Family medicine and patients' satisfaction in Iran

Samad Rouhani[1], Reza Ali Mohammadpour[2*]

[1.] Assistant professor, Department of Public Health, Mazandaran University of Medical Sciences, Sari, Iran & Hospital Management Research Centre, Tehran University of Medical Sciences, Tehran, Iran
[2.] Associate professor, Department of Bio-statistics, Mazandaran University of Medical Sciences, Sari, Iran
mohammadpour2002@yahoo.com

Abstract: Since the second half of 2005, a market oriented reform known as family medicine and rural health insurance scheme was introduced to primary health care network in Iran. The core objectives of this reform were to improve accessibility, quality and utilization of health care services. The assessment of patients' satisfaction, as an outcome quality indicator, was the purpose of this study. This was a cross-sectional study conducted among patients attending health centers in the district of Sari. A self-administered questionnaire, from five different parts of the city, was filled out by 400 attendees during one month of data collection in February 2010. The level of customer satisfaction was far below the level that is expected. Respondents were more satisfied with those items related to the physician than those related to the regulatory aspects of referral system or the duty of health authorities. Villagers' attendance in health centers does not reflect their satisfaction. In fact, they tend not to express their real evaluation of the quality of health centers since they know neither voice nor their choice is to be aptly taken into account.
[Samad Rouhani, Reza Ali Mohammadpour. **Family medicine and patients' satisfaction in Iran.** *Life Sci J* 2012; 9(3):1840-1847]. (ISSN: 1097-8135). http://www.lifesciencesite.com. 267

Key words: Family medicine, customer satisfaction, health insurance, primary health care, health sector reform

1.1. Introduction

For decades, financing and providing primary health care system have been the policy of Iran's government to address the essential health needs of its entire population. The distribution and coverage of primary health care network in Iran have been almost exhaustive in rural and remote areas and performed actively in these areas in particular (Shadpour 1994). In the region, this system has been one of the best in terms of health outcomes. As reports highlighted, vast improvements both in the health care services and health outcomes were the achievements of this system (Asadi et al. 2004; Mehryar 2004). Nonetheless, from the outset, there were increasingly more reports about primary health care network in Iran which were indicative of many problems such as inefficiency, underutilization of facilities, unavailability of health workers particularly physicians, lack of adequate resources, and staff as well as customer dissatisfaction are few of those to be mentioned (Shadpour 1994; Schieber & Klingen 1999). These problems were mostly related to curative care than preventive care. On the one hand, staff fixed salary and life-long employment in the state owned primary health care network, and the dominant of private sector outpatient curative care providers who mostly are the employees of public sector on the other side, low coverage of curative care was the main concern of policy makers and managers in the ministry of health in Iran (Shadpour 1994; Rouhani 2007). Since the second half of 2005, a market oriented reform known as family medicine and rural health insurance scheme was introduced to the primary health care network in this country. The core objectives of this reform were to improve accessibility, quality and utilization of health care services (MOH 2010).

There are few reports about the achievement of this reform, and most of which take into account the service utilization and accessibility of more staff, particularly physicians, (RHIOM 2010; Motlagh et al. 2010); however, there is no indication about the quality of this newly implemented scheme. We have used customer satisfaction as a quality outcome indicator to assess the customer point of view and provide possible information for appropriate decision or change.

Literature supports the market-based reform and variable payment mechanism under which the provider will face with a more competitive environment and will provide services to meet customer needs (Jegers et al. 2002). Competition for attracting customers is an important factor for the health care settings based on market mechanism so that non-competitive providers would most probably be driven out of the market (Kinney 2005). Experts believe that there is a direct relationship between customer value and satisfaction and organizational performance and productivity (Lothgren & Tambour 1999; Garver & Gagnon 2002; Mihelis et al. 2001). As customer satisfaction is influenced by perceived quality of services (Pascoe 1983), then it can

influence the effectiveness of care through persuading patients to comply positively with treatment regimes (Gilson et al. 1994). The arguments support this view that the impact of customer satisfaction increases demand and purchasing resulting in more profitability (Matzler et al. 2004). Particularly in an increasing market-oriented health care reform and competitive environment of health care providers, customer satisfaction is crucial to the health care providers and it can enable them to increase their share in the health care market (Etter & Perneger 1997; Kujala & Ahola 2005). While, the voice of patients has an important role in the health care delivery system, health care providers, particularly in developing countries, have often ignored patients' perceptions about health services (Andaleeb 2001). In this regard, there is a lack of evidence showing the efficient use of customer information in the decision-making process (Kujala & Ahola 2005). This means that the entire process of customer satisfaction practice, which creates valid and reliable information indicating to what extent consumers' needs are met; and use of that information in decision-making process and re-planning in accordance with organisation core objectives, has not been followed (Kujala & Ahola 2005). The underlying factors of this situation could be due to the monopolistic position or non-competitive environment of health care providers hence lack of appropriate choice available to customers, public awareness, and lack of appropriate system dealing with patient rights.

Customer satisfaction survey is a universally exploited method of getting external feedback concerning the extent to which the suppliers and providers of services have been able to meet the needs and expectations of consumers. This modern quality-based approach, as explained by authors (Mihelis et al. 2001), provides immediate, meaningful and objective feedback on customers' expectation and satisfaction. Given the reform implemented in Iran's primary health care network, which is in rural areas and small towns within which there are usually limited access to alternative health care providers, the purpose of this article is to indicate to what extent the patients are satisfied with the newly reformed primary health care facilities.

1.2. Background

Although the state owned primary health care network in Iran was successful in improving the health outcomes particularly through provision of preventive care (Shadpour 1994; Asadi et al. 2004; Schieber & Klingen 1999), the assessment of some interventions as alternative primary health care settings has shown that market efficiency could even provide better achievements both in terms of inputs and outputs at primary health care level in Iran over the past years (Rouhani 2007; Sadeghi et al. 2003).

By the approval of Iran's parliament, family medicine and rural insurance scheme got the agreement to be implemented by ministry of health and medical education, and ministry of welfare to which national health organisations are affiliated. The reform was implemented in all rural areas as well as towns with less than 20000 residents. In this reform payment mechanism as well as the method of employment in primary health sector significantly changed. In this newly created situation, the team of family medicine has the possibility to boost its income through either enrolling a bigger size of population in a designated area, or improving their performance on predetermined criteria which will be assessed and scored by the insurer. Hence, the teams of family medicine are not paid directly from the income generated, but based on the criteria mentioned. According to this scheme, all residents who are living in the areas in which the reform is implemented are insured against the curative care. A benefit package has been introduced for those who follow the terms and conditions of scheme. A general premium rates for these residents are paid per capita of enrolled population with family medicine by government to the national health insurance and are transferred to regional health authorities affiliated to ministry of health. Typically, each physician should cover a population of 4000 from the outreach area of rural health centres. The insured has to pay the cost of services partially as co-payment which varies between10% (for GP visits) to 30% (for drugs or diagnosis tests). To be entitled for the financial benefit of rural health insurance, patients require following the referral system; otherwise, the utilization of curative care is subject to full payment. Family physicians are limited to refer a maximum of 10% of their patients to secondary health care providers and specialists who are listed in advance. In such cases, patients with a signed and stamped referral letter from their family medicine will enjoy the befit of paid inpatients, outpatients curative as well as Para-clinic services from secondary health care providers just by paying the co-payment.

Ministry of health, as the only primary health care provider and even almost the only health care provider in the area of target population, has agreed to provide the service package through signing an annual contract with the teams of family medicine. Payment to these service providers is fixed per enrolled population and variable based on the level of performance. A family physician with the performance level of 90%, based on determined criteria will get 80% of full payment, and for each

percent of improved performance, will get another 2%. In the same way, they will get less per percentage of weak performance but the performance level of lower than 70% with no items less than 50% is not accepted and could lead to termination of contract, if it is not improved in subsequent two months.

2. Methods

This was a cross-sectional study conducted among the patients attending the health centres in Sari district, the capital city of Mazandaran province, in north of Iran with a typical primary health care network. Gaining from the literature, some relevant criteria were chosen for customer satisfaction survey based on which we have provided a self-administered questionnaire. Relevant to the context of study, we have included items of patient satisfaction for those attending the health centres about waiting time, physician communication, patient referral, rural insurance scheme, cost of care, and overall quality of care plus some individual characteristics of patients. To assess the level of respondents' satisfaction, a 5 scale Likert was used. Questionnaires were handed over directly to patients who were accepted the offer for participation. Assistant was given to those who were illiterate. 400 questionnaires from five different parts of the city were filed subsequently during a month of data collection period in February, 2010. After collecting the data, we analysed them using Microsoft Excel and SPSS package.

3. Results

The results of this study have shown that the majority (67%) of respondents were female. In terms of respondents' job, 60% of them were housekeepers, about 18% agricultures and labours, 8% students, and remaining 14% were from other occupations. Just 5.3% of respondents had university education, while 18% were illiterate and the rest had education between primary to high school level. Based on respondents' self-ratings in terms of their economic situation, 4% were good, 72% moderate and 23% weak. 87.5% of respondents had household number of 4 or less. The majority of respondents (63.2%) were visited by a female GP. The majority of respondents (51.7%) came to the health centres by walking and 14% via own vehicle and the remaining 34.3% by public means of transportation. About 20% of the respondents were visiting family physician for the first time, 24% for the second time , 29% for the third time, and 27% were attended the family physicians for 4 or more times in the last three months. 82.8% of respondents had rural insurance coverage and the remaining had other types of insurance. Still 38% of respondents had no medical record with family physician.

Regarding the satisfaction of respondents, Figure 1 compares the degree of patients' satisfaction against the selected items.

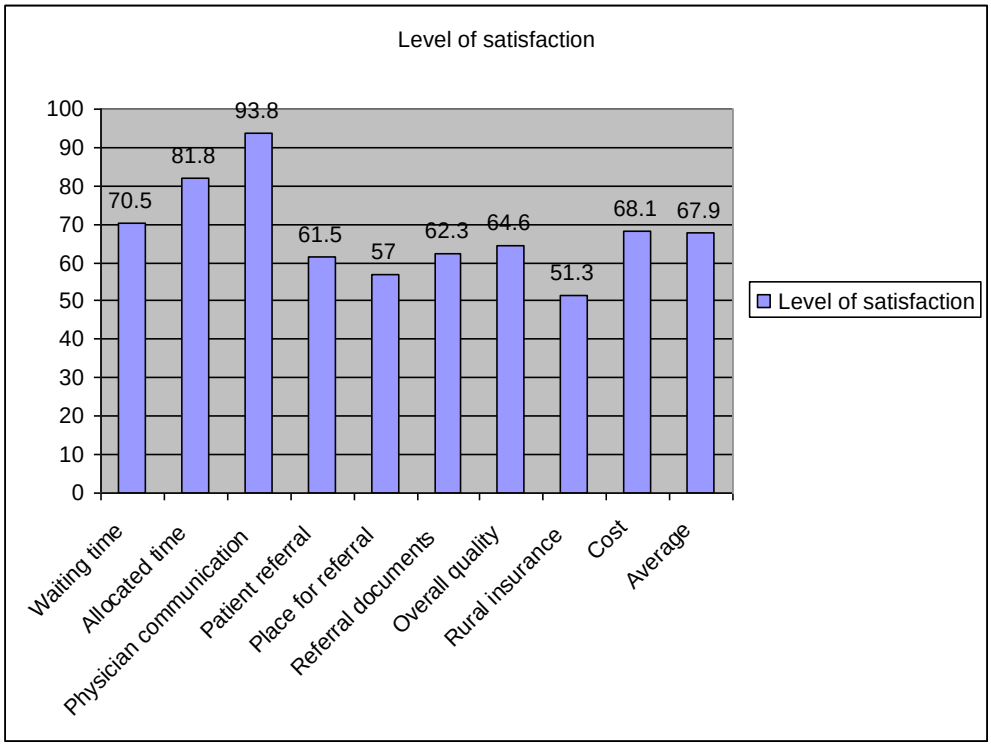

Figure 1: The level of itemised patient satisfaction about family medicine in Iran- 2010

As Figure 1 shows on average, the level of customer satisfaction was 67.9% which is below the level (90%) that is expected. Respondents were more satisfied with physician communication in comparison to other items. Satisfaction about the rural insurance in overall had the lowest rate (51.3%). As the above Figure indicates, higher levels of satisfaction were about the physician personal activities (communication, taking adequate time) than other items like the regulation of scheme (aspects of referral) or those items that are related to the health authority (cost and overall quality) as an intermediate contractor which are far below the objected score of 90%.

Other results of this study revealed that just 49% of prescribed drugs were available to the patients. Regarding to the access to physicians, only 42% of patients mentioned that they have access to them when they are seeking care at the health facility. These later findings had statistically significantly positive correlations with patients' satisfaction. Also, there was statistically significant negative correlation between the amount of payment and the level of satisfaction.

Moreover, other results of this study have indicated that in overall 61.2% of respondents mentioned that they will attend the health centre in the future if they feel sick.

We had access to research findings of customer satisfaction with the alternative primary health care settings (Rouhani 2007; Zakery 2003) conducted before in Iran. A comparison is made between the results of this study and other findings regarding some identical aspects of customer satisfaction as depicted in Figure 2.

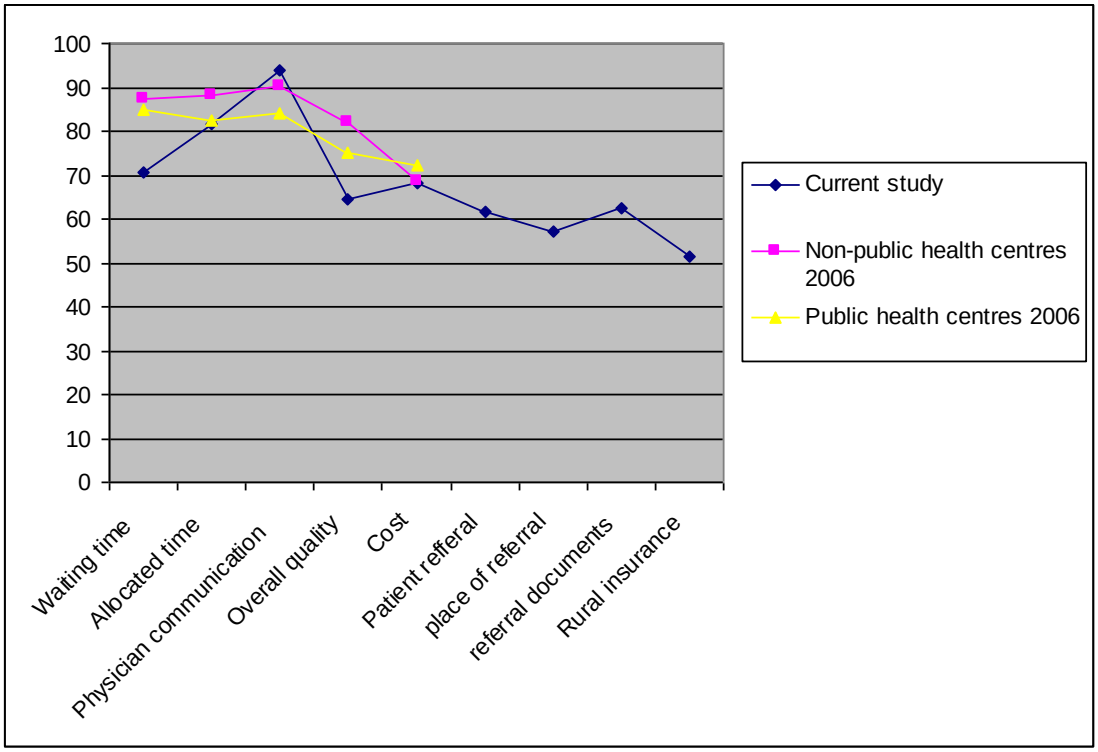

Figure 2: A comparison between the level of customer satisfaction among the patients of family medicine and the results of other research findings at primary health care level in Iran

As Figure 2 indicates, except for physician communication, for other measures of customer satisfaction used in both studies, family physicians had lower level of customer satisfaction; however, in the previous study, satisfaction with that item was relatively high. Again, concerning the other items which were particularly relevant to the family medicine, the level of customer satisfaction was below the level of other criteria.

In terms of the average level of customer satisfaction found in these research findings, a comparison is made in Figure 3.

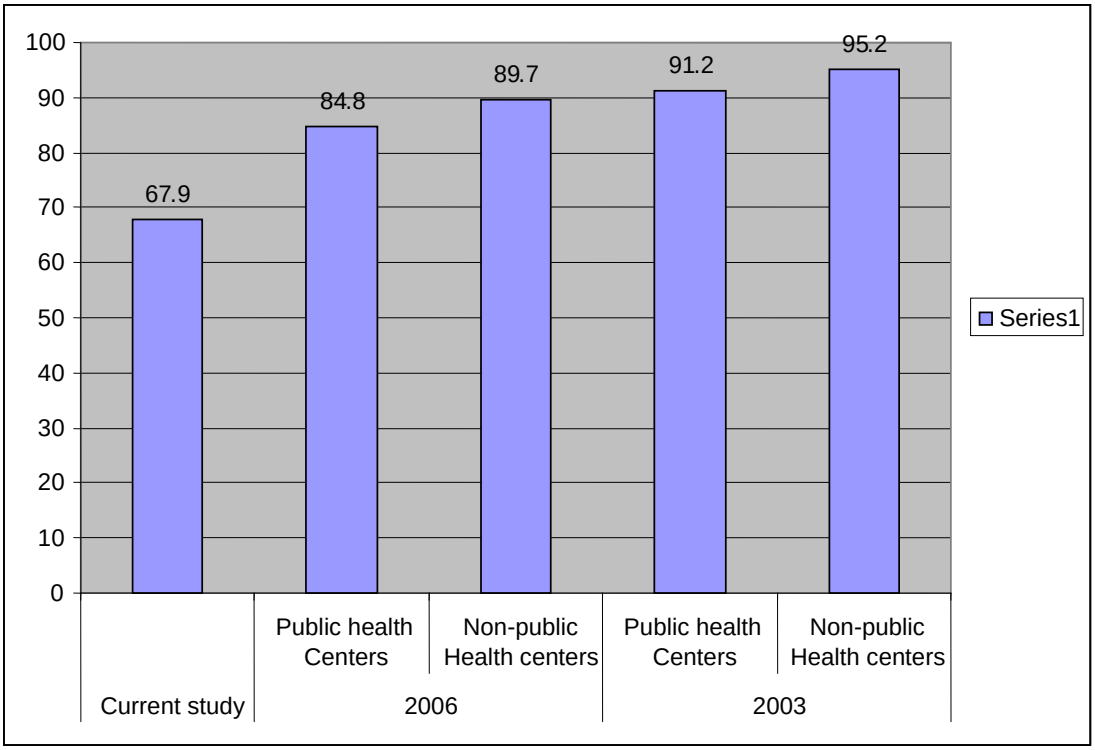

Figure 3: A comparison between the average levels of customer satisfaction on three different sets of primary health care settings in Iran

As Figure 3 reveals, the average level of customer satisfaction found in this study is the lowest one compared which attendees of alternative primary health care settings even public health centres that were publicly financed and provided. Those health centres were located in urban areas which thought they were performing passively and inefficiently as the weakest parts of primary health care system in Iran (Shadpour 1994; World Bank 2007). Also, they normally do not have monopoly position particularly for outpatient curative care in urban areas.

4. Discussion

The results of this study have shown that the level of customer satisfaction, except for the item of physician communication, is far below the level which is expected. Based on Iran's family medicine terms and conditions, the renewal of contract with the physicians in the following years is subject to achievement of an average score of 70% on different aspects of family physician performance including customer satisfaction of which none of those items is below 50% (MOH 2010). But it does not seem to be applicable, practically given the health centres dispersed across the remote areas and lack of adequate accessibility to them together with the shortage of staff in rural insurance department in Iran (RHIOM 2010). Even the level of satisfaction achieved by family medicines in overall is relatively below the level of this indicator in the health centres that were designed in a pilot study in one province that started alternative primary health care settings in Iran a few years ago, as well as public health centres in urban areas in Iran (Rouhani 2007; Zakery 2003).

Patients are more satisfied with the physician personal activities itself that might be the result of family physicians on their part to perform more friendly and responsively to achieve better score, but in those areas that are not directly related to the physicians but to the health authority or regulations set, the level of satisfaction was significantly lower.

The result of this study is in line with those of other reports (RHIOM 2010; Motlagh et al. 2010). For instance, these reports mentioned that patients are charged more than 30 percents as co-payment, three times more than the level agreed by health authorities. Also, they highlighted that the percentage of patients referred is higher than the amount permitted.

Each of those under performance, which have relation with consumer dissatisfaction, could be explained based on their influencing factors. As mentioned earlier, ministry of health has a monopolistic position as the only health care provider in the areas under reform; therefore, health

authorities, by taking advantage of such market position and as interest of profit maximization, may lower the quality or increase the cost for patients as pointed out by Adam Smith (1776), when there is no real alternative choice available to the patients or real competition among providers. As the reports indicated, those people, who are charged more than the amount allowed, do not have accessibility to the services agreed (RHIOM 2010; Motlagh et al. 2010), and in some circumstances are not allowed to be referred (MOH 2010). These could somehow explain the low level of customer satisfaction even lower than the level prior to the reform. This is happening even when a fully paid insurance premium with services planed at patients neighboring is in place with more than fifty percents of patients coming to the health centers on foot.

To explain the referral item, it is worth to mention that a cap of 10% is much far below the reality. It seems that the family physicians are attempting, just by enforcing the regulation, to prevent patients demand for referral, but they are still beyond the amount permitted as reports revealed (RHIOM 2010; Motlagh et al. 2010). In this regard, the main role is played by district health authorities in terms of providing the minimum services agreed that is not achieved so far. For instance, concerning unavailability of prescribed drugs, 70% of its cost should be paid by health authority from the resources being paid by financial package of insurance company. Again, in such circumstances where the services are not available, there is no real risk to health authorities as they still charge patients for 30 percents even to those attendees who just have got a signed and stamped referral letter for secondary care providers without any guarantee that they will be seen by those service providers at secondary level. With this explanation, the risk of patients whose needs are not provided at health centre level, is to the insurance company or patients themselves. Then, what can bring the primary health centres to provide adequate health care to patients and prevent the unnecessary referrals? In other words, if health centres even fail to address patients needs, they can still have their income for referring patients and also save the cost of drugs and other services not being given to patients and then there is no incentive to bring the amount of referral down. Also, given their monopolistic power at rural areas, there is no alternative choice available to the insurance company for having alternative competitors to win the contract. This is perhaps the only reason for not having a bidding procedure in selecting alternative health care providers. Just setting a cap for referral rate could not solve the problem as was not achieved so far; given the insurance company has not in reality the possibility of monitoring the referral rate properly and continuously (RHIOM 2010). It is quite acceptable if people are not treated adequately and not referred on demand; then, they will be dissatisfied not only in terms of the referral itself but also regarding to the rural insurance completely. This could be the best explanation about a surprising result of lowest level of customer satisfaction (51.3%) among the items about a fully paid premium rural health insurance in Iran with planned health services near living areas of rural population.

Having lower level of customer satisfaction from the level which is expected, patients still continuing attendance in the rural health centres in Iran could be interpreted as unavailability of alternative choices to the rural population either financially or geographically. Concerning this issue, the results of current study have shown that those people who were attending the health centres more frequently, had rural-insurance compared with other patients who had other types of health insurance with freedom of choice in selecting their health care provider available in the country, locally or nationally, without any requirement to follow referral system. In other words, low level of customer satisfaction with subsequent attendance in the rural health centres should be a concern of unavailability of choice to be insured under rural insurance scheme. Again, given the level of customer satisfaction together with no freedom of choice for alternative health care providers and no more freely provided curative care and financial and geographical circumstances of rural population, the issues of unmet needs and then the decision of no care as highlighted by Propper (2000) should be a concern when speaking about the performance of newly implemented reform in primary health care network in Iran.

Given the risk related to the monopolistic power of health care providers on the quality or cost of care (Smith 1776), we have found that both the quality, in terms of customer satisfaction, has decreased on the one hand and the cost to the patients in terms of direct payment as well as lack of adequate services and referring them to the other service providers has been increasing on the other hand.

5. Conclusions

By implementing market-oriented reform in primary health care system in Iran, customer satisfaction is not achieved at the level which is expected. This is a surprising result seeing people less satisfied with a completely paid insurance premium by government than in a situation where they were not insured in using the same sort of facilities. Patients are more dissatisfied with the

regulatory aspects of referral system that rule physicians to prevent patients going for secondary care if they want to use the financial benefit of rural insurance. Satisfaction is also lower for those aspects that its improvement is related to the regional health authority. Given the monopolistic position of regional health authorities at rural areas in providing health care, requirements of having referral letter for using secondary care, have left patients with no choice in real terms in using the benefit package of rural insurance in Iran. Attending the health centres but still dissatisfied, means neither voice nor choice of customers has been considered appropriately. If they cannot have access to the expected and appropriate care and cannot be referred to the alternative health care providers, what would be their decision for such scenarios? This could be a risk to the health of population in rural areas as there is the possibility that given the performance of newly reformed health centres, as have found in this study, as well as other studies, could leave people with the decision of no care regarding their felt needs. Rejecting such a hypothesis requires a full assessment of peoples' view points at the household level that may provide appropriate information about the utilization of health care services in general and in different socio-economic groups in particular.

After five years since the reform has been implemented, anticipated services are not in place, and people are charged three times higher than the amount permitted. There is not adequate choice available to them, and hence they are not satisfied. There are big concerns about perceived low-quality services. Probably such a situation has led to an increase in unmet health needs. Accordingly, it can be concluded that the reform has not fully achieved its objectives. And the quality of primary health care in rural areas in Iran, as the main health care available to these people, needs major improvement particularly on curative care.

References

1- Shadpour K. *The PHC experience in Iran*, The Council for expansion of PHC networks. MOHME, UNICEF-Tehran. 1994
2- Asadi LM, Sayyari AA, Akbaric ME, Graya D. Public health improvement in Iran—lessons from the last 20 years. *Public Health*, 2004; 118: 395–402
3- Mehryar A. Primary health care and rural poor in the Islamic Republic of Iran, scaling up poverty reduction: *A global learning process and conference Shanghai*, May 25-27, 2004
4- Schieber G, Klingen N. *Health financing reform in Iran: principles and possible next steps*. The High Council Research of Social Security Insurance. Tehran. 1999.
5- Rouhani S. *The relative efficiency of public and non-public health centres in Iran*. Ph.D Thesis. University of Keele. UK. 2007 .
6- Centre for management of primary health care network. *Handbook of family medicine and rural Insurance in Iran*. Version 11. Ministry Of Health. Tehran. Iran. 2010.
7- Regional health insurance organization of Mazandaran.. *An assessment of health care delivery at the primary health care facilities for insured rural population in Mazandaran Province*. A research based managerial report. Sari. Iran. 2010.
8- Motlagh ME, Nasrollahpour SSD, Ashrafian AH, Kabir MJ, Shabestari MA, Nahvijoy A. Satisfaction of Family Physicians (FPs) about Effective Factors on Activation of FP Program in Medical Universities. *Journal of Gilan Universities of Medical Sciences*, 2010; 76:48-55.
9- Jegers M, Kesteloot K, DeGraeve D, Gilles W. A typology for provider payment systems in health care. *Health Policy*, 2002; 60: 255-273.
10- Kinney W. A simple and valuable approach for measuring customer satisfaction. *Otolaryngology-Head and Neck Surgery*, 2005; 133: 169-172.
11- Lothgren M, Tambour M. Productivity and customer satisfaction in Swedish pharmacies: A DEA network model. *European Journal of Operational Research*, 1999; 115: 449-458.
12- Garver SM, Gagnon BG. Seven keys to improving customer satisfaction programs. *Business Horizons*, 2002;. September-October: 35-42.
13- Mihelis G, Grigoroudis E, Siskos Y, Polotis Y, Malandrakis Y. Customer satisfaction measurement in the private bank sector. *European Journal of Operational Research*, 2001; 130: 347-360.
14- Pascoe CG. Patient satisfaction in primary health care: A literature review and analysis. *Evaluation and Program Planning*, 1983; 6(3-4): 185-210.
15- Gilson L, Alilio M, Heggenhougen K. Community satisfaction with primary health care services: An evaluation undertaken in the Morogoro region of Tanzania. *Social Science & Medicine*, 1994; 39(6): 767-780.
16- Matzler K, Bailom F, Hinterhuber HH, Renzl B, Pichler J. The asymmetric relationship between attribute-level performance and overall customer satisfaction: a reconsideration of the importance-

performance analysis. *Industrial marketing management*, 2004; 33: 271-277.
17- Etter FJ, Perneger VT. Validating a satisfaction questionnaire using multiple approaches: a case study. *Social Sciences & Medicine*, 1997; 45(6): 879-885.
18- Kujala J, Ahola T. The value of customer satisfaction surveys for project-based organisations: symbolic, technical, or none. *International Journal of Project Management*, 2005; 23: 404-409.
19- Andaleeb SS. Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *Social Sciences & Medicine*, 2001; 52: 1359-1370.
20- Sadeghi H, Nikniaz A, Sehati S, Koshavar H. *The comparison between non-public and public health centres in the delivery of health care for children under one year in Tabriz.* MSc dissertation, Tabriz University of medical sciences- faculty of nursing and midwifery. Iran. 2003.
21- Zakery A. *Health institutions, a report on the cooperative health centres projects in East Azerbaijan province*. Provincial health authority East Azerbaijan Province. Tabriz-Iran. 2003.
22- The World Bank Group. Islamic Republic of Iran, *Health Sector Review*, Volume I: Main Report. 2007.
23- Smith A. *An inquiry into the nature and causes of the wealth of nations* Vol. 1, Oxford University Press. 1776
24- Propper C. The demand for private health care in the UK. *Journal of Health Economics*, 2000; 19: 855–876.

8/2/2012