Original Article

The relationship between villagers' knowledge with the reasons behind family physician program in Shahrekord (2010)

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Received: 06/15/2011 Revised: 02/24/2012 Accepted: 04/20/2012

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Journal of Jahrom University of Medical Sciences, Vol. 10, No. 2, Summer 2012

J Jahrom Univ Med Sci 2012; 10(2):43-8

Abstract

Introduction:
Family physician program initiated in 2005 in villages and cities with residents under 20000. One of the objectives of this program is prioritizing health oriented vision instead of providing services so that wasting resources in the field of health is avoided. The aim of this study was to find the relationship between villagers' knowledge with the reasons behind Family Physician Program in Shahrekord

Materials and Methods:
In this descriptive analytical survey, 1100 individuals under the program of rural family physician in Shahrekord were selected by multi-stage cluster random method. Data were collected using a questionnaire and analyzed by t-test, Chi-square, Pearson and spearman correlation tests.

Results:
Mean age of the studied population was 34.23± 14.71 years. The highest percentage (43.8%) of people with very poor knowledge expressed low cost visit and medication as the reason of choosing family doctor program and the highest percentage (%78.6) of those with higher knowledge expressed many benefits of the program in family health. Chi-square test showed that there is a significant relationship between villagers' knowledge and the reasons of choosing family doctor program.

Conclusion:
Results indicated that people had no optimal knowledge toward family physician program. Also, there was a relationship between knowledge and the reasons expressed. Thus, more attention is necessary to be paid by authorities to this specific topic and some measures are essential in training people.

Keywords: Knowledge, Family Physician, Choice, Behavior

Introduction

The implementation of the health care system program and the categorization of its services into three levels was conducted in all of the cities of Iran in 1985. Despite all the remarkable achievements, this program was faced with a major problem due to the lack of a proper referral system

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[DOI: 10.29252/jmj.10.2.43]

[1]. In 2005 the implementation of the family physician and rural insurance programs in rural areas and towns with a population less than 20000 was reformed and the reinforcement of the referral system was taken into consideration[2]. The most suitable guideline for the implementation of the health insurance program in the form of a referral system was the family physician program. Following the act of the Islamic Consultative Assembly regarding the insurance coverage of all the residents in rural areas, the family physician program was finally linked to the massive health care networks of the whole country [3]. Currently, nearly 6 trillion rials are allocated to this cause [4] and the Ministry of Health and Education has assumed to implement this program throughout the country before the end of the 4th Development Plan [5]. In this plan, the general practitioner and his team assume full responsibility of the families that they are to cover. After referring the patient to a specialist, they will still be responsible for following up their patient's state of health. Thus, one of the most important tasks of a family physician is to provide services and treat patients at a primary level; without such services, the term "family physician" cannot be applied to a physician. Also, all health services are provided for the families covered by the family physician program [2]. This program aims at prioritizing health and prevention rather than cure, and therefore reducing medical costs for the public. It emphasizes the significance of classifying medical services in the family physician and rural insurance programs seeking to decrease medical drug usage and prevent further public financial loss in the medical sector.

Being aware of these tasks and purposes causes a better approach towards these goals, prevents any of the resources from going to waste and stops any interference during the process[6]. Since people naturally have the tendency to maintain their health, it is essential to provide them with the right motivation so that not only the health sector, but the people themselves would strive for better health[7]. Such motivation is brought about only if the public is aware of the ends of this program. Since the family physician and rural insurance programs are in their infancies, and no investigation has yet been carried out in this regard, in the present study it is intended to identify a relationship between the villagers' level of awareness and the reasons behind the family physician and rural insurance programs in Share-kord.

Materials and Methods

In this analytical study, the population investigated included 1100 villagers from Laran, Saman and Markazi covered by the health center of Share-Kord. They were selected using multi-stage cluster random sampling. All of these people were covered by rural insurance. Three health centers were randomly sampled: The first center, Harooni, which covered 5959 people from Katak and Asad Abad villages; the second center, Vardanjan, which covered 5386 people from Vardanjan and Tomanak; and the third center, Taghanak, covering 4791 people from Bahram Abad, NoAabad, and Shamsabad. According to sample size, 400, 370 and 330 people were respectively chosen for investigation. The criteria for being a part of the investigation was that the participants had to be residents of those villages, they were supposed to have rural insurance, they had to be at least 15 years of age, and they needed to be literate. The criterion that would disqualify a potential participant was their lack of interest in taking part in the study and not filling out the questionnaires. The means to collecting the data was a questionnaire consisting of three parts (3 questions about the participants' personal information such as age, gender and degree, 4 questions regarding the reasons why they had chosen the family physician and rural insurance programs, and 11 questions to assess each

[DOI: 10.29252/jmj.10.2.43]

participant's level of knowledge and awareness). In the section related to the participants' level of knowledge and awareness, there were closed-ended multiple choice (4 choices) questions in which the participant was allowed to select one choice as the correct answer. For each correct choice, they were granted one score, and a zero for each incorrect pick. All the scores would finally be converted into percentages and a score of 0 to 100 was given to each participant. Those who received a score lower than 20 were considered very weak, 20-40 were weak, 40-60 average, 60-80 good, and over 80 were excellent. In order to examine the scientific correctness of the data collecting tool, 7 expert professors were asked to examine the questionnaires and their opinions were incorporated. In addition, for the ostensible correctness of the tool, 15 individuals of the same population were separately tested to see whether the questions were understandable, corrections were made and necessary changes were applied. In order to determine the perpetuity of the tool, 50 people of the same population who had not participated in the survey, completed the questionnaires and the resulting Cronbach's Alpha was 0.89. In order to persuade the participants, we travelled to each of the villages and after introducing ourselves, explaining our purpose of the survey, and receiving oral consent the questionnaires were filled out.

The data were statistically analyzed using SPSS15. In order to determine a difference between the average score of women and men, the T test was applied. In order to determine the relationship between people's awareness and their age, Pearson's test was applied. And in order to determine the relationship between their level of awareness and educational degree, Spearman's Correlation test was used. And finally, to determine the relationship between the level of awareness and the reasons why the family physician program was chosen, Chi-squared test was applied.

Results

In this study, a total number of 1100 individuals were surveyed. Among them 45.5 percent were men and 54.5 percent were women. T-Test showed no significant difference between the average score for men and women's level of knowledge ($p=0.09$). The average age of the participants in the survey was 34.23 ± 14.71. The highest frequency belonged to the below 30 age group (50.1), and the lowest frequency belonged to the above 50 age group. The highest frequency regarding the level of education belonged to those who had high school education (31.5) and the lowest frequency belonged to those with a university degree (10.3). People's level of awareness with regard to the family physician program was as follows: 30.9 percent very weakly informed; 37.5 percent weakly informed; 22.3 percent average awareness; 7.9 percent well- informed; and 1.4 percent excellently informed. Only 51 percent of the individuals had received previous education regarding the program. There is a reverse relationship between the score received for knowledge and the individuals' age ($P<0.001$, $r=0.143$). There was a direct relationship between the score for the individuals' level of awareness and their educational level or degree ($P<0.001$, $r=0.215$).

As seen in table 1, the highest percentage (43.8) of the individuals who had little knowledge about the plan, stated that they had chosen the family physician program because the checkups and medications in this program were cheaper, while the highest percentage (78.6) of those who had excellent knowledge about the program, stated its numerous benefits for family health as the main reason for their choice. Chi-squared test revealed that there is a significant relationship between the villagers' awareness of the program and their reasons to choose it ($P<0.05$).

[DOI: 10.29252/jmj.10.2.43]

Table 1: Frequency distribution and the relationship between villagers' knowledge of the program and their reasons to choose the family physician program

Reasons for choosing the program	Advice from friends and acquaintances		Health center personnel's advice		Low-cost checkups and medications		The numerous benefits of the program for the family		Total
Awareness	No	Percentage	No.	Percentage	No.	Percentage	No.	Percentage	No. (Percentage)
Very low	17	5	98	28.8	149	43.8	76	22.4	340(30.9)
Low	22	5.3	111	26.8	136	32.9	145	35	414(37.5)
Average	12	4.9	76	31	74	30.2	83	33.9	245(22.3)
Good	2	2.3	26	29.9	19	21.8	40	46	87(7.9)
Excellent	0	0	1	7.1	2	14.3	11	78.6	14(1.4)
Total	53(%4.8)		312(%28.4)		380(%35.2)		355(%32.3)		1100(%100)
The result of the Chi-squared test	P<0.001								

Discussion

Since the family physician program does not have a history and no similar study has been found on this issue, and also because no investigation has been conducted on the family physician program and the villagers' knowledge of the issue, we are going to discuss the investigations which indicate people's knowledge of other health services and their reasons to choose the program or services. In the current study, a minor percentage of the individuals were well aware of the program, which is in agreement with Seyyed Nouri and Jamshidi and Parsi's survey [8&9]. Also, in the study conducted by Shayegh and Esfahani, 82.1 percent of the subjects had little awareness, and only 17.9 percent were well aware of the services offered for dental hygiene [10]. In the present study, a majority of the people examined had little knowledge of the family physician program. These results were in disagreement with some of the investigations such as Halakoo ee Naeenee et al., which revealed that most of the individuals were unaware of the measles immunization program [11]. In Kazanjeen's study, most of the participants had average knowledge [12]. Also, in Manahem's study, most of the individuals being surveyed were well aware and in Angster and Meniz's study, a majority of the participants were well aware of the family physician program [13&14]. The results of Modley's study show that people's knowledge of the cervical cancer screening program was average, but increased after they had been educated on the subject [15]. In Champion's study, women's knowledge of the breast cancer screening program also increased after they had been informed [16]. These findings show that people's level of awareness regarding a particular program depends on their accurate and thorough training and education on the program. In this study, apart from knowledge-based population variants, people's knowledge of the family physician program is inadequate. This shows how necessary it is for authorities and executives to raise awareness in the villagers about the aims of the family physician program.

In the present study, there was a reverse relationship between people's knowledge of the program and their age. This may result from younger people's curiosity to gain more information about recent topics. However, in Manahem's study [13], there was no significant relationship between people's age and their knowledge. In this study, there was a direct relationship between people's score showing their awareness and people's educational level. This is probably due to the fact that educated people are more capable of acquiring information out of various

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sources, especially written sources. Kazanjeen, Mc Farland, Khojaste and Shahrokhi's studies also revealed a direct relationship between people's educational level and their awareness [12& 17-19]. Also, in Manahem's study, there was no significant relationship between a person's gender and the score showing their awareness [13].

Conclusion

In the present study, a minor percentage of the participants stated that they had chosen this program, because their friends and acquaintances had advised them to. This fact is in accordance with Piri, Nouri and Jamshidi's investigations [20 & 8]. Following friends and acquaintances' advice, health center personnel's advice had the lowest percentage. In Nouri and Jamshidi's study, the lowest percentage belonged to friends and acquaintances' advice followed by doctors and midwives' advice, which is in conformity with the present study [6]. In Jafari's study, a large percentage of the participants had chosen free services and low-cost medications as their reason. [21]. Similarly, in the present study, most of the villagers expressed low-cost checkups and medications as their main reason to choose the rural insurance and family physician program. And the results showed that those who were very weakly and weakly informed had chosen the programs for the low cost of the checkups and medications, while those who were well informed or excellently informed had chosen the programs due to the numerous advantages which they offered. This difference is statistically significant. Based on these findings, it is safe to say that since most of the villagers are not well aware of the advantages of the program, most of them expect low-cost checkups and medications, despite the fact that there are more valuable ends to this program.

One of the limitations for the present survey was the fact that many of the villagers were illiterate and therefore, they couldn't fill out the questionnaires. Thus, the result of this survey cannot be generalized to all members of the population.

Acknowledgement

We are truly grateful to the Assistant research director of the medical university of Shahre-Kord for his financial support. Also, we would like to thank all the residents of the villages for their help. Surely, without their help it would have been impossible to carry out this survey.

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[DOI: 10.29252/jmj.10.2.43]