

Relationship between Job Satisfaction and Performance of Primary Care Physicians after The Family Physician Reform of East Azerbaijan Province in Northwest Iran

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Abstract

Background: Following the implementation of family physician program in 2004 in Iranian healthcare system, the understanding in changes in physicians' practice has become important. **Objective:** The objective of this study was to determine the level of family physicians' job satisfaction and its relationship with their performance level. **Materials and Methods:** A cross-sectional study was conducted among all 367 family physicians of East Azerbaijan province in during December 2009 to May 2011 using a self-administered, anonymous questionnaire for job satisfaction. The performance scores of primary care physicians were obtained from health deputy of Tabriz Medical University. **Results:** In this study, overall response rate was 64.5%. The average score of job satisfaction was 42.10 (± 18.46), and performance score was 87.52 (± 5.74) out of 100. There was significant relationships between working history and job satisfaction ($P = 0.014$), marital status ($P = 0.014$), and sex ($P = 0.018$) with performance among different personal and organizational variables. However, there was no significant relationship between job satisfaction and performance, but satisfied people had about three times better performance than their counterparts (all $P < 0.05$). **Conclusions:** The low scores of family physicians in performance and job satisfaction are obvious indications for more extensive research in identifying causes and finding mechanisms to improve the situation, especially in payment methods and work condition, in existing health system.

Keywords: Family physician, Iranian health system, Job performance, Job satisfaction, Primary care

Introduction

Establishing a strong PHC network and constitution of Ministry of Health and Medical Education in 1985,¹ were significant steps toward an improved life expectancy, in Iran. However in response to new challenges, programs

for family physicians and expansion of rural health insurance have started in 2004.²⁻⁴ This reform trebled the number of physicians in rural areas and increased their incomes ten folds.^{5,6} Now-a-days the ministry is planning to expand the program to all cities.⁷ However a number of challenges such as improper motivation initiatives, poor comprehensiveness in instructions and arrangements, lack of job security and delay in payment of salary⁸ lead to burnout⁹ in order to participate in residency entrance examination.¹⁰

In order to assess the impact of this reform in the health sector¹¹ understanding the change in physicians' behavior is important. Numerous studies indicate that job satisfaction is a major determinant of stated intentions to leave the workforce.^{9,12} Previous studies mainly focused on job satisfaction of physicians in different situations, while the relationship between physicians' performance and their job satisfaction was unknown¹³ especially

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in Iranian health system. Therefore, it is important to investigate job satisfaction of family physicians¹² and its relationship with performance. Hence, the objectives of this study were determining the level of family physicians' job satisfaction and its relationship with their performance in Iran.

Materials and Methods

A cross-sectional study was conducted among 367 family physicians of public sector in East Azerbaijan province of Iran, during December 2009 to May 2011; who had minimum 6 months of working history and was working at the time of the study.

Data were collected using a self-administered, anonymous questionnaire containing 35 questions about job satisfaction, personal and professional variables, and three open questions.

A 4-point Likert scale was used for section 2, with "very dissatisfied", "dissatisfied", "satisfied" and "very satisfied" options. The 35 items of job satisfaction questionnaire were categorized in eight domains. The total scores of participants in job satisfaction were transformed into percentage in order to quantitatively relate to physician's performance scores.

The questionnaire, developed by World Health Organization in 1993, we confirmed and retained its validity and reliability after translation to Persian in a recent survey. A translation-back translation process was used to translate the measures. The content validity of the questionnaire was evaluated based on opinions of an expert panel consisting of eight specialists in the fields of health system research and after some modifications and corrections the questionnaire was approved. Cronbach's alpha values were calculated for all 35 items (0.92.), and it showed reasonable reliability (internal consistency). Questionnaires were distributed via post to all of the 367 doctors with a letter explaining the objectives of the study followed by a phone call. Furthermore, a code number was added to every questionnaire by the main researcher. Anonymity and confidentiality of respondents were ensured.

The performance scores, which are measured every three by skilled expert physicians months, as the main criterion for payment system, were added to the respective questionnaire of each respondent. Physician's

performance was measured on a scale is measured by about 40 indicators with maximum possible score of 1000, which was transformed to a scale of 100 for this research. It was found that 30% of family physician income is at risk under the scheme.¹⁴

All analyses were performed using SPSS version 16.0 (SPSS Inc. Chicago) with *t*-tests, analysis of variances, logistic regression and odds ratios.

Ethical consideration for this study and the study protocol were approved by the Ethics Committee of Tabriz University of Medical Sciences (TUMS), which was in compliance with Helsinki declaration.

Results

In this detailed study, 238 questionnaires were received as completed from 367 (64.5%) cases. Half of the participants were males, 71.1% were married, the average age was 32.98 (± 5.49) years and the average length of service was 5.23 (± 4.53) years. Furthermore, 80.5% of the respondents were temporary employees and the median distance of their work place to the capital of the province was 100 (range = 2-250) km. Each physician had covered 4131.85 (± 1298.51) people.

Table 1 shows the average score of job satisfaction to be 42.10 and that for performance to be 87.52. Table 2 represents the mean scores computed for total job satisfaction and each subscale. The overall satisfaction was 32.4%. The respondents' were less satisfied in domains of survival or personal maintenance, security, and recognition but more satisfied in domains of status, companionship, and quality or style of supervision. Initial analyses of physician job satisfaction among single items of questionnaire showed, physicians were more satisfied with their "having colleagues' respect (73.67 ± 28.52)" and "patients' recovery (71.83 ± 25.29)" but were more unsatisfied with "career prospects (15.57 ± 26.94)" and "job security (20.21 ± 28.64)".

Evaluation of the relationship between satisfaction and performance with background variables showed, a significant relationship between working history and satisfaction only [Table 3]. In addition, the results showed significant relationships between marital status, and gender only. Other such relationships were nonsignificant. However, for relationship

Table 1: Sociodemographic characteristic, overall satisfaction and performance score

Characteristic	Percentage	Performance score*	P	Job satisfaction score*	P
Gender					
Male	50	87.91±7.70	0.371	41.35±17.24	0.465
Female	50	87.15±8.81		43.11±19.76	
Age					
<30	43.5	87.71±4.39	0.115	39.76±18.33	0.028
30–39	42.6	87.29±6.21		41.95±18.24	
40–49	12.9	88.02±5.46		46.92±16.23	
50–59	1.7	84.37±11.88		56.80±11.74	
Work history					
<1	13.9	86.95±6.02	0.320	38.16±16.51	0.229
1–3	30.5	88.43±3.80		40.69±19.58	
>3	56.1	87.04±6.65		43.77±17.49	
Marital status					
Single	28.9	87.56±6.15	0.885	41.26±17.87	0.514
Married	17.1	87.42±5.69		43.1±18.71	
Occupational status					
Permanent (formal)	19.4	86.65±5.25	0.592	41.71±18.5	0.758
Committed to serving	17.5	88.33±4.94		44.79±17.45	
Contract	63	87.48±6.30		42.83±18.37	
Number of undercover population					
<4000	55.4	86.34±6.57	0.036	41.94±18.80	0.145
4000–6000	38.5	88.72±4.82		42.45±18.66	
>6000	6.1	88.52±3.81		52.76±20.89	
Distance to center of province					
<50 km	19.6	86.62±5.35	0.533	43.95±16.53	0.516
50–150 km	67.7	87.96±6.06		40.15±17.98	
>150 km	12.4	87.30±4.23		39.98±20.75	

*Data score were out of 100

Table 2: Job satisfaction of family physicians in domains and totally

Domains	Mean of point (±SD)	Great satisfaction (%)	Some satisfaction (%)	Some dissatisfaction (%)	Great dissatisfaction (%)
Total job satisfaction	42.10 (18.46)	4.6	27.7	48.7	18.9
Personal maintenance	30.11 (23.8)	2.9	19.3	28.6	49.2
Security	30.29 (25.2)	7.1	11.8	27.7	53.4
Companionship	48.67 (24.7)	16	32.8	30.3	21
Quality and style of supervision	46.46 (24.2)	10.8	32.4	38.7	18.1
Quality of work	43.02 (24.92)	14.7	15.2	33.8	36.3
Status	48.94 (20.00)	9.7	38.2	38.2	13.9
Recognition	37.94 (23.00)	5.9	21.8	44.5	27.7
Autonomy	43.44 (24.7)	9	27.9	38.2	24.9

SD - Standard deviation

between satisfaction and performance, though not significant, but satisfied persons had about 3 times better performance than the unsatisfied persons had [Table 4].

A content analysis of three open questions about main value aspects of the job were: provision of services, relationship (companionship), and health promotion while the job security and insufficient salary were major aspects disliked. Financial obligation and interest in the provision of health services were indicated as main reasons to work in health system.

Evaluation of relationship between satisfaction and performance with main value of job showed significant relationship between relationship (companionship) and health promotion with satisfaction, so that persons in relationship category had about three times more satisfaction level than persons in health promotion category had, but there was no such relationship between other background variables and satisfaction [Table 3]. The results showed no significant relationships between provision of services, and health promotion with Performance ($P > 0.05$).

Table 3: Results of logistic regression correlation among demographic variables with satisfaction

Variables	n	OR	Lower	Upper	P
Employer					
1	26	0.483	0.155	1.507	0.210
2	19	2.158	0.675	6.903	0.195
3	98	Reference	-	-	-
Marriage					
Single	41	0.860	0.349	2.120	0.744
Married	102	Reference	-	-	-
Gender					
Male	84	0.821	0.369	1.827	0.630
Female	59	Reference	-	-	-
Work history	143	1.147	1.028	1.280	0.014
Population	143	1.000	1.000	1.000	0.704
Distance	143	1.002	0.995	1.009	0.617

*OR - Odds ratio, *Lower - Lower bound for 95% CI for OR, *Upper - Upper bound for 95% CI for OR, CI - Confidence interval

Table 4: Results of logistic regression for relation among demographic variables with performance

Variables	n	OR	Lower	Upper	P
Employer					
1	18	2.326	0.665	8.129	0.186
2	15	0.546	0.108	2.774	0.466
3	82	Reference	-	-	-
Marriage					
Single	32	3.916	1.329	11.540	0.013
Married	83	Reference	-	-	-
Sex					
Male	65	0.295	0.107	0.810	0.018
Female	50	Reference	-	-	-
Work history	115	1.081	0.943	1.240	0.264
Population	115	1.000	0.999	1.000	0.216
Distance	115	1.004	0.995	1.014	0.388
Job satisfaction					
Satisfied	80	2.988	0.899	9.924	0.074
Not satisfied	35	Reference	-	-	-

*OR - Odds ratio, *Lower - Lower bound for 95% CI for OR, *Upper - Upper bound for 95% CI for OR, CI - Confidence interval

Discussion

In this study, the participation rate was higher than a similar study in England (53%), Norway (43%), and lower than a study in Lithuania (78.6%). Generally, the average score of job satisfaction in comparison with the GP job satisfactions in England (62%) and Mexico (54%),^{12,15} was lower and closer to a recently conducted research in Iran.¹⁶ Security and personal maintenance were main factors for dissatisfaction where British GP doctors were dissatisfied with the working hours, recognition and rewards.¹² Furthermore, Lithuanian doctors were dissatisfied from low income, social status and heavy workload.¹⁷ Other findings on physician job satisfaction

in Iran are similar with our findings.¹⁶ One study in European countries¹⁸ showed the strongest correlation of job security with job satisfaction; which was similar to our findings. Furthermore, unequivocal relations between the level of job satisfaction and employment, gender, age and marital status of respondents did not emerge either in our study or those in Europe.

On the other hand, family physicians of our study were young and their income at this level was comparatively lower; and their lower job satisfaction and lookout for specialty education for additional revenues is reasonable. Physicians usually work permanently in Iran, but family physicians work as a contract or mandatory employees, therefore, their employment is uncertain.^{1,5} These differences and the lack of job security⁸ could create more job dissatisfaction. Quality of control procedures, lack of insurance support by health system, and other items has raised family physicians' dissatisfaction.^{8,16} The low level of performance scores is similar with Jabbari's findings¹⁹ in Iran, but lower than the performance of GP physicians in UK.²⁰ The small differences between job satisfaction and performance scores could be attributed to project life in Iran and performance-based payment schemes.

Only a few studies conducted on the relationship between performances of physicians and their job satisfaction.²¹ The finding of Godard indicates that a moderate use of high performance increases workers' job satisfaction, esteem, commitment, and citizenship behavior¹³

Finally our findings indicate, there is no strong evidence for relationship between job satisfaction and performance, while some reported the positive association between job satisfaction and high quality of interpersonal care,²² while others concluded the relationship to be weak.²³ However, a large scale study shows that a higher involvement in high performance is associated with higher job satisfaction.¹⁸ This inconsistency could be related to organizational determinants.

Conclusions

The low scores of family physicians in performance and job satisfaction indicate an obvious need for further research to identify the root causes of low levels of scores. By and large, revision in current policies especially in payment methods and working condition is recommended.

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