

Patient's Satisfaction Regarding Health Education in Primary Health Care Centers working under Ministry of Health Jeddah, Saudi Arabia

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Abstract

Health education (HE) is gaining popularity and recognized as a key in achieving better health outcome. Objectives of this study were to determine the patient's satisfaction regarding health education in primary health care centers (PHCCs). And to strengthen the capacity of health education services by identifying the gaps. A cross sectional study was conducted for 3 months in different PHCCs of Jeddah targeting the patients after their consultation. Two centers from each region were selected through stratified random sampling. A validated questionnaire was used to assess patient's satisfaction regarding health education provided. Overall moderate to high satisfaction with the health education methods was 58% and 38% respectively. However, around 68% overall high satisfaction was noted with the quality of health education. More than 50% females reported not receiving health education during their consultation with the physicians (the most preferred way identified) as compared to 94% by the male patients ($p < 0.001$). More printed health education material was available to the male patients (79%)($p < 0.001$). Overall satisfaction level for the quality was satisfactory but needs improvement for the method of health education. One to one educational clinics preferably by the physicians were the most desired method identified for the health education by the study participants. A need to strengthen the health education services by introducing professional development programs was highlighted.

Keywords: Health education, patient satisfaction, primary health care, quality.

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1 Introduction

Patient health education has been formally defined as “the process by which health professionals and others impart information to patients that will alter their health behaviors or improve their health status”. [1] Patient involvement is thought to improve the way the health care system works. [1] Empowering patients to participate in their health care plays a key role for an improved quality of health and better clinical outcome. Patient empowerment got a prominent recognition following Ottawa Charter of 1986. [2]

It is believed that educational interventions produce a positive effect on behavior change. Studies have proven that educating patients is the most effective way of disseminating knowledge which helps them to stick to the recommended treatment plan, show compliance and adoption of healthy life style. [3,4,5] Other than these benefits, patient health education approach has the potential to be low cost yet an effective way of improving patient’s satisfaction. [6]

Canadian Association of Rehabilitation [7] gives guidelines for patient education, these are:

- be personalized;
- be led by a professional staff, with regular contact between staff and patients;
- be delivered in individual or group settings;
- discuss specific health goals;
- and seek to influence outcomes beliefs, to elicit positive emotions, to increase optimism about the possibility of change, and to heighten the salience of personal experience or other evidence supporting self-efficacy.

Although the new advancements in the medical field help in the diagnosis and treatment; yet interpersonal communication especially in the form of health education between doctor and patient remains to be the main tool for the exchange of information. [8] Studies show the more information is provided to the patient, the more satisfied patient feels and is more likely to cooperate with the treatment showing better compliance. [9,10]

However, the nature of education delivery is not fully specified, and the impact of the education has not been often considered. Studies conducted in Saudi Arabia identified general lack of health education provided to the patients. [11,12] Moreover, only 8% of the PHCs in Kingdom has qualified health educators showing a shortage of trained health educators. [13,14] Because of the patient load it’s difficult for most of the doctors to give enough time and attention on health education which effects patients satisfaction. [10,12]

Only few studies have been conducted about the patient health education in our primary care setups. This study is an effort to identify the causes of patient's dissatisfaction with their consultation focusing on health education in our settings and try to find out ways to improve their satisfaction level leading to improved patient's management.

2 Methodology

2.1 Study design: A cross sectional interview based survey.

2.2 Study location: Primary Health Care centers in Jeddah working under Ministry of Health.

2.3 Study Population: Patients coming to these PHCs for treatment.

2.4 Study duration: A period of 5 months, from 1st December 2016 to 1st April 2017.

2.5 Sampling technique: PHCs were selected using stratified random sampling technique. Jeddah PHCs are divided in 5 geographical regions. We selected randomly 2 centers from each region and interviewed all the patients present in that facility on the day of data collection.

2.6 Sample size calculation: The calculated sample size was 335 patients using Epitools online sample size calculator. We put the patient's satisfaction as 68% (taken from a study conducted in Riyadh [11,15]), confidence interval at 95%, and desired precision at 0.05.

2.7 Study tool and data collection: Validated close ended structured questionnaire with slight modification, adopted from different studies [15,16,17,18], and translated in local language was used.

2.8 Outcome variables: The main outcome variables was; Patient's satisfaction regarding Health Education.

2.9 Data Analysis: Data analysis was done using SPSS 22.

1: Categorical variables were used for descriptive epidemiology

2: Chi square to analyze categorical variables

3: Mean, median, mode with standard deviation were calculated to analyze numerical variables along with Percentages and frequencies.

A five scale likert scale was used for each response item to measure participant's satisfaction. A patient responding "strongly agree" was given maximum score of 5 and "strongly disagree" with a score of one. Thus, an overall satisfaction score was summed based on these individual scores. Raw scores were converted into percentages for ease of interpretation to assess different level of respondent's satisfaction. High satisfaction was considered for a score of 66% or more, moderate if the score is between 33% to 66% and below 33% was considered as low satisfaction. [15]

2.10 Selection criteria

- **Inclusion criteria:** Adult patients coming for treatment in Primary Health Care centers and who were willing to participate.
- **Exclusion criteria:** Attendants of patients visiting Primary Health Care centers.

2.11 Ethical Approval: Ethical approval was taken from ethical committee of Ministry of Health (H-02-J-002) and Directorate of Health affairs Jeddah.

2.12 Informed Consent: Before the interview informed consent was taken from the Patient and confidentiality of data was insured.

3 Main Results

The mean age of participants was 33.8 ± 13.5 years. Our study participants included 156 (46.7%) males and 178 (53.3%) females. Other demographic profile data is given in table 1.

Table 1: Demographic characteristics of study participants (n=334)

	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Marital status						
Single	72	63.7	41	36.3	113	33.8
Married	84	38.9	132	61.1	216	64.6
Divorced / widowed	0	0.0	5	100.0	5	1.5
Education level						
Illiterate	1	5.6	17	94.4	18	5.3
Primary	14	28.0	36	72.0	50	14.9
Secondary	42	45.7	50	54.3	92	27.5
University	99	56.9	75	43.1	174	52.0
Occupation						
Student	52	70.3	22	29.7	74	22.1
Employee	80	64.0	45	36.0	125	37.4
Not working	24	17.8	111	82.2	135	40.4
Nationality						
Saudi	151	59.9	101	40.1	252	75.4
Non-Saudi	5	6.1	77	93.9	82	24.5

On the basis of scoring the overall high and moderate satisfaction with the health education methods was 38% and 58% respectively. However, around 68% overall high satisfaction was noted with the quality of health education (table 2).

Table 2: Satisfaction with health education methods and quality (n=334)

Variables	High (%)	Moderate (%)	Low (%)
Method variables			
Physicians role in education/counseling	70.7	27.8	1.5
Health education clinic	17.7	77.8	4.5
Advice provided in other clinics	63.8	33.5	2.7
Advice provided in waiting area	42.8	52.7	4.5
Group teaching	20.7	72.8	6.6
Education exhibition	16.5	79.9	3.6
Print material	61.7	36.2	2.1
Audio visual aid	28.7	68.9	2.4
SMS	21.3	73.1	5.7
Overall satisfaction (methods)	38.2	58.1	3.7
Quality variables			
Information	80.2	19.2	0.6
Place/space	72.2	27.5	0.3
Equipment	36.2	51.5	12.3
Time	72.8	26.9	0.3
Language	80.8	18.9	0.3
Overall satisfaction (Quality)	68.4	28.8	2.7

Figure 1 graphically represents the difference in the satisfaction level on the basis of methods and quality of health education provided to the patients.

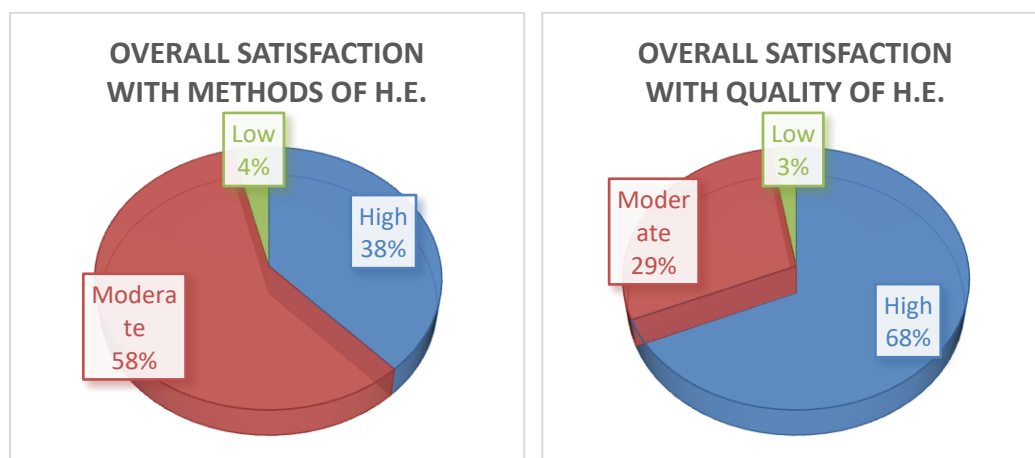


Figure 1: Overall satisfaction of patients regarding methods and quality of Health education at PHC

Comparing gender for the overall satisfaction regarding quality and methods, a statistically significant difference was noted for both the variables (table 3). Males being more satisfied than the females.

Table 3: Comparing gender for overall satisfaction regarding health education (n=334)

	High	Moderate	P value
Overall Satisfaction regarding methods			
Male	53 (34.0%)	103 (66.0%)	0.036
Female	42 (23.6%)	136 (76.4%)	
Overall Satisfaction regarding quality			
Male	120 (76.9%)	36 (23.1%)	0.016
Female	115 (64.6%)	63 (35.4%)	

*Chi square test

The most preferred person to impart health education was physician (96%) followed by health educator (55%), nurses (21%) and other support staff (20%) respectively as shown in fig 2. Similarly, for the most preferred method; one to one physician counseling (93%) followed by separate health education clinics (51%) were identified (fig 3).

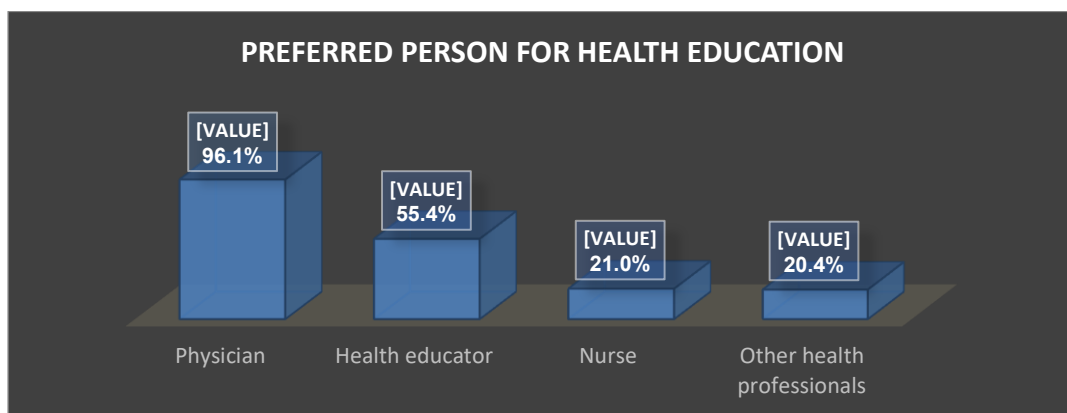


Figure 2: Patient's preferred person for health education (n=334)

With the advancement in technologies, the use of social media (57%) and SMS services (38%) were high in the preference list for health education as shown in fig 3.

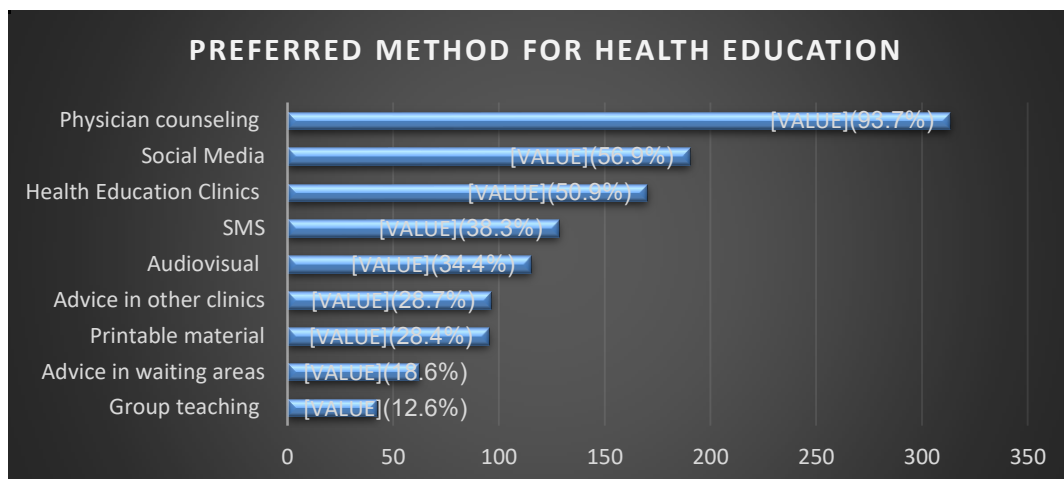


Figure 3: Patient's preferred method for health education (n=334)

Out of 334 respondents 243 (72.8%) needs health education, 38 (11.4%) were not in favor of health education while 53 (15.9%) think health education to be given sometimes only (need based). Almost all the patients with chronic diseases (n=83) were given advice about their disease, its causes and risk factors along with prevention and management plan. Comparison of our study participants on the basis of gender for receiving health education shows statistically significant differences, females being less satisfied ($p < 0.001$). Printed health education material was available more for the male patients (79%) as compared to 47% on the female side ($p < 0.001$) as shown in the table 4.

Table 4: Comparing patient's experience for health education methods in PHC (n=334)

Received the following method during their current visit to PHC	Male N=156 (%) Yes	Female N=178 (%) Yes	Yes n= 334 (%) Yes	P value
Face to face	131 (84.0)	88 (49.4)	219 (65.6)	< 0.001
Group teaching	17 (10.9)	38 (21.3)	55 (16.5)	0.012
Education exhibition	13 (8.3)	12 (6.7)	25 (7.5)	0.678
Advice in waiting area	59 (37.8)	92 (51.7)	151 (45.2)	0.012
Printable material	123 (78.8)	83 (46.6)	206 (61.7)	< 0.001
Audiovisual material	39 (25.0)	29 (16.3)	68 (20.4)	0.057
Did you receive health advice from				
Physician	147 (94.2)	97 (54.5)	244 (73.1)	< 0.001
Health Educator	21 (13.5)	60 (33.7)	81 (24.3)	< 0.001
Nurses	41 (26.3)	64 (36.0)	105 (31.4)	0.060

Other health professionals (like lab staff, pharmacist, dietitian, X ray staff)	72 (46.2)	46 (25.8)	118 (35.3)	< 0.001
Didn't receive any health education	9 (5.8)	8 (4.5)	17 (5.1)	0.626

*Chi square

4 Discussion

This study provides an opportunity to assess the overall patient's satisfaction with the health education attending the PHCs in Jeddah. Majority of the study participants were satisfied with the health education provided to them. The most preferred method identified was individualized face to face health education session by the physician himself; as they are considered as trustworthy source of health information universally. [19] Studies conducted in other regions of Saudi Arabia also identified one to one health education sessions by physicians to be most preferred method. [13,15,18] Literature from European countries like UK[1], Switzerland[2] and other Asian countries like Hong Kong[9] also support these findings; identifying face to face health education sessions by the physicians themselves has a positive impact for achieving desired goals and better compliance. Our study findings showed around 71% respondents reported high satisfaction regarding physician's health education role. This satisfaction is much high than 37% reported in a study conducted in Riyadh; this shows physician's commitment and patient's confidence on our doctors. These personal interactions with the health care professionals provide an opportunity for the patients to share needs and feelings with physicians in privacy. [18,20] On the contrary, this individualized service demands more time and efforts by the physician; which they usually don't have. [21] In developing countries like Saudi Arabia with low literacy rate; a need to train not only the primary health care physicians but the support staff highlighting the importance of health education becomes essential. [11,15]

On the preference list, second option for health education identified by our study participants was through health educators. More than 50% study participants were in favor of them; followed by nurses and other support staff. These findings were consistent with study conducted in Riyadh. [18] Professional development of health care workers is a fundamental part of quality improvement. A prerequisite for quality improvement is command over health education techniques not only for the doctors but for nurses and health educators. [11,22]

Overall satisfaction scores were calculated for the methods and quality of health education. The overall high satisfaction regarding the methods was less accounting only 38% as compared to 68% in Riyadh [15]; while satisfaction regarding, quality was acceptable (68%). Group teaching (21%) especially in the

waiting areas was not a preferred way for our study participants as well as for the participants of study conducted by Al-Khashan et al. [18] This may be because more than 75% patients didn't experience any health education session in groups. This highlights that the health educators are either not present in PHCs or they are not performing their duties properly. In contrast to that, more than 80% participants were satisfied with the group and waiting areas health education sessions in Riyadh. [15] Although the majority of the study participants indicated that they had received health education message from physicians, about a quarter had not; which points to the need for a greater effort in this service. Aiming at providing adequate knowledge and understanding patient health concerns, one can suggest more time to be provided by the physician. [21,22]

Different studies have highlighted the use of medical and technical terms as the most frequently mentioned barrier with regard to health education. [19,21] Limited health vocabulary, literacy and medical knowledge of patients all represent major source of miscommunication between patients and their physicians. [23,24] However, in the present study patients were mostly satisfied (81%) for the doctors not using technical/medical terms, supported by the findings of Holm et al. [25] Around 27 % of our study participants were of the view that the time of consultation was not sufficient and the physician had little time to answer questions. Similar complaints were registered in another study conducted by Al-Khashan et al. [18]

More than 90% patients still want their physician to give proper health education, even though most doctors (73%) are fully utilizing their consultation time. This misconception can be a result of combination of educational barriers interfering targeted learner. [24,25] It is essential for the health care professionals also to be skilled in assessing the needs and the level of education given to the patient. This can be improved by combining clinical expertise with new technologies. [25] Social media, use of SMS services in addition to the audiovisual aid were identified as emerging preferred choices for health education. The preference of social media shows its modern day extensive use. [24,25,26] Social media can serve as an effective platform for educating masses. Literature identified printed/written educational material to be another effective teaching method which was mostly available in PHCs of Jeddah as compared to 44% availability in PHCs of Riyadh. [15] Many studies have highlighted the need for printing high quality written material and making it available for the patients. [15,25]

Males were more satisfied with the quality of care provided in the PHCs as compared to females. Around 50% female patients reported not getting health education from the physicians. This statistically significant difference may be either due to more female and pediatrics patients coming to these centers, overloading the female physicians. Or it may be due to high expectations from female patients. Studies conducted in Riyadh [15] and Najran [26] also showed more satisfaction among the male patients. A limitation of current study is, satisfaction was not calculated separately after consultation with a Non-Saudi doctor.

5 Conclusion

Overall satisfaction level for the quality was satisfactory but needs improvement for the method of health education. One to one educational clinics preferably by the physicians were the most desired method identified for the health education by the study participants. A need to strengthen the health education services by introducing professional development programs was highlighted. Health educator's role should be stressed and utilized to their maximum. Controlling for the shortage of human resource in health care sector, can help improving patient satisfaction. Use of new technologies like SMS alerts and use of social media can be beneficial addition to the existing system.

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