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Professional Quality Work Life among Nurses in Intensive Care Units.

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ABSTRACT:
Background: professional quality work-life, as one of the most important issues in the nursing profession, can negatively affect the healthcare system.
Objectives: To examine the professional quality work life.
Methodology: A descriptive cross-sectional study a non-probability sampling method used and total sample collected was (126) of ICU nurses.
Results: Burnout, Secondary Traumatic Stress, and, Compassion Satisfaction among intensive care units nurses were moderate.
Conclusion: Nurses in ICUs suffered from moderate Burnout and Secondary Traumatic Stress, and the result can be negative effects on the quality of care. Although nurses' Compassion Satisfaction, it is still an important issue that nurses may face in intensive care units.
Recommendations: Increased cooperation, nurse autonomy, and multidisciplinary respect are likely lead to a greater appreciation of nursing input and improve quality of work. It is recommended to develop strategies to reduce CF and improve nurse satisfaction, consequently, and patient care.
Keywords: professional quality work, ICU nurses.

INTRODUCTION

An intensive care unit (ICU) is a stressful environment due to high patient mortality and morbidity, daily confrontations with ethical dilemmas, and a tension-charged atmosphere (1). The ICU is an especially complex and difficult work environment for critical care nurses (1). Critical care nurses are repeatedly exposed to work-related stresses, including involvement in end-of-life discussions, prolongation of life with artificial support devices, and the potential for delivering inappropriate care (1).

Nurses' professional quality of life (ProQOL) is defined as the level of satisfaction they have with their job (2). In the event that nurses are needed, they may deliver a service if they are happy in their job. A workplace that is both positive and safe. As a result, best It is possible to provide service that is tailored to the requirements of clients (3).

ProQOL relates to the satisfaction that nurses experience as a result of their work (4). Compassion satisfaction and compassion fatigue are two

dimensions of ProQOL. According to the findings, there are subscales for compassion fatigue, burnout, and compassion fulfillment in the PROQOL, and these three concepts should be considered together [5]. Job satisfaction, intention to leave, turnover rate, personality, and work stress are all factors [6]. Sociology, psychology, education, administration, health care, and nursing are just a few fields that have investigated the ProQOL [6]. Indeed, ICU nurse recruitment and retention are linked to their ProQOL [6].

Aims of the Study

The delivery of quality care depends upon the physical, mental and spiritual health of nurses. ProQOL is a quality that a person working as a helper experiences in the job. It is in the workplace has positive and negative aspects. The positive aspect of the ProQOL is referred to. "Compassionate satisfaction", and the negative aspect is called ‘‘Compassion fatigue.’’. ProQOL is a multi-dimensional concept influenced by the employees’ understanding of their work, organization, involvement in the workplace and satisfaction with their resources; activities; and the outcome of their duties [7]. A high-quality work-life program is required in organizations to achieve high performance and profitability growth, as well as to continue to attract and retain employees [8].

METHODOLOGY

Design: To achieve the study objectives, a descriptive cross-sectional design was used in this study.

Sample, sampling, and sample size: The study sample was ICU nurses in intensive care units in Iraq. A non-probability (purposive) sampling method was used to select the sample. The total number of nurses who work in ICUs was 180 nurses. The minimum sample size was with a confidence level of 90% and margin of error 5% [6]. The total collected data was 126 nurses with a response rate of 86%, so the analyzed sample was 109.

The inclusion criteria were nursing staff that work in ICUs with at least one year of experience. A nursing high school degree is the lowest degree in nursing that was included in the study. Both morning and night shifts were included, too. Exclusion criteria were nurses who experience less than one year, nurses who work in administrations, and nurses who are working in places rather than ICUs.

Instrumentation: The questionnaire contained ProQOL scale, and demographics which include age, gender, marital status, educational level, years of experience, and type of shift.

Professional Quality of Life (ProQOL): Regarding ProQOL scale, it was created by Stamm (2) which measures how one feels in relation to their work as a helper incorporating both positive and negative aspects (2). This tool assesses the feelings (positive and negative effects) of dealing with people experiencing tremendously traumatic events (2). The tool is composed of three subscales with 10 items each.

The subscales are Compassion Satisfaction (CS) and Compassion fatigue (CF) which CF composed consists Burnout (BO) and Secondary Traumatic Stress (STS). Items are rated on a 5-point scale; (1 = never, 2 = rally, 3 = sometime, 4= often, and 5 = very often). A summation of all items was used. Each category summation scores ranges from 10 to 50. For CS a score ≤22 means low CS level; 23–41 denotes average level, and ≥42 specifies high level. For BO and STS, a score of ≤22 shows low level; 23–41 indicates average level; and ≥42 reveals high level of BO. Arabic version of the tool is remarkably reliable by (Lu et al., 2020) with results of (CS subscale, a=0.81; BS subscale, a=0.73; STS subscales, a=0.76).

Setting and Data Collection: The study was conducted in five ICUs in five different hospitals in four Iraqi governorates. These hospitals were Imam

Hussain Medical City hospital in Karbala City, Al Hillah surgical hospital in Babylon city, Al Furat and Al Sader hospitals in Najaf City, and Al Diwaniah hospital in Al Diwaniah City. The data collection began in first of January 2022 till end of February 2022. The data was collected by giving a printed questionnaire to the study sample. Each participant needed ten to 15 minutes to complete the questionnaire.

Data analysis: Mean and standard deviation for ProQOL were calculated. Pearson correlation coefficient, Spearman's Rank Correlation Coefficient, Analysis of variance (ANOVA) were used to determine the correlation between variables by using the statistical package for social sciences (SPSS) version 2021. The significance level was at $p < 0.05$.

RESULTS

In Table 1, the results show that the mean of nurses' age in the study was 25.3 years with a SD of 0.832. More than half of the participants were female (56.9%). The mean of participants' years of experience was 8.2 with SD of 0.60662. Most of the participants had bachelor's degree (45.9%). Furthermore, 62.4% of nurses worked in the morning duty. Moreover, more than half of nurses in this study were single 56.0%.

Table 2 shows the level of the ProQOL. The level of CS was moderate (Mean ± SD 38.15± 7.392) followed by STS which was also moderate (Mean ± SD 28.1± 5.21) and (BO) was moderate (Mean ± SD 27.14±6.67).

In Table 3, the results indicate that there is a significant correlation between age and BO, and STS at P-value levels (.043, .045, .034, and .048) respectively. Also shows there is a significant correlation between (BO) and (STS with nurses' years of experience of (p-value .034, .034, .021, and .044) respectively. The results have shown there is a no significant correlation between nurses' years of experience and (CS) p= .126.

In Table 4, the results indicate that there is a significant difference in participants' gender regarding STS and BO at p-value (.026 and .034) respectively. It is shows there is a significant difference in nurses' educational level with regard to BO, and STS (p= .042, .043, and .037) respectively. On the other hand, there is no significant difference in nurses' educational level and their (CS) p = .169. Table 3 shows there are no significant differences in CS, BO, and STS with regard to nurses' working shifts (p = .749, .166, .992, .062, and .550) respectively. There are no significant differences between Secondary Traumatic Stress BO, and CS with nurses' marital status (p=.764, .099, .457, and .230) respectively.

DISCUSSION

The results regarding ProQOL in table 2 showed a moderate level of CS with a mean ± SD was 38.15± 7.392. This result consists with [3] and [9] which they found a moderate level of CS. This can be due to feeling job satisfaction and empathy among nurses working in critical care units, but stress at work and the difficulties they face can affect their job satisfaction [10] or can interfere with feelings of joy, empowerment, energy, and exhilaration [6], as caregivers continue to see the positive impact with their patient's improved health conditions [5].

The result showed a moderate level of BO with a mean ± SD (27.14±6.67). Kim [11] and Alshehry [12] also found a moderate level of BO among nurses. Indeed, BO is characterized by tension, anger, aggression, and depression [11] which is associated with increased workloads and unsupportive work environments that can be found in ICU [13].

Regarding STS the result also shows a moderate level with Mean ± SD (28.1± 5.21). This finding is similar to Kim [11] and Alshehry [12] who found moderate level of STS. STS can affect ICU nurses due to the negative consequences of stress and work-related trauma, which include sleep difficulties, invasive surgical images, and fear of remembrance of the person's experiences [14].

Overall, the total result of ProQOL in this study was moderate level among ICU nurses which is consistent with many studies [3, 12, 9, 11, and 4]. In fact, the workload in ICUs [14], dealing with a critical patient [14], or difficulty to sleep [12], can make nurses to not fell high level of ProQOL in ICUs. However, factors such as feeling happy when helping patients [15] and feel satisfied with the job as an ICU nurse [15] may prevent the low level of ProQOL.

In this study in table 3 shows there was a significant correlation between age and BO, and STS. Indeed, with age; the responsibility becomes more stressor [16] and may increase the effect on work and stress [17]. The findings of the study show there are significant differences between STS and BO with nurses' gender and this is supported by [12]. The reason can be female nurses are more affected by hard works because of the nature of the body [18].

It is also there is a significant correlation between BO, and STS with nurses' years of experience and there is no significant correlation between CS with nurses' years of experience. These findings consist with [10] and [19] that were found no significant correlations between CS with nurses' years of experience. However, [12] and [11] found no significant correlations between BO, STS, CS and years of experience Although this is controversial, experience in the nursing profession improves the thinking, skills, and quality of care [20].

The study shows there were a significant difference between BO, and STS with nurses' level of education. However, there was no significant difference between CS with nurses' level of education. This find consists with [10] also found BO, and STS with nurses' level of education. Alshehry [12] found a significant difference between BO, and STS with nurses' level of education in Saudi. In general, level of education can effect on the development of thinking and how nurses deal with events, be satisfied with work, and do nursing care process [21].

The study found there are no significant differences between CS, BO, and STS with nurses shift of work. this result is similar to the result of [22]. Working at night or in the morning does not change nurse's personality and nursing care if shifts are regular with appropriate number of nurses [23].

The result shows there are no significant differences between STS, BO, and CS with nurses' marital status. This found consistent with the result of Bayat [24]. Another study by Alshehry [12] also found no significant differences between BO and STS with nurses' marital status. El-Shafei [25] was found no significant differences between CS, BO, and STS with nurses' marital status. Marital status is not interfering with nursing care and duties in ICUs [26].

CONCLUSION

In conclusion, nurses in ICUs suffered from moderate

BO and STS, and the result can be negative effects on quality of care. Although nurses perceived moderate CS, it is still an important issue that nurses may face in ICUs. Indeed, high levels of BO and STS were significantly related among ICU nurses. Despite the different tasks and duties of nurses in ICUs (as they deal with critically ill patients).

LIMITATIONS

The study design (cross-sectional study) can be limitation in this study as the sample was collected in a specific duration. Also, the sample was collected from four cities in south Iraq which may limit the generalization of the results.

RECOMMENDATIONS

Increased cooperation, nurse autonomy, and multidisciplinary respect are likely lead to a greater appreciation of nursing input and improve quality of work. It is recommended to develop strategies to reduce CF and improve nurse satisfaction, consequently, and patient care.

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TABLES:

Table 1: Demographic Characteristics among the Study Sample

Characteristics		f.	%
Age	M ± SD 25.3 ± 0.832		
Gender	Male	47	43.1
	Female	62	56.9
	Total	**109**	**100.0**
Years of experience	M ± SD 8.2 ± .60662		
Level of education	Nursing school graduate	18	16.5
	Diploma	37	33.9
	Bachelor's degree	50	45.9
	Master's or Ph. D	4	3.7
	Total	**109**	**100.0**
Shift	Morning	68	62.4
	Night	41	37.6
	Total	**109**	**100.0**
Marital status	Single	61	56.0
	Married	47	43.1
	Divorce	1	.9
	Widow	0	0
	Total		

f. = Number of frequency, %=Percentage.

Table 2: ProQOL among the Study Sample

Subscale	M	SD	Interpretation
Compassion Satisfaction	38.1560	7.39266	Moderate
Burnout	27.1468	6.67337	Moderate
Secondary Traumatic Stress	28.1009	5.21739	Moderate

M = Mean, SD = Stander deviation. (Mean of 22 and less =low, 23-41=moderate, 42 and more =high)

Table 3: Correlation between Nurses' demographics' and ProQOL

Nurses' demographics'	Professional quality of life					
	CS		BO		STS	
	P. value	r	P. value	r	P. value	r
Age	.290	.002	.034	.140	.048	.170
Years of experience	.126	.184	.021	.270	.044	.283

P=probability value, NS: Non-Significant at P > 0.05, S: Significant at P < 0.05

Table 4: Differences between Nurses' demographics' and ProQOL

Nurses' demographics'	Professional quality of life					
	CS		BO		STS	
	P. value	F	P. value	F	P. value	F
Gender	.081	3.10	.034	4.61	.026	5.09
Level of education	.169	1.92	.034	2.69	.037	2.46
Shift	.992	.000	.062	3.56	.550	.359
Marital status	.099	2.36	.457	.788	.230	1.49

P=probability value, NS: Non-Significant at P > 0.05, S: Significant at P < 0.05