



Quality of working life of nurses in a tertiary cancer center in Qatar

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ABSTRACT

Background

Nurses are the largest segment of professionals working in the healthcare industry, and a satisfactory quality of working life will empower them to provide the highest quality care to their patients.

Aim

To assess the quality of working life among nurses in a tertiary cancer care center in Qatar concerning the following variables; control at work, employee engagement, general well-being, home-work interface, job/career satisfaction, stress at work, and working conditions.

Methods

A cross-sectional, descriptive study was conducted to assess the QoWL among 146 Staff Nurses working in different units of a tertiary cancer center in Qatar. A Quality of Work life Scale, a seven-point Likert's scale was used, were nurses self-reported their QoWL.

Results

The mean age of the study participants were 36.48 years \pm 6.74, and mean total years of clinical experience in nursing and clinical experience at the center was 14.16 years and 7.65 years respectively. The majority (69.9%) of the nurses who participated in the study were working in inpatient units. Around fifty-four percentage were graduate nurses. A vast majority (89.7%) of the respondents were married and among them, 84.2% of nurses lived with their family. Nurses' perception of the factors associated with QoWL including control and stress at work were found average, and others such as employee engagement, general well-being, homework interface, job/career satisfaction, working condition, and overall quality of work life were considered good. There was no statistically significant difference in the QoWL scores and participants' characteristics ($P > 0.05$).

Conclusion

The overall QoWL was found to be good for the Oncology Nurses working at a cancer center in Qatar. However, Nurses reported having varying degrees of stress at work. Nurses require highly specialized clinical competencies to accurately determine patients' states and predict and cope with difficulties that may occur during treatment.

Keywords: Quality of Working Life (QoWL), Nursing, Job Satisfaction, Cancer, Qatar

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INTRODUCTION

The Quality of Working Life (QoWL) as a theoretical notion aims to capture the essence of an individual's work experience in the broadest sense which has gained acceptance across the globe. QoWL of nurses can be described as the degree to which nurses can satisfy their personal needs through experiences in the work organization while achieving the organization's goals and making meaningful contributions to their organization.¹

REVIEW OF LITERATURE

The seven factors related to QoWL, are Job/career satisfaction, general well-being, employee engagement, stress at work, control at work, home-work interface, and working conditions.²

Job and Career Satisfaction (JCS)

Job and Career Satisfaction (JCS) signify the level to which the workplace provides a person with the best things at work, such as sense of achievement, high self-esteem, and fulfillment of potentials.³

A study was done to examine role structures and processes and their impact on job satisfaction for oncology advanced practice nurses (APNs) in Ontario found that APNs were minimally satisfied with their roles.⁴

General Well-Being (GWB)

The General Well-Being (GWB) factor assesses the extent to which an individual feels good or content with their life as a whole. General well-being theorized as influencing and, being influenced by work. GWB, therefore, integrates broader psychological well-being as well as general physical health aspects.

A comparative study was done to evaluate the differences in outcomes such as job dissatisfaction and burnout between oncology nurses and medical-surgical nurses. The study results showed that oncology nurses reported favorable practice environments and better outcomes than that of medical-surgical nurses.⁵

A study done on 243 oncology/hematology nurses of Queensland health care facilities, explored factors that influence the quality of nurses' working lives. Although nurse's stated high levels of personal satisfaction and personal accomplishment, results indicated that nearly 40% of registered nurses (RNs) are handling with workloads they perceive excessive, 48% are dissatisfied regarding pay, and professional support is an issue.⁶

Employee Engagement (EEN)

Relational leadership and positive relationships among health care workers play a major role in quality oncology nursing environments and nurses' job satisfaction.⁷

A qualitative study was done to explore the work-related demands and rewards experienced by Canadian pediatric oncology staff described their job as fulfilling and meaningful.⁸ Another study showed that the intensity of work-related stress experienced by nurses is significantly less ($P < .001$) on shifts staffed with a clinical support nurse compared with shifts without a clinical support nurse.⁹

Home-Work Interface (HWI)

Home-Work Interface described as the interface between the life experiences of nurses in the workplace and home. An example of this interference is a working mother nurse.¹⁰ A study among 14 Iranian nurses found that shift work schedules negatively affected the personal life of nurses.¹¹ Brooks & Anderson narrated in their study that many of respondents expressed their high stress related to work conditions, such as staff shortage, unsupportive management. Also, they showed their inability to balance between work and family needs, and they agreed that rotating shifts negatively affected their quality of lives.¹²

Control at Work (CAW)

Control at Work (CAW) factor reflects the level at which an employee feels they can work out what they consider to be an appropriate level of control within their work environment. A descriptive study done to identify the specific components of the stress-response sequence in new and experienced pediatric



oncology nurses found that new nurses had few coping reactions, and their most common reaction was resignation and experienced nurses experienced nurses had a greater number and different types of coping reactions and more positive consequences.¹³

Working Conditions (WCS)

Working Conditions (WCS) assesses the degree to which the employee is satisfied with the essential resources, working conditions, and job security are necessary to carry out their work effectively.¹⁴ Improvement in employment conditions may reduce the high levels of burnout and somatic complaints and enhance job satisfaction.¹⁵

The problems faced by oncology nurses in Turkey were overwork, insufficient time off work, lack of compensation for overtime work, lack of protection of breastfeeding and lactating women from cytotoxic agents and deficiencies in occupational health and safety.¹⁶

Stress at Work (SAW)

The QoWL SAW factor is determined by the extent to which an individual perceives they have excessive pressures and feel stressed at work. There is a significant relationship between occupational stress and various factors that include strenuous working conditions, opportunities to practice different phases of the professional role, and support from co-workers. Hospital nurses experience more stress than among nurses working outside hospital settings¹⁷ and nurses with high levels of hardiness have a tendency to have lower stress and higher levels of job satisfaction; highly supportive work environment would improve retention and decrease staff turnover.¹⁸

Oncology nurses face extraordinary stresses that may lead to emotional exhaustion, a feeling of emotional distance from patients and burnout.¹⁹ The nurses' stress levels ranged from mild to severe, including multidimensional stress with existential dimensions. Different types of stress appear to be related to the individual, group, institutional, and cultural level.²⁰

AIM OF THE STUDY

The overall aim of the study is to assess the work-related quality of life among Nurses working in Tertiary Cancer Center, Qatar regarding control at work, employee engagement, general well-being, home-work interface, job/career satisfaction, and stress at work and working conditions.

SIGNIFICANCE OF THE STUDY

Satisfied employees are working with more interest, are more loyal to the organization and more productive. Improvement of QoWL among healthcare providers including nurses will be positively affecting patients' outcomes.

National Center for Cancer Care and Research (NCCCR) is a tertiary care cancer center where nurses are actively involved in the care of cancer patients undergoing a full spectrum of curative and palliative treatment. The oncology nurses in NCCCR are facing numerous stressors related to growing complexity of cancer treatment modalities and demanding patient care. However, this might lead to a reduced quality of patients' care and less job satisfaction. Hence it is decided to identify the work-related Quality of Life among Nurses working in this center.

MATERIALS AND METHODS

A cross-sectional survey design was used to accomplish the objective of this study. The study conducted on 146 nurses working in various units of NCCCR during 2016. NCCCR is a member of Hamad Medical Corporation, the largest healthcare facility in Qatar, the hospital is 74-bedded, and Joint Commission International (JCI) accredited specialty hospital in Qatar that is dedicated to the delivery of optimal treatment and care for patients with cancer and blood disorders. The sample size was calculated based on power analysis of 0.95 and level of significant $P = .05$, estimated sample size was 134 (target population was 205). However, 146 nurses were recruited in this study to compensate any possible attrition and to satisfy the results. The samples were selected through convenience sampling technique and participants represent all units in a cancer hospital. Nurses were invited to take part in the study and explained the study aims, and if they agreed to participate, the questionnaire was



given to them individually, and they were requested to return it back to the researcher after filling all items.

The data-gathering instrument contained two sections. The first section consisted of questions on demographics (including gender, age, education, marital status, and years of experience). The second part was the Work-Related Quality of Life Scale-2 (WRQLS-2).²⁷ The questionnaire included 32 with five choice answers from Strongly Disagree (= 1) to Strongly Agree (= 5), respondents were asked to mark their degree of agreement with the statement.

The WRQLS-2 evaluated the quality of 7 domains of work life including 'Control at Work (CAW)', 'Employee Engagement (EEN)', 'General Well-Being (GWB)', 'Home-Work Interface (HWI)', 'Job Career Satisfaction (JCS)', 'Stress at Work (SAW)', and 'Working Conditions (WCS)'.²¹

The minimum possible score was 32, and the maximum score was 160. Van Laar and colleagues confirmed the content validity of the tool.²¹ Also, the scale's reliability has been examined by the same authors, and the overall reliability coefficient was reported to be between 0.92 and 0.97 and the subscale reliability coefficient between 0.67 and 0.88.²¹⁻²⁴

Ethical Considerations

This research was approved by the Institutional Review Board (IRB) of Hamad Medical Corporation. A cover page was included with the questionnaires to introduce the objectives of the research and the rights of the participants. Each of the respondents provided written, informed consent. The data collection process was conducted under the supervision of the Hospital Research Committee (HRC).

Data Analysis

Data were analyzed using SPSS version 21.0 software (SPSS, Inc., Chicago, IL, USA). Descriptive statistics were calculated, and independent sample t-test was

used to examine the relationship of QoWL and marital status, and gender. Moreover, one-way ANOVA was used to examine the relationship between QoWL and demographic variables. P values less than 0.05 were considered significant for all tests.

Subjects whose perception score is below 33.33% is considered as having poor Quality of Work life. A score of 33.33 to 66.67% is considered as average Quality of Work life. Score above 66.67% is considered as good Quality of Work life

RESULTS

The Quality of Work life tool was distributed to 176 Nurses, of which 146 nurses completed the tool (83% response). The data thus collected were analyzed on the basis of the objectives of the study by both descriptive and inferential statistics. Descriptive statistics for demographic variables are presented in (Table 1), and work variables are presented in (Table 2).

The summary of findings is presented under the following major heads.

Background Data of Sample

The majority of the participants (47.9 %) were between 31 to 40 years of age. The mean age of the study participants is 36.48 years \pm 6.74 and ranges from 27 to 55 years. Among the participants, 83.6% were females. Of the participants, 64.4 % had >10 yrs of total years of experience and the mean of total years of clinical experience in nursing is 14.16 years \pm 6.21 and ranges from 5 to 31 years. The mean years of clinical experience at NCCCR is 7.65 years \pm 3.6 and ranges from 1- 16 yrs. About 69.9% of the nurses who participated in the study were working in inpatient units. Regarding educational qualification of participants, 43.8 % were Diploma holders, 54.1 % were graduates, and only 2% were postgraduates in nursing. A vast majority (89.7%) of the respondents were married and among them, 84.2% of nurses lived with their family.



Table 1 Frequency and Percentage Distribution of Sample Characteristics with Regard to Demographic Variables (n=146)

Demographic variable	Frequency (N)	Percentage (%)
Age in years		
<30	38	26.0
31-40	70	47.9
>40	38	26.0
Gender		
Male	24	16.4
Female	112	83.6
Education Status		
Diploma in Nursing	64	43.8
BSc Nursing	79	54.1
MSc Nursing	3	2.1
Marital Status		
Single	12	8.2
Widowed	2	1.4
Married	131	89.7
Divorced	1	0.7
Staying with family		
Yes	123	84.2
No	23	15.8
Number of children		
None	27	18.5
One	47	32.2
Two	59	40.4
More than two	13	8.9

Table 2 Frequency and Percentage Distribution of Sample Characteristics with Regard to Work Variables (n=146)

Work variable	Frequency (N)	Percentage (%)
Years of Clinical Experience in Nursing		
<10	52	35.6
10-15	35	24.0
>15	59	40.4
Clinical Experience in Current Area		
<5	59	40.4
5-10	49	33.6
>10	38	26.0
Place of Work		
Imaging	64	43.8
Outpatient Unit	79	54.1
Urgent Care Unit	3	2.1
Inpatient Unit	12	8.2



Quality of Work Life

Factor wise scores

The mean score of control at work is 63.87 ± 13.69 and ranges from 30 – 95. The mean score of employee engagement is 74.06 ± 13.72 and ranges from 27-100. Concerning general well-being, the mean score is 70.94 ± 8.36 and ranges from 43 to 97. Homework interface mean score was 71.85 ± 12.65

and ranges from 35-100. Job career satisfaction mean score is 71.55 ± 12.93 and ranges from 33 -100. The mean score of stress at work is 61.85 ± 12.13 and ranges from 30-90. The mean score of working condition is 71.34 ± 12.04 and ranges from 35-100. The mean score of overall QoWL is 70.55 ± 17.13 and ranges from 20-100 (Table 3).

Table 3 Mean, Median, SD, Minimum and Maximum Score of Overall Perception of Quality of Life and Health of Nurses (n=146)

Factors	N	Mean	SD	Minimum	Maximum
Control at Work	146	63.87	13.69	30	95
Employee Engagement	146	74.06	13.72	27	100
General Well Being	146	70.94	8.36	43	97
Home-Work Interface	146	71.85	12.65	35	100
Job Career Satisfaction	146	71.55	12.93	33	100
Stress at Work	146	61.85	12.13	30	90
Working Conditions	146	71.34	12.04	35	100
Overall QoWL	146	70.55	17.13	20	100

Factor wise agreement of Staff Nurses

About 50 % had average, and 48.6 % had good control at work. Employee engagement was found to be good in 62.3%. None reported as having a poor general well being . 63 % had a good general well being and 37 % had average general well being. 65.1 % reported as having good homework interface. About 32.9 % had average job career satisfaction, and 67.1 % was satisfied with the same. Concerning stress at work, 7 % reported as having less stress at

work, 66.4 % had a moderate level of stress, 32.9 % had severe stress at work. Working conditions were found to be average in 30.1 % of nurses and 69.9 % reported to have good working conditions. None reported having poor working conditions. Concerning overall quality of life, 4.1 % had poor QoWL, 32.9 % had average, and 63 % reported to have good overall QoWL. About 41 .8% had average QoWL, and 58.2% had good QoWL. None of the nurses had poor QoWL (Table 4).

Table 4 Factor Wise Distribution of Quality of Working Life (n=146)

Quality of Life	Poor N (%)	Average N (%)	Good N (%)	Total N
Control at Work	2 (1.4)	73 (50)	71 (48.6)	146
Employee Engagement	2 (1.4)	53 (36.3)	91 (62.3)	146
General Well Being	0	54 (37)	92 (63)	146
Home-Work Interface	0	51 (34.9)	95 (65.1)	146
Job Career Satisfaction	0	48 (32.9)	98 (67.1)	146
Stress at Work	1 (0.7)	97 (66.4)	48 (32.9)	146
Working Conditions	0	44 (30.1)	102 (69.9)	146
Overall QoWL	6 (4.1)	48 (32.9)	92 (63)	146



Association between demographic variable and QoWL

There was no statistically significant difference in the QoWL scores observed among the various age group ($P>0.05$). Also, There was no statistically significant

difference in the QoWL scores and total years of experience in Nursing, years of experience in NCCCR, gender, place of work, educational status, marital status, staying with family and number of children ($P>0.05$). (Table 5).

Table 5 χ^2 , DF and p Value of Quality of Life and Demographic Variables of Nurses (n=146)

Demographic Variables	Quality of Life		Total	χ^2	df	p
	Average N (%)	Good N (%)				
Age						
<30	13(34.2)	25(65.8)	38(100)	7.444	2	0.024
31-40	25(35.7)	45 (64.3)	70 (100)			
>40	23 (60.5)	15 (39.5)	38 (100)			
Experience in Years						
<10	19 (36.5)	33 (63.5)	52 (100)	1.415	2	0.493
10-15	14 (40)	21 (60)	35 (100)			
>15	28 (47.5)	31 (52.5)	59 (100)			
NCCR Experience in Years						
<5	19 (32.2)	40 (67.8)	59 (100)	18.123	2	0.000
5-10	15 (30.6)	34 (69.4)	49 (100)			
>10	27 (71.1)	11 (28.9)	38 (100)			
Gender						
Male	8 (33.3)	16 (66.7)	24 (100)	0.843	1	0.359
Female	53 (43.4)	69 (56.6)	122 (100)			

DISCUSSION

The present study aimed to assess the quality of working life among nurses in a cancer hospital in Qatar regarding control at work, employee engagement, general well-being, home-work interface, job/career satisfaction, stress at work and working conditions. The results of present study showed that overall QoWL of nurses in this center are good (63%), and 69.9% of them agreed with good working conditions. Good working conditions have an effect on job satisfaction; it leads to a balance between work and life which increase worker satisfaction and motivation.²⁵

In this study, there is no relationship found between QoWL and education of Staff nurses. That is consistent with other studies.^{26,27} Nevertheless, results of a study done by Moradi et al in Iran² revealed a significant relationship between nurses QoWL and their education level and they found that the QoWL of nurses with lower educational

attainment was superior to nurses with higher education.

The present study results could not identify a significant relationship between years of working experience and QoWL. Similar study results are found in a study done by Nayeri et al²⁸ and Boonrod.²⁹ However, in some other studies,^{2,26,27} nurses with more work experience had a better QoWL.

Findings of the current study showed overall quality of work life of nurses in working in a cancer hospital; Qatar is good. It is not consistent with other studies. A study done by Said et al found a low level of QoWL among the nurses in pediatric setting.³ Similarly, Mordi et al observed in their study that nurses have an only moderate level of QoWL.

Even though overall QoWL was good, it is upsetting to find that nurses reported to have varying degrees of stress at work -66.4 % had a moderate level of



stress, and 32.9 % had severe stress at work. Cole and colleagues³⁰ reported that 93% of the nurses were frequently under the influence of stress factors of their workplace. Adib-Hajbaghery and colleagues³¹ has also examined the occupation-related stressors among nurses and reported that death and patients' suffering (compassionate fatigue), workload, and nurse-physician conflicts were severely contributed to their stress. As well as providing appropriate logistics, improving the coordination within hospital subsystems, and improving the managers and nurses relationships may decrease the stressors in nursing profession.

Implication for health policy makers/practice/research/medical education

A regular stress management program should be available for nurses, and they should be promptly observed for signs of burnout. A detailed study can be done to explore factors contributing to stress among staff nurses.

CONCLUSION

The quality of working life has an important role in attracting and retaining staff. The present study provides the understanding of quality or work life of oncology nurses in Qatar. It is welcoming that the overall QoWL was found good. However, nurses reported having varying degrees of stress at work. It is needed to have plans focus on stress reduction measures.

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