

# Challenges of Family Physician Program in Urban Areas: A Qualitative Research

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## Abstract

**Background:** Family physicians play an essential role and act as a communicational bridge between people and the healthcare system in providing healthcare services efficiently and equitably. This study aimed at exploring the challenges of the family physician program in urban areas in Iran in 2015.

**Method:** This research had a descriptive exploratory design with a qualitative content analysis approach. Data were collected through semi-structured interviews between 2014 and 2015. Seventeen physicians enrolling in family physician program for at least two years were selected through purposeful sampling. Conventional content analysis was used to analyze the data.

**Results:** Coding and analysis of the interview data generated two categories and seven subcategories related to the challenges of the family physician program. The categories were poor infrastructure and poor incentive mechanism.

**Conclusion:** Our findings captured a good picture of family physician program in urban areas to better clarify the challenges of the program and provide a foundation to plan and implement appropriate changes. Thus, our findings will give policymakers a deeper perception to confront the challenges of the family physician program in urban areas.

**Keywords:** Family physician, health service, urban areas

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## Introduction

The World Health Organization (WHO) has defined three goals for an ideal health system: providing health with acceptable standards, ideal responsiveness, and establishing equity among families in financing health services. Despite many efforts in different countries, health systems encounter more or less similar challenges in achieving these goals.<sup>1,2</sup> The WHO suggests that family physician is the core of the world efforts for quality improvement, cost effectiveness, and equity in healthcare systems.<sup>3</sup> Family physician program and referral systems were first developed in the UK in the 1950s. Subsequently, this plan expanded to other countries in northern Europe and Canada and resulted in significant improvements in efficacy of healthcare systems as well as social justice.<sup>4</sup>

Family physicians play an essential role and act as a communicational bridge between people and the healthcare system to provide healthcare services efficiently and equitably. They deliver coordinated health services to people and their families and actively engage in case finding, treatment, and prevention of disabilities.<sup>1</sup> In addition, as gatekeepers, family physicians can make decisions about the appropriate use of health resources. They help patients identify their health needs and select services efficiently. Thus, they reduce health expenditures and

improve health outcomes.<sup>5,6</sup>

Family physician program has four principles: delivering Primary Health Care (PHC) and services to a defined population, establishing a referral system in which it is predicted that one can utilize specialized services, changing the payment system and funding, eliminating payments at the first level of service delivery, and changing the service delivery system from a treatment-oriented to a health-oriented perspective. These services are provided by a team, which is mostly composed of general physicians and other specialists who visit referred patients.<sup>4</sup>

Before the Islamic revolution in 1979, rural parts of Iran, accommodating 65% of the population, were generally underdeveloped and had poor public health indices.<sup>7,8</sup> Afterwards, the health network system relying on PHC developed and became the solution for many health challenges in Iran for many years.<sup>9,10</sup> Their main goal was to provide health services for all people in 1977,<sup>11</sup> but it gradually became fragile to respond to the emerging needs of the contemporary population with a high burden of non-communicable diseases, increasing public expectation to access qualified physicians and the fast growing and expensive technologies.<sup>7,12</sup> Then, the Ministry of Health and Medical Education (MOHME) initiated a series of health sector reforms, including the pilot phase of family physician program in rural areas in 2005.<sup>13,14</sup> Being initially implemented in rural areas and small cities with populations under 20000 individuals,<sup>9,15</sup> these reforms made very sharp improvements in some of the most important health indicators, such as maternal mortality, life expectancy, and control of infectious diseases.<sup>4,16</sup>

Following the successful experience of family physician program in rural regions, MOHME decided to expand this

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program to urban areas.<sup>11</sup> Unfortunately, the PHC network remained incomplete in cities because people enjoyed much greater access to private sector providers in cities.<sup>13</sup> Contrary to rural area, the institutional characteristics of urban settings in Iran may hinder the implementation of family physician policy. These include a passive and fragile PHC network, strong private sector with massive conflict of interest with family physicians, public's high freedom of choice to use health services, and multi-dimensional and more diverse cultural norms compared to rural areas.<sup>7</sup> Furthermore, specialists in the private sector are the most powerful stakeholders in healthcare provision in cities and they do not support preventive services provided through family physicians in Iran.<sup>7,17</sup> For these reasons, a pilot program was designated and some cities were selected to determine cons and pros of implementing the family physician program in urban areas. Fars and Mazandaran provinces were selected as the pilots and Fasa, one of the major cities in Fars province, started the program in May 2013. Since human resources are regarded as the most important pillar of any health policy, exploring family physicians' experiences and perspectives about challenges of this program seems mandatory. They clearly are the main stakeholders and deal primarily with every aspect of the program on an everyday basis. Yet, the current literature does not contain much evidence from Iran and other developing countries regarding these issues. The present study, for the first time after initiation of the national urban family physician program, aims at assessing challenges related to the whole program after 20 months of real world experience. Therefore, this study aims to explore pitfalls and possible challenges of urban family physician program in Iran in 2015.

## Method

### Design

A qualitative design with conventional content analysis was used for data collection and interpretation.

### Settings & Participants

Fasa is a city in Fars province, southern Iran with a population of nearly 210,000 people. This city has 52 health houses and 19 health centers. Besides, 45 family physicians work in the center of the city. The study participants were selected through purposeful sampling. This sampling method is generally used in qualitative research and helps with selection of information-rich participants. The researchers interviewed the paramedics and specialists who participated in the family physician program and had rich experience and information about the challenges of this program. The inclusion criteria of the study were: a) having at least general physician degree; b) working as a physician with at least 2 years of clinical experience, and c) being willing to participate in the study. Overall, 17 physicians (4 females and 13 males) enrolled in the family physician program for at least 2 years were selected.

### Data collection

Data were collected through semi-structured interviews using guide comprising probing questions between 2014 and 2015. The interviews were conducted by one of the researchers who was experienced in qualitative researches. Further support was also provided by other team members who were experienced in the family physician program. The interviews were audio recorded

and transcribed verbatim after each session. In total, 17 face-to-face interviews were conducted, each lasting 60 – 90 minutes. It should be noted that the interviews were conducted in places free from distractions and at the time and location most suitable for the participants. Prior to the interviews, the researchers established rapport with the participants. Then, interviews began with general questions and moved toward more detailed inquiries depending on the participants' responses. The major interview questions were as follows: "Can you describe today's shift?", "What are the problems with the family physician program?", "Would you like to see any changes? If so, what would they be?" At the end of the interviews, the researchers thanked the participants for their time and asked them if there was anything they would like to add. The interviews continued until reaching data saturation point when no new information was gained.

### Data analysis

Conventional content analysis proposed by Graneheim and Lundman was used to analyze the data.<sup>18</sup> Immediately after each interview, its contents were documented by the research team. Then, the texts were read several times to obtain a general understanding of the participants' statements in line with the study objectives. After that, the research team extracted meaning units or initial codes, which were eventually merged and categorized based on similarities and differences. MAXqda2 software 10.0 R250412 was used for data analysis. Eventually, the final codes, including their defining properties and their relationships with each other, were reviewed in order to reach consensus regarding the central, unifying themes emerging from the data.

### Rigor

The procedures that were used to improve data trustworthiness were as follows: coding and categories were sent back to the participants for possible revisions. A team-based approach to analyze data was established to check the credibility. This showed a good level of agreement in interpretation and some disagreements were resolved through discussion. Prolonged engagement, varied experiences, and peer checking were other strategies employed for improving the trustworthiness of the study.<sup>19,20</sup>

### Ethical considerations

This study was approved by the Ethics Committee and Research Council of Fasa University of Medical Sciences. Before each interview, the participants were informed by one of the research team members about the study objectives and procedures and were told that their participation was voluntary. Then, they were required to sign written informed consents for taking part in the research. Besides, they were reassured that they could leave the study any time they wished. Confidentiality was also ensured by considering anonymity.

### Findings

The program included ten family physicians, four medical specialists (nephrologist, neurologist, dermatologist, and internist), two pharmacists, and one pathologist. The participants' mean age was  $47.2 \pm 3.5$  years, with a mean work experience of  $16.2 \pm 3.8$  years as physician and  $29 \pm 2$  months as family physician. The mean population size covered by each physician was 1455 individuals. The participants' characteristics are listed in Table 1.

Coding and analysis of the interview data generated two categories and seven subcategories related to challenges of the family physician program. The categories were poor infrastructure and poor incentive mechanism that have been presented in Table 2 and explained in the following section.

#### Category 1: Poor infrastructure

The first category emerging from the data included poor infrastructure as one of the challenges of the family physician program. Its subcategories were lack of acculturation, failure in expertizing the plan, egoistic manner of medical specialists, deviation from the main goal, and soaring expenses.

##### Lack of acculturation

Almost all participants mentioned lack of acculturation as a big challenge of this program. They highlighted the importance of educating the society through mass media. In this regard, a physician said, *"In my opinion, the major weakness of this program was lack of acculturation. Our people were not ready for this kind of gratis services. In the first months of this program, we had many quarrels with people to inform them about the regulations"*. Another physician added, *"One day, I saw a person who said you are my family physician, but thank God I didn't become sick to come to the doctor. Our people think that they should refer to doctors only when they are sick and don't know anything about the goals of the program"*.

##### Failure in expertizing the plan

The study participants considered failure in expertizing the plan

to be a challenge of this new program. According to the physicians' experiences, a well-planned program is a must for these kinds of projects. The following statement shows the underpinnings of this theme, *"This program was not well planned, supervised, or managed"*. Another physician also mentioned, *"Abrupt start was the major weakness of this program. Our people should accommodate with this program gradually"*.

Moreover, this category demonstrated that the payment and referral systems were not planned correctly. In this regard, a physician said, *"We didn't receive our salary at the end of each month regularly and it is not really fair; we are not sure if this program is going to continue or not"*.

Physicians' lack of knowledge about this program was yet another concern. Regarding this category, a physician reported, *"Our physicians haven't been trained as family physicians and they need many in-service training programs in order to increase their knowledge about families, their needs, follow-ups, and communication"*.

##### Egoistic manner of medical specialists

The participants acknowledged that medical specialists were not oriented with this program. Indeed, most participants complained about their feedbacks that were not legible and complete. These participants felt that one of the goals of this program was creation of a good educational relationship between medical specialists and family physicians that did not happen. The following narrative statements describe this subtheme, *"Some of medical specialists are stingy, their feedbacks are not legible, they are telegraphic and we don't get anything from these feedbacks"*. *"This program*

**Table 1.** Demographic characteristics of the physicians

Variables	Number (%)
<b>Sex</b>	
Male	13 (76.47%)
Female	4 (23.52%)
<b>Age (year)</b>	47.2 ± 2.3
<b>Marital status</b>	
Married	14 (82.35%)
Single	3 (17.64%)
<b>Specialty</b>	
General Physician	10 (58.82%)
Nephrologist	1 (5.88%)
Dermatologist	1 (5.88%)
Internist	1 (5.88%)
Pharmacologist	2 (11.76%)
Pathologist	1 (5.88%)
<b>Average population covered</b>	1455
<b>Work experience as physician (year)</b>	16.2 ± 3.8
<b>Work experience as family physician (year)</b>	29 ± 2

**Table 2.** Main categories and the related subcategories extracted from the physicians' experiences

Main categories	Subcategories
<b>Poor infrastructure</b>	Lack of acculturation
	Failure in expertizing the plan
	Egoistic manner of medical specialist
	Deviation from the main goal
	Soaring expenses
<b>Poor incentive mechanism</b>	Denigration of family physicians
	People's confusion

*is a good source of income for medical specialists, they just think about filling their pockets and ask patients to come back for follow-up even for a simple osteoporosis”.*

#### Deviation from the main goal

Most of the participants acknowledged that the goal of this program was health-based, but some limitations obliged them to only treat diseases, taking them far from the programs goals. In this context, a participant stated, *“Unfortunately, because of high professional responsibility and workload and the large number of the covered population, we didn’t have enough time for health-based care, follow-up, and education. We are just doing our traditional work; the difference is that we have only added referrals”.* Another physician also said: *“Till now, we couldn’t even take a single step toward the goal of the program that is improving health. Most of the first visits and assessments were done carelessly without the physician’s supervision”.*

#### Soaring expenses

The participants’ experiences revealed an increase in expenses. A pharmacist highlighted, *“Drug use has increased according to our estimation. People ask for different kinds of medications at each visit”.* Another physician also mentioned, *“The most important goal of this program was decreasing or managing the referrals to medical specialists, but this goal wasn’t achieved. Patients believed that they didn’t lose anything because of the low cost of a visit, so the number of referrals to medical specialists increased”.*

#### Category 2: Poor incentive mechanism

The second category extracted from the data was poor incentive mechanism. Its subcategories included denigration of family physicians and people’s confusion.

##### **Denigration of family physicians**

The participants strongly believed that their social position had dropped and their self-esteem had decreased. The participants perceived that they needed more attention and security. The following statements illustrate that this program has led to denigration of family physicians, *“We are just here and work as a secretary for medical specialists, we lose our self-esteem”.* Another physician also expressed, *“This is my greatest pain, my patients trusted me before and consulted with me even for a surgery, but now they don’t have any trust and they just come for receiving referrals”.*

##### **People’s confusion**

One view that was frequently expressed by the physicians was people’s confusion. They mostly mentioned that people have not been informed and, as a result, they become confused and will disagree with this beneficial program. In this regard, a physician reported, *“Our patients are confused due to lack of knowledge about these cumbersome bureaucracies. In my opinion, the worst part of this program is the referral system”.* Another participant also maintained, *“Our patients are bewildered. They should initially have a referral leave for going to a medical specialist. Afterwards, they should receive another referral leave for follow-up and showing lab results or radiologic images to the medical specialist. This legwork troubles them”.* Finally, another participant stated, *“We miss many patients when their physicians are not at work and have difficulty to come again for a visit”.*

## Discussion

The study findings showed that the family physician program in urban areas encountered two important challenges (poor infrastructure and poor incentive mechanism), necessitating crucial modifications. According to the results, lack of acculturation was one of the challenges of the family physician program in cities. In this regard, Majidi, et al. (2014) conducted a study entitled “Are people in Tehran prepared for family physician program?” and found that around half of the participants did not have any information about this program. They stated that if we want to achieve successful results from family physician program in cities, we need to increase public awareness about details and objectives of the program in order to appeal people’s trust and encourage their active collaboration in this program by television and radio as major sources of information.<sup>11</sup>

According to the current study findings, failure in expertizing the plan was another challenge of this program. Hatam, et al. (2012) suggested that planning, appropriate management, and organization would correct health plans according to needs assessment and continual supervision on activities.<sup>1</sup> Likewise, Zarif Sanaiey, et al. (2015) reported that mental health was the first and environmental and professional health was the last educational need of family physicians. They also suggested that proper continuing medical education programs had to be coordinated with these needs.<sup>21</sup>

Moreover, our study results indicated that medical specialists were egoistic and did not cooperate well with this program. This is consistent with the results of the research by Khayat-zadeh-Mahani et al. (2014), which demonstrated that specialists were the most powerful players in Iranian health system and did not support preventive services provided by family physicians in Iran. Indeed, they possessed the largest proportion of various investments in healthcare systems due to unequal distribution and political influences. They suggested that fundamental changes were necessary in governing and organizing the health system in order to achieve success in this program in cities in a win-win manner. In doing so, power should be distributed among various healthcare providers equally and most importantly, people have to be trained to seek for care through the referral system.<sup>7</sup> In the same line, Khayyati, et al. (2011) showed that only 35.99% of medical specialists provided feedbacks and 36% of the feedbacks were not plausible.<sup>3</sup>

One of the most important perspectives of the family physician program was changing the service delivery system from a treatment-oriented to a health-oriented perspective and family physician teams were asked to give priority to preventive measures. However, our results showed that this program deviated far from its goals. According to the participants’ experiences, high professional responsibility was one reason. In a previous study, Khayyati et al. (2011) indicated that the family physician program had positive impacts on function of health units in terms of availability of physicians and midwives as well as insurance coverage at health centers in rural areas. Nevertheless, it had no impact on the potential follow-up and case referral rate. Thus, it was suggested that a powerful monitoring system was required for improvement of the program.<sup>3</sup> Similarly, Amiresmaili, et al. (2014) reported that long and inappropriate working hours and high working responsibility were among the reasons for leaving the family physician program in rural areas.<sup>9</sup>

Another aim of the family physician program in urban areas was changing the payment system and funding, eliminating payments at the first level of service delivery, and establishing a referral system in which it is predicted that one can utilize specialized services and the insurance company must pay most of the costs. It was predicted that these systems could decrease drug costs with better insurance coverage, leading to reductions in direct costs of households and eventually fairer services. However, our participants' experiences revealed an increase in the costs. Consistently, Hatam, et al. (2012) showed that although the family physician program could improve health, availability, and equity, it did not decrease the costs and increased referrals to pharmacies, laboratories, and radiology clinics.<sup>1</sup> Furthermore, the results of other studies showed that despite fundamental differences in financial affairs and organization and presentation of treatment services in different countries, all countries faced almost similar challenges in the family physician program.<sup>22,23</sup>

All physicians in our study clearly demonstrated that they were not satisfied with this program as their self-esteem had decreased and their social status had been jeopardized. Similarly, Amiresmaili, et al. (2014) reported that 26% of physicians had left the program in the past and 77.3% intended to leave in the near future. In that study, lack of opportunity for continuing education, inappropriate and long working hours, unsuitable salary requirements, irregular payments, lack of job security, and high working responsibility were regarded as the most common reasons for leaving the program. As human resources are the most important pillar of health policies, they suggested that revision of human resources policies seem necessary in order to reduce the rate of leaving the program and improve its effectiveness.<sup>9</sup> Likewise, Jabbari, et al. (2015) reported that family physician performance and job satisfaction were low. Hence, it is important to find out mechanisms to improve the situation, especially payment methods and work conditions, in the existing health system.<sup>24</sup> Shalileh, et al. (2010) also described the reasons for dissatisfaction in the family physician program. According to their findings, the most serious problems were the dysfunctional payment system, living conditions, limited number of medications that could be prescribed, and limitation in referral to secondary care. Moreover, they stated that most doctors only practiced as family physicians when they had no choice. Therefore, much needs to be done so that Iranian doctors willingly choose to pursue careers as family physicians.<sup>16</sup> Other studies in other countries also showed that doctors were faced with several difficulties.<sup>25,26</sup> For instance, a study conducted by Shah, et al. (2016) revealed that inadequate remuneration, unreasonable facilities at residence, poor working environment, political interference, inadequate supplies, and medical facilities contributed to lack of motivation in physicians. They advocated that by addressing retention and motivation challenges, service delivery could be made more responsive to patients and communities.<sup>27</sup> In China, lack of motivation was identified as one of the important factors in job dissatisfaction.<sup>28</sup> Thus, health authorities must improve their performance through providing a better working environment as well as availability and improvement of instruments and diagnostic devices for diagnostic and treatment services.

Based on the results of our study, people's confusion was another challenge of the program that had to be taken into consideration. Taheri, et al. (2014) stated that 76.03% of individuals were satisfied with the family physician program. On the other

hand, a considerable proportion of patients were dissatisfied with guidance, training, and adequacy of program services and recommended policymakers to develop better programs.<sup>10</sup> Furthermore, Vafae-Najar, et al. (2014) pointed out a gap between the ideal situation and the current situation of quality of services provided by family physicians. They suggested a strong focus on patients and providing high quality healthcare services. They also put emphasis on continuous improvement through studies on patients' behaviors, expectations, and needs to achieve a higher level of service quality in this program.<sup>2</sup>

To sum up, considering the above-mentioned challenges, this program should not be expected to be done in a limited time; rather, successful implementation of this program needs considerable time and planning.

This study had some limitations that should be considered. The first limitation was homogeneity of the physicians as a sample. Future researches involving divergent groups of physicians with different experiences would increase our understanding of the challenges of the program. Despite this limitation, our findings captured a good picture of the current situation to better clarify the challenges of the program and provide a foundation to plan and implement appropriate changes. To the best of our knowledge, this is the first qualitative research since initiation of the urban family physician program in Iran targeting physicians as the main stakeholders. Yet, further action researches have to address the challenges of the family physician program by including those who are part of the process to act on their own behalf to solve real world problems.

In conclusion, qualitative research is a way to reach a better understanding of physicians' perspectives and recommendations to improve family physician program. The current study findings demonstrated poor infrastructure and poor incentive mechanism as challenges of this program. The family physician program is a promising opportunity for individuals and communities' health through strengthening public health and preventive medical services. However, its implementation is seriously challenged, particularly regarding financial resources, change in the community's service utilization behaviors, and service providers who should be enrolled in the plan and provide preventive services. Considering initiation and generalization of this program in Iran, continuous evaluation and monitoring are necessary to eliminate its weaknesses. Indeed, some measures must be taken to implement this program in other cities, as well. Overall, our findings are expected to give policymakers a deeper perception to confront the challenges of the program. In addition, the findings can serve to create a framework for expanding this program to other cities. Finally, we hope that these results will lead to improvement of the family physician program in the world.

**Conflict of interest:** *None declared.*

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## References

1. Hatam N, Joulaei H, Kazemifar Y, Askarian M. Cost efficiency of the family physician plan in fars province, southern iran. *IJMS*. 2012; 37(4): 253 – 259.
2. Vafae–Najar A, Nejatizadegan Z, Pourtaieb A, Kaffashi S, Vejdani M, Molavi–Taleghani Y, et al. The quality assessment of family physician service in rural regions, Northeast of Iran in 2012. *IJHPM*. 2014; 2(3): 137 – 142.
3. Khayyati F, Motlagh ME, Kabir M, Kazemeini H, Gharibi F, Jafari N. The role of family physician in case finding, referral, and insurance coverage in the rural areas. *IJPH*. 2011; 40(3): 136 – 139.
4. Majdzadeh R. Family physician implementation and preventive medicine; opportunities and challenges. *IJPM*. 2012; 3(10): 665 – 669.
5. Arab M, Torabipour A, Rahimifrooshani A, Rashidian A, Fadaei N, Askari R. Factors affecting family physicians' drug prescribing: A cross–sectional study in Khuzestan, Iran. *IJHPM*. 2014; 3(7): 377 – 381.
6. Dewulf B, Neutens T, De Weerd Y, Van de Weghe N. Accessibility to primary health care in Belgium: An evaluation of policies awarding financial assistance in shortage areas. *BMC Family Practice*. 2013; 14: 122.
7. Khayatizadeh–Mahani A, Takian A. Family physician program in Iran: Considerations for adapting the policy in urban settings. *Arch Iran Med*. 2014; 17(11): 776 – 778.
8. Kalhor R, Azmal M, Kiaei MZ, Eslamian M, Tabatabaee SS, Jafari M. Situational analysis of human resources in family physician program: Survey from iran. *Materia Socio–Medica*. 2014; 26(3): 195 – 197.
9. Amiresmaili M, Khosravi S, Feyzabadi VY. Factors affecting leave out of general practitioners from rural family physician program: A case of Kerman, Iran. *IJPM*. 2014; 5(10): 1314 – 1323.
10. Taheri M, Mohammadi M, Amani A, Zahiri R, Mohammadbeigi A. Family physician program in Iran, patients satisfaction in a multicenter study. *PJBS*. 2014; 17(2): 227 – 233.
11. Majidi A, Loori N, Shahandeh K, Jamshidi E, Majdzadeh R. Are people in Tehran prepared for the family physician program? *IJPM*. 2014; 5(8): 984 – 991.
12. Mohaghegh B, Seyedin H, Rashidian A, Ravaghi H, Khalesi N, Kazemeini H. Psychological factors explaining the referral behavior of Iranian family physicians. *IRCMJ*. 2014; 16(4): e13395.
13. Takian A, Doshmangir L, Rashidian A. Implementing family physician programme in rural Iran: exploring the role of an existing primary health care network. *Family Practice*. 2013; 30(5): 551 – 559.
14. Jabbari H, Bakhshian F, Velayati A, Mehrabi E, Allahverdizadeh S, Alikhah H, et al. Effectiveness of presence of physician and midwife in quantity and quality of family planning services in health care centers. *JFCM*. 2014; 21(1): 1 – 5.
15. Lankarani KB, Alavian SM, Haghdoost AA. Family physicians in Iran: success despite challenges. *Lancet*. 2010; 376(9752): 1540 – 1541.
16. Shalileh K, Mahdani A. Family physicians' satisfaction in Iran: A long path ahead. *Lancet*. 2010; 376(9740): 515.
17. Kolozsvari LR, Orozco–Beltran D, Rurik I. Do family physicians need more payment for working better? Financial incentives in primary care. *AP/SemFYC*. 2014; 46(5): 261 – 266.
18. Graneheim U, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today*. 2014; 24(2): 105 – 112.
19. Speziale HS, Carpenter DR. Qualitative research in nursing forth ed. Lippincott Williams & Wilkins: Lippincott Williams & Wilkins; 2007; p.477
20. Polit DF, Beck CT. *Nursing research: Generating and assessing evidence for nursing practice*. 9th ed: Lippincott Williams & Wilkins; 2008.
21. Zarif Sanaiey N, Karamnejad S, Rezaee R. Educational needs of family physicians in the domains of health and conformity with continuing education in Fasa university of medical sciences. *J Adv Med Educ*. 2015; 3(2): 84 – 89.
22. Buss R. *Health care systems in eight countries: Trend and challenges*. 1st ed, editor. UK: The London School of Economic and Political Science. 2002.
23. Ebadi fard Aza F, Rezapour A. *Economic of health care*. 1st ed. Tehran: Ebadifard press; 2011.
24. Jabbari H, Pezeshki MZ, Naghavi–Behzad M, Asghari M, Bakhshian F. Relationship between job satisfaction and performance of primary care physicians after the family physician reform of east Azerbaijan province in Northwest Iran. *Indian J Public Health*. 2014; 58(4): 256 – 260.
25. Kellici N, Dibra A, Mihani J, Kellici S, Burazeri G. Physicians' perceptions about the quality of primary health care services in transitional Albania. *Med Arh*. 2015; 69(2): 123 – 126.
26. Scott A, Sivey P, Ait Ouakrim D, Willenberg L, Naccarella L, Furler J, et al. The effect of financial incentives on the quality of health care provided by primary care physicians. *CDSR*. 2011; 9: CD008451.
27. Shah SM, Zaidi S, Ahmed J, Rehman SU. Motivation and retention of physicians in primary health care facilities: A qualitative study from Abbottabad, Pakistan. *IJHPM*. 2016; 5(8): 467 – 475.
28. Wang Y, Kaplar Z. AME survey–003 A1–part 2: the motivation factors of medical doctors in china. *Quant Imaging Med Surg*. 2015; 5(6): 917 – 924.