Patients’ Satisfaction with Health Education Services at Primary Health Care Centers in Riyadh, KSA

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Abstract

Objectives: The purpose of the study is to assess different aspects of patients’ satisfaction in relation to the health education services provided in Primary Health Care centers at a Major Medical Center in Riyadh, Kingdom of Saudi Arabia.

Research design and methods: This is a cross-sectional survey targeting attendees of PHC centers at Prince Sultan Military Medical City in Riyadh. A total number of 400 participants were enrolled in this study. Data was collected over a 5 months period (Dec 2012 to April 2013).

Results: The overall satisfaction reported with health education services was 68%. One to one education clinic was the most preferred method for delivery of health education. The majority of participants preferred the physician as a health education provider.

Conclusions: Findings from this study showed that our participants expressed a positive evaluation of the distinct dimensions of the health education services provided. However, services of health education were poorly attended in this institution. Barriers causing poor attendance were attributed to the shortage of trained health education staff, lack of time for the providers, cost, and misunderstanding for the role of the health educator.

Keywords: Satisfaction; Health education; Primary Health care; Riyadh; Saudi Arabia

Introduction

Health education is now recognized as a key to achieving better outcomes of health care. Higher patient satisfaction with educational services is now linked to improvements in the quality of health care and improved health outcomes [1,2]. Patient satisfaction feedback helps healthcare providers to identify potential areas for improvement, which in turn can increase the effectiveness of healthcare system [3-5]. Hence, the assessment of satisfaction of patients is important for health educators, physicians, hospital administrators’ and patients themselves to ensure that the standards of health care are achieved and maintained [6]. Satisfied patients are more likely to return for further care and to recommend the health center to others [3,7,9]. Moreover, the more satisfied the patient, the more likely that he/she will develop a relationship of trust with his/her health care providers. Such patients usually are compliant with the medical provider advice and the recommended treatment plan. Compliance will eventually lead to better health outcomes [10,11].

Health education and awareness is the most effective way to disseminate information and encourage people to adopt healthy lifestyles. Adoption of a healthy lifestyle not only helps in prevention of diseases, but also in reducing the risk of complications resulting from these diseases [12]. The patient education approach in particular has the potential to be low cost and an effective way of improving overall patient satisfaction and eventually improving overall health status for the entire population [13].

In a comprehensive review for quality of primary health care (PHC) centres in Saudi Arabia, studies identified that there is poor access and low effectiveness of health education in PHC in general [14,15]. Moreover, there was a particular shortage in health educators, as only 8% of the centers in the country are adequately staffed for health education [16,17]. There is lack of information related to health education and patient satisfaction with this type of service in the PHC setting in the country. Usually the health education printed materials and posters or videos are designed by a specialist group for this issue which include illustration and understandable contents for the attendees in the different health clinics. It should also receive the approval from the academic board of the PSMMC for example in this study case. Due to the importance of the topic and its impact on population health, this study was designed to assess the patients’ satisfaction with health educational services provided in the different PHC centers that belongs to major medical center in Riyadh; Prince Sultan Military Medical City (PSMMC).

Methods

This was a self-administered cross-sectional survey that targeted attendees of PHC centers in PSMMC. There are a total of 12 primary health care centers in Riyadh covering the catchment area of the targeted medical center. A sample of 380 attendees was calculated \( n = \frac{(1) \times (p) (q)}{(d)^2} \) however, the study ended with 400 enrolled participants distributed proportionally among the 12 clinics based on the rate of attendees in each clinic per year. As reported from the statistical book of the PSMMC, the big clinics served around 150-135 patients and 90-105 for small clinics, each day. A sample interval of 9 patients for big clinics and 7 for the small one was assumed to enroll...

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each participant accordingly. In case of any attendees has not accepted to participate in the study, the next one was asked for participation and so on. Usually, attendees had to sit in the general waiting room till the patient’s name was mentioned for the corresponding specialty (curative or preventive) where approached and informed about the purpose of the study. The waiting room was also separated by a partition to separate males from female seats. All voluntarily accepted participants were asked to sign a consent form after receiving clear explanation on the objectives of the study and its importance. Moreover, an explanatory sheet was attached as a first page for those literate individuals. The investigator has to stay with the participant in the same room either for answering any query or to help in filling the questionnaire for those who are in need (illiterates). An assurance was given to the participant as having the right to complete the interview, refuse to answer some questions or to withdraw from the study, and that will not affect his right to receive the care from the clinic. Patients with mental or speech disorders were excluded from the study, however for those below 18 years of age their parents or their caregiver were asked to participate.

An interview is conducted by the investigator in the educator room close to the waiting room which is considered convenient for ensuring comfort. Illiterate participants or those with basic school level were assessed by the investigator in filling the questionnaire within an average of 8 to 15 minutes.

The study protocol was approved by the IRB of the College of Public Health and Health Informatics as well as the IRB at the King Abdullah International Medical Research Centre in the King Saud Bin Abdul Aziz University for Health Sciences. Also internal approval was obtained from the ethical committee in the PSMMMC in Riyadh.

Study instrument

The Patient satisfaction questionnaire was constructed based on previously used questionnaire from the literature dealing with the benefits of health educational services and patient satisfaction [18-25]. The questionnaire was pre-tested with 5% (less than 20%) of the sample size, using other clinics with similar features in order to avoid repeated enrolment of the same participant. Only 2 questions were rephrased to obtain good understanding of the contents. In addition, forward-backward translation was applied to ensure good translation of the questionnaire and adaptability to the local context. The questionnaire included 3 domains of multiple choice questions and it included the following measures: socio-demographic characteristics (age, sex, nationality, marital status, education level, occupation, and place of residence); availability and provision of health educational services (what did the patient receive and what he/she prefers regarding health educational services); patient satisfaction with health educational services such as health education information, health provider interpersonal skills, education organization (time, space and equipment used to disseminate the information) and educational methods (the type and quality of educational methods). Usually, attendees had to sit in the general waiting room till the patient’s name was mentioned for the corresponding specialty (curative or preventive) where approached and informed about the purpose of the study. The waiting room was also separated by a partition to separate males from female seats. All voluntarily accepted participants were asked to sign a consent form after receiving clear explanation on the objectives of the study and its importance. Moreover, an explanatory sheet was attached as a first page for those literate individuals. The investigator has to stay with the participant in the same room either for answering any query or to help in filling the questionnaire for those who are in need (illiterates). An assurance was given to the participant as having the right to complete the interview, refuse to answer some questions or to withdraw from the study, and that will not affect his right to receive the care from the clinic. Patients with mental or speech disorders were excluded from the study, however for those below 18 years of age their parents or their caregiver were asked to participate.

A 5 point Likert type response scale was used to measure participants’ satisfaction ranging from “Strongly Agree” to “Strongly Disagree”.

Data management and analysis

Data was collected, checked for completeness and entered into data editor for analysis with Statistical Package for Social Sciences (SPSS Ver. 20.0, US). Descriptive statistics was calculated for all questionnaire items. Chi-square test and Fischer’s exact test were used to determine

significant variation among categorical variables. A p-value of less than 0.05 was considered significant within a 95% confidence interval.

Each response item in the questionnaire was scored from one “for the least satisfaction” to five for “the highest satisfaction”. For example, a patient that responded “strongly agree” on a question received a score of 5 and a score of 1 for a “strongly disagree” response. An overall satisfaction score was summed based on the score earned for individual responses. Thus scale number 3 “agree” was considered as the cut-off point of good or poor satisfaction. Raw scores were converted to percentages for ease of interpretation and differentiation between the levels of participants’ satisfaction [18]. A score of 66% or more was considered as high satisfaction with the service (as cut-off point). A score of 33% to 66% was considered as moderate satisfaction and a score below 33% was considered as low satisfaction.

Results

Four hundred participants were enrolled in the study from 437 attendees asked for participation in the study where 27 of them were shown a total excuse of participation and 10 withdraw from the interview when they named for their turn to meet the physician or the laboratory. The demographic characteristics of study participants are presented in table 1. The mean age of the participants was 33.3 (µ) and standard deviation (SD) of ±11.8 years. Male to female ratio was 1:1. Around three-quarters of the participants were from the age group 20-44 years. Most of the participants (77.2%) were married. The majority of study subjects (79.7%) were holders of either secondary or university degrees. Around 44.8% of them were employed, few reported being students (14.5%) and the rest (40.8%) reported being unemployed.

Findings from this study showed that 44.8% of the patients have received printed educational materials at some point. Low rates of attendance were found for other methods of education such as one to one clinic (which is usually given by either physician or mostly health educator), group teaching, education exhibition and advice given in the waiting area (24%, 19.5%, 12.8% and 20.2%, respectively). Figure 1 is a display of percent attendees for the different offered educational methods.

Fifty nine percent of the participants have received health education (exhibition and advices in waiting area). Education clinic (face to face) and group teaching, in addition to public materials), or patient education counseling provided by physician, health educator, group teaching, education exhibition and advice given in the waiting area (24%, 19.5%, 12.8% and 20.2%, respectively). Figure 1 is a display of percent attendees for the different offered educational methods.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Total</th>
<th>Male (n=200)</th>
<th>Female (n=200)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>34 (58.6)</td>
<td>24 (14.5)</td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>130 (72.6)</td>
<td>49 (27.4)</td>
<td></td>
</tr>
<tr>
<td>Don't work</td>
<td>36 (22.1)</td>
<td>127 (77.9)</td>
<td>163 (40.8)</td>
</tr>
</tbody>
</table>

Table 1: Demographic Characteristics of study participants (N=400).
educational advices only from physicians, followed by health educator (12.5%) or other health care providers (1.5%). Regarding the patients’ needs for health education services, the majority of the participants reported a need for health education services (90%) either always or sometimes. However, 54.5% of the participants preferred a physician as a health education provider, followed by a health educator (32.2%). No significant differences (P>0.05) were observed in actual providers of health education, preferred providers of health education, and perceived need for health education among males and females in this study sample (Table 2).

Regarding the patients’ preference for a health education method, one-third of the participants had a preference for an encounter with the health educator, forty six percent preferred visiting a health education clinic, followed by advices in waiting area, printed materials, group teaching and SMS mobile (44%, 32%, 21% and 6.5%, respectively).

Generally, the overall reported satisfaction score was high (68%), and satisfaction scores with most of the different reported health educational methods were within the overall range or above (64.2% to 87.2%) except for the physician education counseling; it was found to be low (43.8%) (Table 3).

Discussion

This study provided an opportunity to examine the overall satisfaction with health education services for patients attending the primary health care centers in a major medical center, KSA. The results of the study indicated that most of the interviewed respondents were satisfied with the health education services they received and that the individualized face to face method was the most preferred method by both male and female groups. Different health education studies have shown that the one-to-one method in education could most likely lead to better achievement than other health education techniques due to personal interaction with the health care provider, sharing of needs and feelings, and provision of privacy [26]. On the other hand, it is a common knowledge that this individualized service demands from the health care provided more time and efforts with each client or patient [27]. However, in such case of Saudi Arabian context, the improvement of this method (one to one communication) for education in health is important particularly in country with significant rate of illiteracy and an appropriate level of health awareness.

Around half of the attendees (participants) showed that they used or received the health education service in these clinics which indirectly could be explained as a gap between the health education service and the clinics’ attendees. The main barriers of poorly attended services were mainly attributed to the shortage of trained health education staff, lack of time for the providers, increased cost, and misunderstanding for the role of the health educator.

The findings from our study showed that 65.3% of respondents reported moderate to low satisfaction regarding the role of physicians in health education counseling; however, most of them still preferred physicians as provider of this service. These findings are compatible with others from the literatures [26]. It is universally believed that physicians are a trustworthy source of health information and patients are most likely to achieve higher satisfaction with health educational services when delivered by a physician [28-30]. Therefore, specific training is needed to target physicians in the primary health care setting with a focus on their awareness about the importance of health education [31]. One can suggest more time might be given by the health care provider to sit with the patient to achieve better communication.
and understanding patient health concerns and provide him/her with adequate knowledge on health.

Regarding group teaching as a method to deliver health education in primary health care settings, this current study showed that 87.2% of the participants have reported satisfaction with this service; however, this service was attended by only 19% of the participants. This method is recognized as essential for disseminating adequate knowledge and skills in health education and it has been shown that it is successful in improving chronic disease patients’ outcomes [32,33]. No differences were found when educational activities delivered in groups were compared to education in individual setting in another study [34]. This is probably due to patients’ preference for discussing topics during group sessions that were not handled by health care providers or not addressed during individual sessions [35]. Another advantage for applying this method is that it is cost-effective and provides extra time for the health educator without increasing working hours, [32,34,35] and eventually reduces the repetition that may occur during individualized educational sessions [35].

This study suggested that participants have probably known the importance of health education interventions in waiting area for delivering educational advices since around half of them (43%) preferred it as a “better health education method”. The potential health benefits of this service have been widely studied and reported [36-38]. As shown in a previous study, the patients who received health advice while they are in the waiting rooms of the primary health care centers were more satisfied with their education than those that didn’t receive any [39]. Lack of place organization in the waiting area of the targeted primary health care centers and lack of equipment (audio-visual devices) were considered in this study as a barrier to satisfied participants with this method of education delivery. Similarly, DeShazo et al. reported lack of equipment as a barrier to the adoption of effective waiting room interventions [38]. Another study has shown that the use of advanced equipment and technologies in health education and counseling of patients could be more successful to reach the goal of educational interventions [39]. The health education exhibition and campaigns as alternative educational methods could be more efficient for increasing the audience awareness about the importance of early diagnosis and prevention of most of diseases as reported in some studies [40,41]. This method has been proven as effective to achieve encouragement for changing behavior during a breast cancer campaign [42]. Our study found that two-thirds of the participants were highly satisfied with health education exhibition arranged by PHC centers in PSMMC; even though, no more than 13% of study participants has reported that they have previously attended a health education exhibition. A study conducted elsewhere, has suggested that this type of health education method requires high cost, more time, and precise arrangement and scheduling [42].

One of the effective teaching methods for delivering patient education is written materials. Around half of the study participants in this study (44.8%) have received health education printed materials in primary health care centers, and the rest of them have received these materials from the health care providers. A high score of satisfaction (80.5%) was obtained for the quality of the printed material, its content, and conductivity to their health needs. Evidence from previous studies, elsewhere, has shown that patients were in preference of obtaining written health educational materials because of their relevance to their health problems, improvement in their knowledge, and reduction in confusion or misunderstanding [43-45]. All health care settings are in need to work on the written materials to make it of high quality and available to all health care visitors [43]. Special attention is to be paid to organization, cultural relevance, and literacy among the targeted population. So, many recommendations are to be developed toward the use of successful and effective methods of education as part of integrated strategies and planning for health education mainly in the primary health care settings [43,46,47].

Conclusion

In general, the importance of health education service was shown in the responses of the participants, but it is not yet enough to attract the majority of the attendees of the different clinics in PSMMC. One to one educational clinics were the most preferred method by the study participants and preferably delivered by a physician. It will be therefore of paramount importance for the country to develop a strategic plan for training professionals in health education while introducing services that are effective and rated as highly satisfactory in this community. There is a need to strengthen the capacity of health education services by controlling the shortage in human resources and establishing of professional development programs and strategies for all health care providers and supporting material and equipment in primary healthcare centers. Strategies based on behavioral theory are recommended to increase motivation to increase attendance of health education services.

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References


