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Family Physicians' satisfaction with factors affecting the dynamism of the urban family physician program in the Fars and Mazandaran provinces of Iran

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Abstract

Background and objective: A successful family physician program needs ongoing and full cooperation between people and the organizations in charge. Ensuring the satisfaction of family physicians through improvement of the underlying factors could motivate them to provide high-quality services. This study aimed to determine the family physicians' satisfaction level with the factors affecting the dynamism of the urban family physicians program in the Fars and Mazandaran provinces of Iran.

Method: This cross-sectional study was carried out in urban areas in the Fars and Mazandaran provinces in 2016. The sample consisted of 143 and 96 family physicians, respectively, in Fars and Mazandaran provinces and was selected using the stratified random sampling method. Data were collected using a questionnaire and included both sociodemographic variables and factors assessing the family physicians' satisfaction levels. Each factor was scored based on a Likert scale from 0 to 5 points, and any satisfaction level higher than 3 out of 5 was equated with being satisfied.

Results: The overall satisfaction levels among family physicians in Fars and Mazandaran provinces were 2.77±0.53 and 3.37±0.56, respectively, revealing a statistically significant difference between provinces (p<0.001). Moreover, the mean satisfaction scores for the performances of healthcare centers, insurance companies, specialists, healthcare workers, and the population covered were 2.78±0.1, 2.54±0.9, 2.52±0.8, 4.24±0.07, and 2.96±0.8, respectively. The family physicians' levels of satisfaction were significantly correlated with population size (p=0.02, r= -0.106), and willingness to stay in an urban family physician program (p<0.001, r= +0.398).

Conclusion: This study revealed that family physicians exhibited a low level of satisfaction with the urban family physician program. Given the direct association between family physicians' satisfaction levels and retention in the program, it is expected that family physicians will no longer stay in the program, and it is likely to have subsequent executive problems.

Introduction

Family physicians are Doctors of Medicine who are working at the first level of the family physician referral system. They provide healthcare services to prevent disease, diagnose and treat illnesses, enhance the quality of life, and refer patients to specialists on the second level in the system when they need more specialized healthcare services.[1,2] The level of satisfaction of physicians is associated with their motivation to work and the quality and quantity of the services that they provide.[3] Previous studies have reported that personal characteristics, job conditions, organizational features, healthcare team members, and the cooperation of the population covered are the underlying factors in job satisfaction among family physicians.[3] Factors such as job attractiveness, proper working conditions, possibility of progress, honesty and collaboration between coworkers, sympathy when problems arising in the workplace, and the job being viewed honorably by the public can also affect job satisfaction in the medical field.[4] In contrast, job dissatisfaction factors have been reported to be low income, long working hours, heavy workload, and lack of free time.[5]

Linzer reported that the physicians working in American Health Maintenance Organizations (HMOs) showed low levels of satisfaction with their jobs and that the time they spent with each patient predicted their satisfaction levels.[6] Moreover, another study found six determinants of job satisfaction and job exhaustion among faculty members of a family medicine department, which were: time (62%), job benefits (9%), resources (8%), being undervalued

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(8%), physician well-being (7%), and practice demand (6%).[3] In addition, Beasley et al. reported that satisfaction with an organization was inversely correlated with the intention to change workplaces and directly correlated with the ability to achieve professional goals.[7] In addition, a study conducted in 1996-97 reported that job dissatisfaction rates among general practitioners and family physicians were 17 and 20%, respectively.[8] Similar results were found in studies which were conducted in Iran. Mikaniki et al. showed that physicians' mean satisfaction level, out of a total of 5 points, with their healthcare teams and available equipment and facilities was 3±0.6, whereas it was 2.8±0.8 for the population covered, 2.8±1 for interdepartmental collaboration, 2.7±0.9 for healthcare network performance, and 2.1±0.9 for specialists' performances.[9] Furthermore, Torabian et al. demonstrated that 58.8% of the family physicians were completely dissatisfied with the referral system, 65.5% were completely dissatisfied with changing the laws, and 47.5% were completely dissatisfied with rural insurance rules.[10] The study also reported family physicians were dissatisfied with low visit fees, the limited number of laboratory tests and medications that they are permitted to prescribe, inconsistencies between the Ministry of Health and insurance laws, intradepartmental inconsistencies, and executive problems in the completion and utilization of health records.[10]

Family physicians' satisfaction levels could affect the dynamism of the family physicians program. Dynamism refers to maintaining the family physician program while gradually increasing efficacy and effectiveness. Obviously, the determinants of family physicians' satisfaction levels could also affect the dynamism of the family physicians program, including supportive healthcare networks and insurance companies, specialists at the second level of the family physician referral system, and the population covered.

Since July 2012, an urban family physician program has been utilized in cities with populations over 20,000 in just the Fars and Mazandaran provinces of Iran. This urban family physician program has a somewhat different structure than the current rural family physician program implemented previously in all regions of Iran. The urban family physician program differs from the current rural program in terms of the working hours, service costs,

coverage of health service packages without involving health workers at the primary care stage, and the aggregation of physicians in the private sector.[11,12]

Since the urban family physician program's implementation in Iran, no study has been done to assessed family physician' satisfaction with the program to the best of our knowledge. Given the important supportive role and cooperation of the urban primary healthcare network, insurance companies, specialists and the population covered by the family physician program, this study aimed to determine family physicians' satisfaction level with the factors affecting the dynamism of the urban family physicians program.

Materials & Methods

Study Population and Sampling

This cross-sectional study was carried out in urban areas with populations over 20,000 in Fars and Mazandaran provinces in the winter of 2016. The study protocol was approved by the Ethics Committee of Babol University of Medical Sciences, Babol, Iran with ethics number IR.MUBABOL.REC.1397.032.

The urban family physician program in Iran was implemented in just Fars and Mazandaran provinces. Thus, we selected these two provinces as the study locations. Fars is a province in the south of Iran with an urban population of 3 million, and Mazandaran is located in the north of Iran and has an urban population of 2 million. In total, 1192 and 565 family physicians, were working in urban family physician program in Fars and Mazandaran provinces, respectively, at the time of this study. We used a stratified random sampling method. First, we considered Fars and Mazandarn provinces to be one stratum. Based on the sampling formula, $n=Z^2pq/d^2$ with $p=0.5$, $d=0.001$, and a confidence interval of 95%, we selected 143 and 96 family physicians, respectively, from Fars and Mazandaran provinces, which comprised of 12% and 17% of the total family physicians, respectively, in these provinces. Next, we selected family physicians through a systematic random sampling method from the list of family physicians in each province. That way, a family physician was selected from every eight family physicians in Fars province and from every six family physicians in Mazandaran province.

As a next step, we visited the family physicians in their offices in healthcare centers and informed them of the study's goals and procedures. Verbal consent was obtained, and other ethical principles, including confidentiality of the data and subjects' identities, were adhered to throughout the study.

The family physicians included those who had worked in the urban family physician' program for at least six months, anticipated staying in the program for at least one month after study recruitment, and verbally agreed to participate in the study. Physicians were excluded if they did not cooperate sufficiently, i.e., they either refused to participate in the study or did not complete the questionnaire.

Data collection instrument

A self-administered questionnaire was used to collect the data. The data included sociodemographic variables gathered through 8 open- and closed-ended questions. Working hours of family physicians were categorized into four shifts, including working the morning shift (8:00 A.M to 12:00 A.M), the evening shift (4:00 P.M to 8:00 P.M), both the morning and evening shifts, and working 8:00 A.M to 2:00 P.M, i.e., the official work hours.

The questionnaire also contained 24 closed-ended questions pertaining to physicians' satisfaction with the performance of the healthcare network (6 questions), insurance companies (6 questions), specialists (4 questions), and healthcare workers (4 questions). Their satisfaction with the cooperation and participation of the population covered (4 questions) was also measured. Each item was scored based on a Likert scale from 0 to 5 points (very low, low, moderate, high, and very high). We then used the weighted mean to evaluate the satisfaction level in each area. A weighted mean higher than 3 out of 5 signified satisfaction. The questionnaire was designed while taking into consideration the available evidences and guidelines.[9,11,12] Furthermore, its validity was verified by a panel of experts from Iranian health insurance companies, experts monitoring the urban family physicians program, and three urban family physicians. The panel of experts evaluated the design via the Delphi method. They scored each question as: necessary and appropriate (2 points), necessary but in need of revision (1 point), or not appropriate (0 points). The questionnaire was finally complete after three rounds of evaluations and revisions. Its reliability was ensured with a Cronbach's alpha of 0.91.

Statistical Analysis

Data were analyzed via SPSS software (Version 23 for Windows; SPSS Inc., Chicago, USA). We used Spearman's and Kendall's tests to determine the correlations between the ordinal variables. Independent t-tests and one-way ANOVAs were used to compare the means. The Mann-Whitney and Kruskal-Wallis tests were also used to compare the means, when the Kolmogorov-Smirnov test did not confirm the normality of the data. The significance level was set at $p < 0.05$.

Results

Of the 239 family physicians who participated in the study, 236 were included in the final analysis and three were dropped out due to incompletely filled out questionnaires. Of the family physicians participating in the study, 59.3% and 40.7% worked in Fars and Mazandaran provinces, respectively. The demographic characteristics of the participants are shown in **Table 1**. The mean age of the family physicians was 47.55±8.7 years, and 64.0% of them were males. They had worked in the urban family physician program for 46.09±15.30 months in Fars and 43.24±14.21 months in Mazandaran province. Based on their contracts, 12.0% of family physicians worked the morning shift, 13.7% the evening shift, and 62.3% both morning and evening shifts. Also, 11.1% of them worked at 8:00 A.M to 2:00 P.M. Moreover, 31.4% of the physicians in Fars and 18.7% in Mazandaran province covered more than 3,000 people.

The results of the independent t-test revealed that the mean overall satisfaction levels in Fars and Mazandaran provinces were 2.77±0.53 and 3.37±0.56, respectively, and there was a significant difference between the two provinces ($p < 0.001$). **Table 2** shows the means and SDs of family physicians' satisfaction levels with factors affecting the dynamism of the urban family physicians program, in total and by province. Among the 24 factors related to the dynamism of the urban family physician program, the mean satisfaction level of family physicians with regards to ten factors was higher than 3. Also, the family physicians were most satisfied with the attitude of healthcare workers towards others and patients and least satisfied with the timely payment of their salaries.

Table 1: Demographic characteristics of the family physicians participating in the urban family physician program in Iran, 2016

		Fars province	Mazandaran province	Total
Sex	Male	92 (65.7)†	59 (61.5)	151 (64.0)
	Female	48 (34.3)	37 (38.5)	85 (36.0)
Marital status	Married	127 (90.7)	91 (94.8)	218 (92.4)
	Single	13 (9.3)	5 (5.2)	18 (7.6)
Education	General practitioner	139 (99.3)	95 (99.0)	234 (99.2)
	Specialist	1 (0.7)	1 (1.0)	2 (0.8)
Type of employment	Governmental	29 (20.7)	28 (29.2)	57 (24.2)
	Private	111 (79.3)	68 (70.8)	179 (75.8)
Type of work shift	Morning shift 8:00 to 12:00 A.M.	17 (12.3)	11 (11.5)	28 (12.0)
	Evening shift 4:00 to 8:00 P.M.	20 (14.50	12 (12.5)	32 (13.7)
	Morning and evening shifts	88 (63.8)	60 (62.5)	148 (63.2)
	8:00 A.M. to 14:00 P.M.	13 (9.40	13 (13.5)	26 (11.1)
Population covered	1500 and lower	29 (22.1)	23 (24.0)	52 (22.9)
	1501-2500	28 (21.4)	19 (19.8)	47 (20.7)
	2501-3000	30 (22.9)	36 (37.5)	66 (29.1)
	More than 3000	44 (33.6)	18 (18.8)	62 (27.3)
Population of cities where family physician worked	20000-50000	10 (7.1)	14 (14.6)	24 (10.2)
	50001-100000	23 (16.4)	19 (19.8)	42 (17.8)
	100001-200000	31 (22.1)	-	31 (13.1)
	> 200000	76 (54.3)	63 (65.6)	139 (58.9)
Willingness to stay in the family physician program	Very low	25 (18.7)	6 (6.4)	31 (13.6)
	Low	18 (13.4)	6 (6.4)	24 (10.5)
	Moderate	33 (24.8)	24 (25.5)	57 (25.0)
	High	34 (25.4)	32 (34.0)	66 (28.9)
	Very high	24 (17.9)	26 (27.7)	50 (21.9)
Years working in the urban family physician program	Less than 2	22 (15.7)	15 (15.6)	37 (15.7)
	2 – 4	21 (15.0)	33 (34.4)	54 (22.9)
	More than 4	97 (69.3)	48 (50.0)	145 (61.4)

†Data are presented as totals and %.

Table 2: Mean satisfaction scores for family physicians in Fars and Mazandaran provinces for the factors affecting the dynamism of the urban family physician program

	Factors related to Dynamism	Satisfaction level			p-value*
		Fars province	Mazandaran province	Total	
Support and cooperation of the urban healthcare network	To solve probable issues	2.44±1.3†	3.33±1.1	2.80±1.3	<0.001
	To solve the issues between family physicians and specialists	2.12±1.1	3.04±1.1	2.49±1.2	<0.001
	To solve the issues between family physicians and emergency centers, para clinics, and hospitals	2.54±1.1	3.34±1.0	2.86±1.2	<0.001
	Quality of inspections and supervisions by authorities and experts	2.84±1.2	3.34±1.1	3.05±1.2	0.002
	Quality of authorities and experts' performances	2.19±1.1	3.85±1.0	3.46±1.1	<0.001
	Timely payment of salaries	1.74±1.1	2.35±1.3	1.99±1.2	<0.001
	Total	2.48±0.9	3.20±0.9	2.78±1.0	<0.001

Factors related to Dynamism		Satisfaction level			p-value*
		Fars province	Mazandaran province	Total	
Support and cooperation of insurance companies	To solve the issues between family physicians and specialists	1.88±1.1	2.81±1.0	2.26±1.2	<0.001
	To solve the issues between family physicians and emergency centers, para clinics, and hospitals	2.17±1.1	3.02±1.1	2.51±1.2	<0.001
	To solve the issues between family physicians and contract pharmacies	2.59±1.1	3.35±1.1	2.90±1.2	<0.001
	Quality of inspections and supervisions by authorities and experts	2.36±1.1	3.21±1.2	2.71±1.2	<0.001
	Attitudes of authorities and experts	2.99±1.2	3.94±0.9	3.38±1.2	0.001
	Timely payment of salaries	1.38±0.8	1.81±1.1	1.55±0.9	<0.001
	Total	2.22±0.8	3.02±0.8	2.55±0.9	<0.001
The performance of specialists	Timely admission of referrals	2.45±1.1	3.03±1.0	2.69±1.1	<0.001
	Quantity or percentage of feedback provision	1.99±1.0	2.80±1.0	2.32±1.1	<0.001
	Quality of provided feedbacks	1.78±0.9	2.36±1.0	2.02±1.0	0.003
	Compliance with the franchise agreement	2.91±1.1	3.38±1.0	3.11±1.1	<0.001
	Total	2.37±0.8	2.89±0.8	2.52±0.8	<0.001
The performance of healthcare workers	Discipline and attendance	4.19±0.9	4.51±0.7	4.32±0.8	0.007
	Attitudes toward people and patients	4.37±0.7	4.59±0.6	4.46±0.7	0.02
	Teamwork and desirable performance of tasks	4.03±1.0	4.38±0.7	4.17±0.9	0.009
	Level of knowledge and skills (practical ability and experience)	3.89±0.9	4.39±0.7	4.09±0.9	<0.001
	Total	4.12±0.8	4.47±0.6	4.25±0.7	<0.001
Cooperation and participation of the population covered	For initial visits and admission	2.90±0.9	3.28±0.8	3.09±0.9	<0.001
	For periodic examinations	2.77±0.9	3.25±0.9	2.97±0.9	<0.001
	Adherence to treatment schedules and recommendations	2.95±1.0	3.38±0.8	3.12±0.9	0.001
	Adherence to the principles and rules of treatment and referral	2.39±1.1	3.07±0.9	2.67±1.1	<0.001
	Total	2.75±0.8	2.89±0.7	2.96±0.8	<0.001

† Data are presented as Mean ± SD , i.e., the means and SDs of the satisfaction levels of family physicians for each factor related to the dynamism of the family physician program; * Independent t-test.

In terms of percentages, 35.2% of the physicians were satisfied with the performance of the healthcare networks, 29.4% were satisfied with the insurance companies, 35.0% were satisfied with the specialists, and 92.8% were satisfied with the healthcare workers. In addition, 41.6% of the physicians were satisfied with the cooperation of the population covered. Finally, the satisfaction level of 44.5% of the physicians was higher than 3 out of 5 points.

The results of the independent t-tests and one-way ANOVAs indicated no significant association between the mean overall satisfaction level and age, gender, education, years of working in the family physicians program, and population covered (p>0.05) (**Table 3**). Moreover, as shown in **Table 4**,

there was a weak inverse correlation between the family physician's satisfaction level and the populations of the cities in which they worked (p=0.02, r= -0.106). Also, family physicians who were more satisfied were more willing to stay in the urban family physicians program (p<0.001, r= +0.398).

Table 3. The satisfaction levels of the family physicians participating in the urban family physician program in Iran, according to demographic characteristics

		Fars province	Mazandaran province	Total
Sex	Male	92 (65.7)†	59 (61.5)	151 (64.0)
	Female	48 (34.3)	37 (38.5)	85 (36.0)
	p-value*	0.03	0.19	0.37
Marital status	Married	2.74±0.51	3.37±0.55	3.01±0.61
	Single	3.07±0.65	3.36±0.79	3.15±0.68
	p-value*	0.026	0.966	0.313
Education	General practitioner	2.76±0.52	3.37±0.57	3.01±0.62
	Specialist	3.58±	2.95±	3.27±0.45
	p-value*	0.119	0.456	0.559
Type of employment	Private	2.73±0.47	3.33±0.52	2.96±0.57
	p-value*	0.112	0.292	0.018
Type of work shift	Morning shift 8:00 to 12:00 A.M.	2.57±0.35	3.17±0.66	2.81±0.57
	Evening shift 4:00 to 8:00 P.M.	2.63±0.5	3.29±0.47	2.88±0.58
	Morning and evening shifts	2.81±0.50	3.41±0.57	3.05±0.61
	8:00 A.M. to 14:00 P.M.	2.78±0.71	3.44±0.56	3.12±0.71
	p-value**	0.220	0.567	0.110
Population covered	1500 and lower	2.69±0.52	3.26±0.57	2.94±0.61
	1501-2500	2.74±0.43	3.21±0.62	2.94±0.56
	2501-3000	2.73±0.61	3.40±0.51	3.10±0.65
	More than 3000	2.89±0.54	3.63±0.54	3.11±0.63
	p-value**	0.363	0.088	0.298
Population of cities where family physician worked	20-50 thousand people	2.77±0.67	3.51±0.58	3.20±0.71
	50-100 thousand people	2.90±0.69	3.57±0.40	3.20±0.66
	100-200 thousand people	2.77±0.42	-	2.77±0.42
	+200 thousand people	2.73±0.49	3.28±0.59	2.98±0.60
	p-value**	0.604	0.084	0.008
Years of working at urban family physician program	Less than 2	2.60±0.53	3.28±0.69	2.88±0.68
	2 – 4	2.92±0.60	3.28±0.55	3.14±0.59
	More than 4	2.77±0.50	3.46±0.53	3.00±0.60
	p-value**	0.132	0.324	0.119

† Data are presented as mean±SD; * Independent t-test; **One-way ANOVA test.

Table 4. The correlations between overall satisfaction level and some demographic variables

	Fars province		Mazandaran province		Total	
	r	p-value*	r	p-value*	r	p-value*
Age	-0.161	0.11	+0.003	0.97	-0.079	0.22
Population covered	+0.146	0.15	+0.094	0.28	+0.433	0.05
Population of cities where family physician worked	-0.212	0.03	-0.088	0.30	-0.143	0.02
Years of working in the urban family physician program	+0.061	0.55	+0.069	0.42	+0.012	0.85
Willing to stay in the family physician program	+0.360	<0.001	+0.358	<0.001	+0.398	<0.001

* Spearman's or Kendall's test.

Discussion

There are some factors related to the dynamism of urban family physician program, including healthcare networks in urban regions, insurance companies, specialists at the upper level of the referral system, healthcare workers, and the population covered. This study showed that family physicians' satisfaction levels were lower than average, except when it came to the performance of healthcare workers. Moreover, we found that there was a significant difference in family physicians' satisfaction with all determinants between Fars and Mazandaran provinces.

Previous studies in Iran have shown that family physicians' satisfaction levels were different among provinces in some, but not all, factors.[13,14] A mandatory referral system and prohibition of direct referral to specialists in Fars province may be an underlying cause of low satisfaction among family physicians there which was not seen in Mazandaran province. In this regard, the family physicians in Fars province stated that clients requested referrals to specialists, although documents revealed more than 80-90% of them did not require referrals. Most physicians believed that the clients who were not familiar with the referral system and family physician's principles preferred to receive more specialized and luxurious services, due to the low consultation fee of the specialists in the family physician referral system. In a consistent vein, Torabian et al. reported that inappropriate behavior of people and franchises with low attendance were the causes of dissatisfaction among rural physicians in Hamedan province in Iran.[10] On the other hand, family physicians in Fars province were dissatisfied with some specialists who divided their services into multiple sessions when one visit was all that was necessary. This behavior may be due to the extra fees from the family physician system. Despite applying a consultation fee for each visit to family physicians in Fars province, the irregular referral requests did not decline in number.

The present study indicates that family physicians were more satisfied with healthcare workers than the other factors related to the dynamism of the urban family physician program. Consistent results have been reported in other studies.[12,13] Some healthcare workers were novices and had scant work experience, and some of them had been recruited unofficially. Thus, they tried do their jobs better, resulting in family physicians' satisfaction

with them. Other factors, such as regular supervision on the part of family physicians of the performance of healthcare workers, could enhance family physicians' satisfaction because physicians could then monitor the healthcare workers' performances and make note of when they do a poor job or provide low-quality services.

We found that urban family physicians' satisfaction with supportive organizations was lower than average. This finding is consistent with those of some other studies.[9,12,13] Recent findings have revealed the same situation to the implementation of new policies for government agencies in different regions of Iran. These findings are a warning to policy makers and administrators to consider the potential support for organizations before designing new policies and deciding how they will be run. Therefore, it may be necessary to prepare suitable infrastructures before the implementation of a program if the required criteria have not been met. Along these lines, a study presented six infrastructures necessary for the implementation of the urban family physician program in Iran, including communication, policymaker and stakeholder, structural, technical, resource, legal, and stewardship and governance infrastructures.[14]

This study demonstrated that most family physicians were dissatisfied with the performance of both specialists, at the upper level of the healthcare system, technical support, and the population at the lowest level. Some other studies have reported the same results.[12,13,15] Due to the supportive impact of specialists and their strategic role in the dynamism of the family physician program, it will be necessary to perform interventions as soon as possible to improve their performances. Our study revealed that family physicians were less satisfied with the quality and quantity of feedback forms from specialists. In a well-organized healthcare system, the specialists should report outcomes for referred clients to the first stage of the referral system in a standard written form and advise the physicians at the first stage as to what needs to be done. Also, recent studies have revealed better treatment outcomes when a standard feedback form is written and the specialists report their recommendations back to the first stage of the referral system.[16]

This study showed that family physicians had the least satisfaction with late salary payments. Similar findings have also been reported in other studies.[12,13] For instance, almost half of the reasons for physician's dissatisfaction

in Pakistan are related to their low incomes.[17] Moreover, family physicians working in primary health care (PHC) in Lithuania who were relatively dissatisfied with their jobs stated that their dissatisfaction was mainly due to their low salaries.[18] Another study conducted in the USA from 2004 to 2005 reported that 67% of family physicians who worked in rural areas in small towns were totally satisfied with their jobs, although their satisfaction level with their salaries was just 30%.[19] Untimely payment of salaries could be due to unstable financial resources; in such a case, insurance companies will be unable to pay the family physicians' salaries, specialists' fees, and medication costs.

Furthermore, this study reported more physicians covering over 3,000 individuals, which could be due to a lack of general practitioners, especially in Fars province, or the refusal of some physicians to join the urban family physician program. A lack of physicians is also seen in the healthcare systems of other countries, even more developed ones such as England, Finland and the United States.[20] Covering a large population could indicate a greater income and may prevent the dissatisfaction of physicians with regards to their salaries. However, such a situation is not the goal of the family physician program. A study in Norway showed that covering an inappropriately large population reduced the opportunities of the program to provide preventive services and comprehensive and on-time care. Also, it may make the periodic follow-up of patients with chronic diseases difficult.[21]

Considering the important impact of the service provider's satisfaction with healthcare programs on the quantity and quality of the service provision, we suggest the following items to improve the family physicians program:
1) Physicians' salaries will be paid on time through sustainable funding.
2) Supporting organizations, including healthcare centers and health insurance companies, will cooperate appropriately with family physicians, healthcare providers at the second stage of the referral system (specialists), and co-workers at boarding centers.
3) Stricter monitoring of physicians' performances at the second stage of the referral system (specialists) regarding client intake from the first stage will commence, and evaluations of the quantity and quality of their feedbacks to the first stage will take place.

4) Convince the population covered to accept the rules of the family physician's program thorough education and cultural development at the community level.

Strengths and Limitations

We designed a specific and valid questionnaire which covered nearly all the factors related to family physicians' satisfaction. Moreover, despite the dispersion of the cities in each province, we used face-to-face meetings to explain the aim of the study and educate participants on completing the questionnaire, which is a more accurate method compared to phone calls or emails.

A limitation of this study was the sampling time, which coincided with a delay in paying the salaries of the family physicians in the urban family physician program. Thus, the delay may have confounded the results. Moreover, this cross-sectional study was limited to determining the cause and effect relationship between the variables. Finally, this study was limited in its generalizability to all parts of Iran due to some probable differences in socioeconomic status between the provinces of Fars and Mazandaran and other areas.

Conclusion

We concluded that family physicians exhibited a low level of satisfaction with all the factors affecting the dynamism of the family physician program, except for the performance of healthcare workers. Given the direct association between the satisfaction of family physicians and their tenures in the family physicians program, many of them may not stay much longer. Thus, executive problems are likely to occur if the current weaknesses in the program are not resolved. Therefore, intervention programs and strategies have been proposed to upgrade the organizations and performances of all involved.

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