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Abstract

Background: Quality of work life is defined as an opportunity to exercise one's talents and capacities and to face challenges and situations that require independent initiative and self-direction. It is also an activity thought to be worthwhile by the individuals' involved. **Aim of the study:** to assess quality of working life and job stress and determined the relationship of quality work life and the job stress of nurses in the Critical care unit in health insurance hospitals. **Research design:** A descriptive correlational research design. **Sample:** A purposeful sample of (80) male and female nurses was included in the study. **Setting:** conducted at Health Insurance Hospital in Minia City. **Tools of data collection:** included two tools, tool I: included a personal data, the work related background sheet, and Quality of working life of nurses Questionnaire and Tool II: Job stress scale. **Results:** the results of this study indicated that more than two thirds of staff nurses who worked in the critical care units were have highly satisfied about work context followed by two fifth of them have high work life then less than one quarter of them have satisfied aboutwork world and the minority were have satisfied about quality of work and work design. Regarding causes of job stress among staff nurses working in the critical care units near to three quarters of them agreed that the working-hours do not fit with their personal life, followed by more than half of them mentioned work shifts are changing frequently, salary does not match with the required tasks and limited opportunities for enhancement and development in this hospital. **Conclusion:** there was a significant negative fair correlation between staff nurses' quality of work life perception and their job stress Also, there were increased in mean scores of job stress with low level of work design, work life, work context, work world and total work quality of work life. **Recommendation:** Educational Training to improve communication system, performance evaluation, hospital policies, health work environment.

Keywords: Job Stress, Nurses in Critical Care Units, Quality of Work Life

Introduction

Nurses are one of the most diverse and largest workforces in the health care system. The word "nurse" originated from Latin word "Nutricius" which means someone who nourishes, fosters and protects. The role of nurses in the health care system is expanding and changing. Their role is not just limited to institutional care but also involves delivery of services at various levels of the health care system. The nurses are one of the strongest pillars of the health care delivery system in providing safe, affordable and quality services to the people. Mortality, morbidity and disability reduction, health promotion through healthy lifestyles are positive health outcomes in which nurses have a pivotal role (Suresh, 2013).

Quality of Work Life (QWL) can be defined as an extent to which an employee is satisfied with personal and working needs through participating in the workplace while achieving the goals of the organization (Swamy, Nanjundeswaraswamy & Rashmi 2015). Analysis of work life quality is intended for use to improve work conditions taking into consideration the physical, mental, psychological and social needs of individuals (Sirin, Sokmen 2015).

A high QWL is essential to attract new employees and retain a workforce. Consequently, organizations are seeking ways to address issues of recruitment and retention by achieving a high QWL. Focusing on improving QWL can increase the happiness and satisfaction of employees that result in many advantages for the employee, organization and consumers. On the other hand, failure to manage these factors can have a major impact on employee behavioral responses for example, organizational identification, job

satisfaction, turnover intention, organizational commitment (Gayathiri, Ramakrishnan, 2013& Jebel, 2013).

Nursing is strenuous work and occupational stress is prevalent among nurses, thus affecting their QWL. Specifically, occupational stress is a major health problem for nurses and organizations. It is widely recognized that factors in the nursing work setting and the work organization have an impact on nurses' QWL. Therefore, occupational stress is an increasingly recognized health issue affecting the QWL of nurses. The quality of nurses' work life, as well as the quality of health services in general, can be improved by identifying the stressors in the work environment (Behdin, 2013).

Job stress represents a serious risk to the QWL for nurses. Nurses directly confront severe illness and death which is considered a unique stressor that other professions do not experience, and this impacts their QWL (Wilson et al., 2009). A cross sectional study of Croatian nurses (n=1,392) working at four university hospitals identified eight major groups of occupational stressors that impacted QWL. The study was meant to add to the existing literature in the area of occupational health through detailed analysis of the relationship between occupational stress and QWL (Wu, Chi, Chen, Wang, & Jin, 2010)

Significance Of The Study

Stress is also found to be associated with a perceived lack of work- life balance. Work-life balance is believed to exist when there is good functioning at work and at home with a minimum of role conflict (Sturges & Guest, 2004).

The retention of qualified nurses is vital if health organizations are to survive. One promising method to understand nurse retention is to assess QWL and related factors, such assessment improves the understanding of health organization regarding the impacts of work environment and other related factors on the nurses' work life as well as organizational productivity (Brook & Anderson, 2005; Brooks et al, 2007).

In this context, it was observed by the investigator that many of nurses are dissatisfied with working conditions, career development opportunities, participation in decision-making, work place safety, organizational and interpersonal relation and working hours. As this study may provide some valuable insights on quality of work life factors that is significant towards job stress among critical care nurses. thus, enabling hospital management to institute better policies and procedures to enhance and instill sense of professionalism within the hospitals to improve existing commitment towards the hospitals.

Aim Of The Study

The aim of the current study is to assess quality of working life and job stress and determine the relationship of quality work life and the job stress of nurses in the Critical care unit in health insurance hospitals.

Research Questions

- Is the quality of Work life affected by job stress?
- Is there a relation between quality of working life and job stress?

Subjects and methods

Research design:

A descriptive correlational research design was used to achieve the aim of the current study.

Setting:

The study was conducted at health insurance hospital In Minia City.

Subjects:

A purposeful sample of (80) male and female nurses was included in the study.

Tools of data collection: two tools were used in this study for data collection

Tool I: A self – administration questionnaire sheet

It was used for collecting the data for this study. It consisted of two main parts:

Part one: this part concerned with data pertaining personal data of the study subjects as: nurse's age, gender, level of education, marital status, years of experience in nursing, years of experience in critical care unit, and work related background sheet: (4 items); it included the type of unit they are working in, work schedules (full or part-time, shift worked, number of working hours per each shift.

Part two: this part concerned with Quality of working life of nurses Questionnaire. The tool was

developed by Brooks and Anderson (2005) to assess the Quality of nursing work life. The tool contains 42 statements about nursing work life, divided into 4 dimensions as: Work life-Home life (7 items), Work Design (10 items), Work context (20 items), and Work World (5 items)

Scoring system:

The response for each item was measured on a five-point scale: "strongly agree=5," "agree= 4," "uncertain= 3," "disagree= 2," and "strongly disagree= 1." The total score of the scale was (42 Items Multiplied In Upper Likert Scale Value (5) = 210 scores. The scores of each dimension was summed up and then converted into a percent score. Percent of respondent's agreement was calculated by percent of both strongly agree and agree responses.

The score ranged from (42 to 93) indicated low QWL, from (94 to 151) indicated average QWL, from (152-210) indicated high QWL and from Subscales of the tool, total score of less than 50% was considered as unsatisfactory while score of 50% and more was considered as satisfactory level of QWL

Tool II: Job stress scale

This tool included job stress Questionnaire. The tool was developed by Al-Omar (2003) to assess job stress level of nurses. The tool contains 39 statements, divided into 3 dimensions as: causes of job stress (18 items), level of stress (15 items), and outcomes of job stress (6 items)

Scoring system:

The response for each statement was measured on a five-point scale: "strongly agree=5," "agree= 4," "uncertain= 3," "disagree= 2," and "strongly disagree= 1." The total score of the scale was (39 statement Multiplied in Upper Likert Scale Value (5) = 195 scores. The scores of each dimension was summed up and then converted into a percent score. Percent of respondent's agreement was calculated by percent of both strongly agree and agree responses.

Tools Validity and reliability

The tools were submitted to a panel of five experts in the field of nursing administration at Minia and Ain Shams University confirmed its validity.

Reliability of the tools (tool I part three, II) were performed to confirm validity of tool and calculated statistically. The internal consistency measured to identify the extent to which the items of the tool measure the same concept and correlate with each other by Cronbach's alpha test were .871 & .811 respectively.

Pilot study:

A pilot study was conducted at the beginning of the study which included 8 nurses (10% of the total sample). The aim of the pilot study was to test the feasibility of the study. It also served to estimate the time required for filling the questionnaire sheets which was about 20- 25 minutes. They were included in the main study subjects during the actual collection of data. The process of pilot study took two weeks (from 07/1 to 22/01) in January 2017.

Ethical consideration:

A written initial approval was obtained from the research ethical committee of the Faculty of Nursing, Minia University. The researcher introducing herself to the directors and discussed the aim of the study, then met the head nurse of each department, and introducing herself with discussed the aim of the study and determined the suitable time to meet the study participants and collect the data. Nurses were reassured that all information obtained was confidential and would not affect their professional evaluation.

Data collection procedure:

The official approvals were obtained from medical and nursing administration of Minia university hospital. Prior to collection of data, a formal letter issued from the vice dean of post graduate studies and research at Faculty of Nursing, Minia university, and the approval of ethical committee. Submitted to medical and nursing administrations and the heads of the units for obtaining their permission and help to conduct the study. The letters also listed the data needed for the study. Moreover, a written consent was obtained from each participant. Before the nurses participate in this study, the nature, the aim, methods, and anticipated benefits of the study was explained. The

researcher informed the participation is voluntary and they have rights to withdrawal at any time without giving any reasons.

Before distribution of the questionnaire, the investigator met the participants according to the time which determined by head of each department, introducing herself and explained the purpose of the study and the components of the tools to the participants in the study setting. Then, the researcher distributed the data collection sheets to respondents individually in their workplace. The filling time for the questionnaire sheet took about 20 – 25 minutes. The researchers checked the completeness of each filled form after the participant filled it. Data collection was done during the morning, afternoon, and night shifts two days / week, February, to July 2017.

Statistical design:

Statistical analysis was done by using Statistical Package for the Social Science (SPSS 20.0). Quality control was done at the stages of coding and data entry. Data were presented by using descriptive statistics in the form of frequencies and percentage for qualitative variables, and mean & standard deviation (SD) for quantitative variable. Correlation coefficient test was also used between empowerment and job satisfaction and statistical significance was considered at $p < 0.05$.

Results

Table (1): Distribution of the studied nurses ' personal data (N= 80).

Personal data	No.	%
Gender		
Male	12	15.0
Female	68	85.0
Education Level		
Bachelor Degree in Nursing	4	5.0
Associate's Degree in Nursing	47	58.8
Diploma Degree in Nursing	29	36.3
Years of experience in nursing		
1-	63	78.8
11 – 20	17	21.3
Mean ± SD	7.0 ± 5.8	
Years of experience in current place		
1-	45	56.3
6 –	25	31.3
11- 15	10	12.5
Mean ± SD	5.4 ± 4.1	
Total	80	100

Table (1), reveals that, 85% of the respondents were female, 58.8% held associate degree in nursing, 78.8% of the study sample were had less than 10 years' experience

in nursing, while 56.3% of them were had less than 10 years' experience in current place.

Table (2): Distribution of the studied subjects ' work background data (N= 80).

Work background	No.	%
Work Setting		
Critical Care Unit	18	22.5

Work background	No.	%
Intensive Care Unit	18	22.5
Neonatal Intensive Care Unit	10	12.5
Dialysis unit	34	42.5
Work Pattern		
Full time	33	41.3
Part time	47	58.8
Working Days During the Week		
3 days	33	41.3
6 days	47	58.8
Hours of Work During the Day		
6 hours	33	41.3
12 hours	47	58.8
Working in Another Place		
Yes	15	18.8
No	65	81.3
If yes how many hour (n= 15)		
6 hours	13	86.7
12 hours	2	13.3
Total	80	100

Table 2, shows that, 42.5% were working in dialysis unit, 58.8% were working part time and 6 days / weeks & 6 hrs / day, also, 81.3% of the study sample had no another work place.

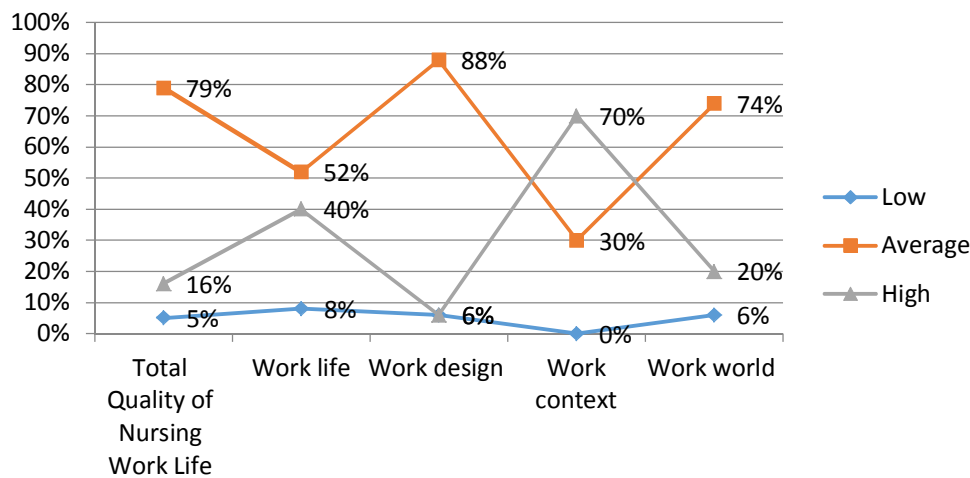


Figure (1): Frequency Distribution of Total and Subtotal Quality of Work Life Score

Figure (1): revealed that, 88% of the studied sample perceived work design as average, followed by 79% of the studied sample perceived total QNWL Scores as average, then 74% of them perceived work world as average and 52% of them perceived work life as average, while 30% of the studied sample perceived work context as average level.

Table (3): Mean job stress scores of the Studied Subjects (N= 80)

Domains	No. of items	Min – Max	Mean ± SD
Causes job stress	18	35 - 67	50.5 ± 6.4
Level of job stress	15	27- 53	41.1 ± 5.6
Outcomes of job stress	6	10- 24	16.4 ± 3.1
Total job stress	39	74 - 134	108.0 ± 12.5

Table (3): Shows that, total job stress their mean were 108.0 ± 12.5 and min- max ranged between 74- 134 scores.

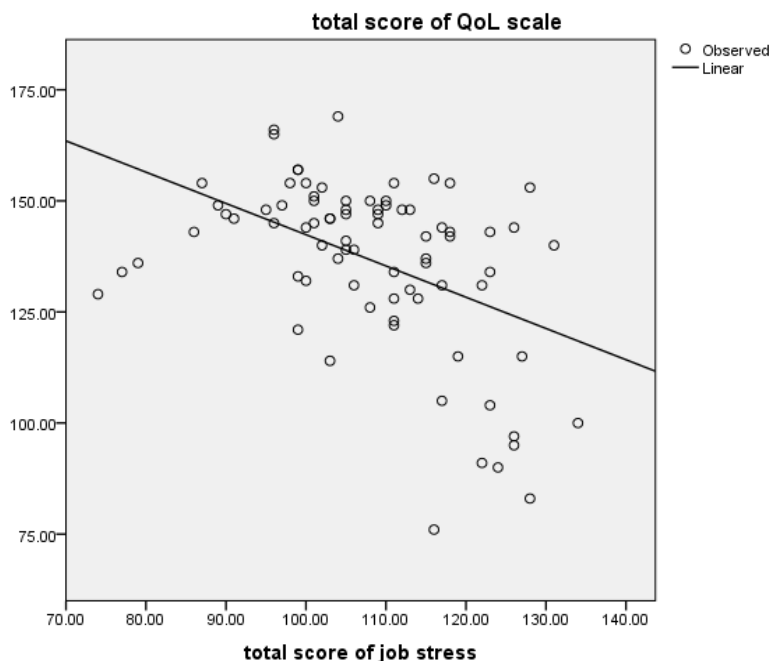


Figure 2: Linear correlation between nurses' total QoL and their job stress.

Fig. (2) Illustrated that, there were fair negative association between total QoL and job stress.

Discussion

Quality of life provides employee with the motivation and the opportunity to perform well. Improving nurses QWL is a prerequisite to increase their organizational productivity (Bragard et al., 2012). Nurses especially who are working at intensive care units should enjoy a satisfactory quality of working life to be able to provide quality care to their patients. Therefore, attention should be paid to the nurses' working life.

Regarding work life more than half of nurses have average satisfaction level that may be directly have effect on the quality of work, because the nurses occupied by their home life rather than their work.

When looked at the previous studies in the same constancy it was found that the finds of study by Mohammed et al., (2012) reported that the respondents were dissatisfied with their work life and the major influencing factors were inability to balance work with family needs, unsuitable working hours, lack of facilities for nurses, and inadequacy of vacations time for nurses and their families. Ojekou et al., (2015) recommended in their study that the management of the hospitals should provide a conducive work environment, providing necessary resources and adequate break periods to ensure staff welfare.

Also, Abdelhakam et al., (2015) who assessed quality of work as perceived by staff nurses and its relation to their turnover intension at critical care units, reported that the majority of the nurses were not able to balance work with their family needs.

So, it can be concluded from the previous and present studies that health care managers develop successful plans to improve the quality of work life. This help to enhance the home and work environments to improve performance and increase the commitment of nurses.

Regarding the nurse's perception of work design dimension items, it was reported that the majority of nurses have average level of work design satisfaction. The result was in accordance with a study done by Abdelhakam et al., 2015 indicated that 91.3% of the studied nurses perceived work design as average. These result due to the shortage of nurses, lack of resources, inadequate assistance from nursing assistants and interruption from relatives of patients in the hospitals

Another section in this study was covered job stress. The results of the study in this section were covering the nurse's responses about job stress regarding the causes, level and outcome of job stress. The most respondents' agreement circled around the different sources of job stress which included; working-hours do not fit with personal life. Work shifts are changing frequently, limited opportunities for enhancement and development in the hospital; salary does not match with the required tasks, absence of financial incentives, lack of stability at home, being not respected and lack of ability to catch up with the rapid technology changes.

On the same line with Mosadeghrad et al., (2011) founded that, the major sources of stress were inadequate pay, inequality at work, too much work, staff shortage, lack of recognition and promotion prospects, time pressure, lack of job security and lack of management support. Another study by Rita et al., (2013) and founded that another sources of work stress among nurses included (death and dying, conflict with physician, inadequate emotional preparation, problem with peers, problem with supervisors, level of workload, uncertainty concerning treatment, patient and family and the level of discrimination.

Apart from the stressors mentioned above, it appeared that there might be difference in the levels of stress experienced by nurses working in the intensive care units. Therefore suggested education for hospitals nursing

managers on job stressors in order to develop strategies to address and improve the Quality of Work Life conditions and to decrease level of job stress for intensive care units nurses' life as supervisor supports, decrease overload and conflict and ambiguity in addition to psychological intervention to increase coping with job environment.

Conclusion

Based on the findings of the current study the following conclusions can be drawn: there was a significant negative fair correlation between perception of staff nurses' quality of work life and their level of job stress. Also, there were increase in mean scores of job stress with low level of work design, work life, work context, work world and total work quality of work life.

Recommendations

- Educational training to improve communication system, performance evaluation, hospital policies, health work environment.
- Improve the working condition of staff nurses through feel safe from personal harm, secure environment and increase sense of belonging in their work place.
- Staff nurses managers able to improve the level of QWL by increasing their job satisfaction with security in work condition, work schedule, work hour and workload.

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