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Original Article

Evaluating the perception of martyrs' parents of access to the services of health monitoring plan provided by Foundation of Martyrs and Veterans Affair of 10 and 11 districts of Tehran in 2014

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ABSTRACT

Background & Aim: Facilitating people's access to necessary health services is one of the most important strategies to reach social justice within countries' health system. Therefore in-time access to health cares and ensuring desirable results are essential. This study was conducted to evaluate the perception of martyrs' parents of accessing the services of health monitoring plan.

Materials and Methods: This descriptive-analytic (cross-sectional) study was conducted on 246 parents of martyrs under the supervision of Foundation of Martyrs and Veterans Affair of 10 and 11 districts of Tehran who used the services of health monitoring plan; samples were selected through simple randomized sampling. Data gathering tool was a researcher-made questionnaire that contained two parts of demographic characteristics with 18 items and perception of access with 20 items. Data were analyzed using SPSS 16, descriptive statistics, Fisher's test and Chi-square test.

Results: Results showed that 92.3% of the parents had a medium perception of access to the services of health monitoring plan. Also evaluating different dimensions of access showed that the perception of martyrs' parents in the dimensions of accessibility and affordability was poor and were respectively 75.2% and 73.2%.

Conclusions: It is necessary to improve the accessibility and affordability dimensions of access among martyrs' parents.

Introduction

Facilitating people's access to necessary health services is one of the most important strategies to reach social justice within the countries' health system (1). Also, in-time access to health care is necessary to reach desirable results (2). Provided primary healthcare, along with being effective, should be just, affordable and culturally acceptable for people and lead the countries' health systems toward reaching the goal of "health for all" (3). Accessing adequate resources of services is different from the opportunity to get health services; in other words, people's effective access to healthcare services would be limited by financial, organizational, cultural and social barriers (4).

Results have shown that factors such as the income level, the distance between the living place and healthcare center, educational level, age and social status are effective on people's access to healthcare services. It is obvious that people with low incomes, especially the elderly population, would refer to doctors less than the rich elderly population. So it could be stated that improvement of health and quality of life

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depends on accessibility and availability of affordable healthcare services (5).

Australia is one of the seven countries with an advanced medical system. However an international survey that was conducted in 2009 showed that despite availability of physicians and accessibility of healthcare services in Australia, patients' access to physicians at the time of need or the next day is very low; meaning that only a few general practitioners would visit patients at the time of their need or its next day and only about half of the physicians would visit patients without having any appointment. Despite the fact that national medical services are free in England, still providing available services is faced with problems, like poor communicational skills of healthcare providers and their lack of information about patients' level of awareness, cultural backgrounds and needs (6).

Results showed that limited hours, long waiting time, the absence of medical personnel, not providing drug quota for public hospitals, tendency toward unregistered use of smuggled drugs among poor population of poor countries due to not having enough cash, not completing the period of treatment due to low financial situation and willingness to visit farther health centers due to not having enough money were some of the obstacles for poor population to access medical services (1, 2).Also, another study showed that the elderly's fear of the roads' safety and difficulty in finding transportation vehicles for going to the doctors are some of the factors that would affect access to medical services (1, 3).

Weber et al believed that patients' lingered waiting time for visiting the doctor and limited time for accessing medical services are some of the factors that could affect access to healthcare services (7). Also, financial incapability like not having health insurance, organizational factors like shortage of providers of primary healthcare and personal factors like different languages could limit the access to health services (8). Conducted studies in America have revealed that different rates of mortality caused by cardiovascular diseases are not just due to demographic characteristics and in many cases, it is caused by different levels of access to medical services and facilities (5). In 2005 the national health monitoring plan was designed and developed by the Foundation of Martyrs and Veterans Affair which is still continuing more widely. Martyrs' parents were one of the groups who used these services for free. The services included physicians' visits to patients' houses every other month, providing clinical services at home if needed, providing clinical and paraclinical services at contracted health centers, providing rehabilitation and medical equipment and other services. The main goal of this project was to improve the health of martyrs' parents and to facilitate their access to medical healthcare services was one of its secondary objectives. Regardless of how to access medical services and its related obstacles that obviously exist, the perception of people of medical services would affect their behaviors in searching for them (9). Therefore people's perception of access is the main concern of this study. What matters is that people usually do not realize what they could access and so they would act on that basis. Barriers to access would lead to unmet medical needs, delay in receiving appropriate and in-time cares and inability in receiving preventive cares and could eventually cause hospitalization and increase of medical costs (10). Therefore the present study was performed to evaluate the perception of martyrs' parents of access to the services of health monitoring plan.

Methods

This research was a descriptive-analytic (cross-sectional) study. The study population included all the martyrs' parents under the supervision of the Foundation of Martyrs and Veterans Affair of 10 and 11 districts of Tehran who used the service of health monitoring plan. The sample size was calculated using ratio estimation formula; assuming that half of the parents had desirable access to the services of health monitoring plan (p = 50%) and with a confidence interval of 95% and error rate of d = 0.05, the sample size was calculated to be n = 384. After modifying the sample size for S limited population (N = 700) and using the formula of $n' = \frac{n}{1+\frac{n}{N}}$ the sample size was decreased to 248. Then by simple randomized sampling and using The Randomizer software, 248 numbers from 1 to 700 was randomly selected and based on them, samples were selected from the numbered list of martyrs' parents under supervision of health monitoring plan by the Foundation of Martyrs and Veterans Affair of 10 and 11 districts of Tehran. Then their phone numbers were extracted from their files to contact them.

Data were gathered using two researcher-made questionnaires. The first questionnaire was for obtaining the demographic characteristics of the martyrs' parents including the parent's relation to the martyr (which indicates their gender), age (years), having medical insurance (primary and supplementary), living status (with spouse and relatives, without spouse and with relatives, without spouse and alone), educational level, income, number of years using the services of health monitoring plan, number of physicians' visits in a year and using the services of health centers at the time of need (centers contracted with the Foundation of Martyrs and Veterans Affair, public centers and private centers). The second questionnaire evaluated the perception of access to the services of health monitoring plan which was designed by the research team based on Penchansky's five dimensions of access (11). This questionnaire contains 20 items; items 9 and 10 are about accessibility, 16-19 are about affordability, 11-15 and 20 are about acceptability, 1, 3 and 4 are about availability and 2 and 5-8 are about accommodation. The questions have closed answers with yes/no choices; yes has a score of 2 and No has a score of 1.

Perception of access based on the gained score varied from 20 to 40. For classifying the total score of access and the score of its dimensions to poor, moderate and good, first, the obtained score was divided by the number of items. So the total score and the score of dimensions became between 1 and 2. Then the score of 1-1.33 was considered as poor, 1.33 to 1.66 as moderate and 1.66 to 2 as good. The validity of the questionnaire was evaluated through qualitative content validity, and its reliability was evaluated using test-retest method. The intraclass correlation coefficient between two phases of measurement for the perception of access questionnaire was ICC = 0.7. Also, the internal consistency of the questionnaire was 0.75 using Richardson's coder. Considering the different addresses of the participants and availability of their phone numbers, the questionnaires were completed through phone calls (12). To regard the ethical issues of the study, the study was explained at the ethics committee of Tehran University of Medical Sciences and was approved by No. 9111196055 Also, for ethical considerations, the aims of the study were explained to the participants, and they were assured of anonymity and confidentiality of their information and then they were interviewed if they were willing to participate.

Data analysis was performed using SPSS 16 with descriptive statistics such as relative and absolute frequency distribution tables. For evaluating the distribution of the study's

main variable (access) Kolmogorov-Smirnov test was used; since this variable did not have a normalized distribution, non-parametric tests were used. Also to evaluate the relation between the demographic characteristics and the perception of access, Chi-square and Fisher's tests were used.

Results

From 248 questionnaires, 246 were completed and two were excluded since the martyrs' parents were not able to continue the study and requested to be excluded; therefore, data analysis was conducted on 246 questionnaires. The minimum age of the participants was 54, and their maximum age was 92 years. The mean and standard deviation of the age of participants was 74.95 ± 7.14 years. Other demographic characteristics are presented in table 1. The range of the perception of access score was from 21 to 33. Most of the participated parents in the study (92.3%) gained a moderate score of the perception of access (total) to the services of health monitoring plan, 2% had a poor perception, and 5.7% had a good perception. Their score for the perception of different dimensions of access are presented in table 2.

Table 1. Frequency distribution of participants' demographic characteristics

Demographic characteristic		Frequency	Percent
Relation to the martyr	Father	86	35%
	Mother	160	65%
	Total	246	100%
Number of visits	1-4	65	26/4%
	4-8	169	68/7%
	8-12	12	4/9%
	Total	246	100%
Educational level	Illiterate	134	54/5%
	Under diploma	102	41/5%
	Diploma or higher	10	4/1%
	Total	246	100%
Income level	500,000 to 1,000,000 Tomans	142	57/7%
	1,000,000 to 1,500,000 Tomans	79	32/1%
	1,500,000 to 2,000,000 Tomans	15	6/1%
	More than 2,000,000 Tomans	10	4/1%
	Total	246	100%
Health Services Insurance from the Foundation of Martyrs	Yes	123	50%
	No	123	50%
	Total	246	100%
Gold Insurance from the Foundation of Martyrs	Yes	242	98/4%
	No	4	1/6%
	Total	246	100%

Table 2. Frequency distribution of the perception of martyrs' parents of the total score of access and its dimensions of availability, accessibility, affordability, acceptability and accommodation

Perception of access	Total score of access		Availability		accessibility		affordability		acceptability		accommodation	
and its dimension	N	%	N	%	N	%	N	%	N	%	N	%
Poor	5	2	103	41/9	185	75/2	180	73/2	3	1/2	3	1/2
Moderate	227	92/3	125	50/8	55	22/4	66	26/8	80	32/5	23	9/3
Good	14	5/7	18	7/3	6	2/4	-----	-----	163	66/3	220	89/4
Total	246	100	246	100	246	100	246	100	246	100	246	100

Considering the relation between the demographic characteristics of martyrs' parents and the dimensions of access, the relation between the parent's relation to the martyr and the dimension of acceptability ($p = 0.009$) and the relation between the number of visits to physicians and dimensions of affordability, acceptability and accommodation ($p = 0.03$) ($p < 0.001$) ($p < 0.001$) were statistically significant. Also, the educational level had a significant relation with the dimension of availability ($p = 0.006$). The income level and having a primary or supplementary insurance had no significant relation with any of the demographic characteristics.

Discussion

In the present study, regarding its goal which was to evaluate the perception of martyrs' parents of access to the services of health monitoring plan, it was revealed that most of the participated parents had a moderate perception of access (total) to the provided services of health monitoring plan. A study that was conducted in Baltimore, Maryland, USA, and evaluated the perception of access to health cares among the population of over 20 years showed that most of the participants had a good perception of access to provided services (13). The differences between these two studies could be caused by the differences in the cultural and social structures and the demographic characteristics of the study populations especially their age difference.

Also, results about the five dimensions of access to provided services of health monitoring plan revealed that parents' perception of accessibility and affordability dimensions were poor. In the present study, despite the fact that the health centers contracted with the Foundation of Martyrs and Veterans Affairs of 10 and 11 districts of Tehran were geographically close to the houses of martyrs' parents and easily accessible for them, but since these centers are located in traffic control zones, the participants would face obstacles for visiting the health centers, including transportation costs, direct payment by themselves for transportation and not being able to use personal cars in the traffic control zones.

Health Services and Iran Golden Insurances would cover most of the enormous costs of medical services for martyrs' parents but, lack of information about the centers contracted with these insurance companies, the need for emergency medical services and consequently being forced to pay some of the medical costs by themselves, and repaying a part of medical costs by the insurance companies with a two-month delay were some of the obstacles reported by the participants. Furthermore, some of the participants who had a poor economic condition had problem in directly paying the official costs of medical services like the price of non-insurance drugs and also, unofficial costs like the transportation

costs for visiting the health centers contracted with the Foundation of Martyrs and Veterans Affairs.

The perception of availability of services among participated parents in the present study was moderate and their perception of the acceptability and accommodation of services of health monitoring plan was good. Despite having sufficient human resources, contracted pharmacies and clinical care centers to provide care at home, health monitoring plan is still facing problems in providing care to the martyrs' parents at the time of need and in emergency cases across the city. Participants of the present study reported that they would not be able to use the services of health monitoring plan when they are sick and in need for help. So the health monitoring plan has problems in availability of services. In the present study the perception of participants of the dimension of accommodation had a good score which could indicate ordered provision of services at planes times.

Among all the studies which have evaluated Penchansky's five dimensions of access, a study that was conducted by Peters et al about the relation between poverty and access to medical services in developing countries revealed that poverty had a significant relation with the access of poor population and despite the improvement in accessing medical and health cares in developing countries, still many of the low-income people have limited access to medical services in the dimensions of accessibility, affordability, acceptability and accommodation. Results of this study regarding the dimension of accessibility and affordability are similar to the results of the present study (14). Results of the study by Donna et al that evaluated the access of female wounded veterans to medical cares showed that about half of the participants had unmet or delayed needs; its reason was mostly financial inability to pay for medical cares (affordability) and in a few cases, who were at old ages, problems in transportation (accessibility) was the reason. These results are similar to the results of the present study (2). Okoro et al in their study, which was titled "access to health care among older adults and receipt of preventive services", resulted that low-income population who mostly do not have supplementary insurance have reported to have problem mostly in the dimension of affordability. Their results are similar to the results of the present study (8). Thorpe et al in their study evaluated different dimensions of access to medical care and determined its perceived barriers by the elderly; they revealed that 25% of the elderly population encountered barriers in different dimensions of access and from them, the 63-73 year old elderlies who did not have Medicare insurance had a poor score in the dimension of affordability. In the dimension of availability, the participants reported some obstacles for emergency services, hospital services, specialized services and mental healthcare services. Results of this study in the dimensions of availability and affordability are similar to the results of the present study (9). The study of Peters was not similar to the present study in the field of acceptability. Some of the reasons for this difference could be different expectations and requests of the consumers from the services providers, social barriers, differences in the attitudes of consumers and service providers and gender inequality in providing medical cares for women in comparison to men in low-income and generally poor countries (14). Also the study of Fitzpatrick was not similar to the present study regarding the dimension of acceptability. The reason for this difference was that in this study most of the elderlies reported that the physicians were not responsive toward their concerns (15). Thorpe showed that 18% of the elderly have reported obstacles for access in the

dimension of accommodation and explained that the period of waiting for visiting the physicians was too long. This result is not similar to the results of the present study (9). Donna in their study showed that working women had some problems in the dimension of accommodation since they were not able to leave work or were responsible and taking care of their children or elder relatives. This result is not similar to the results of the present study (2).

In the present study the relation between the age group and perception of access and its dimensions was not statistically significant ($p = 0.7$). However, results of the study of Donna et al showed a significant relation between age and unmet or delayed medical needs of the participants ($p < 0.001$) (2). A significant relation was revealed in the present study between the educational level of participants and the dimension of availability ($p = 0.006$). But the relation between having Health Services Insurance and Gold Insurance and also the income level of the martyrs' parents and their perception of access and its dimensions were not significant. Donna et al in their study showed a significant relation between the participants' educational level and their unmet or delayed medical needs; they also found a significant relation between having insurance and the income level with unmet or delayed medical needs (2). In the study of Shavers, the relation between people's perception of access to medical care and their income level, educational level and mean of age was statistically significant; in a way that people with low income, low educational level and a mean age of 39.2 years had a difficult perception of receiving medical cares (13).

Fitzpatrick in their study showed that elderly's gender, age, income level and type of insurance had a significant relation with their perception of obstacles for accessing medical care; in their study men, people who were younger than 72 years old, low-income people and those with private insurances perceived more barriers in accessing medical services (15).

According to the results of the present study, the scores of affordability and accessibility dimensions were poor and it mean that martyrs' parents experience more obstacle in accessing medical services from health monitoring plan in these two dimensions. So, considering the goals of this study, the obstacles should be determined and resolved for having optimum coverage of the plan.

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Conflict of Interest

The authors declare that they have no conflicts of interest

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