Urban family physician plan in Iran: challenges of implementation in Kerman

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Abstract
Background: The Family Physician Plan has recently been implemented in three provinces of Iran on a pilot basis and is going to be implemented throughout Iran in the future. Through a qualitative design, this study aims to determine probable implementation challenges of Family Physician Plan in Kerman.

Methods: This study was conducted in Kerman in 2013. Data were collected through interviews with 21 experts in the field. Sampling continued until data saturation level was achieved. All interviews were recorded and then analyzed, and main themes and subgroups were extracted from them based on a framework analysis model.

Results: most prevalent establishment challenges of Family Physician Plan were classified into policy-making, financial supply, laws and resources.

Conclusion: The urban Family Physician Plan can be carried out more effectively by implementing this plan step by step, highlighting the relationships between the related organizations, using new payment mechanisms e.g Per Capita, DRG, make national commitment and proper educational programs for providers, development the health electronic Record, justifying providers and community about advantages of this plan, clarifying regulatory status about providers' Duties and most importantly considering a specific funding source.

Keywords: Family Physician Plan, Healthcare, Kerman.

Introduction
Providing health in different physical, psychological, social, and spiritual aspects is one of the requirements of every society (1). This right has been recognized by nearly all governments of the world (2). Evidence suggests that healthcare system has long been experiencing several problems in Iran. Iran’s current low rank (58th) in providing health and treatment services among health systems of the world reflects weakness and low efficiency of this health system in achieving its essential goals (3).

Chang in service provision approaches seems inevitable in removing these problems. One of the approaches which have recently been taken into huge consideration in Iran is Family Physician Plan. According to most experts and based on the experiences of several countries, the Family Physician Plan can be the primary solution for many problems of healthcare system in Iran (4,5). This Plan began in 2005 in rural parts of Iran and was significantly successful. Significance of results caused this plan to be implemented on 05/06/2010 on a pilot basis in 17 cities with a population of less than 50 thousand in the three provinces of Khuzestan, Chahar Mahal Bakhtiari and Sistan Va Baluchesta n (5-7). Despite the
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three years’ implementation of this plan in these cities, the expected results have not been obtained yet due to some problems (6,8).

In Iran, medical universities are responsible for providing health services for people. In rural areas, these services are provided by family physicians organized by deputy of health of the university and Health Service Insurance Organization partly covers the costs.

There are evidence that “Urban Family Physician” plan is faced with a lot of problems and has different weaknesses including incomplete referral system, lack of appropriate feedback by specialists to family physicians, lack of realistic anticipation of facilities, high volume of local duties, and uncertain financial resources (9,10). These shortcomings are incompatible with the objectives of Family Physician Plan (i.e. increased accountability increased public access to healthcare services and decreased unnecessary costs in the health market).

Education and support are two main and important parts for every plan; and there are some problems in developing countries in this regard (9). Written reports and visits from family physician centers indicate weaknesses in presenting services and performing duties, and it seems that one of the reasons for this failure is lack of necessary skills (10).

Especially in developing countries, it is hard for patients to access information on the suitable healthcare services compatible with their needs (11). Thus, in the case of such problems, patients may not take advantage of some services or may conversely insist on unsuitable or unnecessary services which may increase their expenditures. If the patients are informed of facilities, they will probably use them (12). Results of other studies show that despite fundamental differences in financial affairs, and organization and presentation of treatment services in different countries, all countries faced almost similar challenges in Family Physician Plan (13,14). Concerning the start and generalization of this plan in Iran, continuous evaluation and monitoring is necessary to remove weaknesses of this system and some measures must be taken to implement this plan in urban areas using the experiences gained from rural areas.

Since this plan will be implemented in Kerman in near future, it is necessary to conduct research to find and beat off potential challenges of urban Family Physician Plan. This study aims to determine challenges of urban Family Physician Plan in Kerman, Iran.

**Methods**

This applied research was carried out in Kerman in 2013 using a qualitative method. Data were collected through semi-structured interviews. In this study, samples were selected using purposive and snowball sampling. It was tried in this study to select some samples from all organizations involved in rural Family Physician Plan and in charge of implementing urban Family Physician Plan. Sampling continued until data saturation level was obtained. Data collected for 21 people (9 from Kerman University of Medical Science, 5 from health services insurance, 1 from the medical system and 6 experts (4 social physicians and 2 researchers in the field of Family Physician Plan)). These subjects were selected based on their managerial experience (both in rural Family Physician Plan and in urban Family Physician Plan), having at least 4 years of work experience, interest and being aware of the subject.

To collect data, 21 face-to-face interviews and one complementary interview was conducted. All interviews were recorded and analyzed. Average interview time was 50 minutes. All interviews were conducted by one of the authors in interviewees’ offices. Interview questions were designed so that they could examine interviewees’ viewpoints and beliefs about the plan. Moreover, interviews were assured that their information would remain confidential and would be used only for research purposes, and that they would leave the interview whenever they wished.
At first, 3 in-depth interviews were conducted to have an understanding of the subject and to recognize cases which could be taken into account during semi-structured interviews. Accordingly, an appropriate set of questions for the interviews were developed. Data were analyzed using framework analysis method which consisted of 5 stages of identifying, identifying a thematic framework, indexing, charting and mapping and interpretation. This method is mostly used to analyze qualitative data in policy-making studies (15). During the identification stage, a form containing information about the subjects and a summary of each interview were prepared. It should be noted that to ensure the accuracy of the points of the interviews, interview files and the authors’ perceptions of the interviews were given to the interviewees to be sure that our perceptions and their beliefs were identical. To create an initial conceptual guideline form, several meetings were held between researchers to discuss the plan. Then, this conceptual framework was examined after examining every interview. Each interview was coded separately, and a list of these codes along with their relationship with the conceptual framework was extracted from these interviews. In this step, one or two codes were allocated to each section having related information (16). After that, these codes were studied and, if necessary, changed after meetings with other researchers. This process was repeated several times for each interview. Then, similar codes were integrated and table main codes were formed. Then, charting stage was done so as to compare interviewees’ viewpoints about every element of this conceptual model, and finally, the relationship between elements of the model and its subset was recognized.

**Results**

Challenges of establishing urban Family Physician Plan in Kerman were classified into 9 main themes and 36 subgroups (Table 1).

**Table 1. Challenges of establishing Family Physician Plan in Kerman**

<table>
<thead>
<tr>
<th>Theme 1: Problems in policy-making and programming</th>
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<tbody>
<tr>
<td>1-1-Haste at the beginning of the plan. 1-2- Beginning Family Physician Plan before integrating insurances. 1-3- Lack of a unique boss. 1-4- Poor understanding of the implementation area</td>
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<tr>
<th>Theme 2: Problems in funding</th>
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<tbody>
<tr>
<td>2-1- Imperceptible budget at the start of the plan. 2-2- Insufficient financial resources. 2-3- Weakness in financial processes. 2-4 - Economic instability</td>
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<tr>
<th>Theme 3: Failure in methods of payments</th>
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<tbody>
<tr>
<td>3-1- Delay in payments 3-2 Removal of franchise in the city. 3-3- Regulatory difficulties resulted from diverse methods of payments in the city. 3-4- Unclear methods of payment to other forces. 3-5- Lack of backup software for methods of payments</td>
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<tr>
<th>Theme 4: Behavior (culture and education)</th>
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<tr>
<td>4-1- Cultural problems of service receivers. 4-2- Cultural problems of service providers. 4-3- Poor information process</td>
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<tr>
<th>Theme 5: Difficulties in laws and regulations and monitoring their implementation</th>
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<tbody>
<tr>
<td>5-1- Cumbersome laws. 5-2- Incomprehensive and unclear rules 5-3 - Unclear regulatory position</td>
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<tr>
<th>Theme 6: Problems in organizing (organizational arrangement and method of communication)</th>
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<tbody>
<tr>
<td>6-1- Inappropriate communication between providers. 6-2- Long delay in sending the memorandum and instructions. 6-3- Uncertainty and conflict. 6-4- Inappropriate role of all beneficiaries</td>
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<th>Theme 7: Problems related to service providers</th>
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<tr>
<td>7-1- Non-conventional volume of tasks assigned to physicians. 7-2-Migration of physicians from rural areas to urban areas. 7-3- Insufficient physicians’ skills and education. 7-4- Poor cooperation of some experienced physicians. 7-5- Worries of service providers about receiving funding on time. 7-6- Decreased number of physicians. 7-7- Low incentives of doctors to work in areas with lower deprivation index</td>
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<th>Theme 8: Resources</th>
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<tr>
<td>8-1- Inappropriate physical space. 8-2- Shortage and poor distribution of resources. 8-3- Problems related to patient’s electronic file. 8-4- Lack of coherent information bank</td>
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<th>Theme 9: Justice</th>
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<tr>
<td>9-1- Injustice in presenting services. 9-2- Injustice in funding</td>
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http://mjiri.iums.ac.ir
Plan is loss of reasonable. "The referrals have no good feedback about the plan. They even have no exact definition of family physician.

Theme 2 - Problems in funding: One of the interviewees mentioned that “this plan is stopping mainly due to financial problems” (P 16). Another interviewee stated that “the money that is going to be given to the main provider is given to him through some middlemen and it results in delayed payment.” (P20). Moreover, since this plan coincided with economic instability, it failed: “this plan failed due to unpredictable economic conditions of Iran and sanctions” (P 5).

Theme 3 - Failure in Payment Methods of payments: Concerning delay in payments, one of the experts stated that "right now, insurance companies pay us late and conditions will get worse if this plan is implemented” (P17). Concerning removal of franchise, it was stated that “since referring to doctors has practically no certain expenses, people can refer to doctors due to any reasons” (P3). There are different methods of payment to providers in cities "since there are different suppliers in the city, there are different payment methods too, and it requires more complex monitoring systems." (P2). In Kerman, no software has been prepared to pay the agencies providing services.

Theme 4 - Behavioral problems (culture and education): one of the experts stated that “incompatibility of people’s tendencies with referral system can be some obstacles to establish this plan” (P 21). It was also noted that many doctors disagreed with this project. There are some people in this plan whose benefits may be at risk, so they disagree with its implementation” (P 4). Another problem was that Information was not very good. People do not know what the plan is. They even have no exact definition of its conditions.

Theme 5 - Problems in rules and regulations: According to the interviewees, the relevant rules are not comprehensive and clear: "a series of rules is changing. Rules are considered good only at the first level. Moreover, some rules are restricting" (P4). Regulatory position is unsatisfactory too. “Urban version of the family physician only includes executive issues and we have no guidelines for monitoring the plan” (P21).

Theme 6 - Problems in organizing (organizational arrangement and method of communication): One of the subjects stated that “patients’ referrals have no good feedback and their follow-ups are not good” (P15). In this case, experts mentioned other problems too. “We are at the end of 2012 and no memorandum has been signed yet. (P17). Some beneficiaries are not well-justified about the plan. “Some organizations haven’t participated in this plan. TV and Radio Organization is not ready for advertisements, etc. (P20).

Theme 7 - Problems related to service providers: Work hours and work volume of family physicians are not reasonable. "The amount of work assigned to a family physician in the form of service packages is non-conventional and work volume described for physicians is more than that defined in Labor Office" (P10). Physicians do not have necessary skills to participate in this plan "newly graduated general practitioners do not have the necessary capacity to implement the project, and they must be taught". Moreover, those physicians who have more knowledge and skills cooperate less with this plan. Perhaps the most important concern of providers is financial problems: “Pharmacists and doctors are afraid of becoming dependent on insurance reources” (P2). Another challenge that threatens Family Physician Plan is loss of doctors. "Over time, family physicians leave this plan due to participating in residency test, delays in payment, and lack of facilities in rural areas" (P6).

Theme 8 - Problems related to the sources: Lack of resources is another prob-
lem of this plan. "Large spaces which existed in villages do not exist in cities (P7). In addition to shortage of manpower and its poor distribution, one of the respondents noted that "in some areas, we don't have other technical personnel in addition to shortage of doctors" (P7). Necessary infrastructures are not ready to implement the project. “Health electronic files are not available” (P13).

Theme 9- Justice: Experts believed that the current rules passed for this plan caused discrimination between rural and urban population. “Franchise is 30% in the first level of services in rural areas but 0% in urban regions, while there is a limitation on pharmaceutical services in rural areas but not in cities” (P1).

Discussion

We classified challenges of Family Physician Plan in Kerman into policy-making and programming, financial supply, payment method, culture-creation, laws and regulations, communications, service providers, resources and justice groups.

To implement the Family Physician Plan efficiently, more detailed feasibility was required; this plan could be implemented based on the situation of each area. Obviously, unclear results of pilot studies cause a lack of better implementations in other cities.

Before Family Physician Plan started, all insurance companies must be integrated; though, they were not integrated. It was stated in a study that diverse insurances and absence of a unique insurance was an important challenge in implementation of this plan (17). Also, it was stated in a study that financial problems and lack of coordination between Ministry of Health and Ministry of Welfare were the main reasons why this plan was not successful (8). Furthermore if the University of Medical Science is both the supervisor and the executive manager, that not criticize its work.

Implementing urban Family Physician Plan is harder than and differs from the rural plan due to different population, different service providers and services, and higher expectations of people (18). Successful implementation of this plan in the city requires cooperation of private sections; although the potential of these sections has not been considered in this plan. Most physicians were not optimistic about this national plan (19).

It is clear that there was no appropriate planning and coordination from the very beginning because necessary credits have not been included in the annual budget. Experts believed that Ministry of Health which had difficulties in funding the previous programs would fail to implement this plan due to the removal of franchise in the first level and high inflation in the society.

In 2000, the WHO announced that one of the three main goals of health system is fair cooperation to fund health expenses (20). Getting franchise and limited prescriptions in rural Family Physician Plan and getting franchise and no limitation in receiving medication in the urban Family Physician Plan are examples of discrimination.

In addition to delays in payments in Iran, long financial processes cause a part of resources lost over time. Providers doubt whether their salaries will be paid on time. In some studies, delayed payments were the main dissatisfaction reason of health and treatment personnel (21,22). Iran healthcare systems do not have much experience in using new payment mechanisms (e.g Per Capita, DRG) (15). These diverse methods of payments will cause some problems due to a need for more extensive monitoring, technical systems, and new payment software.

We found that that the relationship between service presentation levels and beneficiary organizations is inappropriate and there is no proper coordination. Lack of cooperation of the Armed Forces due to their limitations and lack of free cooperation of TV and Radio Organization in implementing urban Family Physician Plan are also examples of inconsistencies of the plan.

Cultural and educational problems are
another challenges found in this study. Improving culture is impossible unless there is a national commitment and proper educational programs. Unfortunately, insurance organizations have not taken any action to educate people (to make appropriate use of insurance) so far (15). However, a suitable insurance program can bring about some incentives to change patients and service providers’ behaviors (23). It was shown in a study that 55% of patients with non-emergency health problems who referred to emergency units could have been treated by a general practitioner or just by some health suggestions (24). In another study, it was shown that improving culture and giving information was poor in the society and people had low information about family physicians (25).

Moreover, many doctors are not fully aware of this plan and do not have enough training in this regard. In a study that evaluated family physicians’ attitudes toward their employment, most interviewees noted that they had no knowledge of the plan at the start of this plan (17). Results of numerous studies reflect poor information and insufficient training of physicians regarding Family Physician Plan and poor referral system (22, 26, 27). They suggested that related educations must be proportional to the new needs and should start at the university level.

Rules of Family Physician Plan are now cumbersome and supervision of related institutions is inadequate and ineffective (25). In addition to physicians’ unwillingness to be involved in urban physician plan, incomplete and vague rules will result in the complexity of monitoring. Proper supervision of providers dramatically reduces costs and expands insurance services (15).

We found that there is issue with the health electronic file, and once it is solved, most problems related to referrals, quality of services and responding and monitoring will be solved accordingly. Numerous studies revealed poor availability of electronic health files; some were incomplete or inaccessible (17, 19, 26).

Shortage of physicians is one of the problems of health system in most countries even developed ones like the USA, England, and Finland (28). It was shown in a study that in addition of the available general practitioners in 2009, Family Physician Plan needed 4593 more physicians in order to cover all population of Iran (29). It seems that the main problem here is inappropriate distribution of general practitioners in Kerman. In another study in Iran, it was shown that general practitioners were distributed more inappropriately than specialists (30).

We found that when urban Family Physician Plan is implemented, most physicians who work in rural areas want to move to cities. It was mentioned in a study that average number of people covered by family physicians has increased by 500 people compared with a similar study carried out four years ago; it shows a decrease in the number of family physicians and their unwillingness to stay in this plan (31).

Another concern in this regard is the volume of duties assigned to physicians. For example, in recent years family physicians in countries like England and Holland have objected to their insufficient salary and hard work condition (32, 33). In Iran, some physicians are also unwilling to continue this plan due to high workload and insufficient payment (17, 34).

One of the strengths of this study was that it had a future view to prevent some problems of implementation of Urban Family Physician plan in Kerman province. But probably, neglecting people’s opinions about the family physician plan was the biggest drawback of this study. Difficult access to interviewees and beneficiaries and non-cooperation of the Armed Forces were the main limitations of this study.

To sum up, results show that different factors affect Family Physician Plan in Kerman. Most prevalent problems were funding and unclear rules and thematic and national regulations. Obviously, executive challenges of this plan can be reduced by reviewing policies, rules, and regulations,
suitable programming, and finding a stable financial resource. It is also recommended that sufficient resources including workforce must be taken into consideration before implementing this plan in another cities. Moreover, different levels of interaction between beneficiaries must be expressed clearly, and appropriate monitoring systems must be considered. Payment system must be modified in a way that no provider loses money and all participate in this plan. More importantly, a good culture must be provided and all mass media must cooperate with Ministry of Health. Finally, they must reflect benefits of this plan so that all people get willing to participate in this plan. Since most cities of Iran have conditions similar to Kerman, results of this study can be generalized to all cities of Iran, but some of cities in Iran have their unique characteristics, that result should be adjusted accordingly.

Concerning the above problems, Family Physician Plan should not be expected to be implemented in a limited time, and rather successful implementation of this plan may take considerable time.

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References

15. Karimi I, Salarian A, Anbari Z. A
comparative study on equity in access to health services in developed countries and designing a model for Iran. AMUJ 2010; 12(4):92-104.


35. Sheldon T. Dutch GPs take three-day
36. Torabian S, Cheraghi M, Azarhomayoon A. Family physician pro-