



Influential Factors in the Persistence of Family Physicians in the Health Centers Affiliated to Hormozgan University of Medical Sciences and Health Services (2017)



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ABSTRACT

Background: One of the challenges of implementing the family physician program is the decrease in the number of doctors, especially in rural and deprived areas, the present study aimed to determine the intentions of family physicians to persist in the health centers affiliated in Hormozgan city.

Methods: This cross-sectional study was conducted on 195 physicians in the health centers implementing the family physician program. Data were collected using a questionnaire. Data analysis was performed in SPSS version 21 using independent t-test, Pearson's correlation-coefficient, and ANOVA.

Results: In total, 57.9% of the participants were female, and 42.1% were male. The majority of the subjects (61%) were aged 30-60 years. The results of Pearson's correlation-coefficient indicated that income, payment status, working hours, willingness to continue education, job security, motivation to serve, commitment to service provision, and confidence in the family physician program had significant, positive associations with the intentions of family physicians to stay in the health centers ($P < 0.001$).

Conclusion: According to the results, health ministers, policymakers, and planners could help with the persistence of family physicians in the healthcare centers in deprived areas through reviewing the number of the healthcare team members and their job descriptions.

1. Introduction

Health is the basis of the sustainable social, economic, political, and cultural development of human communities and is of particular importance in the infrastructure of various sectors in the society [1]. To achieve health services, the Ministry of Health and Medical Education provided primary health care [2].

The government policies in the healthcare network are mainly focused on three principles, including the prioritization of healthcare services, prioritization of deprived, rural areas over urban areas with proper facilities, and prioritization of outpatient services over inpatient services. Based on these principles, the primary healthcare system was established during the 1980s in the form of healthcare networks [3].

The family physician program is considered to be the most effective strategy for implementing rural insurance programs in the form of referral systems [4].

The family physician program has been established in the Iranian health system since 2005 with the aim of increasing access to comprehensive and continuous health services in the community. In the referral systems based on the family physician program, general physicians and their teams are fully responsible for the health of their covered individuals and households. Even after the referral of the individuals to specialized healthcare centers, physicians and healthcare teams will remain responsible for their follow-up [5].

According to healthcare authorities, one of the most important problems of the family physician program is the lack of intention on behalf of physicians to stay in their workplace although they are considered the main element of the family physician program [6].

In a national study conducted in the United Kingdom to compare the job satisfaction of general practitioners in 1998 and 2001, the mean satisfaction was reported to decrease from 4.6 in 1998 to 3.9 in 2001 [7]. In addition, Atefi et al. (2014) investigated the influential factors in the discontinuation of the duty of family physicians, stating that delayed payments and low salaries were the main influential factors in this regard [8]. Staying in remote and deprived areas has also been reported as a major cause of discontinuing duty by family physicians [5].

Examining the influential factors in the intention of family physicians to stay at work has indicated that the deprivation level of the region could lead to the discontinuation of work by family physicians [9]. In the studies, doctors have declared the most important reasons for the refusal to continue working in the family physician program: low salaries and the impact of the assessment of rights [10]. Furthermore, the results of foreign surveys have denoted some of the factors associated with geographical regions and physical facilities to affect the presence of physicians in the family physician program [11, 12].

In Iran, the Family doctor program is a relatively new plan started by the Ministry of Health and Medical Education in August 2005 collaborated with the General Directorate of Health Services to increase public access to comprehensive and continuous health services [13]. One of the main challenges in the implementation of the family physician program is the decrease in the number of doctors, especially in rural and deprived areas [14].

The present study aimed to determine the persistence of family physicians in the health centers affiliated to

Hormozgan University of Medical Sciences, as well as its influential factors.

2. Materials and Methods

2.1. Study Design

This study is cross-sectional study, conducted on 196 physicians working in the centers implementing family physician program in Hormozgan province.

2.2. Study Population and Sampling Method

Consisted of all physicians working in family physician program in Hormozgan, by using census method, entered in the study.

2.3. Instrument

Validity and reliability of this questionnaire were confirmed in Damari et al. (2016), (Cronbach's alpha = 0.9). The questionnaire was based on the executive instruction of the family physician program provided by the Ministry of Health. The questionnaire consisted of two parts, first of which was related to demographic characteristics, and the second part included 28 questions classified in 8 sections and related to salary, payments, working hours, willingness to study, job security, motivation to provide services, trust in family physician program, and service commitment. The scores were given based on the Likert scale (very little = 0, little = 1, moderate = 2, Much = 3 and very much=4) [15].

2.4. Statistical Analysis

Once the data were collected and sorted, they were entered to the SPSS files and analyzed using the following descriptive indices: mean median, standard deviation and in depended t-test and Pearson coronation. The SPSS version 19 was used for the analysis.

2.5. Ethical Code

The Ethic Committee of Shiraz University of Medical Sciences approved the study protocol (ID, 95-01-4-12486).

3. Results and Discussion

In total, 113 of the subjects (57/9%) were female and 82 (42/1%) were male. Regarding marital status, 122 (62/6%) were single, and 73 (37/4%) were married. Only 40 subjects (20%) were native, while the largest number of them (156 physicians) were non-native (80%) (Table 1).

According to the findings, (42/5%) of the participants had less than one year of work experience, while 35.8% had work experience of 1-5 years, 9.8% had work experience of 5-10 years, and 11.9% had more than 10 years of work experience.

Table 1: Demographic characteristics of respondents

Variables	Groups	Number (%)
Age (year)	26 - 30 years old	119 (61)
	31 - 35 years old	34 (17.4)
	36 - 40 years old	16 (8.2)
	> 40 years old	26 (13.3)
Gender	Male	113 (57.9)
	Female	82 (42.1)
Native status	Native to province	13 (6.7)
	Native to city	23 (11.8)
	Native to villages	3 (1.5)
	Non-native	156 (80)
Marital status	Single	122 (62.6)
	Married	73 (37.4)
Employment status	Conscription law's conscripts	87 (44.6)
	officially employed	27 (13.8)
	Contractually	81 (41.5)
Work experience	Lower than one year	82 (42.5)
	1-5 years	69 (35.8)
	5-10 years, and	19 (9.8)
	over 10 years	23 (11.9)

In the present study, Pearson's correlation-coefficient was applied to examine the research hypotheses. According to the obtained results, the variables of income, payment status, working hours, willingness to continue education, job security, motivation to serve, commitment to services, and confidence in the family physician program significantly influenced the persistence of the physicians for presence in their workplace ($P < 0.001$).

Among the mentioned factors, willingness to continue education was considered to be the most relevant component of persistence in the workplace ($r = 0.78$), followed by the subsequent components. Accordingly, motivation to serve ($r = 0.66$), working hours ($r = 0.54$), and confidence in the family physician program ($r = 0.54$) had the most significant associations with the professional persistence of the family physicians (Table 2).

In the current research, independent t-test was used to determine the influential factors in the persistence of family physicians and the correlation with marital status, and the results indicated a significant difference between income and marital status ($P = 0.01$). In other words, income had a more significant effect on the persistence of the married physicians compared to the single physicians. Furthermore, the results indicated that out of 224 family physicians, 138 cases (61.30%) quit their position, the majority of whom were in their practitioner's period ($n = 74$; 62.27%).

Table 2: Results of Pearson's correlation-coefficient

Variables	Pearson's Correlation-Coefficient	P value
Income	0.38	<0.001
Payment status	0.41	<0.001
Working hours	0.54	<0.001
Willingness to continue education	0.35	<0.001
Job security	0.78	<0.001
Motivation to serve	0.50	<0.001
Commitment to services	0.66	<0.001
Confidence in family physician program	0.54	<0.001

As an institution the main of which is to organize human workforce, facilities, and resources to address organizational goals, a health center cannot achieve its goals without efficient human resources. Humans are the foremost influential factor in the formation of a social organization and play a pivotal role in achieving organizational goals [16].

Therefore, the managers and planners of social issues must pay special attention to human factors in every organization [17]. In the family physician program, general practitioners and their teams are fully responsible for the health of their covered individuals and their families, while they remain responsible for the health and follow-up of patients and their families after their referral [18].

One of the main challenges in the family physician program is the reduced number of family physicians, especially in deprived areas, so that there are no available family physicians in some healthcare centers for variable periods of time, which disrupts service provision. With the recruitment of inexperienced practitioners, training must be repeated [15]. Encouragement of physicians to serve in deprived areas is an important goal of healthcare policymakers in Iran. However, the efforts in this regard have not succeeded yet.

A study by the National Center for Medical Research aimed to assess the willingness of Iranian physicians to serve in deprived areas, as well as the influential factors in this regard.

The mentioned research was conducted as a survey on a random sample size of 5,482 physicians who were delivered a questionnaire containing data on their employment status, and 2,789 completed questionnaires were analyzed. The obtained results indicated that more than 60% of the physicians agreed to serve in deprived areas under certain circumstances regarding the provision of their livelihood and well-being (e.g., proper residence facilities) in order to stay in these areas [19].

The results of the present study indicated a significant, positive correlation between high income, payment rates, motivation to serve, service commitment, and confidence in the family physician program and the intention of family physicians to stay in their workplace. Moreover, high income, average grades, and confidence in the family physician program had the most significant impact on the intention of the physicians to stay in underprivileged areas. On the other hand, long working hours and willingness to continue education had negative effects on this parameter, so that the increased level of these variables were associated with the reduced intention to stay. With respect to the negative impact of the willingness to continue education on the intention of family physicians to stay, our findings were consistent with the study by Kamien (1998) as they considered the willingness to continue education to be a major cause of the low intention of family physicians to continue working in rural areas [7].

Another study carried out in 2006 indicated that income and payment status were the most important influential factors in the intention of family physicians to stay in underprivileged areas [20]. According to Wong and Stewart (2010) [11], variables such as long working hours and intention to continue education had negative effects on the intention of family physicians to stay, while serving and increased salaries had positive effects in this regard. The findings of the current research also showed that the family physicians who had not left their service areas and decided to continue their collaboration with the family physician program stated that their most important motivations were to serve in deprived areas and earn higher incomes [20].

According to another research, continuing education was one of the reasons of family physicians not to stay in rural areas, which is in congruence with the results of the present study [21]. A study by Mousaviraja et al. (2014) entitled the "Influential Factors in the Work Continuation of Family Physicians in Kohgiluyeh and Boyerahmad Province" demonstrated that delayed payment and inadequate income reduced the rate of intentions to stay in family physicians, which is consistent with the results of the present study [3].

According to a research performed at Mashhad University of Medical Sciences (Iran) in 2009 entitled "Determining the Causes of Family Physicians' Low Intention to Stay", the most important caused of abandoning collaboration with the family physician program were low contract prices (26.7%), effects of monitoring scores on the received salary (11.7%), and numerous responsibilities assigned to the physicians (9.9%) [22]. Similarly, Wong et al. investigated the performance of family physicians in Canada, observing that the factors associated with geographical areas and physical facilities were the most significant influential factors in the constant presence of family physicians [11].

The increased number of the populations covered by each physician is due to the shortage of family physicians, and higher income has been associated with the increased satisfaction of these physicians. However, there is a wide range of tasks, and family physicians are highly involved in the health issues of their covered population. Consequently, increased dissatisfaction due to heavy workload has led to several challenges in the provision of care services by family physicians in various areas.

One of the most important factors in the success of every healthcare plan is the satisfaction of service providers, which will eventually cause them to become indifferent if neglected, thereby deteriorating the quality and quantity of care services [23]. Therefore, it is essential for healthcare authorities to pay special attention to this issue and provide family physicians with proper facilities at their residence, while reducing deprivation in their covered regions. In addition, these authorities could review the population covered by family physicians in order to encourage them to continue serving in these areas.

4. Conclusion

According to the results, proper measures should be taken in order to provide amenities and enhance human motivations to serve effectively. Some of the suggestions in this regard include the recruitment of more volunteers in various regions based on the need for physicians and selecting native volunteers. The ultimate goal of the healthcare system is to promote public health, which is of the essence in family physicians and their healthcare teams in rural areas. Therefore, the influential factors in the intention of family physicians to stay in underprivileged areas must be thoroughly investigated.

Authors' Contributions

T.R., designed the article. T.R., and L.H., did write the article. M.M., was supervisor. A.K.J., edited the article.

Conflict of Interest

The authors affirm that there is no conflicts of interest that may have influenced the preparation of this manuscript.

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