

## Relationship Between Quality of Work Life and Nurses' Professional Commitment in Intensive Care Units at Selected University Hospitals

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**Abstract:** Intensive care units have complex work environment that can lead to a lot of challenges in providing high quality and safe patient care. High workload in intensive care units can lead to high rate of absenteeism and turnover which would affect nurse's job productivity and consequently affect both quality of their work life and commitment. The aim of this study was to investigate the relationship between quality of work life and nurses' professional commitment in intensive care units at selected university hospitals. Descriptive correlational cross-sectional design was used to collect data from a convenient sample of 73 nursing staff. Work-related quality of life scale and Professional commitment questionnaire was carried out. Results data were analyzed using descriptive statistics and correlation. Most of the study sample were female (N=47, 64.4%), their age mean score was 32.11 (SD= 9.10) years old, married (N=49, 67.1%) and had diploma degree (N=32, 43.8%) and associate degree (23, 31.5%). Correlation indicated that the overall quality of working life satisfaction was statistically significant and positively correlated with professional commitment ( $r=0.38$ ,  $p=.001$ ). All the quality of working life subscales was statistically significant and positively correlated with professional commitment ranged from  $r=0.32$  ( $p=.006$ ) for home work interface to  $r=0.68$  ( $p=.0001$ ) for job career satisfaction. It can be concluded that the quality of working life was positively correlated with professional commitment. It is recommended for nurse managers and hospital administrators to improve the quality of nurses working life who are working in intensive care units so that their professional commitment will improves.

**Key words:** Quality of Work Life • Nurses' Professional Commitment • Intensive Care Units

### INTRODUCTION

Intensive care units have complex work environment that can lead to a lot of challenges in providing high quality and safe patient care [1]. High workload in intensive care units can lead to high rate of absenteeism and turnover which would affect nurse's job productivity and consequently affect both quality of their work life and commitment [2]. Turnover rate have been increasing among nurses that affect the organization productivity [3].

To decrease turnover, attract and retain highly qualified nurses, nurse managers need to improve the quality of their work life and consequently improve their professional commitment [4]. The intention to leave the nursing profession has a reverse correlation with professional commitment. Nurses who want or plan to leave the work has less professional commitment [5].

Professional commitment is the desire of nurses to be a part of the organization [6]. High quality of work life is important to attract and retain the nurses [3].

Quality of work life is an important aspect of quality of life [7]. It was defined as the feeling and emotions of a person's regarding their work and experiences [8] and it is a part of quality of life that is affected by work [9]. Quality of work life consisted of six components which are general well-being, home-work interface, job career satisfaction and control at work, working conditions and stress at work [9]. Quality of working life is related to safe and healthy working environment [10] which considered nurses a valued assets resource to the organization [11].

The first component of quality of work life is the general well-being; work setting with a high workloads and low control is mostly unsafe for nurse's well-being [12]. The second component is the home-work interfaces.

Nurses face a challenge balancing between social life and work especially who have babies and other demands such as family, home and children needs as well as family members with health problems [13]. Additionally, nurses work in intensive care units which are a stressful work environment because of caring for sick and dying patients. These lead to different feelings of sadness, depression, pain and emotional stress which negatively affect their social lives [14]. Most of nurses also works rotating shifts which disrupt their family lives [13].

Job and career satisfaction are the third component that affects how nurses enjoy their work. When nurses are willing to spend more time in their job, positive patient outcomes improve and consequently job satisfaction increases which is considered a challenge facing any health care organization [13]. control at work is the fourth component of quality of work life. Work control refers to the ability of the individual to control over his performance during the working hours while there are many factors affecting work control such as, less autonomy, improper communication and dissatisfaction [4, 15]. While the fifth component is concerned with the working conditions; which estimate to what extent the nurses are satisfied in their stressful work environment [16]. Intensive care unit's stressful environment will affect the psychological condition of nurses, their performance and communication with patients and their families [13].

Finally, stress at work is the sixth component of quality of work life; Nurses are potential to face a lot of stressful situations; job stress refers to the undesired symptoms physically and emotionally that happen when the nurse's capabilities and resources not match with the work requirements [15]. Many factors such as staff shortages, unexpected workload and new technology may lead to job stress [13].

Professional commitment is another strategy that nurse managers and health care organization administrators can use to retain, maintain and attract the qualified nurses and keeping their commitment to the profession and to their organization [17]. It have important outcomes for organizations, employees and patients [18]. Studies indicated that commitment increase nurses' satisfaction [19] and consequently affect their quality of patient care [20]. In addition, there was an inverse relationship between professional commitment and the desire to leave the profession [21].

Professional commitment emerged from nurses' feelings and perceptions about their professional competencies and using their knowledge and research results in their work, so they feel that they should be

committed to the profession and improve the image of nursing profession in the society [22]. Nursing are committed to provide an optimum patient care and promote the nursing profession. However, professional commitment has an origin in the concept of organizational commitment [23].

In the literature review, few studies investigated the relationship between quality of work life and professional commitment. Some of these studies were in business field that where in Malaysia [24] and India [3]. These studies found a positive relationship between quality of work life and commitment. In nursing field, most of the studies assessed the quality of work life [13, 25] tool development [8, 9] literature review study [26] relationship with psychological problems [27] relationship with safety of care and performance obstacles [28] and work family enrichment relationship with turnover [18].

Commitment was investigated with patient safety and patient perceived care quality [18, 29, 30]. A study investigated the relationship between quality of work life and commitment in Istanbul among 153 nurses. However different instruments used to measure the quality of work life that encompasses other dimensions include work environment, relations with directors, working conditions, work perception and support services [31]. The aim of this study was to investigate relationship between quality of work life and nurses' professional commitment at selected university hospitals.

## **MATERIAL AND METHODS**

**Aim:** The aim of this study was to investigate the relationship between quality of work life and nurses' professional commitment in intensive care units at selected university hospitals.

**Research Question:** What is the relationship between quality of work life and nurses' professional commitment in intensive care units at selected university hospitals?

**Design:** Descriptive correlational cross-sectional design was used to collect data and investigate the relationship between quality of work life and nurse's professional commitment in intensive care units.

**Sample and Setting:** A convenient sampling technique was used to recruit 73 nursing staff 20 of them were head nurses and charge nurse and 53 were bedside staff nurses with different qualifications who were working in different critical care units included emergency intensive care unit,

medical intensive care unit, surgical department and neonatal intensive care unit at three university hospitals that are affiliated to a governmental University.

**Instruments:** Demographic Information collected from the nurses included: Gender, age, marital status, working unit, position, work hours, years of experience working in the unit, hospital and the profession, education level, work shift and salary.

Work-related quality of life scale used in the health care sector [9] involved six psychosocial subscales with 24 items. General well-being includes 6 items with a reliability of 0.89 and evaluates the participant's general feelings of happiness and life satisfaction. Home-work interface which includes 3 items with a reliability of 0.82 and addresses work-life balance and the degree to which the profession is seen to help home life. Job and career satisfaction include 6 items with a reliability of 0.86 and linking satisfaction with job and career opportunities such as sense of achievement and high self-esteem.

Control at work which includes 3 items with a reliability of 0.81 about control over decisions at work. Working conditions which include 3 items with a reliability of 0.79 assess the workplace environment. Stress at work includes 2 items with a reliability of 0.81 and reflect excessive pressure or experience of stress at work. Overall reliability of the 23 items was 0.91. Finally, one item measuring the satisfaction from overall quality of work. All items are scored on a five-point Likert scale from 1 = "Strongly disagree" to 5 = "Strongly agree", with some items with reverse scored. The instrument was validated among nurses [13]. Reliability in this study resulted in Cronbach's  $\alpha$  = .86.

Professional commitment questionnaire included four items [32] using a 7-point scale (1=strongly disagree; 2=moderately disagree; 3=slightly disagree; 4=uncertain; 5=slightly agree; 6=moderately agree and 7=strongly agree). In another study, reliability Cronbach's  $\alpha$  was 0.8 and convergent and discriminant validity was proved [33]. Reliability in this study resulted in Cronbach's  $\alpha$  = .87.

A bilingual expert panel translated the questionnaires from English into Arabic language. Scientific experts and clinical staff nurses reviewed the content and general linguistic clarity before using the questionnaires.

**Procedure and Data Collection:** Official permission obtained from general director of each hospital and nursing directors explaining the purpose and nature of the study and for the nursing staff who will participate in the

study, then, nurses were asked to complete the demographic sheet and to answer the self-administered questionnaires waiting with them for their question regarding the questionnaire. The time needed to complete the questionnaire was approximately from 30-40 minutes then sheets collected from the participants are sure that all of it completed before leaving their units and thanking them for their participation in the study.

**Ethical Consideration:** Institution Review Board Committee and Administrative nursing directors were asked for approval to carry out the study. Questionnaires were anonymous and were stored in private place to ensure confidentiality. In addition, participation in the study was voluntary and any participant can withdraw from participation in the study, all information will be under confidentiality and for research use only.

**Data Analysis:** Data were analyzed using descriptive statistics (Number, percentages, mean and standard deviation) for nominal variables. Correlation between continuous variables using SPSS version 22 [34].

## RESULTS

Most of the study sample were female (N=47, 64.4%), their age mean score was 32.11 (SD= 9.10) years old, married (N=49, 67.1%) and had diploma degree (N=32, 43.8%) and associate degree (23, 31.5%). The majority of sample were working as staff nurses (53, 72.6%) working full time (N=52, 71.2%) and about half of them were working all types of shifts (N=40, 54.8). Most of the study sample were not satisfied with their salary (N=60, 82.2%), 65% of them received a salary ranged from 1000 to 3000EGP. Average years of experience working in the unit was about 9 years (SD= 8.95), years of experience working in the hospital was about 10 years (SD= 9.14) and years of experience working in the nursing profession was about 12 years (SD= 9.00), (Table 1 & 2).

Regarding the nurse's response to the quality of work life subscales, the average was mostly ranged between 3 (Neutral) and 4 (Agree) as showed in table 2. The highest average was 3.82, SD 1.04 for stress at work, followed by job career satisfaction (M=3.67, SD=0.75), control at work (M=3.49, SD=0.81), general well-being (M= 3.38, SD=0.72), home-work interface (M= 3.27, SD= 0.92) and finally working conditions (M= 3.17, SD=0.88), the item that asking for the overall quality of working life satisfaction was in average of 3.25 (SD= 1.25) and average for the professional commitment was 5.29 (SD= 1.54) on a scale from 1 to 7 (Table 2).

Table 1: Descriptive Statistics for Sample Demographics (N=73)

	Variable	N	%
<i>Gender</i>	Male	26	35.6
	Female	47	64.4
<i>Marital Status</i>	Single	21	28.8
	Married	49	67.1
	Unmarried	3	4.1
<i>Position</i>	Staff Nurse	53	72.6
	Head nurse	20	27.4
<i>Working Hours</i>	Full Time	52	71.2
	Part Time	21	28.8
<i>Education Level</i>	Diploma	32	43.8
	Associate Degree	23	31.5
	BSN	18	24.7
<i>Working Shift</i>	Morning Shift	14	19.2
	Afternoon Shift	5	6.8
	Night Shift	5	6.9
	All Shifts	40	54.8
	Long Day (8AM-8PM)	9	12.3
<i>Salary Satisfaction</i>	Satisfied	13	17.8
	Dissatisfied	60	82.2
<i>Salary</i>	1000-2000 EGP	24	35.3
	2001-3000 EGP	27	39.7
	3001-4000 EGP	14	20.6
	4001-5000 EGP	1	1.5
	More than 5000 EGP	2	2.9

Table 2: Mean and Standard Deviation for the Study Variables (N=73)

Variable	Minimum	Maximum	Mean	SD
Age	21	60	32.11	9.10
Years of experience working in the unit	1	38	9.23	8.95
Years of experience working in the hospital	1	38	10.21	9.14
Years of experience working in nursing	1	39	12.03	9.00
Quality of Work Life Subscales				
General well being	1.83	5.00	3.38	.72
Home-work interface	1.67	5.00	3.27	.92
Job career satisfaction	1.83	5.00	3.67	.75
Control at work	1.67	5.00	3.49	.81
Working conditions	1.33	5.00	3.17	.88
Stress at work	1.00	5.00	3.82	1.04
I am satisfied with the overall quality of working life	1.00	5.00	3.25	1.25
Professional commitment	1.75	7.00	5.29	1.54

Table 3: Correlation Matrix for the Study Variables

	Variable	1	2	3	4	5	6	7
Quality of Working Life Subscales	1. General well being	-						
	2. Home-work interface	.62**	-					
	3. Job career satisfaction	.76**	.57**	-				
	4. Control at Work	.59**	.53**	.72**	-			
	5. Working conditions	.71**	.65**	.61**	.54**	-		
	6. Stress at Work	.49**	.33**	.53**	.33**	.40**	-	
7.	Overall quality of working life	.43**	.43**	.38**	.37**	.49**	.19	-
8.	Professional commitment	.48**	.32**	.68**	.50**	.38**	.38**	.38**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation test indicated that the overall quality of working life satisfaction was statistically significant and positively correlated with professional commitment ( $r=0.38$ ,  $p=.001$ ). All the quality of working life subscales

was statistically significant and positively correlated with professional commitment ranged from  $r=0.32$  ( $p=.006$ ) for home work interface to  $r=0.68$  ( $p=.0001$ ) for job career satisfaction as showed in Table 3.

## DISCUSSION

The current study aimed to investigate the relationship between quality of work life and nurses' professional commitment in intensive care units at university hospitals. Nurses indicated that they mostly agreed with highly satisfaction rate on the overall quality of working life. Stress at work subscale had the highest average of agreement that they do not feel stress of work. This result is inconsistent with a study found that most of the sample rated high level of stress at work [35]. This could be due to work environment with satisfactory facilities and resources.

Home-work interface subscale was highly rated which indicated that nurses were satisfied in this study which is consistent with Van der Heijden *et al.* [36] who found that most of the sample disagree that home and work interfere. Also, Russo and Buonocore [18] found that nurses who experienced work-family enrichment have high level of professional commitment. In contrast, Estryn-Behar and Van der Heijden [37] found that majority of the sample were unsatisfied with the balance between work and family life.

Job career satisfaction subscale was highly rated which is consistent with a study found that nurses reported a high rate of career satisfaction [38]. However, in different study indicated that the most satisfied and committed nurses have an intent to leave the nursing career in the following 5 years [39]. This means that this phenomenon needs to be deeply investigated to explain the factors which lead to this result.

General well-being subscale was also highly rated. Intensive care environment that have a specific nurse- patient ratio which is mostly one to one may make it preferable setting for nurses and increased their satisfaction. Control at work and working condition were rated mostly the same. In intensive care units, there is an opportunity for autonomous and participatory decisions related to nursing work since they spent more time with patients [30]. Availability of safety measures in the work environment such as disposable supplies and infection control precautions may fulfill feelings of safety and satisfaction regarding working condition.

The current study revealed that nurses rated their professional commitment 5.29 out of 7 which is relatively high. This result is consistent with Yang *et al* [40] who reported that nurses rated their occupational commitment about 4 out of 5. In addition, Yang *et al.* [41] reported that nurses rated their professional commitment

relatively high. A study was also done among 640 registered nurses indicated that there was a relationship between commitment and how well they perform their jobs [30].

In this study, the overall quality of working life satisfaction was positively correlated with professional commitment. In contrary, there was a statistical significant negative correlation between organizational commitment and general health well-being [42].

## CONCLUSIONS

Findings of the current study concluded that the nurse's response to the quality of work life subscales following as the highest average was for stress at work followed by job career satisfaction, then control at work followed by general well-being and home-work interface and finally working condition. There was statistical significance and positive correlation with professional commitment. All the quality of work life subscales was statistically significant and positively correlated with professional commitment.

**Recommendations:** It is recommended that nurse managers and hospital administrators have to give more attention to improve the quality of nurses working life who are working in intensive care units so that their professional commitment will improves and subsequently retain the qualified staff nurses and decrease turnover through:

- Designing programs to teach staff nurses how to cope with work and life stress.
- Giving an opportunity to nurses to make decisions related to their work so increase their feelings of control at work
- Illuminating nurses about work career through clear work objectives, providing needed training and appreciate their work leading to increase satisfaction.
- Further research studies needed with larger sample size to confirm the current study results and replicate the study in different health care sectors such as private, governmental and health insurance hospitals.

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