

The Relationship Between Professional Quality of Life (ProQol) and General Health in Rajae Trauma Hospital Staff of Shiraz, Iran

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Abstract

Background: Professional quality of life is the quality that everyone feels in relation to their work. Both the positive and negative aspects of doing a job influence the professional quality of life. The majority of people spend more time at work than they do anywhere else, doing anything else.

Objectives: The aim of this research was to study the relationship between professional quality of life and general health in the staffs of Rajae trauma hospital.

Methods: This was a cross-sectional study, which was conducted at Rajae trauma hospital of Shiraz during a 12-month period (2014). Participants were selected by systematic random sampling.

Results: We included 331 staff with mean age of 29.32 (5.1) years, amongst who there were 119 (36%) males and 212 (64%) females. Gender, marital status and education did not affect professional quality of life and general health, but emergency department personnel compared to other sectors had higher prevalence of depression and traumatic stress. In addition, the staffs were in good situation in terms of burnout, secondary traumatic stress, physical dysfunction, social dysfunction and severe depression and in moderate level in terms of compassion satisfaction and anxiety and sleep disorders.

Conclusions: The study findings confirmed a significant relationship between professional quality of life (ProQol) and general health questionnaire (GHQ)-28 dimensions. Reducing burnout and secondary traumatic stress as well as increasing compassion satisfaction had a direct impact on decrease in mental health problems in the staff.

Keywords: Relationship, Professional, Quality of Life, ProQol, General Health, Iran

1. Background

According to previous research, employees of health professions are more vulnerable than ordinary people to mental illness and depression (1). The researchers believe that physical health is influenced by psychological growth, and mental health promotion is based on the prevention and treatment of emotional stresses. Functioning in other domains of ProQOL is threatened as the level of mental health decreases (2).

Professional quality of life (ProQol) is part of retaining and recruiting. ProQol is a quality that people feel in relation to their work. Both the negative and positive aspects of doing the job will influence ProQol. Compassion of fatigue and compassion satisfaction are two aspects of ProQol. The positive part is compassion satisfaction and the negative one is compassion fatigue. Compassion satisfaction is things such as anger, frustration and depression

type of burnout. The second part, which is secondary traumatic stress, is the negative aspect that includes feeling driven by fear and work related to trauma (3). Supporting the positive and negative effects of care such as burnout, depression or fatigue are essential aspects of recruiting and retaining workers in their professional job. Three major phenomena that have been documented in other professions are compassion fatigue (CF), compassion satisfaction (CS), and burnout (BO) (4). Protective and risk factors are connected to institutional support of the worker to receive the access needs of their job. Workers who have a good ProQOL provide better care and like to stay in their positions longer than those who have poor ProQOL (5, 6). Both positive and negative aspects of the job influence the professional quality of life.

There is a direct relationship between keeping a professional job and work-related stress, which have been expressed as concern of psychological, social and cost of

workers turnover (7-10).

Quality of working life has attracted attentions to the healthcare setting in the recent decades (11). One of the largest service providers, in different societies, are health care agencies (12, 13). Health care agencies are improving their professional quality of life and have become a challenging subject in health care organizations since the 1970s (14, 15).

The aim of the present study was to determine the relationship between ProQOL (compassion satisfaction, burnout and secondary traumatic stress) and the general health (physical dysfunction, anxiety and sleep disorder, social dysfunction, and severe depression) in the staffs of the Rajaei trauma hospital.

2. Methods

2.1. Participants and procedures

This cross-sectional study was conducted at Rajaei trauma hospital, the first trauma center in south of Iran, during a one-year period. Data was gathered from 331 staff of Rajaei hospital. Participants were selected by systematic random sampling. In this sampling, we gave numbers to 993 staff of Rajaei trauma hospital, then picked a number randomly and chose one out of every three people. In this way, 331 participants were selected.

2.2. Measures

Data were collected using Professional quality of life assessment questionnaire and general health questionnaire (GHQ). To evaluate the quality of work life, we used the translated version of ProQol and for the evaluation of general health, the general health questionnaire-28 (GHQ-28), which was developed by Goldberg in 1978, was used (16). This instrument was previously validated and reliable in Iran (17). For ProQol reliability, the developed questionnaire was first translated and reviewed by a panel of three experts. Then a total of ten experts in the general health field gave a score to each question based on Lawshe's checklist. Content Validity Ratio (CVR) was determined for each question and it was over 0.57% for each question. Therefore, the questionnaire had a good reliability.

Regarding validity, ten staff completed the ProQol questionnaire for each question (a total of 300). Data were analyzed using SPSS 18 software and Cronbach's alpha was above 0.7. The questionnaire was used in the study after validity.

2.3. ProQOL Questionnaire

Short form of ProQOL questionnaire has a 30-item self-report instrument designed to measure positive and negative affect of helping others, who experience suffering and trauma. Health-related ProQOL includes three dimensions of behavioral burnout, compassion satisfaction, and compassion fatigue (11) with each subscale having 10 questions. Questions of compassion satisfaction include question numbers 3, 6, 12, 16, 18, 20, 22, 24, 27, 30 and questions of burnout scale include 1, 4, 8, 10, 15, 17, 19, 21, 26, 29 and questions for compassion fatigue include 2, 5, 7, 9, 11, 13, 14, 23, 25, 28. Each question had six options (0 = never; 1 = rarely; 2 = a few times; 3 = somewhat often; 4 = often; 5 = very often) (18).

2.4. General Health Questionnaire

The 28-Item version of GHQ (GHQ-28) was developed by Goldberg in 1978 (16). This is a 28-item self-report questionnaire that contains four subscales measuring somatic symptoms, anxiety and sleep disorder, social dysfunction and depression. Each sub-scale contains seven items and each item is scored on a four-point Likert scale. The score for each subscale ranges from 0 to 21. The total score, ranges from 0 to 84 with lower score (which is obtained by summing up the scores of all subscales) indicating higher general health status. The validity and reliability of the questionnaire were determined in various studies and were also estimated and confirmed in Iran. By conducting a pilot study, Yaghoubi assessed the specificity and sensitivity of the questionnaire as 86.5% and 82%, respectively and the cut-off score as 23 based on a Likert-scale scoring. The reliability coefficient of the questionnaire was estimated as 88% using test-retest and Cronbach's alpha. We used the Persian version of GHQ-28, which was translated by Yaghoubi and Palahang to measure the mental health status in the participants (17).

2.5. Statistical Analysis

Data were collected from the ProQol and GHQ-28 questionnaires. All the statistical analysis was performed using the SPSS 18 software and descriptive and inferential statistics such as Pearson correlation, t test and analysis of variance (ANOVA). Data are presented as mean \pm standard deviation (SD) and proportions as appropriate.

3. Results

Overall, 331 staff with mean age of 29.32 (5.1) years were included in the study, among whom there were 119 (36%) males and 212 (64%) females. Table 1 shows the population information in terms of gender, educational level, marital

status and staff workplace. Other demographic characteristics reported in Table 1 include frequency and percentage of marital status, education and workplace of staff. Table 2 indicated the distribution of mean age, standard deviation and the frequency of age groups. Both professional quality of life and general health subscales mean and standard deviation have been separately presented in Table 3. Table 4 includes a correlation matrix of the study variables and their subscales. According to the information provided in Table 4, there was an important negative relationship between the components of social dysfunction, physical symptoms, sleep disorder, anxiety and depression sympathy with the consent of the general health of quality of life ($P = 0.01$). A negative relationship means that if the following components reduce overall health satisfaction, they will increase sympathy for hospital staff. Also, there was a significant positive relationship between the components of professional quality of life. This means that whenever the general health subcomponent increases, it will increase the quality of life subcomponent ($P = 0.05$).

Table 1. Frequency Distribution and Percentage of Gender, Marital Status and Education Level of the Population

Variable/Group	No. (%)
Gender	
Male	119 (36)
Female	212 (64)
Marital status	
Single	160 (48.3)
Married	171 (51.7)
Workplace	
ICU	81 (24.5)
Ward	92 (27.8)
Emergency Department	64 (19.3)
Operating Room	94 (28.4)
Education	
Associate degree	57 (17.2)
Bachelor	256 (77.3)
Masters Degree	12 (3.6)
PhD	6 (1.8)

4. Discussion

Our study showed a significant relationship between ProQOL and GHQ dimensions, so reducing burnout and secondary traumatic stress as well as increasing compas-

Table 2. Distribution, Mean, Standard Deviation and Frequency of Age of the Population

Age Group	No. (%)
32 <	267 (80.7)
32 - 43	51 (15.4)
> 44	13 (3.9)
Mean (SD)	29.31 (5.09)

Table 3. Distribution of Mean and Standard Deviation of General Health Questionnaire and Professional Quality of Life

Variable/Component	Mean (SD)
GHQ	
Physical dysfunction	9.17 (4.37)
Anxiety and sleep disorders	10.46 (4.61)
Social dysfunction	8.73 (3.66)
Severe Depression	6.17 (4.9)
ProQOL	
Compassion Satisfaction	23.34 (8.16)
Burnout	16.59 (6.35)
Secondary traumatic stress	19.16 (5.44)

sion satisfaction has a direct impact on decreasing mental health problems in staff. Compassion satisfaction has a negative relationship with physical dysfunction, anxiety and sleep disorders, social dysfunction and severe depression. Burnout and secondary traumatic stress have a positive relation with these health-related factors. Gender, marital status and education do not affect the professional quality of life and general health, yet emergency department personnel compared to other sectors experience more depression and traumatic stress.

The positive associations between burnout and four of the subscales that were measured by the GHQ (somatic symptoms, anxiety, distress, and social dysfunction) are consistent with the findings of Musa et al. (19). Furthermore, Kasraie et al. (20) showed that there is an inverse correlation between job stress and quality of work life, where quality of life decreases by increasing staff stress. Also, this study showed a significant relationship between job stress, job satisfaction, quality of work life and citizenship. The study of Wu et al. between job burnout and occupational stress was proved and they concluded that reduction in occupational stress could lead to burnout prevention (21). This conclusion is consistent with the findings of Conrad and Kellar-Guenther, who reported that burnout could result from extreme job stress, thus controlling psychologi-

Table 4. Correlation Between Sub-domains of General Health Questionnaire and Professional Quality of Life

Variable	Sub-Component	1	2	3	4	5	6	7
GHQ	1.Physical dysfunction	1						
	2.Anxiety and sleep disorders	0.546 ^a	1					
	3.Social dysfunction	0.444 ^a	0.525 ^a	1				
	4.Severe Depression	0.54 ^a	0.653 ^a	0.583 ^a	1			
ProQOL	5.Compassion satisfaction	-0.323 ^a	-0.287 ^a	-0.197 ^a	-0.219 ^a	1		
	6.Burnout	0.651 ^a	0.432 ^a	0.346 ^a	0.362 ^a	-0.730 ^a	1	
	7.Secondary traumatic stress	0.173 ^a	0.128 ^b	0.145 ^a	0.148 ^a	0.141 ^b	0.236 ^a	1

^aP = 0.01.^bP = 0.05.

cal stress can help mitigate burnout. Moreover, the negative association between sympathy satisfaction (job satisfaction) and burnout were supported by this research (22).

Another study (23) showed that burnout is common in nurses. The main causes of burnout are staff crisis in hospitals and work overload. This study suggests that nurses need special attention in Iran. Many nursing staff remain at their positions for only a few months around the world. Study of Hsu showed that the development of a questionnaire is reliable and valid for examining the quality of working life of nurses (24).

Mohammadi et al. (12) studied the relationship of nurse's psychological problems and quality of work life (QWL) in the intensive care unit of Tehran hospitals, in 2010. The study showed that it is necessary to consider the anxiety of nurses, especially by directors due to the impact of anxiety on reduction of nurses' QWL. Soric et al. (25) stated that there is no evidence of a significant association between quality of life and work ability yet showed that education has a positive association with work ability of nurses and their quality of life. In another study in China, burnout and two dimensions of occupational adjustment were measure in nurses (occupational stress and coping resources). This study showed that it is better to do job re-designing and offering occupational health education to reduce occupational stress and to prevent burnout (21).

The subscales of professional quality-of-life were not related to the position type of the employee, age, or gender. Employees, who were leaving their position showed higher burnout and lower compassion satisfaction scores (26). Bercei et al. showed that chronic stress has a negative effect on the health-related quality of life (27).

Study of Kasraie et al. (20) showed relationships between hospital job stress, job satisfaction, quality of work life, and citizenship behavior.

Musa et al. (19) examined the relationships between

quality of work life subscales including job satisfaction or compassion satisfaction, compassion fatigue or secondary traumatic stress, burnout, and distress. In this study, three instruments were used to measure the target relations and they concluded that there is a need to create a positive work climate through equipping aid workers with adequate training, psychological support services and cultural orientation to decrease the psychological suffering of aid workers. In a study by Khaghanizadeh et al. nurses were selected via probable multistage sampling. They explained that the nurses with high QWL tended to have lower job stress (15).

Therefore, authorities in the health care system should develop strategies and intervention programs toward improving the three attributes, which will lead to improving the quality of staff's working life, increasing the quality of patient care, and saving health-care organizations.

This study had some limitations including lack of good cooperation of some staff to fill the questionnaires, the study population being selected from only one hospital and low number of target population.

In addition, the analysis suggested that it may be useful to investigate the effective factors on ProQOL and GHQ dimensions, which will help managers apply better policies in order to increase their staff performance.

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