REVIEW

PEOPLES EXPECTATIONS FROM HEALTHCARE PROVIDERS – A TURKISH PERSPECTIVE

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ABSTRACT

There is high expectation from the population on part of the healthcare providers. These include; skilful and timely medication administration; and knowledge, honesty, listening skills, availability and professional attitude. The aim of this paper is to evaluate the expectation of population with regards to the healthcare providers in Turkey. A cross- sectional study was conducted in Turkey, including both rural and urban population, carried out from October 2011 till January 2012. A total of 540 household heads were selected using multistage random sampling technique. Data was collected using modified self-administered 16-items QUOTE (Quality of Care Through the Patients' Eyes) questionnaire. The questionnaire measures communication/ accessibility, organizational skills and professional skills. The response rate was (77.1%) and data was analyzed by using SPSS version 16.0. All the aspects measured using QUOTE questionnaire were found to be important by the majority of respondents, but with varying degrees of priority. The quality aspects related to the professional skills of physicians was ranked first followed by communication/ accessibility and last but not the least is the organizational skills of health care providers. This study explored the Turkish people priorities and expectations regarding healthcare providers. The public priorities and expectation were different across population. This may reflect the need to understand people's expectations before providing the services to avoid complaints that may occur after the services have been rendered.

Keywords: Expectation, healthcare provider, professional skills, quality of care, Turkey

INTRODUCTION

Health systems throughout the world aim to make their services more responsive to patients and the public[1]. With recent developments in healthcare management, patients are considered as customers, whose expectations should be fulfilled by the quality standards imposed by the health system[2]. There is high expectation from the population on part of the healthcare providers. These include: skilful and timely medication administration; knowledge, honesty, listening skills, availability and professional attitude[1-3]. Turkey has engaged with the "Health Transformation Program" (HTP) since 2003 to improve its health care system with one of the primary objectives of to ensure continuous quality improvement in health care services[3,4].

Before the HTP health insurance was offered by five public schemes, each with its own provider network and different benefit packages. In the health care delivery system, there were three main public providers, the Ministry of Health (MoH), the Social Insurance Organization (SIO) and universities, in addition to private hospitals. In 2002 the MoH with 654 hospitals owned 57% of all hospitals and 50% of all hospital beds in Turkey. The SIO provided healthcare services with 120 hospitals and other health facilities. Even though there were only 50 university hospitals, they were the main provider of tertiary services. There were 270 private hospitals which constituted 23% of all hospitals. But only 8% of all hospital beds owned by the private sector. As it is seen, private sector contributed to the healthcare delivery system by mainly providing outpatient services[5,6]. Doctors had been allowed to work both part-time in public facilities and private sector. By the end of 2002, the share of full-time physicians was 11 % compared to 89% working part-time[7].

In Turkish health care sector one of the main problems was the low number of doctors and the inequality in their distribution. In 1999, before the HTP, the number of physicians per 100 thousand

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people in Turkey (123.6) was much lower than the average ratio of OECD (181.7 without Turkey)[8,9]. Indeed, because of low wages of public sector, doctors usually preferred dual practice. Thus, there was an inadequacy in the number of doctors at the MoH hospitals. Moreover, socio-economically less-developed eastern and southeastern regions had the lowest ratio of health personnel to population. In December 2002 population per specialist doctor was 19,334 people on average at the worst conditioned five cities of eastern region, and 2,267 people on average at the best conditioned five cities of other regions[10,11].

The HTP still ongoing and up to now a series of reforms have taken place. Most importantly, five separate public security schemes have been united under the Social Security Institution (SSI) and the Universal Health Insurance (UHI) was implemented[3,4,12]. UHI covers the entire Turkish population and provides health services under one scheme. Under the HTP, the SIO health facilities have been transferred to the MoH, thus separating the purchaser and the provider of health services. Beside that under the same HTP a performance-based supplementary payment system (Pay for Performance: P4P) has been initiated in 2004 and implemented in all the MoH hospitals. Family physicians system has been implemented to all over the country since end of the 2010 and the existing health information systems have been improved. Moreover, health personnel in the MoH hospitals have access to better medical technology via increased government investments and out sourcing these services to the private sector[4,13,14].

Prior to the introduction of the P4P, the MoH facilities were suffering from overcrowding, long waiting times, poor quality, poor responsiveness, and lack of adequate operational resources. These were neither satisfactory for the patients nor for the health personnel. The P4P aimed at improvement the services provided by the MoH hospitals focusing on quality of care, efficiency and patient satisfaction. The P4P system distributes bonus payments to the health personnel based on their performance and encourages them to be more productive and provide high quality health care services. The total bonus payment is adjusted by the institutional
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performance multiplier which is provided to the hospitals by the MoH depending on institutional performance assessment results. This assessment evaluates five equally weighted domains: (a) access to examination rooms, (b) hospital infrastructure and service processes, (c) patient and caregiver satisfaction, (d) institutional productivity, (e) institutional targets[4,13,14,15].

In fact, one of the main aims of the HTP reforms is to have money follow patients. HTP reinforced the recognition of patients' rights by initiating "Patients' Rights Units" since September 2004. In 2008, nearly all state hospitals gave patients the right to select their physician[4]. Because of these human-oriented reforms the patient satisfaction has becomes an important goal for the health care providers. Thus the health care providers need to understand people's expectations before providing the services to avoid complaints that may occur after the services have been rendered[16]. Recently, the MoH developed the "Hospital Quality Standards" to set approximate service standards of hospitals regardless of their types (public, private or university), to launch a national quality system in health[3].

After the HTP reforms, in 2008, the share of the MoH hospitals has reached to 63% as the SIO health facilities were given to the MoH management. The most prominent change in the total hospitals has been observed in the private sector. The total number of private hospitals rose to 400 in 2008 and private sector share increased to 30%. Private sector's share in total outpatient services increased to 21% in 2008 from 4% in 2002[5,6]. Notably there was an increased competition in the area of health service provision among hospitals. Thus better understanding of patient expectations is playing an ever increasing role in this competition among health service providers[17].

Furthermore, with the HTP reforms a large increase in the total numbers of doctors is observed in Turkey. The improvements in the doctor's salaries with the P4P system as well as the capacity increase in the medicine universities have played significant role. The number of physicians per 100 thousand people in Turkey reached to 158 in

2008 by increasing 27.8% with respect to the 2002 level[8,9].

With the HTP reforms on the planning of health staff, newly graduated doctors were encouraged to serve in disadvantaged areas. While in December 2002 population per specialist doctor at the worst conditioned five cities of eastern region was on average 8.5 times higher than the average of the best conditioned five cities of other regions, in December 2008 this ratio decrease to 2.5[10,11].

In this study we assessed the expectations and priorities of the Turkish people towards the health care providers especially regarding the quality aspects of health care. In literature, even though there are some studies considering the patient satisfaction in Turkey for the period prior to HTP[18-20], there is only one study on the patient expectations within the Turkish population[21]. Bostan et. al. reported on a small survey of patients' expectations about hospital care only in Trabzon, one province of Turkey in 2004. And that study in Trabzon does not examine after the HTP period. This study also addressed the need for a reliable instrument to assess the Turkish people's expectations of the health care system and health care providers. The QUOTE (QUality Of care Through the patients Eyes) instrument was applied in different countries for different purposes including the assessment of people's expectations[22-33]. The research questions are; whether QUOTE may be used in the Turkish context and what are the most important quality aspects of health care from the people's perspective.

MATERIAL AND METHODS

A cross-sectional household survey was carried out in Turkey from October 2011 to January 2012. QUOTE (QUality of care Through the Patients Eyes) scale was first developed by the Netherlands Institute for Health Services Research (NIVEL)[22]. Different versions of QUOTE have been developed and used over the last two decades[23-32]. QUOTE questionnaire has been built on three interrelated features, these include: a) Importance "the weight given to care aspects by the patients"; b) Performance "patients' experiences relating to the functioning of medical practices and health care providers for each aspect of care"; and

c) Quality impact "combined effect of importance and performance"[23,26,33]. The NIVEL designed the QUOTE instruments with two parts: generic and disease specific questions. Generic part has 10 questions that could be used in all QUOTE questionnaires and for various patient groups[23,24,32]. The disease specific part has a flexibility that allows researchers to develop the questions in accordance with their research objectives[24-32].

For this research, the researcher developed a modified 16-items QUOTE instrument using the ten generic items from QUOTE instrument plus six extra items selected from different literatures. A group of five experts who are familiar with topic and have the required competence in English language held a series of focus group discussions to assess this modified 16-item QUOTE instrument. The output was initial Turkish version of 16-item QUOTE instrument. Then this version was pilot-tested in 25 household's head selected randomly from twelve geogaphical regions (Mediterranean, Western Anatolia, Western Black Sea, Western Marmara, Eastern Black Sea, Eastern Marmara, Aegean, South-eastern Anatolia, Istanbul, North-eastern Anatolia, Central Anatolia and Mid-eastern Anatolia) in Turkey[34]. Turkey is located in the northern hemisphere and bridges Europe and Asia. Its among high middle income countries with total population exceeds 74.5 million in 2010. The female population making up 49.9% of the total populationwith annual population growth rate of 13.5% in 2011[34]. The questionnaire was further amended and modified according to the findings in the pilot study. Commission of five experts suggested to keep the same items of both original and translated forms with some changes in the translation to make it clearer and understandable. The content validated Turkish version was distributed among seven hundred heads of household selected randomly using a multi stage random sampling technique. From each of the twelve geographical regions we selected one province, one districts from each selected province, two municipalities from each selected district, two quarters from each selected municipality, five blocks from each selected quarter, and three heads of household from each selected block. In order to be included in the study, respondent or a member of the respondent

household must have used at least two or more types of health care services in the last one year.

Ethical Approval
A written informed consent was obtained from each respondent after explaining the study objectives and guarantee of secrecy, before the study instrument is passed to the respondents. A total of 540 fully completed questionnaire (response rate = 77.1%) were included in the study. Ethical approval (FF-175-2011) for the study was obtained from the National University of Malaysia Medical Center (UKMMC).

In general, QUOTE questionnaires consist of two parts: importance and performance. Both parts have been rated separately by respondents on a four-point Likert scale. In part one, respondents were asked to rate the relative importance of the healthcare service. The fact that ordinary Likert scales tend to be highly skewed towards the 'important' dimension was solved by providing 4-point response options; very important (10 scores), important (6 scores), slightly important (3 scores), and not important (0 score). In part two, the same items have been measured for performance[17]. Performance items referred to contacts with the health care providers and health care institutions. We dichotomized the response categories (1 = 'no', 2= 'not really', 3 = 'on the whole yes', and 4 = 'yes') into percentages 'yes' and 'no'[23].

The performance score (P) represents the proportion of respondents who were not satisfied with the care received. The concept "quality of health care from the patients' perspective" was operationalized as the product of importance and (perceived) performance according to the formula: Quality Impact Score = [10 – (importance × performance)]. When the Quality Impact Score was <9.0 (range is 0 – 10), indicates that more than 10% of patients are dissatisfied and the related aspect of care need improvement[26,28,33,35].

The questionnaire's internal consistency and homogeneity was calculated by Cronbach's α coefficient, while the questionnaire's reliability was assessed by calculating Intra-class Correlation Coefficient (ICC)[36]. The ICC of 0.4 or above was considered acceptable[37]. Therefore, a sub-sample of 60 respondents
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from different regions was asked to complete the questionnaire twice with an interval of 2 weeks in order to examine the stability of the scale.

Statistical Analysis
Normality test (The One-sample Kolmogorov–Smirnov test) was done and all of the data was found to be normally distributed. Therefore, Pearson's correlation coefficient was calculated to assess the reliability of the two completed questionnaires. The importance scores, from the 16-items QUOTE questionnaire were recruited to asssess the reliability and validity of the intrument, because the importance rating is more likely to be stable and less situation dependent than performance rating[25]. The construct validity was determined using Principal Component Analysis (PCA). Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity were used to study the adequacy of the data for factor analysis. Eigenvalue ≥ 1 and screen plot have been used to determine the number of factors to be extracted. Statistical Package for Social Science (SPSS) program (version 16; SPSS Inc., Chicago, IL, USA) was used for data analyses[38].

RESULTS

Participants' Characteristics
Out of the 540 participants, more than half of the participants were female (169; 52.0%) with mean age of 44.1 years, SD = 13.9 and age range 20–74 years.

Construct validity
Factors analysis was conducted to identify the nature of the factors underlying the set of measures in the 16-items QUOTE questionnaire. The sample adequacy for extraction of the factors was confirmed. Bartlett's test result was ($p < 0.001$), with the KMO value of 0.92. In this analysis, the factors with eigenvalues equal to or higher than 1 were considered significant and chosen for interpretation. Through PCA, three factors were extracted, explaining 86.0% of the total variance. These included:
• Factor 1 (7 items) explained 40.9% of the total variance and was labeled as "accessibility/ communicability".
• Factor 2 (5 items) explained 23.2% of the total variance and was labeled as organizational skills.

• Factor 3 (4 items) explained 21.9% of the total variance and was labeled as professional skills. All factor loadings were higher than 0.4, indicating that they were statistically significant and higher than the recommended level. The factor loading of each item is listed in table 1.

Table 1 Components loading, eigenvalue and total variance explained of QUOTE- 16 items expectation about health care providers as result of principal component analysis with varimax rotation

No.	Health care providers and health care Institutions should…..	Factor 1	Factor 2	Factor 3
7.	: should make sure that, in urgent matters, I can consult a specialist soon after a referral.	0.931	*	*
6.	: should always be easily accessible by telephone.	0.929	*	*
5.	: should always inform me, in understandable language, about the medicines and possible risk or side effects involved in any treatment.	0.922	*	*
9.	: should have waiting and consultation rooms that are easily accessible for disabled people or people in a wheelchair.	0.899	*	*
11.	: should be willing to discuss matters with me if I feel things have not run satisfactorily	0.890	*	*
10.	: should always allow me to manage my own budget for care.	0.866	*	*
8.	: should always allow me to choose another professional.	0.831	*	*
16.	: should always advice services or prescribe medicines which are free of charge or fully covered by insurance.	*	0.903	*
14.	: should always keep appointments punctually.	*	0.886	*
15.	: should not keep me waiting in the waiting room for more than 15 minutes.	*	0.867	*
13.	: should always allow me to decide on which help to get.	*	0.855	*
12.	: should arrange with me what to do in case of an emergency.	*	0.787	*
3.	: should always be friendly attitude and take me seriously	*	*	0.849
4.	: should always be honest and have enough time for me	*	*	0.848
1.	: Health care providers should have a good understanding of my problems	*	*	0.834
2.	: should be skilful and work efficiently	*	*	0.810
	Eigen value	**6.548**	**3.711**	**3.506**
	% of Variance	**40.926**	**23.193**	**21.914**

* In this table are showed only the values more than 0.40.

Rate of importance has been calculated for the different aspects of quality of care from the people's point of view. The relative importance of quality aspects are shown in the first column of Table 2. Quality aspects that received relatively high importance scores (8.19 to 8.36) are the professional skill items, followed by the communication/accessibility items (7.88 to 8.01); while the organizational skills received the lowest scores (7.14 to 7.75).

Standard deviation of the importance scores varied between 2.17 to 2.89 (item number 2 and 15). Table 2 also shows performance scores of health care providers, with respect to health care providers and health care institutions, the performance score of 0.12 for item number 1 indicates that 12.0% of the respondents thought that health care providers and health care institutions didn't have a good understanding of their problems. The relative impact of importance

and performance rating on overall quality of care scores can be illustrated by the use of quality impact indices, presented in the quality columns of Table 2.

Table 2 Item included in QUOTE-questionnaire and Importance (I), Performance (P), Quality Impact (QI = 10 - [P*I]) scores of 540 respondents.

No.	Health care providers and health care Institutions should…..	Importance score (SD)	Performance score	Quality impact score
1.	: should have a good understanding of my problems.	8.28 (2.22)	0.12	9.01
2.	: should be skilful and work efficiently.	8.36 (2.17)	0.10	9.16
3.	: should always be friendly attitude and take me seriously.	8.27 (2.25)	0.09	9.26
4.	: should always be honest have enough time for me	8.19 (2.33)	0.08	9.35
5.	: should always inform me, in understandable language, about the medicines and possible risk or side effects involved in any treatment.	7.88 (2.35)	0.05	9.61
6.	: should always be easily accessible by telephone.	7.90 (2.32)	0.08	9.37
7.	: should make sure that, in urgent matters, I can consult a specialist soon after a referral.	7.85 (2.34)	0.06	9.53
8.	: should always allow me to choose another professional.	8.01 (2.23)	0.05	9.60
9.	: should have waiting and consultation rooms that are easily accessible for disabled people or people in a wheelchair	7.92 (2.36)	0.07	9.45
10.	: should always allow me to manage my own budget for care.	7.95 (2.23)	0.06	9.52
11.	: should be willing to discuss matters with me if I feel things have not run satisfactorily	7.91 (2.30)	0.05	9.60
12.	: should arrange with me what to do in case of an emergency.	7.75 (2.57)	0.07	9.46
13.	: should always allow me to decide on which help to get.	7.15 (2.85)	0.09	9.36
14.	: should always keep appointments punctually.	7.50 (2.71)	0.09	9.32
15.	: should not keep me waiting in the waiting room for more than 15 minutes.	7.14 (2.89)	0.08	9.43
16.	: should always advice services or prescribe medicines which are free of charge or fully covered by insurance.	7.27 (2.83)	0.11	9.20

*Importance scores can range from 0–10, performance scores can range from 0–1. A 'quality impact score' of <9.0 indicates that more than the usual 10% of the patients are dissatisfied with the particular aspect of care.

Internal Consistency and Reliability
The questionnaire's internal consistency (Cronbach's α coefficient) and the Intraclass Correlation Coefficient (ICC) of total scale and subscales are presented in Table 3. The Cronbach's α coefficient was excellent (0.91) for the total means (ICC= 0.91) and in the range of 0.91 to 0.98 for the three subscales (professional skills: 0.97; communication/accessibility:0.98; organizational skills: 0.91). The data of 60 respondents (with mean age of 42.7 years, SD = 12.7 and age range 24–68 years) was used for test–retest reliability. The Pearson correlation coefficient (r = 0.97, p value = <0.001) indicated the good stability of the questionnaire.

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DISCUSSION

Table 3 Cronbach's α coefficient and ICC for the scale and its subscales (n =540)

Subscale	No. of items	Mean (SD)	Cronbach's α coefficient	ICC	95% CI for ICC
Professional Skills	4	33.09 (8.65)	0.97	0.97	0.97 - 0.98
Communication/Accessibility	7	55.42 (15.34)	0.98	0.98	0.98 - 0.98
Organizational Skills	5	36.82 (11.92)	0.91	0.91	0.90 - 0.92
Total scale(n=540)	16	125.33 (25.38)	0.91	0.91	0.89 - 0.92

For this study, a self-administered, easy to complete questionnaire was tested. It measured the people's expectation from healthcare provider and health institution by measuring the quality of care through the patient's eyes (QUOTE-Expectation). QUOTE protocol has been applied to demonstrate the questionnaire's validity and reliability[23,28]. A 16 items QUOTE-Expectation questionnaire was developed in a manner that simulates what is applied in a series of disease- and care-specific patient satisfaction instruments (QUOTES), with exception that all questions considered as one entity to evaluate the expectation instead of being two parts (disease- and care-specific). However, from PCA, three distinct factors were extracted that jointly explained 86.0% of the total variance and each factor most likely to represent a separated scale.

Future studies would do well to further look into these three factors and further elaborate on them. It is notable that seven items (5,6,7,8,9,10,11) included in the first factor concerned aspects related to the accessibility and communication. The second factor included items (12,13,14,15,16) related to organizational skills, while the third factor included items (1,2,3,4) related to professional skills. Although the items in each factor may not be completely related to the given factor name, however these results come almost in line with other studies done by Bara et al (2003)[30] in Romania and Ali Jadoo et al (2013) in Iraq[16].

The main objective of this study was to explore the Turkish people's priorities and expectation regarding the healthcare providers. Apparently, the public priorities and expectation were different across population. The high importance scores (mean ± SD) obtained in the first column of Table 3 showed that the professional skills (8.19-8.36) were on the top priority of Turkish population as compared to accessibility (7.85-8.01) and organizational skills (7.14-7.75).

At the same time, the second column (performance score) of Table 3 indicated that about 8.0% of respondents were dissatisfied toward the professional skills, in a range of 9.01-9.350. While 6.5% (9.20-9.46) and 5.0% (9.37-9.61) of respondents were dissatisfied toward organizational skills and accessibility respectively. In fact, the high satisfaction scores obtained by the 16-items QUOTE-Expectation in the present study were not surprising. The Turkish health system over the past decade has witnessed marked progress in all aspects of health services[3,12,15], in addition to remarkable development in all health indicators[3,12,34].

Also the overall satisfaction with health services among Turkish citizens increased from 39.5% in 2003, just before the beginning of the HTP reforms, to 75.85% in 2011[39]. The application of the law of universal health insurance in 2008 has positive impacts on accessibility and institutional productivity, because all public health facilities (including the private services contracting with the Government) are opened to entire population; including the rights to choose physician and type of hospital; financing of healthcare services (reducing the financial burden on the citizen); and the ability to take appointment by phone[3,17,34]. However, the number of physicians per hundred thousand had not changed significantly[3,34]. Despite the fact that the government had made a great

effort in attracting health personnel to work in the public sector through the implementation of payment for performance, Turkey still ranks at the bottom of the WHO European Region[3,14]. This may explain partly the trend of public to put the professional skills in its highest priorities.

Study limitation
First, QUOTE questionnaire is commonly available in 32 and 16 items versions, but there is no limitation in number of items. In this study we tried to follow the QUOTE protocol in modifying the questionnaire. This might put some limitation regarding the number of items especially in term of healthcare professional part. Second, in our questionnaire there is no clear separation between public and private sectors, this may be considered a bias concerning the understanding and interpretation of questions by respondents.

CONCLUSION

The 16-items QUOTE-Expectation is an easy to complete instrument to explore people's expectation, with evidence of good validity and reliability. The high satisfaction scores that the QUOTE-Expectation produced in our validation study reflect the Turkish people priorities and expectations regarding healthcare providers. All aspects measured using16-items QUOTE questionnaire were found to be important or extremely important by the respondents, but with varying degrees of priority. Quality aspects related to the professional skills of physicians came first followed by communication or accessibility and the organizational skills of health care providers. Further studies are needed to test the responsiveness and generalizability of the QUOTE-Expectation to other linguistic and cultural settings. Health care receivers should aware of their rights as important actors in the health care system. Their opinions have to be taken in account in the important issues such the quality services and control of the quality of health care, in addition to their right to participate in decision-making process when it comes to their health.

List of abbreviations
Quality of Care Through the Patients' Eyes (QUOTE), Health Transition Programme (HTP), Social Security Institution (SSI), Universal Health Insurance (UHI), Social Insurance Organization (SIO) and universities, Family Practitioner Scheme (FM), Performance-Based Payment System (P4P), Turkish Statistical Institute (TURKSTAT), Statistical Package for Social Science (SPSS) and Intraclass Correlation Coefficient (ICC).

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