's satisfaction in the bivariate analysis but insignificant in the final model. Previous experience in medical care had negative association with patient satisfaction. This might be due to a previous exposure to a hospital with less or no satisfactory service, which might in turn raise a concern on patient's safety and clinical effectiveness.

We found that patients were more satisfied when they had a lot of perceived control over their own health. This is in line with a prior study which showed that the personal ability to control one's environment has a positive effect on satisfaction.<sup>31</sup> This is also supported by a research finding that has shown a positive satisfaction with perceived control over the childbirth environment, even though the setting was in the maternity care.<sup>32</sup>

Interestingly, patients concerned with the consultation or disappointed with the consultation were unsatisfied. This could be explained by several reasons. Since patients expect the hospital as a place that diagnoses their problems and helps them get well, their expectations have not been met. This is also expressed by emotional feelings where disappointment with the current health care service depicts the patients' satisfaction. They might have also described the condition of their current illness – either they have debilitating and incurable disease and/or not sure about their future health.

Patients who perceived their health status was relatively good were more satisfied. This is supported by a study done in Ethiopia in which perceived health status was seen as a determinant of patient satisfaction.<sup>33</sup> This is also supported by other studies, reporting that a low perceived health status is associated with lower patient satisfaction.<sup>18,34,35</sup> Besides, Grøndahl VA et al,<sup>36</sup> explained in their study that patients could never acknowledge their satisfaction when they assume that their health condition is deteriorating and when they lack the hope to be cured. Patients who have a lot extent of influence on the consultation negatively predicted patient's satisfaction. This finding needs further investigations.

The findings of this study must be interpreted with the attention to the following limitations. This study mainly focused on the processes of hospital health care and did not include the structural aspects and outcome of health care. The result is only from the patients' point of view about the consultation; it did not assess the providers' perspective of medical consultation. The study only includes patients in

the outpatient department of general, medical, and surgical specialties. Hence, we cannot generalize this result to the inpatient departments and other outpatient departments of respective hospitals. The study included patients from public hospitals only, and so, it is difficult to generalize the findings to the private hospital context. However, the findings of this study could be generalized to hospitals having similar settings. The dependent variable is measured using only a single Likert item; thus, it only measures global level of patient satisfaction. Even though a global measure of patient satisfaction is valid in other studies, it may not be sensitive for some parts of the measurement.

On the basis of our findings, we recommend that health service providers and managers focus on patient experience to enhance patient satisfaction. We recommend that studies incorporate health service providers to assess the complete picture of patient satisfaction and the match in expectation between patients and health service providers. Future research is also needed to explore the reasons that patients felt the extent of influence on consultations had a negative association with satisfaction.

## Conclusion

There was a significant difference between preconsultation expectations and post consultation expectations. Postconsultation expectation had a positive association with patient satisfaction. Factors such as perceived health status and perceived control on health were the ones that positively influenced patient satisfaction, and any presence of disappointments, felt extent of influence to the consultation, and previous experience in health care service were factors that negatively influenced patient satisfaction.

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## Author contributions

All authors contributed toward data analysis, drafting and critically revising the paper and agree to be accountable for all aspects of the work.

## Disclosure

The authors report no conflicts of interest in this work.

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## Supplementary materials

### Preconsultation questionnaire on patients' expectations of health care

Thank you for taking part in our study of patients' expectations for health care. All the information you provide is completely confidential. Please answer the following questions before your consultation. Thank you for your help.

These questions are about your expectations of your health care. To what extent do you agree with the following in relation to your visit and consultation?

### Postconsultation questionnaire on patients' expectations of health care

Thank you for taking part in the second part of our study of patients' expectations for health care. All the information you provide is completely confidential.

Please answer the following questions after your consultation. Thank you again for your help.

We would like to ask you about the extent to which your expectations of the visit and consultation were met.

To what extent do you agree with the following in relation to your visit and consultation?

Serial no		Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
<b>I</b>	<b>Receiving instructions from health care provider</b>					
1	Be given clear information about where to go	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Be given an appointment for a convenient date/time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Be seen on time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The reception staff will be helpful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>II</b>	<b>Health care provider-patient communication style</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	The health care provider I see will be:					
5	Helpful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Respectful and treats me with dignity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Knowledgeable about/understand my health condition/problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Be clear and easy to understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Involve me in decisions about my treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>III</b>	<b>Treatment given/procedures performed</b>					
	I will be given:					
10	A physical examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Tests/investigations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	A diagnosis or to have a previous diagnosis confirmed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	A new, changed, or repeat prescription	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	A referral to another doctor/specialist/	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>IV</b>	<b>Health care provider approach to information</b>					
	Information will be given:					
15	Reassurance about my condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Advice about my health/condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	I will be given a full explanation, in clear language about:					
17	What caused my condition/problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	How to manage the condition/symptoms/pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	The benefits/side effects or complications/risks of treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	I will be given the opportunity to:					
20	Discuss the problems in my life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Figure S1** Preconsultation questionnaire on patients' expectations of health care.

Serial no		Strongly agree (1)	Agree (2)	Neither nor disagree (3)	Disagree (4)	Strongly disagree (5)
<b>I</b>	<b>Receiving instructions from health care provider</b>					
1	I was given clear information about where to go	<input type="checkbox"/>				
2	I was given an appointment for a convenient date/time	<input type="checkbox"/>				
3	I was seen on time	<input type="checkbox"/>				
4	I found that the reception/liaison staff were helpful	<input type="checkbox"/>				
<b>II</b>	<b>Health care provider-patient communication style</b>					
	The health care provider I saw:					
5	Was helpful	<input type="checkbox"/>				
6	Was respectful and treated me with dignity	<input type="checkbox"/>				
7	Was knowledgeable about/understood my health condition/problem	<input type="checkbox"/>				
8	Was clear and easy to understand	<input type="checkbox"/>				
9	Involved me in decisions about my treatment	<input type="checkbox"/>				
<b>III</b>	<b>Treatment given/procedures performed</b>					
	I was given:					
10	A physical examination	<input type="checkbox"/>				
11	Tests/investigations	<input type="checkbox"/>				
12	A diagnosis or had a previous diagnosis confirmed	<input type="checkbox"/>				
13	A new, changed, or repeat prescription	<input type="checkbox"/>				
14	A referral to another doctor/specialist	<input type="checkbox"/>				
<b>IV</b>	<b>Health care provider approach to information</b>					
	I was given:					
15	Reassurance about my condition	<input type="checkbox"/>				
16	Advice about my health/condition	<input type="checkbox"/>				
	I was given a full explanation, in clear language about:					
17	What caused my condition/problem	<input type="checkbox"/>				
18	How to manage the condition/symptoms/pain	<input type="checkbox"/>				
19	The benefits/side effects or complications/risks of treatment	<input type="checkbox"/>				
20	I was given the opportunity to discuss problems in my life	<input type="checkbox"/>				

Figure S2 Postconsultation questionnaire on patients' expectations of health care.

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