

## The Strengths and Weaknesses of Urban Family Physician Program during 2012-2016 from the Viewpoint of Policymakers, Administrators and Services Recipients in Shiraz: A Qualitative Study

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### Abstract

**Introduction:** The “family physician” program is one of the plans which aimed at expanding the coverage of insurance, overcoming the barriers to the health system of the country, and solving the public health problems in Iran. This study was conducted to identify the strengths and weaknesses of the urban family physician program from the viewpoint of policymakers, administrators, and recipients of services in the city of Shiraz during 2012-2016, using corrective strategies.

**Methods:** This is a qualitative study, and the data were collected through focus group discussions and semi-structured interviews. A total of six focus group discussions sessions and 40 interviews were conducted, and the target sampling was done.

**Results:** A total of 9 basic concepts and 46 sub-concepts were identified to explain the strengths and weaknesses of the family physician program. The main concepts included: 1- Culture-making and community preparation, 2- Structure and deployment facilities of the program, 3- Manpower training, 4. Service coverage, concept 5. Resources (financial, human and equipment), 6. Stewardship and monitoring of the program, 7. Insurance system, tariffs, and compensation of services, 8. Clarity of the guidelines and regulations, and 9. Satisfaction with the implementation of the plan.

**Conclusion:** According to the results of the study, educational planning for public culture-making through the media and newspapers, proportion of the number of people covered by each doctor, aggregation of insurances, and legal requirements for specialists to cooperate effectively are recommended to improve the program.

**Keywords:** Health, Management, Physician, Quality

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### Introduction

Nowadays, health care systems have received a special attention as one of the most important sectors of public services (1). Iran, like other countries, has experienced a number of reforms in the health system, including the development of Primary Health Care in 1984 (2). Despite its success

in improving the indices of health in Iran (3), this plan was faced with the lack of establishment of the referral system, which is one of its obvious weaknesses and the lack of flexibility to meet emerging needs (4). For resolving or reducing these problems, the project of family physician and rural insurance has been implemented since 2005 with the cooperation

of Health Insurance Organization, the Ministry of Welfare and Social Security, and the Ministry of Health and Medical Education in the rural and urban areas on less than 20,000 people (4). Following the successful experience of FP project in rural areas, in 2011, six years after the launch of FP in rural areas, the Ministry of Health and Medical Education (MOHME) decided that the FP can be implemented in larger cities with the population more than 20,000 (5). The FP project has been approved by the fourth and fifth programs of economic, social, and cultural development of Iran (6). Family physicians have certain knowledge, skills, and attitudes that make them qualified for the continuous and comprehensive medical care, health care and preventive care services to any family member, regardless of age, gender or type of problem (such as biological, behavioral or social). The family physician accepts the responsibility for managing the health needs of the individual and, at the same time, maintains a confidential and intimate relationship with the patient (7, 8).

The implementation of the project of Urban Family Physician has started since July 24, 2012 in Fars Province (as the first province in implementing the project). The present study aimed to investigate the strengths and weaknesses of the family physician program from the perspective of policymakers, administrators, and recipients of services in Shiraz city from 2012 to 2016 and provide corrective strategies.

## Methods

### Study Area

This is a qualitative study. The sampling was targeted, and there was an attempt to collect the data from the most informed individuals. Data collection was conducted through focus group discussions and semi-structured interviews with policymakers and decision-makers of the planning and implementation of the family physician project in Shiraz, as well as the physicians and service recipients from early 2012 to late 2016.

### Study Design

The sampling method in this study was purposeful. To do this, we mostly involved those who had experience or were gaining experience in the family physician program. Thus, for the qualitative part, three groups of people (policymakers, executives, and service recipients) were purposefully selected. To select the implementers of the family physician project, we extracted the contact numbers of 70 family physicians who were participating in

the family physician program in Shiraz University of Medical Sciences and contacted them. They were invited to attend a focus group discussion. The inclusion criteria for family physicians in a focus group discussion were based on the two following factors: 1. Two groups with agreement and disagreement about the family physician plan and 2. Family physicians who had worked as a family physician from the beginning of the plan or had at least one year of continuous work experience in the family physician program. The snowball method was used to select the policymakers to participate in a focus group discussion. Thus, after the first referral to the head of the family physician project in Fars province, the names of the people were obtained; thus, the other people who had a role in this project were introduced by the selected people. To determine the criteria for inclusion of policymakers who were involved in project decision-making and policymaking from the beginning and to select the members who were to participate in a focus group discussion of service recipients, we randomly selected 50 to 100 registered family physicians according to age and gender; then, for the discussion session, we invited a focus group among them. Inclusion criteria for service recipients were: 1. Age of 20 to 60 years, 2. literacy, and 3. registered plan and use of family physician services at least 5 times.

### Study Description

A total of six focus group discussions and 40 interviews were conducted. The interviews and meetings were conducted by individuals who were fully familiar with these types of meetings and were skilled in this field. The information gathering tool was several general questions as a guide for a semi-structured interview; based on the answers, subsequent questions were asked.

At the beginning of the interviews, the research objective was explained to the participants, and they were assured that their statements would be completely confidential and would not be available to anyone other than those involved in the research. Also, before starting the interviews, informed consent was taken from the participants for recording the discussions. The participants were allowed to withdraw at any stage of the study according to their own discretion. The meetings and interviews were recorded using two recorders. At the same time, some notes were taken from the conversations.

The individual interviews lasted 50 to 75 minutes, and the focus group discussions lasted 130 to 180 minutes. The interviews and meetings continued

until the data saturation stage and lack of access to new information. Following the focus group discussions and interviews, the recorded voices were transcribed and the texts as well as the related notes were analyzed using the content analysis method. In the results section, the letter *M* along with a number referred to the interviewee who had been quoted.

To analyze the data, we used the framework analysis method. It consists of five main steps: (1) familiarizing (2) identifying a conceptual framework; (3) listing (4) charting; and (5) mapping and interpreting. In this study, the familiarization process was done by transcribing the interviews and focus group discussions, reading the transcripts and the notes taken during the interviews, summarizing the interviews, and listening to the recorded interviews again.

Following this stage, the interviews were annotated, and the key concepts and themes were identified and summarized. After comparing the codes and identifying a thematic framework, every written text about the interviews was reviewed and annotated based on the thematic framework. The duplicated text was indexed using some codes related to the themes and sub-themes of the conceptual framework. The conceptual framework developed was reviewed through the familiarization process and based on the interviews and the meetings held by the researchers and the interviewees. The themes extracted during the analysis process were updated. The duplicated text was indexed using some codes related to the themes and sub-themes of the conceptual framework. When appropriate, parts of the data were encoded with one or more codes (cross-indexing).

### Text Analysis

Finally, a table was drawn in which each row presented an interviewee marked with an appropriate code, and the columns of the table also represented the themes and subthemes. Then, in order to do the analysis, we put the tables together in such a way that it was possible to compare the views expressed by each interviewee in the form of themes and subthemes (by looking at the columns) and to compare different interviewees for each theme (by looking at the rows). At this stage, which was the most important and most difficult stage of the analysis, the chart was interpreted to compare the data obtained for the individuals and the sub-themes, and the relationships between the themes and the sub-themes were examined.

### Results

40 semi-structured interviews and 6 focus group discussions with the presence of the policymakers and administrators as well as service recipients in Shiraz were analyzed. According to the results of the present study, the mean age of the policy makers ranged from 30 to 55 years to high, that of the physicians ranged from 30 to 55 years to high, and the mean age of the service recipients ranged from 20 to 60 years to high. The demographic and occupational characteristics of the participants are shown in Table 1.

Using the content framework method at the end of this qualitative study, we identified 9 basic concepts and 46 sub-concepts (Table 2), which will be further explained.

#### Concept 1: Culture-making and Doing Necessary Preparations in the Community

The vast majority of participants in the family

**Table 1:** Demographic and occupational characteristics of the contributors

			Number	Percent
policy makers	Gender	Male	20	100
		Female	0	0
	Education	PhD	3	15
		General Practitioner	15	75
physicians	Gender	Male	16	40
		Female	24	60
	Education	General Practitioner	29	72.5
		Specialist	11	27.5
Service recipients	Gender	Male	31	72.1
		Female	12	27.9
	Education	Under the diploma	1	2.3
		Diploma	14	32.6
		Bachelor's degree	14	32.6
		MA	10	23.3
PhD	1	2.3		

**Table 2:** Concepts extracted from focus group discussions on family physician program

Themes	Subthemes
Concept 1: Culture-making and doing necessary preparations in the community	<ol style="list-style-type: none"> <li>1. Informing and educating the people before and during the implementation of the family physician program</li> <li>2. Referring to the family doctor just to get a referral letter</li> <li>3. Putting family physicians under pressure by the patients to refer them to higher levels</li> <li>4. Your confidence and trust in your family doctor</li> <li>5. People's desire to visit specialist and subspecialist doctors</li> <li>6. Free referrals of patients to levels one, two and three outside the family physician program</li> </ol>
Concept 2 - The structure and facilities for establishing the program	<ol style="list-style-type: none"> <li>1. Providing administrative and technical infrastructure, including: Electronic Health Record</li> <li>2. The existence of approved clinical guidelines for managing common diseases and referrals</li> <li>3. Including all beneficiaries in the program (insurances, private sector, people, Para clinical sector, trade unions of the Medical Council, and associations).</li> <li>4. Appropriateness of the plan with the system of the healthcare network of the country</li> <li>5. Dividing responsibilities between health and welfare ministries</li> <li>6. Non-electronic insurance booklets</li> <li>7. Information system</li> </ol>
Concept 3- Human Resource Training	<ol style="list-style-type: none"> <li>1. The quality of proper training of general practitioners to assume responsibilities and play the role of family physician</li> <li>2. Training family physician assistants (nurses / midwives)</li> <li>3. The ability of the assistants selected by family physicians</li> </ol>
Concept 4- Coverage of Services	<ol style="list-style-type: none"> <li>1. Collaboration of Para clinical centers (laboratories, pharmacies, radiology centers) with the plan</li> <li>2. Inserting drug items in prescriptions and the services sponsored by insurances for the patient's subject to the plan</li> <li>3. The hours of access to family physicians</li> <li>4. Access of low-income community groups to family physicians</li> <li>5. The quality of adequate insurance coverage for all services</li> <li>6. Identifying the patients with diseases that are covered by some services in the package, including diabetes, hypertension, etc.</li> <li>7. The quantity of service providing centers, especially on the periphery of cities</li> <li>8. Prevention and screening programs at Level One in line with Health-oriented Services</li> <li>9. Limited used of the private sector's capacity</li> </ol>
Concept 5- Resources (financial, human and equipment)	<ol style="list-style-type: none"> <li>1. The number of doctors in the province and its proportion with the implementation of the plan</li> <li>2. Willingness of the physicians in emergency departments and the doctors of university headquarters in the province to enter the program</li> <li>3. Collaboration of specialist doctors of the private sector with the program</li> <li>4. The use of nurses / midwives by family physicians</li> </ol>
Concept 6- Project Trusteeship and Supervision	<ol style="list-style-type: none"> <li>1. Delegation of sufficient and required authority to the University of Medical Sciences by the Ministry of Health</li> <li>2. The existence of an external system of monitoring and evaluating the program and its objectives</li> </ol>
Concept 7: Insurance System, Tariffs and Service Compensation	<ol style="list-style-type: none"> <li>1. Payments to the para-clinics contracted with the program</li> <li>2. Getting a franchise from people to control the visit burden</li> <li>3. Financial relationship between doctors and patients</li> </ol>
Concept 8: Transparency of the Plan's Guidelines and Regulations	<ol style="list-style-type: none"> <li>1. The effect of contract cancellation on insecurity of the system and doctors</li> <li>2. The effect of multiple modifications of the program on individuals' inference</li> <li>3. Cancellation of the insurance contracts of the doctors outside the program in Fars province</li> <li>4. Transparency in accepting emergency cases</li> <li>5. Extent of authority to choose a family doctor based on the address of the place of residence</li> <li>6. People's access to specialists and subspecialists outside the family physician program</li> <li>7. Transparency in the guidelines related to private sector services, including pharmacies and laboratories</li> <li>8. The effect of the existing laws on the family physician program</li> <li>9. The lack of an effective law to deal with doctors who do not increase their working hours despite the increase in the population covered.</li> </ol>
Concept 9: Satisfaction with the Implementation of the Project	<ol style="list-style-type: none"> <li>1. People satisfaction</li> <li>2. Physician Satisfaction</li> </ol>

physician program, including the policymakers, believed that prior to implementing the family physician program, no necessary culture-making had been done, and people had not been sufficiently informed and justified about the inherent characteristics of the family physician program and its limitations and had not accepted the changes caused by it.

*“The lack of culture-making and the high speed of implementation are among the challenges of the plan. Also, it was, and still is, very difficult to justify the people who have paid their insurance premium for years, to choose a doctor and enter the referral channel.”* (M 7, J3).

*“The rush into implementing the plan without doing necessary culture-making and informing the people, doctors and authorities is perhaps the most important challenge in implementing the program”* (M 6 J 3).

### *Concept 2: The Structure and Facilities for Establishing the Program*

According to most of the participants in the meetings, the most important problem in the implementation process of the family physician project in this province was the lack of necessary infrastructures. One of the infrastructures required to implement this plan is an electronic system for the inclusion of medical and health information of the covered individuals.

*“Nowadays, 90% of the basic visits are virtualized; they press a button, and it is all filled without asking for your opinion. Because there was no electronic system and file, the speed of the Internet is another problem.”*(M 9, J 1)

### *Concept 3: Human Resource Training*

Most participants in this study believed that general practitioners in the family physician program needed to be trained before the start of the plan.

*“... Our education system just releases graduated doctors, but they're not family physicians. ... There must be at least a training course, a minimum training course of 6 months.”*(M 1, J 6).

Another issue that arises from the lack of training the doctors is the lack of feedback from specialists and lack of follow-up by family physicians.

*“Unfortunately, from the second and third levels of services, there is no sufficient feedback to physicians for continuing the outpatient services and rehabilitation of patients in the referral system.”*(M 6 J 3)

### *Concept 4: Coverage of Services*

One of the challenges faced by the family physician

program is how para-clinical centers collaborate with this project. Many private centers are reluctant to collaborate with it.

*“Most importantly, unfortunately in Fars province even the patients who have an insurance contract have to pay 70% of the laboratory costs in para-clinical centers, and the insurance only pays 30%; that is, if you go to a laboratory and have a prescription of a family doctor, you have to pay 85,000 Tomans out of 100000 Tomans.”* (M 6, J2).

### *Concept 5: Resources (Financial, Human, and Equipment)*

Regarding the extent of the collaboration of GPs in this plan, most of the participants believed that the number of physicians who collaborated was high, and those who did not enter were either the specialists who had their own patients and did not need to enter the project, or those who earned money through other jobs.

*“For example, a doctor who is a cardiac surgeon and very well-known and has never signed a contract with insurance companies and all patients paid him for visits doesn't enter the family physician program now, for example radiologists”* (M 5 J 2).

### *Concept 6: Project Trusteeship and Supervision*

Some other participants believed that the system of monitoring the program and its objectives was not defined and there was not such a system.

*“There is no monitoring system that we can trust and that controls the whole family doctor program.”* (M 7, J3).

*“The lack of an external evaluation system in the family physician program may lead to potential bias in recording and analyzing the findings; on the other hand, it will make the effectiveness of the plan uncertain from the scientific standpoint.”* (M 7 J3)

### *Concept 7: Insurance System, Tariffs and Service Compensation*

Another challenge of the plan is the irregular or delayed payment schedule by insurance companies, which makes the physicians dissatisfied.

*“Insurance payments are not very good. For example, now that I'm with you, I received my April salary with delay. Payments are neither great, nor bad. It is acceptable for us. Since franchise has appeared, it's become better.”*(M 6 J 2).

However, according to people, their expenditure has only declined in terms of the franchise of the doctors' visits, but regarding laboratory and radiology, their out-of-pocket expenditures have increased.

*“Franchises are low; that’s right, but the lengthy process of becoming able to visit a specialist doctor is time-consuming and overwhelming, and we prefer to pay for the visit, but not waste our time.” (M 9 J4).*

#### **Concept 8: Transparency of the Plan’s Guidelines and Regulations**

According to the participants, the government has conditioned the continuation of the doctors’ life to participate in the family physician program; otherwise, they will face the termination of the insurance contracts.

*“A physician working in Fars province may not want or be able to enter the plan for a thousand reasons ... why are they deprived of this right? Until this plan is implemented nationally and comprehensively throughout the country, this law should not be threatening or compulsory.”(M 3 J1).*

#### **Concept 9: Satisfaction with the Implementation of the Project**

The participants believed that people were generally satisfied with the first level services but dissatisfied with the services at the second and third levels.

*“At level 1, patient satisfaction is good, but at levels 2 and 3 it’s not good at all. There are some statistics and, without compliments, they’re kept secret. People are dissatisfied but the officials don’t reveal it. When there is no criterion, we have to examine qualitatively.”(M 5 J 2).*

#### **Discussion**

In this research, the researchers examined the strengths and weaknesses of the program of family physician in Shiraz to provide an overview of the strengths and weaknesses as a policy-makers’ guide for the reforms.

According to the conceptual framework obtained in this study, the lack of basic and essential infrastructure, as well as the lack of public culture necessary to implement this program, has created many problems in implementing it, which has overshadowed many of the strengths of the program. In addition to the fact that the physicians had not been informed, the provision of information for other people in society was not enough. Thus, people, as the recipients, sometimes refer to the family physician for stamping the insurance booklet only. Similarly, other scholars in Iran have reported this issue in their study (5, 9-11).

Therefore, one of the main levers through which healthcare can be corrected is behavioral change, and

this change must occur in both groups, recipients and service providers. Since people and executors are the two main beneficiaries in this program, it is essential to re-emphasize the information.

According to a qualitative study, the feedback from the specialized physicians to the family physicians has been reported as one of the weaknesses of the program. Regarding the investigation of the role of the staff employed at Level 2 of the referral, there are some clear points; despite the familiarity of the agents with the obvious problems of the referral system before the implementation of the family physician program, in the implementation phase of the project, and afterward, no serious attention has been paid to the existing problems. Level 2 of the referral is specialized; it was laid down that it responds to the health and treatment needs of the clients referred from level 1, but due to the weakness in determining the policies, this task is not done satisfactorily. The important benefits of sending feedback to the family physicians are avoiding unnecessary costs and stabilizing them with the treatment and the basic level of disease (12). Khayati et al. also emphasized the collaboration of the specialists in the program of family physician and referral system (13). Development of referral pathway in Iran health system is essential (14).

Also, the findings of the study indicated that, from the viewpoint of the implementers, the number of patients who are now referred to the higher levels is more than necessary, and most family physicians have acknowledged that they are under pressure from the patients to receive a referral form or that a large number of patients refer to them merely for receiving referral form. Mohaqqeq et al. also emphasized the decline in referrals from the general practitioners to the specialized physicians (15).

According to the findings of a qualitative study, the most important problem in the process of implementing the National Project of Family Physician in this province is lack of necessary infrastructures, including electronic health records. One of the major issues in the program is the creation of an electronic health record for the public and has put a lot of emphasis on it before the program was implemented. Fardid’s study suggested that creating an electronic health record can help to improve the speed and quality of service provision and reduce violations (9)

In the training of human resources, the lack of adequate training for general practitioners and ongoing training programs for the acceptance of responsibilities and role of family physician were among the weaknesses

of the program. Other studies also reported the lack of family physicians' proper training in the family physician program (5, 10, 13, 16, 17).

It seems that reviewing the content and methods of education and paying attention to the motivational factors of participants to increase the effectiveness of continuing education programs is necessary. This has had a good result in other countries (18-20).

### Conclusion

Based on the present research, some of the objectives of the family physician program have been realized and, for achieving some other goals, appropriate interventions at the national and regional levels should be done. It is also necessary to design and implement appropriate experimental studies to eradicate the defects in the program.

### Authors' Contribution

Zolaykha Mohamadi, Zahra Kavosi, Mehdi Birjandi, Omid Barati and MahmoudReza Peyravi were responsible for the study conception and design. Zolaykha Mohamadi, Zahra Kavosi, Mehdi Birjandi, Omid Barati and MahmoudReza Peyravi performed data collection and prepared the first draft of the manuscript. Zolaykha Mohamadi, Zahra Kavosi, Mehdi Birjandi, Omid Barati and MahmoudReza Peyravi did the data analysis, revised the paper for important intellectual content, and supervised the study.

### Informed Consent

Informed consent was obtained from all individual participants included in the study.

### Funding/Support

This project has partly been supported by a grant from Shiraz University of Medical Sciences.

### Ethics Consideration

Written consent forms were obtained from all specialists. Besides, the specialists had full freedom to reject or accept participation in the research. They were also reassured about the confidentiality and anonymity of all the interviews. Finally, all the participants are acknowledged for their collaborations.

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This project has partly been supported by a grant from Shiraz University of Medical Sciences. This article was extracted from a master's thesis with the code number of 2858.

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### Research limitations

Coordinating clinicians, policy makers and service recipients to participate in focus group discussion sessions. Find the address of offices and clinics in the city. Non-return of some questionnaires. Non-cooperation of some doctors and policy makers working in the family doctor plan. Dispersion of service centers that slowed down the process of collecting information.

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**Conflict of Interest:** None declared.

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