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A Multicenter Study of Factors Affecting Patient's Satisfaction Visiting Primary Health Care Clinics in Riyadh, Saudi Arabia

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Abstract

Background: Patients satisfaction is increasingly being recognized as a central element in monitoring quality of health care services; the assessment of which may offer ways of optimizing health care delivery and preventing waste of medical resources. This study was designed to assess satisfaction and its determinants among patients attending governmental primary health care clinics.

Methods: This was a cross-sectional study of a representative sample of patients attending two governmental clinics in Riyadh, Saudi Arabia. Data was collected via a self-administered questionnaire and stratified random sampling with equal allocation was adopted to select a significant number of patients of equal gender representation.

Results: A total of 200 patients participated in the study, 71% were 21-40 years old with equal gender distribution, 77% were Saudis, 72.5% were satisfied with the services provided. The only factor that had a significant impact on overall satisfaction was the waiting time between registration and consultation, with those waiting over 30 minutes more often reporting to be dissatisfied with the service provided. (p=0.002).

Conclusion: Overall, participants were satisfied with the services they received. However, those who had longer waiting time between registration and consultation showed higher rate of dissatisfaction.

Keywords: Primary health care clinics; Satisfaction; Saudi Arabia; Riyadh

Introduction

Primary Health Care (PHC) is an essential element of integrated health care services that deal with preventive, curative and rehabilitative aspects of medicine [1]. The Saudi Constitution states that health care is the right of every citizen; in 1980 the government of Saudi Arabia adopted the World health Organization (WHO) "Health for All" concept, in which PHC is named an integral aspect [2]. This involved the abolished of all former dispensaries and maternal and child health centers, followed by the amalgamated of their services into PHC centers [3]. Since then, other PHC development strategies, aimed at promoting positive relationships between PHC facilities and active patient participation, [4] have included expanding PHC facilities, co-ordination between primary, secondary, and tertiary health care facilities and inter and intra-sectional co-ordination with the Ministry of Health (MOH). The end result has been the creation of a network comprising 1,925 centres and 220 specialized hospitals throughout the country [5].

However, the rapid urbanization and socioeconomic transformations that are occurring in Saudi Arabia have created an urgent need to assess how well services are being rendered [6]. This is mostly due to the higher expectations the general population have in relation to healthcare and how their satisfaction impacts on certain health-related behaviors such as compliance, appointment keeping, and use of medical services [7,8]. Satisfaction can be defined as the extent an individual's experience compares with his or her expectations [9]. Patients' satisfaction is related to the extent to which general health care needs and condition-specific needs are met, the doctor's ability to communicate adequately his actions and thoughts and the congruence between intervention desired and that received by the patient [10]. Evaluating to what extent patients are satisfied with health services is clinically relevant, as satisfied patients are more likely to comply with treatment, [11] take an active role in their own care, [12] continue using medical care services and not continuously seek to change physicians [13]. In addition, those physicians may also benefit from satisfaction surveys as these identify potential areas for improvement and health expenditure may be optimized through patient-guided planning and evaluation [14].

However, critics have drawn attention to the lack of a standard approach to measuring satisfaction and the lack of comparative studies [15,16] often leading to such surveys as are conducted and published to be ignored. Moreover, patient satisfaction is considered, by some, to be of dubious benefit in facilitating the process of clinical care, as patients have no specific clinical expertise and are, perhaps, readily influenced by non-medical factors [17,18]. Nevertheless, satisfied patients are more likely to comply with medical treatment and therefore ought to have a better outcome [11]. This study aimed to evaluate the level of satisfaction among patients attending primary health care clinics, its determinants, and to assess if the current levels are those desired by both the general population and government bodies.

Methods

This was a cross-sectional, multi-center study carried out in two governmental primary health care clinics in Riyadh, Saudi Arabia between the 1st June 2014 and the 1st October 2014. Prior to the study, approval was sought and obtained from the institutional review board (IRB) of the two governments' primary health care clinic centers. All information of a personal nature was obscured to conserve anonymity, as per requested by ethics committee. A consent form was given to each participant for a signature prior to collection of data. The minimum sample size was determined using the Fisher's formula for sample size

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determination in a population less than 10,000 for descriptive studies [19]. After adjusting for non-response and attrition, a minimum sample size of 96 was obtained, this was then adjusted to 100 (with equal gender allocation) for a total of 200 surveyed individuals. Then, a systematic random technique was adopted to select every other patient attended the targeted clinics every morning for each working day of the week during the study period until the required sample size was obtained. A structured, self-administered questionnaire was utilized, with sections on socio-demographic characteristics of the participants (age, gender, level of education and occupational status), wait times for the various stages between entering and leaving the center was recorded by stop watches of medical students (between registration and consultation, consultation time, between consultation and leaving the centre for example waiting for investigations or medications dispensing) and overall patient satisfaction with the offered service. The questionnaire was validated by three primary health care consultants. The rating of patients' satisfaction was as follows: 1=very dissatisfied, 2=dissatisfied, 3=fairly satisfied, 4=satisfied, 5=very satisfied; Ratings of one and two were considered dissatisfied, while ratings of three, four and five were considered satisfied. We decided to give the patient spectrum of satisfaction decisions to make the decision easier for the patient, but we grouped the decisions at the end to two major categories only. A descriptive analysis was conducted to all variables of the study sample.

Statistical Analysis

The data obtained were analyzed with the Statistical Package for Social Sciences (SPSS) version 17, and Microsoft Excel 2007. Frequency distribution and cross tabulation were computed for categorical variables. The dependent variable was patient's satisfaction, while some of the independent variables were wait time, age, gender, educational level and occupational status etc., of the participants. Chi-square test was used to compare differences between proportions satisfied and non satisfied. Fisher exact test was used instead in case of small frequency, and Pearson's correlation for association between continuous variables. Expression of satisfaction with services by the participants was either as non satisfied or as satisfied. Level of statistical significance was set at 5% ($p \leq 0.05$).

Results

A total of 200 patients participated in the study, with the majority 71% being between 21 and 40 years old. Mostly were Saudi 77%, live inside Riyadh 92%, married 68%, educated to University level 52% (Table 1). Almost two-thirds 69.5% were follow up cases whereas remaining were new cases 30.5% (Figure 1). Total waiting time between arrival and leaving the clinic ranged from 12.5 minutes to 95 minutes (37.2 ± 20.1). Overall the time lapsed between registration and consultation was between 3 and 35 minutes (15.2 ± 9.9). Consultation time was between 2.5 and 25 minutes (7.8 ± 5.3). Regarding the time lapsed between consultation and leaving the center, it ranged between 5 and 35 minutes (14.2 ± 11.1) (Table 2). Overall, most of the patients 72.5% were satisfied with primary health care clinics services (Figure 2).

None of the studied socio-demographic characteristics of the participants (age, gender, nationality, marital status, educational level, occupation status and residence) was significantly associated with their satisfaction level. In addition, there was no significant difference between new and follow-up cases in this regard ($p>0.05$) (Table 3). However, patients who waited for longer periods of time between registration and consultation were more likely to be dissatisfied with rendered services ($p=0.002$). Although, longer examination time (>20 minutes) and longer time between consultation and leaving the center (>30 minutes) had some degree of correlation with rates of dissatisfaction, the differences were not statistically significant (Table 4).

Discussion

The primary health care program in Saudi Arabia is a pioneering program that has achieved considerable success within a few years of its establishment [20]. Patient's satisfaction is generally considered as the extent to which they feel that their needs and expectations are being met by the service provided. Patients usually express their views through complaint procedures, changing their physicians, and by expressing their opinions on the quality of services received [21]. In health care, patient satisfaction has long been considered as an important component when measuring health outcomes and quality of care [22].

The purpose of this study was to assess the satisfaction degree of patients attending the primary health care clinics in Riyadh, Saudi Arabia. The results showed that satisfaction with provided services was

	Frequency	Percentage
Age (years)		
10-20	14	7.0
21-30	82	41.0
31-40	60	30.0
41-50	24	12.0
>50	20	10.0
Gender		
Males	100	50.0
Females	100	50.0
Nationality		
Saudi	154	77.0
Non-Saudi	46	23.0
Marital status		
Single	60	30.0
Married	136	68.0
Divorced/widowed	4.0	2.0
Educational level		
Illiterate	10	5.0
Secondary	36	18.0
University	104	52.0
Postgraduate	50	25.0
Occupation		
House wife	31	15.5
Student	60	30.0
Employee	99	49.5
Others	1.0	5.0
Residence		
Inside Riyadh	184	92.0
Outside Riyadh	16	8.0

Table 1: Socio-demographic characteristics of the participants (n=200).

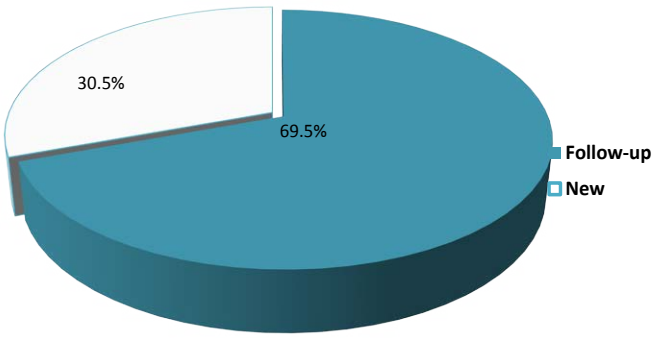

Figure 1: Distribution of the participants according to the status of new case or follow-up case category.

	Frequency	Percentage
Between registration and consultation		
≤10	72	36.0
11-20	75	37.5
21-30	30	15.0
>30	23	11.5
consultation time		
≤5	65	32.5
6-10	92	46.0
11-20	37	18.5
>20	6.0	3.0
Between consultation and leaving the centre		
≤10	99	49.5
11-20	51	25.5
21-30	17	8.5
>30	33	16.5

Table 2: Distribution of the participants according to waiting time in minutes (n=200).

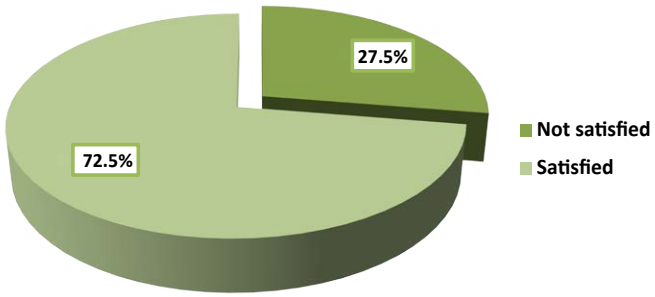

Figure 2: Participants` general satisfaction regarding primary health care clinics` services.

	Satisfied N=145 N (%)	Not satisfied N=55 N (%)	p-value*
Gender			
Male	72 (49.7)	28 (50.9)	
Female	73 (50.3)	27 (49.1)	0.874
Nationality			
Saudi	109 (75.2)	45 (81.8)	
Non-Saudi	36 (24.8)	10 (18.2)	0.319
Age			
≤30	74 (51.0)	22 (40.0)	
>30	71 (49.0)	33 (60.0)	0.163
Marital status			
Single	40 (27.6)	20 (36.4)	
Married	103 (71.0)	33 (60.0)	
Divorced/widowed	2 (1.4)	2 (3.6)	0.252
Educational level			
<secondary	10 (6.9)	0 (0.0)	
Secondary	25 (17.2)	11 (20.0)	
University	77 (53.1)	27 (49.1)	
Post-graduate	33 (22.8)	17 (30.9)	0.162
Occupation			
House wife	24 (16.5)	7 (12.7)	
Student	43 (29.7)	17 (30.9)	
Employee	69 (47.6)	30 (54.6)	
Others	9 (6.2)	1 (1.8)	0.508
Residence			
Inside Riyadh	132 (91.0)	52 (94.5)	
Outside Riyadh	13 (9.0)	3 (5.5)	0.564**
Category			
New	47 (32.4)	14 (25.5)	
Follow-up	98 (67.6)	41 (74.5)	0.340

Table 3: Socio-demographic characteristics associated with patient`s satisfaction regarding primary health care clinics services (*Chi-square test; ** Fisher Exact test).

	Satisfied N=145 N (%)	Not satisfied N=55 N (%)	p-value*
Between registration and consultation			
≤10	57 (39.3)	15 (27.3)	
11-20	60 (41.4)	15 (27.3)	
21-30	17 (11.7)	13 (23.6)	
>30	11 (7.6)	12 (21.8)	0.002
consultation time			
≤5	42 (29.0)	23 (41.8)	
6-10	73 (50.3)	19 (34.5)	
11-20	27 (18.6)	10 (18.2)	0.126
>20	3 (2.1)	3 (5.5)	
Between consultation and leaving center			
≤10	71 (49.0)	28 (50.9)	
11-20	42 (29.0)	9 (16.4)	
21-30	12 (8.3)	5 (9.1)	
>30	20 (13.8)	13 (23.6)	0.180

Table 4: Association between waiting time and patient`s satisfaction regarding primary care health clinics services (*Chi-square test).

generally acceptable. However, long waiting time need to be paid more attention. High level of satisfaction with primary health care services is a good point and can be considered as an important index of the quality of health services to predict both capacity [23] and consumption [24] that is associated with the steadiness of care, [25,26] physicians' communication skills, [27,28] and confidence in health system [8]. Regarding educational level and its impact on degree of health care services satisfaction, the study revealed that higher educated patients were more dis-satisfied regarding health care services than illiterates, although not significant. Al Qatari and Haran, [29] found that the less the education level, the more satisfaction but Scott, [30] mentioned that studies on educational status showed that educational status may has a positive or negative influence on satisfaction depending on its interaction with other socio-demographic variables. Regarding nationality, the study didn't find any difference in satisfaction between Saudi and non-Saudi patients. Our result is in agreement with Al Qatari and Haran [29] who didn't find any difference in satisfaction between Saudi and non Saudi patients and this was confirmed by Dousari et al., (2008) who showed that Kuwaiti patient`s satisfaction was not influenced by age, gender and nationality of the patients of PHC centers [31]. Salem [32] in his study revealed that non-Saudi patients in both urban and rural health centers had significant higher levels of satisfaction and this finding was in agreement with Al Emadi et al., (2010) who found that non Qatari patients were more satisfied with health care services than Qatari patients [33].

As regards the examination time in clinics and its association with satisfaction, the study showed that half of the patients satisfied with services had between 6-10 minutes examination time while more than 40% of those unsatisfied had 5 minutes and less examination time. Salem [32] reported that patients with longer consultation (one quarter of hour or more) time recorded a significant higher satisfaction score and this was in agreement with Hull et al., [34] who found a clear association between mean consultation time and patient satisfaction. Al Hajeri [35] concluded that longer consultation time has been linked to a higher satisfaction rate. Nevertheless, each patient requires a different amount of time to receive the appropriate management Dousari et al., [31] confirmed this when reported that patients were more satisfied when their physicians allowed more consultation time to express themselves in their own words during the medical history and when physicians were more informative in the treatment planning part. As regards waiting time in primary health care clinics and its impact on patient satisfaction, it was found that longer waiting time, particularly between registration and examination was significantly

associated with unsatisfaction regarding primary health care clinics services. In another study conducted by Salem in Qassim Province, Saudi Arabia [32], he reported that waiting one hour or more in both urban and rural health centers recorded the lowest satisfaction score (72.11% and 76.88% respectively) with significant difference ($P<0.05$). Wassem et al., (2003) [36] found that patients with actual waiting times exceeded two hours were significantly more likely to be dissatisfied when compared with actual waiting time one hour or less.

The main limitation of this study is that the sample was selected from only two health care facilities. Therefore, the result of our study cannot be generalized to other health care facilities in Riyadh, Saudi Arabia. Finally, the cross-sectional study and the respondent bias do not permit causal inferences about the results. The results of such studies can be valuable in planning new services, expanding and reorganizing current services. We advise providers to get feedback from their patients to help them to improve their services by adopting a more patient-centered approach, transforming their attitude and introducing a convivial ambience at health services outlets.

Conclusion

Overall participants were quite satisfied with the services provided. Patients who had longer waiting time particularly between registration and consultation showed higher rate of unsatisfaction with services provided.

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