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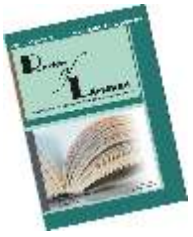

THE COMPARISON OF "OUT OF POCKET HEALTH EXPENDITURE" BEFORE AND AFTER OF THE FAMILY PHYSICIAN PROGRAM IN FARS, IRAN

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ABSTRACT:

Reducing out of pocket payment is one of the main objectives of policy making for the health system. The urban family physician program(FPP)of Iran was one of the projects in the field of health. In this study, we tried to compare changes in out of pocket payments (OPP) before and after implementation of this program.

For this purpose household income and expenditures surveys of Iran for two years (2011, before the program and 2012 after the program) were used. These data contained 1239 households exhibiting in cities having over 20 thousand populations. OPP were calculated for inpatient, outpatient, and pharmaceutical domains and their amount regarding before and after of family physician program were compared.

The results of comparing two groups with this technique showed that there were no significant differences among three categories of inpatient, outpatient, and pharmaceutical OPP before and after implementation of FPP and at least this program could control the increase of OPP.

KEYWORDS: *Urban family physician program (urban FPP), Fars province, health costs, out of pocket payment (OPP)*

INTRODUCTION:

The FPPis a sort of family medicine in which doctors and families are in direct contact with each other. In addition to treatment, these doctors alsocare about the mental health of people. Family physicians are familiar with their patients' medical history and therefore are more easily able to treat them. Their decisions are based on cost-effectiveness by finding the best therapies. Family physicians, in the case of discretion, refer patients to specialists and specialist declares the checkups findings, and treatment of disease and the necessary follow-upsto the family physician(1). More than a decade, the rural FPP has been implemented in Iran. But the urban FPP was kept secret until the beginning of 2012that was conducted in the provinces of Mazandaran and Fars as a pilot. The implementation of any new plan and reform ofthe health system and other systems is associated with some costs and benefits. The urban FPP also has not been immune from this rule and may have advantages and disadvantages for the health system of Iran (2). One of the performance indicators to evaluate the health system reforms is paying out of pocket. Health policy makers seek to improve people OPPand have documented scientific evidence in this regard is of great importance (3). This study is intended to assess the change in OPPof households in the Fars province by using a scientific method.

Methods:

This study is descriptive-analytical. In this respective, the micro data cost-income of urban and rural households of Fars province will be used, which have been collected by the Statistical Center of Iran. This data includes cost and revenue data for one year after the beginning of the program's full implementation in Fars province as a pilot (2013) and before it. The reason for this was that in 2013, the country's healthcare reform plan had not begun yet, and so it has not effect on the results of the study; and that in 2013, the Fars province implemented this project fully after the awareness of its method of implantation by doctors and people. The sample consisted of all cases collected by the Statistical Center of Iran. The data include the costs which are paid by households for their own health and the number of consumption for each of three categories: outpatient, inpatient and the pharmaceutical. In addition to the data of cost and frequency of consumption, data on the socio-economic characteristics of households, including the income of a family's superintendent, and number of household members also will be collected. In this study, the household expenditure-income data collected by the Statistical Center of Iran will be used. The advantage of this data is that, Iran Statistical Center is an independent body of the Shiraz University of Medical Sciences and the Department of Health and its managerial decisions and findings is far from the possible bias. In this study, the data of OPP of households in urban areas will be used based on one of the years before and one of the years after implementation of the project. Also, the OPP data will be divided into different categories as the cost of inpatient, outpatient and medication, and the results in urban areas will be considered based on them.

Findings:

Table 1 shows the results of descriptive study for the Fars province before and after the implementation of the urban FPP. The average of out of pocket payment for medication, inpatient and outpatient costs includes all cases, such as those who had never used the services. The proportion of the population over 65 years old in Fars province in every household in the sample of2012 was less than in2011. Also the average of household income in 2012 was more than 2011.

Variable	Average	Criterion Deviation	Average	Criterion Deviation
	Before Development plan		After Development plan	
The average of drug costs	441269	1231304	439126	902985
The average of hospitalization costs	24929	173982	13582	55625
The average of outpatient costs	295348	1094662	373477	1562439
The average of household income	16276000	8979717	21778000	10189000
The average number of persons under 65 years old	0.2976	0.555	0.288	0.427

Table1. The results of descriptive study for Fars province before and after the implementation of urban FPP.

In this study, the T statisticis used to compare the difference of the averages of OPPin the two groups. Table 2 shows the results of comparing the OPPfor health system in three sectors of inpatient, outpatient and medication for 2011 and 2012. As specified in the table,it is not possible to reject the null hypothesis that shows there is no difference between the two study groups for the 3 examined types of outpatient services, medical and hospitalization. Therefore, there was no significant difference in OPP.

	T statistic	Significant level	Degrees of freedom
Hospital services	-1.5407	0.1237	1237
Outpatient services	1.0208	0.3075	1237
Pharmaceutical Services	0.0349	0.9722	1237

Table2. The results of comparing the OPPfor health system in three sectors of inpatient, outpatient and medication for 2011 and 2012

DISCUSSION:

The results of the presented study showed that urban FPP had no effect on OPP costs to the health of families. Though numerically, OPP costs for medical and hospitalization services and for outpatient services are reduced and increased, respectively. With regard to the annual inflation in health costs in Iran and also by considering the objective of the urban FPP that was not to reduce the OPP of people and had some other goals such as increased health, increased access and equitable distribution of health, it can be said that urban FPP partly has been able to stop the growth of out of pocket payment (4).Most of the conducted studies in Iran were concentrated on evaluating the catastrophic costs of health and a little attention have paid to the numeral value of the OPP. In Iran, from 2007to 1995, the percentage of direct OPP reached from 46% to 50%, as well as some signs that show the increase of OPP was more than the amount for 2009 (5).According to Kavousi et al study (2009), 8.11% of households were facing the catastrophic costs of health care indistrict 17 of Tehran. Also, according to Karamiet al study (2010) in Kermanshah province, 2.22 % of households were facing the catastrophic costs of health care (6, 7). As can be seen, there is a significant difference between the results of local and national studies. It is therefore necessary for policy makers to measure the changes in health system performance at every level, identify factors affecting the development and policies that will achieve better results in different areas. The performance of the system sub-components, including the health system in different regions of the country should also be assessed. Meaningful and comparable information about the performance of the health system and the key factors explaining the changes could strengthen the scientific basis for health policy making at the national and international levels (8).In studies that have been conducted in Turkey and Thailand, the percentage of households facing catastrophic costs were 6% and between 8-14%, respectively (9, 10).

CONCLUSION:

This study aimed to evaluate the performance of the urban FPP for the OPP in the health system. Results showed that although the project was not able to reduce the costs of OPP of the public, at least it could stop its upward trend. It is recommended for future studies to examine the equity in the urban FPP.

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