

## Comparison of quality of work life in rural family physicians and other general physicians in Iran

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### Abstract

**Background:** Job satisfaction of physicians in family physician team is considered as one of the important factors for health system. The aim of the present study was to compare the quality of work life (QoWL) in rural family physicians and general physicians with private clinics in Kurdistan province.

**Methods:** A cross-sectional study was conducted among 103 general physicians including 50 rural family physicians and 53 general physicians with private clinics in Kurdistan province in 2016. The data were collected using QoWL questionnaire and analyzed using SPSS, v. 16. Descriptive statistics including frequency, percentage, mean, and standard deviation (SD) were used to describe the data and to examine the relationship between the variables, T-test was run.

**Results:** The QoWL of rural family physicians with a mean (SD) of 55 (7.6) was higher than average scores. But QoWL of other general physicians with a mean (SD) of 47.7 (13.5) was lower than average scores. The results of t-test showed that there was a significant difference between QoWL of family physicians and other general physicians ( $t=82.3$ ,  $P=0.001$ ). In rural family physicians, there is a significant association between the QoWL and gender ( $t=2.7$ ,  $P=0.009$ ) as well as native status ( $t=2.53$ ,  $P=0.004$ ). In general physicians with private clinics, the QoWL of native physicians was higher than that of non-native physicians ( $t=4.3$ ,  $P=0.001$ ).

**Conclusion:** The QoWL of rural family physicians is better than that of others general physicians, even though it is unsatisfactory in both studied groups. Therefore, improving the QoWL of rural family physicians, especially female and non-native rural family physicians, is recommended because promoting the rural family physicians' satisfaction can decrease the likelihood of turnover, and thus increase service quality and responsiveness, as a goal of the health system.

**Keywords:** General Practitioners; Job Satisfaction; Personal Satisfaction; Personnel Turnover

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## **T**Introduction

The Quality of Work life (QoWL) increases employee satisfaction and enhances learning at the workplace, and it helps employees to adapt better to their environmental changes. Dissatisfaction with work life can have negative effects on employees' performance. Providing quality health services to the community is one of the main concerns of health systems (2). The provision of health care is entirely dependent on those who work in the system and the most valuable source in the health system is not the latest technology or the most modern facilities, but the employees who are the human resources of the health system (3). Therefore, in order to maintain the quantity and quality of health services, health managers and policy makers are always looking for strategies and methods to reduce dissatisfaction at all levels of the organization.

There are many factors that can affect the quality and procedure of health care provision. One of the most important of these is the QoWL of health workers (4, 5). In various studies, the impact of different dimensions of QoWL and organizational variables such as organizational conditions (6), occupational stress (7), organizational support of health care workers (8), workload (9), job satisfaction (4, 10), and job burnout (6, 11, 12) on the quality and quantity of health-care provision have been shown. Also, the QoWL of employees can affect performance (13) and job involvement (occupational interaction) (14). Some other scientists believe that part of the decline in productivity and quality of service is due to shortcomings in the QoWL. Employees tend to look at issues from their own point of view; they want to change their economic and non-economic consequences. All of the above has its roots in the concept of humanizing the workplace or, in other words, improving the QoWL (15).

Physician' job satisfaction is a complex function of multiple variables. Previous studies have identified the determinant

factors in job satisfaction such as wages, working hours, employer's characteristics, and education level. Family physician satisfaction is an important factor in health systems, because these physicians are at the initial level of health services and are considered as gatekeepers of the health system and are aware of the physical, psychological, and social dimensions of the community, and if necessary, they refer patients to higher levels of health care. The Family Physician Program and the referral system of the general physicians and his team are fully responsible for the health of the individuals and families covered and are responsible for tracking even after referring them to the specialized level (16).

The right to the highest attainable standards of health is one of the human rights that have been emphasized in human rights documents (17). The quality of work life of physicians influences the standards and quality of patient care. The impression and feeling of the rural family physician's team may influence the way they treat patients, both medically and personally (18). Therefore, due to the importance of family physicians in the health system of the country, obtaining information from managers and policy makers of the health system about the status of job satisfaction and the QoWL of physicians, its dimensions as well as factors affecting it is important. Thus, the aim of the present study was to compare the QoWL in rural family physicians and other general physicians in Kurdistan.

## **Methods**

A cross-sectional study was conducted on general physicians in Kurdistan province in 2016. The statistical population consisted of 140 general physicians divided into two groups. The first group consisted of all general physicians employed in the rural family physicians program in rural health centers or cities under 20,000 population covered by Kurdistan University of Medical Sciences

and the second group included all general physicians with private clinics in Kurdistan province (i.e. those who did not participate in the rural family physician program). Regarding the limited Statistical population, sample size was equal to the statistical population and the census method was used. The inclusion criteria for both groups were willingness to participate in the study and having at least six months of work experience.

The data collection tool was a QoWL questionnaire. The questionnaire consists of six dimensions: Job and Career Satisfaction (JCS), work conditions (WSC), general well-being (GWB), home-work interface (HWI), stress at work (SAW), and control at work (CAW). The questionnaire items are based on a 5-point Likert scale of 0 (completely disagree) to 4 (totally agree) for positive items and is measured at a sequential measurement level, which will eventually change with the level of measurement of the gap by combining all the items. The questionnaire was prepared according to a study by Van Larr et al. (19), translated by Shabani-Nejad; to assess the validity of its content, the viewpoints from the professors and experts of the Department of Health Management and Health Economics at Tehran University of Medical Sciences and the experts of the Ministry of Health and Medical Education were obtained. Also, the reliability of the questionnaire was evaluated using test-retest method with a correlation coefficient of 95% between questions and Cronbach's alpha for internal correlation was obtained to be 0.78 (20).

The research proposal was approved by the Ethics Committee of Kurdistan University of Medical Sciences in terms of technical and ethical codes (IR.MUK.REC.1395.92). Also, the participants signed the informed consent forms.

Data were analyzed using SPSS software 16 (SPSS Inc., Chicago, IL, USA).

Descriptive statistics including frequency, percentage, mean and standard deviation (SD) were used to describe the data and t-test was used to examine the relationship between the variables.

## Results

A total of 103 general physicians with 75% response rate participated in the study. 50 (45.5%) were rural family physicians and 53 were general physicians with private clinics. Also, 68 (64.1%) of the participants were male. The mean (SD) age for rural family physicians was 29.7 (7.4) years and 34.8 (7.4) years for general physicians with private clinics. Also, the mean (SD) work experience for rural family physicians and general physicians with private clinics were 3.6 (1.3) years and 6.6 (6.2) years, respectively.

In rural family physicians, among the different domains of QoWL, the JCS had the highest mean (SD) of 61 (13) and the SAW had the lowest mean (SD) of 47 (24). The total QoWL with a mean (SD) of 55 (8.8) was higher than the average score of 50 (0-100 score). In general physicians with private clinics, among different domains of QoWL, the GWB was found to have the highest mean (SD) of 54.9 (16) and the WSC had the lowest mean (SD) of 38.6 (20). Total QoWL with a mean (SD) of 47.7 (13) was lower than the average scores (Table 1 and Figure 1).

The results of t-test showed that there was a significant difference between the QoWL of rural family physicians and general physicians with private clinic ( $t=82.3$ ,  $P=0.001$ ), and the QoWL of family physicians was higher than that of other general physicians. Also, the JCS ( $t=0.5$ ,  $P=0.001$ ), the WSC ( $t=36.3$ ,  $P=0.001$ ), and CAW ( $t=3.03$ ,  $P=0.003$ ) in the rural family physicians and general physicians with private clinic were different (Table 1).

Table 1. Mean (SD) score of QoWL and its dimensions among rural family physicians and general physicians with private clinics in Kurdistan province

		Rural Family Physician Mean (SD)	General Physician with private clinics Mean (SD)	P**
Dimensions of quality of work life (QoWL)	JCS*	61 (13)	47.2 (14)	0.001
	WSC*	51.8 (19)	38.6 (20)	0.001
	CAW*	57 (20)	44.3 (22)	0.003
	GWB*	57.7 (8)	54.9 (16)	0.26
	SAW*	47 (24)	47.8 (19)	0.93
	HWI*	49 (24)	42 (22)	0.13
	QoWL*	55 (8)	46.7 (13)	0.001

\* Job and Career Satisfaction (JCS); Work Condition (WSC); Control at Work (CAW); General Well-being (GWB); Stress at Work (SAW); Home-Work Interface (HWI)

\*\* t-test.

In rural family physicians, the QoWL varies according to the gender ( $t=2.7$ ,  $P=0.001$ ) and native status ( $t=2.53$ ,  $P=0.004$ ) of respondents and the QoWL of men and native rural family physicians were higher than that of women and non-native, respectively. The QoWL of rural family physicians was not different in terms of marital status ( $P=0.96$ ).

In general physicians with private clinics, the QoWL of native physicians

(mean=49.9) was higher than that of non-native physicians (mean=34.6), and this difference was statistically significant ( $t=4.3$ ,  $P=0.001$ ). However, the QoWL of general physicians was not different in terms of marital status ( $P=0.23$ ) and gender ( $P=0.71$ ) (Table 2).

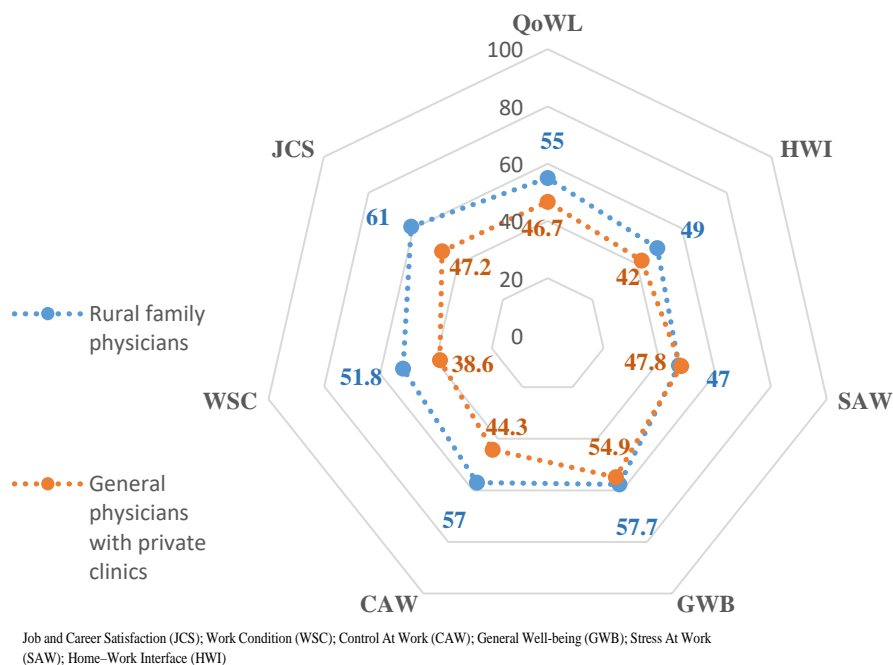


Figure 1. Mean score of QoWL and its dimensions among rural family physicians and general physicians with private clinics in Kurdistan province

Table 2. Comparison of the QoWL of family physician and physician with private clinics in Kurdistan province based on marital status, sex, and native status

Variables		General Physician with private clinics				Rural Family Physician			
		N	Mean (SD)	t	P	N	Mean (SD)	t	P
Sex	Male	42	46.4 (13)	0.37	0.71	24	57.9 (8)	2.7	0.001
	Female	11	48.1 (14)			26	52.4 (6)		
Marital Status	Married	38	45.5 (15)	1.2	0.23	24	55 (8)	0.048	0.96
	Single	15	49.9 (11)			26	55 (7)		
Native Status	Native	43	49.9 (12)	3.4	0.001	41	60.5 (5)	2.53	0.004
	Non-native	10	34.6 (14)			9	53.8 (7)		

## Discussion

In our study, the QoWL of rural family physicians with the average mean of 55 was more than the average scores (0-100 score) even though it is not satisfactory. In the study by Shabani-Nejad et al. (20) on the QoWL of urban family physicians in Iran, the QoWL of physicians with average mean of 46 was below average scores. In another study in Iran, the average quality of family physicians' life (28.9%) was described as unsatisfactory (21). In a study in the United States, using a five-item questionnaire, QoWL for the family physicians was measured, and the average of QoWL was higher than the average score (22). This difference in the QoWL of family physicians in our study, as compared to other studies, can be attributed to the implementation of the Health Transformation Plan in the health sector during the second phase of the Health Transformation Plan in 2014, which led to the following changes: increasing the budget of the rural family physician program, attracting and increasing the number of rural family physician, and renovating and rehabilitating rural health centers where rural physicians work (23, 24).

The QoWL of rural family physicians was higher than that of general physicians with private clinics. In a study in the United States, the mean of QoWL for family physicians was significantly lower than that of physicians who worked independently (22). This difference can be attributed to better condition of the rural family physicians after implementation of the

Health Transformation Plan in 2014 including an increasing per capita from 213460 in 2013 to 965000 Iranian Rials in 2014 and the increase in the average salary of rural family physicians from 25 million in 2013 to 75 million Iranian Rials in 2014 (23).

The QoWL of the rural family physician was higher in men than in women, which is not consistent with the findings reported by Arab et al. (25), Shabani-Nejad et al. (20), and Eker et al. (26). A study in the United States also showed that there is no significant difference in the quality of life between male and female physicians except for "satisfaction with parent organization" (27). The reason for the difference in the results of the present study with other studies is perhaps the difference in physicians' rural and urban work environments. The higher QoWL in men, as compared to women, may be due to earlier adaptation of men with the rural environment, although those studies measured the QoWL of urban family physician.

In both the rural family physicians and general physicians with private clinics, native people had a higher QoWL compared with non-native ones. In another study in Iran, there was a significant difference between the native status and the QoWL of physicians (21). Native people are more compatible with the environment and facilities as well as people of the community, so the higher QoWL seems quite natural.

According to the findings, in the group of rural family physicians,

the JCS had the highest mean, and the HWI and SAW had the lowest average. Also, in a study in Iran, the GWB had the highest mean and CAW the lowest mean (21). In another study in Iran, the CAW had the highest mean (20). The probability of a difference in the means and areas is due to differences in the provinces and the conditions governing the environment as well as differences in the urban environment and rural family physicians. The QoWL of rural family physicians is better than that of other general physicians, even though it is not satisfactory in the two studied groups. Therefore, improving the QoWL of rural family physicians, especially female and non-natives, is recommended. The QoWL of family physicians can affect service quality and responsiveness as a goal of the health system, because promoting the rural family physicians' satisfaction can decrease the likelihood of turnover and increase service quality and responsiveness as two goals of the health system.

#### *Conflict of interest*

Authors declare no conflict of interests.

#### *Acknowledgment*

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