

Investigation of administrative obstacles to family physician program in urban areas of Iran

Javad Javan Noughabi¹, Saeed Hosseini²

Journal of Research & Health Social Development & Health Promotion Research Center Vol. 7, No. 2, Mar & Apr 2017 Pages: 703- 711 DOI: 10.18869/acadpub.jrh.7.2.703 Original Article

1. **Correspondence to:** Department of Health Economics, School of Management and Medical Information Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

Email: javadjavan.n@gmail.com

2. Department of Biostatic and Epidemiology, School of Health, Kerman University of Medical Sciences, Kerman, Iran

Received: 9 Feb 2014 Accepted: 9 Dec 2014

How to cite this article: Javan Noughabi J, Hosseini S. Investigation of administrative obstacles to family physician program in urban areas of Iran. *J Research & Health*2017; 7(2): 703-711.

Abstract

Health is regarded as one of the basic rights of each person in society; so governments are obligated to provide it equally for everyone. The best way to achieve this goal is the establishment of health insurance with the orientation of family physician and the strategic referral system. Yet, such programs will not be successful without encouraging people to participate and changing social behaviors. The aim of the present study was to investigate the administrative obstacles and problems to family physician program in urban areas of Iran. This study was a qualitative research conducted. A purposive sampling method was employed and the data were gathered via semi-structured interview with open-ended questions and document examination. All the interviews were recorded digitally and immediately transcribed verbatim. They were finally analyzed based on framework analysis. The participants' detailed descriptions showed that systemic, environmental, and human related factors were the main obstacles to the implementation of family physician plan. Since the success and performance of each program effectively cannot be obtained without people's acceptance and collaboration, the necessity of training and giving information rapidly and timely to the residents in urban areas is felt more than ever. Also, making authorities aware of the obstacles expressed by people can be helpful in harmonizing the program with people's requests; and can result in overcoming the challenges and obstacles facing the program.

Keywords: Family, Family Practice, Physician, Primary

Introduction

Health and security are the primary rights of everyone in a society; so governments are obliged to provide them equally to each member of society [1]. Health is the center of social, economic, political, and cultural development in all human societies and is of special importance in the development of society infrastructures in different sectors. Thus, a comprehensive health system in a country is of vital importance [2].

In Iran, the health care network was established in 1984 after being legislated as a law by the parliament following the publication of the results of a joint research program by the ministry of health and the world health organization between the years 1975 and 1979. When designing the health care network in a multifaceted and broad vision, the goal was to include all rural and urban areas and the assigned task for all the units providing health services in all levels was clarified. In practice, though, due to some factors the health care systems were developed mainly in the rural areas, and the development in the urban areas was far less extensive and urban hospitals did not follow the trend in the development [3].

As a result, some problems began to arise in providing the public with health care services which can be categorized as follows: an inadequate and unequal access to the services, exorbitant costs of health care, inconsistency among the different levels of services, emphasis on treatment and a neglect of preventive measures, getting bogged down at individual levels instead of engaging at broader social levels, the limitation of services in doctors' offices and ignoring possibilities like home care services, clash of patients' interests with that of society and that of the health care system, and finally the lack of accountability on behalf of the service providers [4].

According to most experts, the strategy of Family Physician and the referral system could be a solution to many problems ailing the healthcare system [2,4]. The World Health Organization (WHO) views the Family Physician plan as the centerpiece for global effort to improve the quality of services, reduce costs, improve efficiency, and establish equality in healthcare .Up to 1997, fifty six countries had established the Family Physician plan [2,3].

Through the unrelenting efforts of the Iranian parliament, especially the health and treatment commission, and with the cooperation of the Management and planning organization, the medical insurance organization was obliged to issue health insurance booklets not only for all rural-area residents, but also for the nomadic tribal people roaming the country [3]. Moreover, this coverage included all the residents in small towns with populations under 20000 to be provided by Family Physician plan through the referral system [3,5]. An opportunity thus arose to ensure equal access to health care services which was convenient for both urban and rural areas [5].

The urban family physician program was began from mid-May 2010 as a pilot project in 17 cities having population less than 50 thousand residents in the provinces of Khuzestan, Sistan and Baluchestan, and Chaharmahal and Bakhtiari [6].

Since then, efforts have been made to extend the program to all four corners of the country first implemented the full-fledged plan on July 2012 in Fars province and second in Mazandaran and then in other provinces [5,6].

The necessity of public participation in health programs, which is one of the most important features of sustainable health services, is indispensable. In order to implement the family physician program fully and successfully, the participation of all parties involved is a must; in other words in order for this plan to achieve an integrated and efficient model, an effective relationship among the patients, families, and the society is needed [7]. According to Steven's research, hospital expenses are accounted for the majority of health and medical care costs (whether manpower or financial), provided that we accept 80 to 90 percent of patients can be diagnosed and treated at the first level of healthcare services; hence, the current trend in developing countries in reducing credit allocation for this level of health services does not seem very logical [8].

Another study showed that using the referral system lowered the number of hospital outpatients to 40% [9].

Despite the efficiency of the referral system, it is constantly facing multiple challenges which will ruin the plan if timely diagnosis and intervention is not made [4].

In a study conducted in Slovenia, an average of 58.2% respondents expressed great satisfaction regarding the accessibility to a family physician while the downside of the project was the lengthy time patients had to wait to visit the physician [10].

Another study showed that 24% of Italian Family Physicians lacked enough knowledge on family planning programs and needed other team members' support to offer desirable services [11].

A study conducted by Pour shirvani et al [12] in the northern provinces of Iran indicated that the referral system was inefficient in 67% of cases [12]. According to this study, the main obstacle to the implementation of the family physician plan in rural areas was mentioned as the non-compliance with the principal of referral from Level 1 upwards and vice versa.

Considering the developing trend of family physician, people's ideas and opinions about the obstacles and possible problems facing this program should be acknowledge for implementing an ideal program. In addition, considering the fact that this project is rather recent and the fact that little research has yet been conducted on this subject, the main goal of our study was to offer a classification of obstacles and problems facing the ideal implementation of Family Physician plan in urban areas of Iran. Thus, the current research which is a qualitative study was embarked with the aim of recognizing administrative obstacles to the implementation of family physician plan in urban areas and the city of Gonabad was selected as a case study.

Method

The present study was conducted in Gonabad city, the northeast of Iran, to examine the administrative obstacles to family physician plan in urban areas of Iran.

A qualitative approach was designated for this study because this method provides a deep understanding of the participant under investigation and practically was the only approach responding to the research questions as it is generally believed that the choice of the research method is determined by the research questions [13]. In addition, the qualitative model is individual-centered and natureoriented in essence and its main purpose is to achieve a full understanding of social and conceptual meaning that individuals give to their routine lives [14].

Therefore, in this study the qualitative method was used to obtain rich and valuable information about the obstacles to Family physician plan in urban areas of Iran.

The population under the participant of this research included administrative staff involved in family physician plan and individuals with knowledge about this plan in Gonabad city in the year 2012.

In this study, purposive sampling with maximum diversity was used and sampling was not stopped until data saturation level was reached by gathering data from 15 participants.

Inclusion criteria for participants in this study consisted of: administrative staff of family physician plan as well as Gonabad city residents having a minimal knowledge of the Family Physician Plan in urban areas. Their awareness of the plan was a requirement as this could help implement the plan more efficiently.

The data was gathered through semistructured interviews and document examination. Studies conducted on the family physician plan in rural areas as well as instructions on how to implement the plan on both rural and urban areas and the circulars dispatched to the health department branches about how to implement the plan and the stipulations of the fourth and fifth bill of development were the documents scrutinized. The interview was incepted by a general question on "how to materialize the plan and the obstacles to family physician plan in urban areas?" and to have a further clarification, we used queries like "can you explain further?" or " what do you mean exactly by saying that" or " could you give us more examples?" Each interview lasted averagely 30 to 45 minutes.

All interviews were recorded and transcribed verbatim and then main and subsidiary themes were extracted based on framework analysis – with its 5 stages of familiarization, identification of a thematic framework,

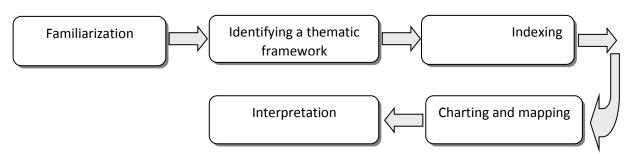


Figure1 Framework analysis

indexing, charting, and mapping and interpretation (illustrated in Figure. 1) [15]. In the familiarization stage, a content communication summary was designed for every interview. By reviewing the interview, its different parts were distinctly separated and the handling of the interview relatively was improved. Then, a conceptual framework was put forth based on the data and the basic constructs were clarified along with the subthemes. In the third and fourth stages which are also called organizing or indexing, tables were drawn using excel. For codification, each member was separately immersed in the data frequently, i.e. the interviews were studied several times and the themes were extracted. The reason for the separate coding was the fact that we intended to prevent any individual's assumption to affect others' ideas. The research team members made a list of extracted themes and their correlation with the conceptual framework. In this stage, one or two themes were allocated to each part of the interview containing the relevant data. Then, we gathered the team members to crosscheck and make any necessary changes. This process was repeated several times for every interview. Then, tables were drawn to make a comparative analysis of the interviewees' ideas on each component of the conceptual framework and discern the correlations between the components and their subsystems. In the final stage, mapping and interpreting, each component of the conceptual framework also underwent a procedure similar to the coding process. Four acceptability criteria of credibility, transferability, reliability, and conformity were used [16].

To ensure the credibility of data, sampling was carried out with a maximum variation of age,

sex, and socio-economic factors. Besides, the interview transcripts and the drafted themes were put at the participants' disposal and necessary changes were made after reviewing and gaining their approval.

In order to ensure transferability, all phases of the study and the environment in which the study was executed were fully explained to the participants.

To ensure reliability, the process of study was described for teachers with experience in qualitative research and after they reviewed the study, they confirmed the results.

Considering the fact that in the present study the three aforementioned criteria of validity and reliability have been observed, it can be said that credibility will automatically ensue.

Results

In this study, among 15 participants 60% were male and 40% female all aged between 17 and 51 years.

20% of the participants were students, 20% employees, 20% self-employed, 13% doctors, 13% housewives, and 7% were unemployed. In this framework-analysis based study, 3 main

themes and 17 subthemes were extracted.

Each concept is illustrated in Table 1. The obstacles and hindrances were categorized into three main themes related to systemic, environmental, and human factors.

Systemic obstacles: The first administrative obstacle to family physicians program in urban areas was related to the system or structure of government (Ministry of Health). The respondents in the interviews referred to the weakness of government in informing the public.

(Female respondent, 39-year-old, GP):

Main themes	Subthemes
Systemic obstacles	Inefficient publicizing
	Economic barriers to implementation
	Physician's low salaries
	Constant moving of physicians
	Better access to physicians in the strong private sector
	The absence of an Electronic Health File for each person
	Copying from foreign programs
	Poor quality of services
	Implementation of program hastily without analysis of the weaknesses, strengths, opportunities, and threats
	Ignoring lessons from rural Family Physician Program (lack of accurate assessment of rural Family Physician Program)
Environmental obstacles	The inability of the government in full program implementation
	Urban areas widespread and busy
	Time-consuming program
	A lack of culture promotion
Human obstacles	Obstacles related to people
	Obstacles related to managers and policy-makers
	Obstacles related to physicians

Table1. Primary concepts of major obstacles to the implementation of urbanfamily physician plan.

"dissemination of information has been relatively inadequate. The majority of the populations under this plan are neither clearly aware of the purpose nor the procedures of implementation of the plan. They have identified the family physician plan as a way to be referred to specialists."

It was also believed that publicity of the plan was better in rural areas.

(Female respondent, 32-year-old, civil servant): "the plan has been publicized in villages but I have no idea whether the publication will be implemented in cities, too."

Other obstacles mentioned by the interviewees were that the implementation costs of the family physician plan are high.

(Male respondent, 37-year-old, General Practitioner (GP)): "The biggest obstacle seems to be economically including the salary of the physician, the cost of medication, and

the personnel's salary. A plan without a good financial backing would become an obstacle to itself."

Plus they believed that physicians' low income had a negative impact on the quality of services.

(Male respondent, 37-year-old, GP): "If it's implemented properly, it will be good, on condition that the number of patients allotted to the physicians is proportional to their capabilities and they should be well paid so that they have enough motivation to cooperate and offer services of high quality"

People believed that easy access to physicians in the prosperous private sector worked as a deterrent for people to refer to family physicians.

(Male respondent, 50-year-old, selfemployed): "I don't think I will use their services because there are lots of physicians in every street and they are easily accessible, yet I will wait to see how this plan is being implemented."

Another obstacle the interviewees referred to was the absence of electronic medical profile for people who would require prolonged accessibility and service provision.

(Female respondent, 39 -year-old, GP): "The family physician should keep a complete record of every patient under his care which would include information about their physical, mental, and emotional health conditions. And every now and then the doctor should update the information. Any action of diagnosis, treatment, and rehabilitation should be directly under the supervision of a family physician."

Other obstacles cited by interviewees were the fact that the plan wasn't appropriate for indigenous people and that there was a lack of accurate assessment of the rural Family Physician plan which led to hasty implementation of the program in urban areas without proper expertise.

(Male respondent, 41-year-old, office employee): "This plan is just a mock plan copied from a foreign one and the implementation in Iran won't yield any fruit certainly."

Some interviewees believed that implementing the program hastily without analyzing the weak points, strengths, opportunities, threats and the possible substitution of physicians are among other obstacles which will cause low quality services.

(Male respondent, 37-year-old, GP): "The Family Physician program focuses on economic issues and since there are many poor people in cities who can't afford the costs of medications or even visiting the doctor, it might be effective but since they haven't worked on keeping individual health records systematically and the doctors are moved on regularly, so they will have less information about the patients and it might be inefficient."

Environmental Obstacles: Factors that are beyond the control of government. According to the interviewees, the government won't be able to handle this plan and they mentioned that there will be no guarantees to implement the plan properly considering the time consuming nature of the plan.

(Male respondent, 44-year-old, selfemployed): "The urban Family Physician program will be launched by the government but it is unlikely that a desired result be achieved."

The interviewees believed that since the plan was time-consuming, there was a dire need for making the grounds ready and preparing the public for better implementation of the plan.

(Male respondent, 44-year-old, GP): "The urban Family Physician program needs time because physicians are still unaccustomed to it; the public isn't prepared either. Also, it will be feasible only if the doctor's income is satisfactory."

(Female respondent, 32-year-old, office employee): "We should work on public awareness of the plan and in this case we can even resort to TV commercials as in the case of many health problems for which animated cartoons have been made."

Interviewees believed that another obstacle to urban Family physician plan is the large population in urban areas.

(Female respondent, 46-year-old, housewife): "Since the urban areas are more developed and densely-populated, there is a high demand for services in urban areas. However, the implementation of Family Physician program in rural areas was easier than in urban areas". Human barriers: factors that are related to human behavior. Respondents referred to some obstacles which encompassed the public, administrators, policy-makers, and doctors.

Respondents referred to the people's insufficient awareness of the program and believed that although the target of this plan is the public, people may generally not cooperate in the implementation of the program as they should. So, the public cooperation is absolutely necessary.

(Male respondent, 17-year-old, Student): "Some people might have the illusion that this plan is only much ado about nothing and may not believe it's useful. We should publicize this plan so as to change their attitude."

On the other hand, another factor that was considered to be an obstacle was that since this plan is government-sponsored and that people are to pay only a small fee, it might lead to an excessive increase in public demand for the same which in turn makes the implementation harder.

Discussion

These findings confirm that according to public opinion, many factors can hinder the efficient implementation of urban family physician program in Iran. In a study by Ingersoll et al., the relationship between organizational culture and readiness and the formation of employee commitment to the organization was examined and it was revealed that organizational readiness is the strongest determining factor in organizational success [17]. In the present study, systemic or organizational obstacles were introduced as the main obstacles to the implementation of Family Physician plan.

Interviewees believed a major obstacle to urban Family Physician program is the haste in the implementation of the program without teaching from the rural Family Physician program.

Implementation of health programs will be successful when the primary health care principles are followed [1]. Public participation and self reliance are the most important of these principles which means that without the cooperation and interest of the public, no success can be achieved [18].

So, health and well-being are spontaneous phenomena which should be motivated in public. In addition to the health sector, the community should be made involved in its own care. This incentive is created when people have a good knowledge and attitude toward the program's goal [19].

The results in this study showed that people did not have enough awareness of Family Physician Plan while informative programs and training are necessary for acquiring the appropriate knowledge and attitude; needless to say that informative programs and publicity must be in line with the local culture.

Alidousti et al. showed in a descriptive and analytical study on the attitudes of people in rural areas of Shahrekord that 53.4% of villagers had moderate knowledge regarding Family Physician Plan which this amount was considered to be insufficient [20]. These results are consistent with the findings of Buchan [21].

Being time consuming is another obstacle mentioned by the respondents. A study by Buchanan et al. in 2005 indicated that although participatory management requires time, its advantages outweigh the disadvantages [21]. The participants in this study believed that the absence of an electronic health filing system was an administrative obstacle. This profile is of prime importance in urban family physician plan [22]. Electronic health profile is a collection of health records of citizens which is saved electronically on a regular basis and can be left at the disposal of authorized persons without limitations [23]. As to the necessity of electronic health records, Broiler concludes that in order to access timely, high quality, cost-effective and customer-oriented health services, electronic health record is of extreme importance [24]. Although the necessity for electronic health records has been highlighted in the directives of Family Physician Plan in urban areas, it requires for implementation all health centers to be supported with suitable information systems.

In a study by Mirani et al., technical factors were introduced as the main obstacles to the implementation of electronic health records among which, inefficient hospital information systems and national standards for data exchange were recognized as the biggest obstacles.

Therefore, it is essential for us to have a full assessment of technical infrastructures, equipment, and standards before implementing this system to prevent any possible future failures [25].

The satisfaction on behalf of the service

providers is an important factor contributing to the success of health programs so that if it is ignored, not only the quantity but also the quality of services would suffer irreparable damages. In this study, physician's insufficient income was mentioned as an obstacle which is consistent with the findings of all other related studies conducted in Iran such as Motlagh, Raeisee, and Jannati studies [26-28]. Moreover, Van Ham et al. in a survey on job satisfaction among young physicians concluded that factors such as low income, excessive working hours, high pressure of job, and little free time are the factors involved in reducing job satisfaction [29].

The results of this study showed that human factors are the major obstacles in the course of implementing urban Family Physician Plan, which necessitates the full cooperation of public and priority of the program to the government.

Ebrahimipour et al. in a descriptive study examined the perceptions and expectations from the quality of services in Family Physicians program in rural areas of Mashhad in 2011-2012 and concluded that there is a gap between the current situation and desired status of family physician services. They mentioned that this gap needs to be minimized through training and efficient management of health care team [30].

A study of Family Physicians Plan's implementation in Canada showed that family physicians needed full cooperation from not only other specialists and members of the medical team, but also from families to provide high quality and regular services to the patients and to be able to plan and dispense all critical or chronic services [31].

We hope that the feedback provided by the present study raises the awareness of the related managers and policy-makers so that they can implement family physician program in the best possible manner. Limitations of the study included the narrow scope of target population in Gonabad which makes it hard to generalize to other areas. Further, we recommend that other methods for designing qualitative studies should also be tried on the participant.

Conclusion

One of the administrative obstacles on the way of urban family physician program is people's inadequate awareness of this program which makes it necessary for the administrators to provide information to the public through the mass media.

Physicians do not have enough information about this program. This may be due to the novice physicians involved in this project. Therefore, it is necessary for the authorities to solve this problem by holding training courses for the involved physicians.

Moreover, providing healthcare centers with information systems and electronic health file can reduce some of the obstacles to the urban family physician plan.

Furthermore, in family physician programs people are considered the clients, health teams are providers and the authorities are sponsors, so a continuous communication among these components can result in the implementation of the program more efficiently.

Acknowledgments

The authors wish to thank all participants who helped the researchers in the accumulation of data.

Contribution

Study design: JJN, SH Data collection and analysis: JJN, SH Manuscript preparation: JJN

Conflict of Interest

"The authors declare that they have no conflict of interests."

Funding

The author (s) received no financial support for the research, authorship and/or publication of this article.

References

1-Ministry of health and medical education. Illustration of health team and family physician services. 1st ed. Tehran: Arvij publication; 2007.

2- Ghodarzi G, Azadi H, eds. Determining of technical efficient on Iran universities hospital. Proceeding of

5th National Congress of Healthcare Administration Student; 2007.

3- Farahani Mazidabadi M, Hajiha F. Implementation of family physician program from beginning to yet. *Barname*2009; 341: 9-14.

4- Davoodi S. An introduction to health systems. Tehran: Davoodi; 2006.

5- Ministry of health and medical education. Executive instruction of family medicine and rural insurance. 12st ed. Tehran: Ministry of health and medical education; 2012.

6- Ministry of health and medical education. Executive instruction of family medicine program and referral system in urban. 2st ed. Tehran: Ministry of health and medical education; 2012.

7- Bladyan S. Familiar with family physician. In: Hatami H, Razavi F, Eftekhar H, Majlesi F, eds. Comprehensive textbook of public health. Tehran: Shahid Beheshti university of medical science; 2012. pp:681-5.

8- Stephen WJ. Primary medical care and the future of the medical profession. *World Health Forum*1981; 2(3): 316.
9- Khoja TA, Al Shehri AM, Abdul Aziz AAF, Aziz K. Patterns of referral from health centres to hospitals in Riyadh region. *EMHJ*1997; 3(2): 236-43.

10- Himmel W, Dieterich A, Kochen MM. Will german patients accept their family physician as a gatekeeper? *J Gen Intern Med*2000; 15(7): 496-502.

11- Girotto S, Delzotti F, Baruchello M, et al. The behavior of Italian family physicians regarding the health problems of women and, in particular, family planning (both contraception and NFP). *Adv Contracept*1997; 13(2-3): 283-93.

12- Pour Shirvani M. Scan in philosophical principles of qualitative and quantitative researches in behavioral sciences. *Quarterly of Methodology in Human Sciences*2007; 13(52).

13- Brannen J. Mixing methods: qualitative and quantitative research. London: Gower; 1992.

14- Sadooghi M. Scan in philosophical principles of qualitative and quantitative researches in behavioral sciences. *Quarterly of Methodology in Human Sciences*2007; 13(52).

15- Rashidian A, Eccles MP, Russell I. Falling on stony ground? A qualitative study of implementation of clinical guidelines' prescribing recommendations in primary care. *Health Policy*2008; 85(2): 148-61.

16- Streubert Speziale HJ, Streubert Streubert HJ, Carpenter DR. Qualitative research in nursing: advancing the humanistic imperative. 5th ed. Philadelphia, PA: Lippincott williams & wilkins; 2011.

17- Ingersoll GL, Kirsch JC, Merk SE, Lightfoot J. Relationship of organizational culture and readiness for change to employee commitment to the organization. J *Nurs Adm*2000; 30(1): 11-20.

18-Baghiani Moghadam MH, Ehramposh MH, Dehghani

Tafti MH. Principles and general health services 2. Tehran: Shabnam danesh publication; 2004; 47.

19- Sadegi Hassanabadi A. Introduction to public health. Shiraz: Shiraz university of medical sciences; 1990.

20- Alidosti M, Tavassoli E, Khadivi R, Sharifirad Gh. A survey on knowledge and attitudes of rural population towards the family physician program in Shahr-e-kord city. *Health Information Management*2011; 7: 636.

21- Buchan J, Ball J, Rafferty AM. A lasting attraction? The "Magnet" accreditation of rochadale infirmary. Available at URL:http:// www. shtm.ac.uk/hsru/staff/ PDFs/Rochdale. Accessed, 31 nov2005.

22- Kalankesh L. [Necessary attributes of legal electronic health records]. Proceedings of 2nd international conference on information technology and knowledge. Tehran: Amirkabir university; 2005.

23- Ministry of health and medical education. Executive instruction of family me dicine program and referral system in urban. 1st ed. Tehran: Ministry of health and medical education; 2010.

24- Gartee R. Electronic health record: understanding and using computerized medical record. New York: Julie levin alexander; 2007.

25- Mirani M, Ayatollahi H, Haghani H. A survey on barriers to the development and adoption of electronic health records in Iran. *Journal of Health Administration*2012; 15: 50.

26- Motlagh E, Nasrollahpour Shirvani S, Ashrafian Amiri H, Kabir M, Shabestani Monfared A, Nahvijoy A. Satisfaction of family physicians (FPs) about effective factors on activation of FP program in medical universities. *Journal of Guilan University of Medical Sciences*2011; 19(76): 48-55.

27- Raeisee P, Motlagh M, Kabir M. Evaluation of the performance of referral system in family physician program in Iran University of Medical Sciences: 2009. *Hakim Research Journal* 2010; 13(1): 19-25.

28- Jannati A, Maleki MR, Gholizadeh M, Narimani M, Vakili S. Assessing the strengths & weaknesses of family physician program. *Knowledge and Health*2010; 4(4): 38-43.

29- Van Ham I, Verhoeven AA, Groenier KH, Groothoff JW, De Haan J. Job satisfaction among general participations: a systematic literature review. *Eur J Gen Pract*2006; 12(4): 174-80.

30- Ebrahimipour H, Vfayynjar A, Nejat Zadeh Gan Z, et al. Gap analysis between perceptions and expectations of patients of family physician service quality in rural health centers in Mashhad 2011-12.

31- Pimlott N. Who has time for family medicine? *Can Fam Physician*2008; 54(1): 14-16.