Original Article

Psychosocial Risk Factors and Quality of Life Among Nurses Working in Public Sector Tertiary Care Hospitals of Peshawar, A Correlational Study

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ABSTRACT

Psychosocial risk factors at nurse's work environment are the major threat to the professional well-being and health of nurses. Nurses in developing countries like Pakistan are not appreciated and valued as greatly as compared to Western states which are evinced by their very low pays and poor work conditions. These can lead to different consequences like affecting work abilities and poor quality of life. **Objectives:** To evaluate psychosocial risk factors and quality of life among nurses working in public sector tertiary care hospitals of Peshawar. **Methods:** A cross sectional (correlational) study was conducted to assess relationship between "Psychosocial risk factors" and "quality of life" (QOL) among registered nurses at public sector tertiary care hospitals of Peshawar. Copenhagen Psychosocial Questionnaire and WHO quality of life scales were used for data collection. Data was analyzed using SPSS version 23. **Results:** The mean age of nurses was mean 28.95 ±5.25 SD. In term of psychosocial risk factors, participants reported high mean score in all factors. Regarding quality of life, majority 63% reported having "Poor" while only 37% nurses have "Good" quality of life. There was negative correlation between quantitative demands, work pace, emotional demands, burnout and stress and offensive behaviours with participant's quality of life (p-value 0.001). While positive correlation was observed between recognition, social support and quality of life among studied nurses. **Conclusions:** This study found multiple factors of psychosocial environment at public sector hospitals of Peshawar. The poor psychosocial environment has potential influence on overall health and quality of life of nurses.

INTRODUCTION

Nursing is renowned and gratifying profession, however it is also known as a very hectic and stressful job [1, 2]. Due to the distinctive nature of the nursing profession where work rosters, work burden, coworkers behavior, environmental issues, patient cooperation, administrative features, nature of illnesses and family support directly affect the work routine [3]. Various psychosocial risks factors and stress induced by those factors have been extensively accepted as the global concern [4]. Quality of life is an important part of physical and psychological health, which can be affected by psychosocial risk factors [5]. Hence, the concept of quality of life is incomplete without considering work life, which is an important component in health care settings, particularly in nurses' work life [6]. Different psychosocial hazards in work environment are the major threat to the Quality of life (QOL) that has profound impact on the level of responsibility during the provision of primary healthcare facilities [5]. Similarly, burnout and stress are the ultimate outcomes of psychosocial risk factors. A descriptive cross sectional study from Peshawar reported that majority of nurses (81%) had job stress [7]. Nurses in developing countries such as Pakistan are not appreciated

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and valued as greatly as compared to Western states which is evinced by their very low wages and poor work conditions [8]. This may result in attrition of job which may worsen the acute shortage being faced by Pakistan health care system [3, 9].

METHODS

A cross sectional study was conducted from July 1st to August 31, 2021 at public sector tertiary care hospitals of Peshawar. Sample size was calculated using Raosoft sample calculator, at 95% CI, 5% margin of error and 50% prevalence. The calculated sample size was 341. The rate of refusal was taken as 10% so the total sample was 375. A proportionate sample of 375 nurses was selected using simple random sampling technique from Hayatabad medical complex, Khyber teaching hospital and Lady reading hospital Peshawar. All male and female nurses having at least 1 year experience and willing to participate in study were included in the study. However nurses with any co morbidity like diabetes and any psychiatric illness were excluded from the study. Ethical approval was taken from ethical review board (ERB) of Khyber medical university. In addition, written informed consent was taken from each study participants. Psychosocial risk factors were measured with Copenhagen psychosocial questionnaire. The reliability of scales of COPSOQ III is ranging from Cronbach alpha of 0.7 to 0.9 [10]. The WHOQOL BREF covers four types of domains including physical, psychological, social and environmental domains and consists of 26 items. Alpha coefficient ranging from 0.71 to 0.86 has been found for the four subscales.

RESULTS

Socio demographic Variables	Categories	N (%)
Age	Equal or less than 24	57 (16.72)
	25-34 years	238 (69.79)
	35 to 60 years	46 (13.49)
Gender	Male	145 (42.52)
	Female	196 (57.48)
Marital Status	Married	147 (43.11)
	Unmarried	194 (56.89)
Educational Qualification	Diploma	147 (43.11)
	BSN	178 (52.20)
	Master's degree	16 (4.69)
Current Position	Charge nurse	309 (90.62)
	Head nurse	21 (6.16)
	Nursing Manager	11 (3.23)
Professional experience	1-5 years	234 (68.62)
	6-10 years	76 (22.29)
	11 years and above	31 (9.09)
	Regular	225 (65.98)

Table 1: Socio demographic information among participants

Figure 1 shows overall quality of life of nurses, majority 63%

reported having "Poor" while only 37% nurses have "Good" quality of life.
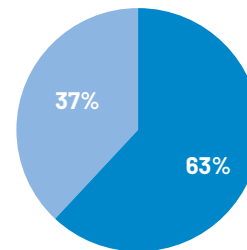

Nurses Quality of Life

37% 63%

Figure 1: Quality of Life

Table 2 presents the transformed score with mean and standard deviation of all four domains of WHOQOL-BREF among participants

WHOQOL-BREF Domains	Mean ± SD
Physical health	49.18 ± 12.01
Psychological health	49.56 ± 12.91
Social relationships	46.76 ± 21.97
Environment	46.39 ± 16.12

Table 2: WHOQOL-BREF Domains Transformed Score (0-100)

Table 3 shows the relationship between psychosocial risk factors and domains of quality of life among nurses. Psychosocial risk factors were assessed using COPSOQ questionnaire. Seven features of nurses' work environment were evaluated: the demands at work place, work organization and job contents, interpersonal relationship and leadership, work individual interface, social capital, conflicts and offensive behaviours and general health and wellbeing. Higher mean in the scale of job demands were the indication of poor working conditions. Whereas the lowest mean in the resource scale i.e. interpersonal relationship and social capital were the evidence of unfavourable and worst working environment. In demands at work domain, participants reported high mean score in "work pace" (67.38 ± 26.58 SD), followed by quantitative demands (60.39 ± 24.44 SD), emotional demands (60.31 ± 21.41SD) and demands for hiding emotions (56.33 ± 20.44SD). Regarding work organization and job contents, the highest mean score was observed in "meaning of work" (68.73 ± 27.99) influence at work (56.80 ± 20.30) possibilities for development (54.11 ± 31.47) while the lowest score was reported in control over working time (38.53 ± 26.15). Interpersonal relationship and leadership subscale mean score was lowest in "Recognition" (41.50 ± 24.05), quality of leadership (46.73 ± 23.82) predictability (47.29 ± 25.74) and social support from colleagues (49.78 ± 26.76). Highest score was reported in the dimension of role clarity (61.36 ± 22.55). The scale related to job satisfaction was lowest mean value (3.0 ± 0.87), that proved that nurses were dissatisfied from their job. Quality of work score was in average limit (51.76 ± 27.46) while "work life conflict" mean

score was highest (64.04 ± 22.70) among all dimensions that indicate that nurses personal life is in conflict with their job. Mean score of "horizontal trust" (58.43 ± 27.66) vertical trust (56.13 ± 25.74) organizational justice (41.20 ± 27.31). Vertical Trust deals with whether the employees can trust the management and vice versa while Horizontal Trust deals with whether the employees can trust each other in daily work or not. The highest mean score in this domain was bullying (37.74 ± 33.08) followed by "gossips and slander" (35.12 ± 33.33) unpleasant teasing (30.28 ± 31.06) physical violence (29.25 ± 31.80) cyber bullying (22.87 ± 31.75) conflicts and quarrels (21.55 ± 29.35). However, sexual harassment was lowest score (19.28 ± 28.83) among all dimensions. The highest mean score was observed in burnout (57.90 ± 26.78) and sleeping troubles (57.09 ± 24.27), which shown that the incidence of burnout and sleeping troubles was high among nurses.

Psychosocial risk factors	Physical Health	Psychological health	Social relationship	Enviro-nment
Correlation coffiencent ®				
Quantitative demands	-0.104	-.247**	-.061	-.386**
Work pace	-.223**	-.338**	-.229**	-.348**
Emotional demands	-.123*	-.172**	-.027	-.298**
Demands for hiding emotions	-.111*	-.155**	-.093	-.347**
Influence at work	-.207**	-.117*	-.255**	-.240**
Possibility for the development	0.017	.139*	.247**	.147**
Control over working time	0.077	-.060	.198**	.009
Meaning of work	-0.023	.018	-.005	-.136*
Predictability	0.045	.077	.253**	.136*
Recognition	0.061	.120*	.139*	.234**
Role clarity	0.006	.120*	.099	.064
Role conflict	-0.004	-.075	.088	-.120*
Illegitimate tasks	-.131*	-.192**	-.005	-.159**
Quality of leadership	-.153**	.003	.079	-.015
Social support from supervisor	.180**	.085	.096	.217**
Social support from colleagues	.208**	.135*	.265**	.291**

Table 3: Psychosocial risk factors and Quality of Life
**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

DISCUSSION

Nowadays, Nurses are facing multiple work related psychosocial risk factors in hospitals which have profound impact on their wellbeing and quality of life. The present study was conducted to investigate all such psychosocial risk factors and examined the nurses' quality of life. Regarding demands at work, nurses reported high score for work pace and quantitative demands. This situation may be due to the reason that Pakistan is facing acute shortage of nurses and the nursing workforce has mostly been ignored [9, 10]. Work burden is the main cause of anxiety in the hospital settings [11]. These findings are consistent with other studies that explained that demands at workplace were high on nurses [12, 13]. Regarding work organization and job contents, nurses reported highest mean value for

meaning of work. It is a work related positive attitude that is manifested by strength, commitment, and interest [14]. On the other hand, the lowest score was reported in control over working time which indicated that nurses are facing unpredicted work schedules and lengthy working hours. Interpersonal relationship and leadership is the positive psychosocial aspect of work environment. Competent and efficient leadership is fundamental for the improvement and success of health care organizations [15]. Unfortunately, based on the results of this study, the lowest score was found in subscales including recognition, quality of leadership, and social support from colleagues. These findings show that majority of nurses are facing lack of recognition, haven't good leadership. These results are not consistent with previous studies conducted in china and Serbia [5]. Their scores were relatively better than the present study. In Pakistan, Displeasure of nurses regarding their job is badly disturbing the provision of quality healthcare services to patients [16]. In the present study, the job satisfaction scale was lowest mean value that proved that nurses were dissatisfied from their job. This result is similar with the study conducted in Karachi [17, 18]. Quality of work score was in average limit and dissimilar with previous study that reported good quality of work among nurses [19, 20] while "work life conflict" mean score was highest among all dimensions that indicate that nurses' personal life is potentially affect due to the nature of their job. Active utilization of time by worker is very necessary to prevent this conflict [21]. The findings of previous study regarding work life conflict is also consistent with our result [11]. In the present study, the organizational justice score was lower than the average. This suggests that nurses are exposed to unfair environment and facing discrimination at their workplace. Past research studies have also revealed that injustice and reduced organizational support is the contributed factor for stress and anxiety among nurses [2]. "American Nursing Centre" considered bullying at workplace as a very damaging factor and associated with symptoms of hopelessness, depression and anxiety in nurses [22]. Several Research studies had explored that nurses are more vulnerable to sexual harassment due to their close contact with opposite sex patients, medical assistants, caregivers, paramedical staff, doctors and administrative staff [23]. In this study, Nurses reported average mean score of bullying, gossips, slander, physical violence and sexual violence at their work environment. These findings are also congruent with other studies [6, 23]. Improper sleep is the major cause of health issues such as depression, hypertension, and many heart diseases. Nurses' sleep troubles can have major effects on their attention, decision-making and communication [24]. The

highest mean score was observed in burnout and sleeping troubles .Similar results were reported from other studies that also found high level of burnout among participants [25]. Regarding overall quality of life, majority 62.76% reported having "Poor" while only 37.24% nurses have "Good" quality of life. These findings were not supported by previous study that reported majority of participants have good quality of life [17, 18]. The present study found negative correlation between quantitative demands, work pace and emotional demands with participant's quality of life. This suggests that high work demands have negative impacts on nurses' quality of life and can cause stress among nurses. These findings were congruent with study conducted previously [20]. Meanwhile, offensive behaviors i.e. bullying, physical and sexual violence have negative impact on quality of life and nurses' health. This may result in poor job performance by nurses like lack of enthusiasm and consideration in performing duty. 21 In present study burnout and stress were also negatively correlated with nurses' quality of life health. Previous studies strongly support these findings. Burnout brings to have harmful consequences for health-care workers, such as broken relationships, challenging substance and alcohol use, and suicidal ideations [12].

CONCLUSIONS

The present study discovered multiple positive and negative aspects of psychosocial environment at public sector hospitals of Peshawar. The poor psychosocial environments have potential impact on physical and mental health of nurses. Demands at work, Burnout and lack of social support were the major cause of job dissatisfaction and poor quality of life among nurses. It is very mandatory for nursing management to plan and implement policies to improve working environment and lessen stress at work that can eventually improve the health and well-being of nurses.

Conflicts of Interest

The authors declare no conflict of interest.

Source of Funding

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