





# Developing Urban Family Physician Program in Shiraz, Fars Province, the Doctors' Experiences: A Qualitative Research

Ali Reza Safarpour<sup>1</sup>, Ladan Zarshenas <sup>2</sup>, Azita Jaber <sup>2</sup>, Mohammad Hadi Imanieh<sup>1</sup> and Manoosh Mehrabi<sup>3,\*</sup>

<sup>1</sup>Gastroenterohepatology Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

<sup>2</sup>Community Based Psychiatric Care Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

<sup>3</sup>Department of e-Learning Planning in Medical Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

\*Corresponding author: Department of e-Learning Planning in Medical Sciences, Virtual School (Comprehensive Center of Excellence for e-Learning in Medical Sciences), Shiraz University of Medical Sciences, Neshat St., Shiraz, Iran. Tel: +98-9173069822, Email: mehrabima@sums.ac.ir

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## Abstract

**Background:** Regarding problems related to quality, justice, effectiveness of health care provided by the Ministry of Health of Islamic Republic of Iran in 2015, the family physician is the main responsible for the health team who provides all the services and medical-healthcare with the assistance of midwives and other staff.

**Objectives:** The purpose of this study was to explain the experiences of urban family physicians in Shiraz, Fars province, Iran.

**Methods:** This study was conducted in 2018 at Shiraz University of Medical Sciences, Shiraz, Iran. Participants in this study were 8 physicians in the urban family physician program with a variety of experiences. The method of this study is qualitative, based on content analysis. Sampling was done purposefully using semi-structured in-depth interviews from participants to reach saturation. Data were analyzed using content analysis with software MAXQDA V. 2007. Data validity was evaluated using criteria such as credibility, dependability, and confirmability.

**Results:** Results were presented in 4 categories: lack of infrastructure, inefficiency of implementation, comprehensive look at the health of the community, and the need for corrective actions along with 17 subcategories.

**Conclusions:** The most important challenges after 8 years of starting a family physician program include the lack of infrastructure, inefficiency of the implementation method, lack of a comprehensive look at the health of the community, and the need for corrective actions in the program. It is the responsibility of health policymakers to address these challenges to improve them. It is recommended that training at all levels of the involved individuals, including theoretical and practical training should be considered.

**Keywords:** Family Physician, Qualitative Research, Iran

## 1. Background

In 2005, the health system of Iran, in response to problems related to quality, justice, effectiveness and more comprehensive studies in other world health systems, implemented family physician program in the whole of the country. This is the second big change after launching health networks. In this program, the family physician is the main responsible for the health team who provides all the services and medical-healthcare with the assistance of midwives and other staff (1, 2). In addition to curing diseases, family physician provides necessary training and counseling for disease prevention and achieving an acceptable level of mental and physical health. Therefore, a family physician must deeply and enthusiastically involve in the whole life issues and community's health needs and

take into account all aspects of medicine, culture, religion, patient and family status, and community status in care of patients (3). Conceptually, family physician program is a complete medical-healthcare system whose most important outcomes are to eliminate the confusion of people visiting doctors and increase people's satisfaction with health services, and of course, preventing waste of sources, and minimizing costs and economic savings are also on its agenda (4).

But what family physician experience in everyday life may be different and not considered, while the most accurate and deepest information is the information that family physicians experience, which can depict the actual picture of the implementation of this program. Past experiences form the attitude of the future, and these experi-

ences can only be achieved through the words of doctors and the story that they describe their successes and failures. Despite the studies conducted in this regard, there are still insufficient studies to examine the experiences of family physicians with a qualitative approach. The adoption of this approach will lead to a deeper understanding of issues and subjects related to family physician.

## 2. Objectives

Therefore, this study is designed to explain the experiences of family physician in Iran (Fars province), so as to use its results in solving the problems of this program and consequently, improve the quality of health services.

## 3. Methods

This research was done qualitatively using content analysis method to create knowledge, acquire new insights, express facts, and guide for performance, and achieve a broad description of a phenomenon by reaching concepts and categories that describe the phenomenon (5-7). In this study, researchers have used 8 physicians participating in the urban family physician program of Fars province, Southern Iran until it was adequate to answer the study questions by reaching the data saturation. Study participants were selected based on family physician experience and their willingness to participate in interviews and presenting their experiences. Those who did not tend to provide experiences excluded from the study.

Access to the participants was based on the list of family physicians from the family physician department of Shiraz University of Medical Sciences, Shiraz, Iran, and the doctors were selected based on the inclusion criteria from four geographical areas of Shiraz city. Then researchers have performed purposefully semi-structured in-depth interviews. All interviews were recorded by the voice recorder and after each interview, they were transcribed and coded separately. Interviews were conducted at the doctors' office. Each interview lasted 45 to 60 minutes. Interviews were beginning with the general question like, "Please tell us about your experiences from family physician project". Then interviewer asked which factors facilitated the program and which factors prevented the correct implementation of the project. Sub-questions were: please "explain more" or "give an example" or "what is your purpose?".

Trustworthiness of the findings was examined through the following criteria: credibility refers to internal validity, in the sense that whether participants, recognize the meaning given to the findings, as related to reality (8, 9). The researcher asked the participants to review the findings and confirm their compliance with their experiences

and opinions. Dependability, which is equivalent to reliability, seeks to find out how much the research results are reliable (8). For this purpose, the researcher presented the audit trail detailed report. Confirmability is the method used by the researcher to confirm his findings. Accordingly, the researcher provided a number of interviews, codes, and categories to the researcher colleagues and a number of faculty members familiar with the method of analyzing qualitative researches and asked them to review the accuracy of the data coding process.

### 3.1. Data Analysis

Content analysis proposed by Graneheim and Lundman was used to analyze the text data (10). This method is aimed at creating knowledge and understanding of the phenomenon under study.

The analysis units in this research are texts of interviews and semantic units of words, sentences and paragraphs that raise issues related to a field. Each semantic unit is assigned to a code and a group of contents that represents similarity forms categories. After the initial data were collected through a semi-structured interview, the analysis phase started simultaneously. The data were read line by line and primary codes were extracted. Then the codes were placed in separate categories based on distinctions and similarities. After this phase, the categories were grouped in more general categories based on similarities in order to reduce the categories, and finally, a general description of the subject of the research was presented through the created categories. All interviews were analyzed using MAXQDA V. 2007 software.

### 3.2. Ethical Considerations

This study was conducted under license number 95-01-13-13367 from Shiraz University of Medical Sciences and the Ethics Committee. Then the interviewing place and coordination time with the interviewees were recorded. Written informed consent was completed by them and permission was granted for voice recording. They were assured that their information was confidential.

## 4. Results

Participants' characteristics are shown in [Table 1](#).

According to the participants, the urban family physician program has advantages and disadvantages and requirements that can be classified into 4 categories and 17 subcategories. These categories and subcategories are presented in [Table 2](#).

The explanations of each part are presented here and the exact phrases, which presented by physicians and used

**Table 1.** Participants' Characteristics

| Participants | Age | Gender | Type of Office (Private/Public) | Marital Status | Work Experience |
|--------------|-----|--------|---------------------------------|----------------|-----------------|
| 1            | 40  | Female | Public                          | Married        | 12              |
| 2            | 45  | Male   | Private                         | Single         | 11              |
| 3            | 50  | Female | Private                         | Single         | 15              |
| 4            | 37  | Male   | Private                         | Married        | 15              |
| 5            | 42  | Male   | Public                          | Married        | 17              |
| 6            | 36  | Female | Public                          | Married        | 14              |
| 7            | 40  | Female | Private                         | Married        | 16              |
| 8            | 34  | Male   | Private                         | Married        | 12              |

**Table 2.** Categories and Subcategories that Comprise the Experiences of General Practitioners Contributing to the Urban Family Physician Program

| Categories  | Subcategories  |
|---|--|
| <b>Lack of underlying necessary structures</b>        | A. Non-preparedness of the community culture   |
|   | B. The necessity of acculturation by specialists   |
|   | C. The need to prepare and attract the cooperation of media                                    |
|   | D. Lack of training plans for the implementation of the program                                |
|   | E. Absence of needed electronic infrastructures and sources, such as human resources and tools |
| <b>Inefficiency of implementing the program</b>       | A. Imposing additional costs   |
|   | B. Executive weakness  |
|   | Non-considering welfare facilities   |
|   | Increasing workload  |
|   | Lack of reflection and encouragement   |
| <b>The holistic consideration of community health</b> | Inconsistencies and conflicting orders   |
|   | Screening: Finding epidemics at the beginning, genetic and mental disorders                    |
|   | Following up patients for treatment response and drug side effects                             |
|   | Management of clinical and para-clinical costs   |
|   | Counselling and training   |
| <b>Necessity of corrective actions in the program</b> | Step-by-step implementation  |
|   | Consult form instead of referral   |
|   | Franchise  |
|   | Representatives  |
|   | Health charge card   |
|   | Rotational shifts  |

for analysis are gathered in supplementary file by categories and subcategories.

#### 4.1. The Lack of Underlying Necessary Structures

##### 4.1.1. Non-Preparedness of Community Culture

The participants believed that the implementation of the family physician program requires culturalization of the community. They believed that in the early phases of the program, many of the visitors looked at the doctors as a “secretary” or only referred the office to receive a referral form. In fact, the referring patients considered the family physician a free bridge to obtain specialists. Problems with

this view have been reduced by implementing optional referrals instead of inductive referrals.

##### 4.1.2. The Necessity of Culturalization by Specialist

Doctors in the study stated that specialist doctors, considered the opinions of the general practitioner to be insignificant, and neglect their referral and consult forms. Also, some specialists unnecessarily called for expensive diagnostic tests, such as MRI, CT scan, etc., to patients, or imposed patients to have frequent and continuous visits that were sometimes unnecessary. Such encounters to general practitioners have led to increased costs for both patients and the government, increasing payments and debts to

insurance. Participants believed that some of these behaviours were only for the funding of specialists' salaries and its result increased the pressure on general practitioners and even the community.

#### 4.1.3. *The Need to Prepare and Attract the Cooperation of the Media*

The participants stated that false advertising of mass media about specialists have caused many people to seek visits with general practitioners in order to receive a referral form. On the other hand, ignoring general practitioners in public advertisements and media has weakened the role of this group and has encouraged the public to get to the specialists' office.

#### 4.1.4. *Lack of Training Plans for the Implementation of the Program*

This training includes the practice of non-hospital treatment, community health training, such as epidemics, training on how to register and monitor data and visitors, and other things. The participants believed that this training might even indicate if a doctor is fit to participate in the program. Therefore, the implementation of theoretical and practical pre-tests before the implementation of the program is one of the requirements of the implementation.

#### 4.1.5. *Absence of Needed Electronic Infrastructures and Sources, Such as Human Resources and Tools*

The doctors of the program stated that unfortunately, the data recordings were time-consuming and after the launch of electronic systems, they were unused and, unfortunately, much space is needed to keep them in the clinic or office. On the other hand, the system (SIB) has a large amount of information, some of which seem to be unnecessary at the first level of patient referral. While data entry requires a lot of personnel and this issue is challenging in crowded clinics or offices. The doctors believed that the personnel entering the information are required to have sufficient knowledge of illnesses and electronic systems while having enough time to do so. Some of them even pointed out that nursing and midwifery experts could be used for this purpose. Another disadvantage stated from the point of view of these doctors to the SIB system is its inflexibility and should be corrected.

## 4.2. *Inefficiency of Implementing the Program*

### 4.2.1. *Imposing Additional Costs*

The family physician program in the province was implemented with the view that in addition to the general coverage of the community in terms of health in the

long run, it would reduce the cost of health and treatment. But unfortunately, owing to not considering pre-constructions, it was not successful in achieving this goal. Waste of time because of the time it takes to enter unrelated data in systems, the cost paid for insurance, the costs paid for unnecessary and repetitive referrals to specialists, the cost of experiments and diagnostic tests that experts ask for and sometimes not necessary, and the costs involved in implementing several and opposing directives and circulars are among the issues that make the cost-effectiveness questionable.

### 4.2.2. *Executive Weaknesses*

In addition to the availability of infrastructure, family physicians also identified one of the defects in the implementation of the program. They considered the implementation problems of the program, such as non-consideration of welfare facilities, increased workload, lack of reflection and encouragement, inconsistencies in terms of receipt and payments, and inappropriate evaluation. According to the participants' statements, the payment for private and public doctors varies, such that doctors in the section of government centers are timely and appropriate, but private doctors, such as private clinics, have long delayed payments. Also, the incorrect payment system and lack of financial incentives are the other reasons for their dissatisfaction.

## 4.3. *The Holistic Consideration of Community Health*

In spite of numerous problems with this program, one of the most positive aspects of this program was the comprehensive look at the health of individuals and community. In this program, the possibility of screening, finding epidemics at the beginning of work, and genetic and mental disorders were provided. Also, follow up patients in terms of responding to treatment, drug complications, managing clinical and para-clinical costs, counselling, and training has all contributed to less patient wanderings in the healthcare system, which has been seen in many participants' statements.

### 4.4. *Necessity of Corrective Actions in the Program*

Regarding the problems that have arisen, family physicians believe that in addition to introducing, programming and providing infrastructure, other points can help improve the program in Fars province or to implement it in other provinces. Those points are as follows:

- Step-by-step implementation
- Consult form instead of referral
- Receiving franchise
- Representatives of family physicians for decision-making

- Health charge card for patients
- Practitioner's rotational shifts

From other physicians' statements, it was necessary to carry out the phase-out of the family physician project. They believed that this program, if successful in other countries, would be due to its step-by-step implementation. Contributors were advised to use the consultation form instead of the referral form. They stated that with the use of the consultation form, the specialist physicians paid more attention to the views of general practitioners and also, patients did not look at the general practitioners as a tool for easier access to specialists. General practitioners in the project believed that receiving a little fee for service from patients can minimize the unreasonable referrals of patients. Meanwhile, physicians have enough time for real needed patients.

The absence of one of the general practitioners in provincial and national planning meetings is one of the disadvantages of this project. The participants suggested that one or more of the doctors who have been involved with the project in recent years and have touched the problems, involved in meetings and decision-making. This is also reflected in Contributing Statement No. 2. One of the biggest problems faced by physicians was the lack of annual or monthly leave. For this reason, one of their suggestions was to rotate the shifts of these physicians so that they can sometimes benefit from their own leave at any time, without worrying about a replacement physician.

## 5. Discussion

In this qualitative study, which aimed to study the experiences of general practitioners working in the country family physician program in Shiraz, Fars, Iran, we came to these conclusions briefly:

1. Before the implementation of the program, both the community of patients and the medical community did not have the necessary cultural training, neither they were provided with the required training for how the program is properly implemented for service providers nor recipients. Honarvar et al. (11) in 2018, recommended that attention to the knowledge of people toward this program should be highly considered.

2. At the time of the implementation of the program, suddenly a large number of people came to the clinics and treatment centers, and due to the lack of software and hardware availability and the existence of standard instructions or sometimes conflicting executive orders, the implementation of the program was practically faced with a lot of problems. This is in line with a study conducted by Fardid et al. (12) who have been reported that infrastructure was not provided before starting the program.

3. Since the program looked at all aspects of the health system, the possibility of patients' follow-up and the relationship between family physicians and higher levels of healthcare allow patients to undergo an integrated treatment system for treatment and post-treatment planning.

4. The necessity of extensive corrective actions in the implementation of this program in terms of participants (specialists, caregivers and other staff) in this study was another result of this study.

One of the most important problems that should be dealt with, according to the interviewees, is cultural problem of the people. In this program, the position of the family physician is not explained to the people as responsible for the health and treatment of the individual and his or her family. Also, since the position of specialists in the family physician program was not determined, and the fees paid for specialists were determined based on the number of referrals from family physicians, as participants mentioned, specialists encouraged patients to visit family physicians and receive as many referral letter for the relevant specialist. As a result, one interviewee suggested that they should provide counseling forms instead of referrals. The culture of many people's lack of trust in general practitioners and the willingness to use the services of specialists without barriers and free of charge is also mentioned in the study by Mehrolohasani et al. (7).

The lack of coordination of doctors and organizations involved in the implementation of the family physician program, including insurance organizations and the University of Medical Sciences, has been mentioned as other problems. Since the doctors' cooperation with insurance at the beginning of the program was unilaterally and compulsorily abandoned, many doctors who were reluctant to participate in the program entered the program. This unwillingness led some of them to oppose the program.

In the meantime, the lack of consideration of welfare facilities, such as facilities that included doctors before the implementation of the program, like annual leave without the obligation to provide a replacement and failure to provide insurance for doctors are some of these inconsistencies. Inefficient payment system in this program is one of the important findings, which have been found in the study of Doshmangir et al. in 2018 (13). Also, taking into account the quantity of the work done in patient care rather than the quality of care is one of the major problems that the family physicians are involved with. Advantages interested doctors in implementing the family physician program are to screen patients from non-patients, the possibility to follow up patients with chronic diseases and prevent complications of the disease if possible, as well as the possibility to manage the healthcare costs of patients if the program is implemented correctly.

According to the report of Shiraz University of Medical Sciences, 5000 patients with diabetes and 8000 patients with hypertension have been identified for the first time in the five years of family physician program development in Fars province. Obviously, given the high burden of these diseases on the health system of the country, identifying this number of patients at the primary stages, will save a lot of financial resources. Undoubtedly, what has become clear to the authors more than any other thing in this study is the need for comprehensive training of doctors and patients and the authorities responsible for the implementation of the family physicians' program.

According to our study, the implementation of the family physician plan in Fars province of Iran, despite the achievements such as job creation for general practitioners and health care providers, encourage physicians to pay attention to the aspects of prevention and detection of the disease before entering the chronic phase (such as diabetes), and increase the accessibility of less developed areas of health services, also have deficiencies and problems. However, since implementation of the plan is legally binding in the entire country, it is advisable for the administrators to create the context and prerequisites, especially for the cooperation and coordination of general practitioners and specialists, and other human resources, and the electronic data recording infrastructure, and using the experiences of process owners in two pilot provinces (Fars and Mazandaran) and the cost-effectiveness of this project to implement it in other parts of the country.

Among the authors' suggestions to improve the implementation of the family physician program is training at all levels of the people involved in the program, survey and even submitting the implementation of the program to non-governmental organizations of medical guilds, including the medical system organization, creation of a consolidated payment system, including constant payment and payment based on function (quantitative and qualitative) (14), creating a mechanism to maintain job security and the establishment of job and retirement insurance as well as increased salary and advantages of family physicians based on the inflation rate of the country.

### 5.1. Limitations of the Study

Since the implementation of the family physician program in Iran has not lasted a few more years, prospective cohort studies need to compare the different indices with a more comprehensive examination of the longer-term effects of this project on the health system in Iran.

Given the nature of qualitative studies, in spite of the authors' efforts to increase the reliability and validity of

the research, our perception of the physicians' opinions in the study may remain subjective.

### 5.2. Conclusions

Despite the improvement of the health system and the useful role of the family physician program in the case finding and quality of care of patients, the most important challenges after 8 years of starting a family physician program include the lack of infrastructure, inefficiency of the implementation method, lack of a comprehensive look at the health of the community, and the need for corrective actions in the program. It is the responsibility of health policymakers to address these challenges to improve them. It is recommended that training at all levels of the involved individuals, including theoretical and practical training should be considered.

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### Footnotes

**Conflict of Interests:** The authors do not report any conflicts of interest regarding this study.

**Ethical Approval:** This study was conducted under license number 95-01-13-13367 obtained from Shiraz University of Medical Sciences and the Ethics Committee. Then the interviewing place and coordination time with the interviewees were recorded.

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**Patient Consent:** Written informed consent was completed by them and permission was granted for voice recording. They were assured that their information was confidential.

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