Quality of Life of Nurses Working in a Tertiary Level Hospital

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ABSTRACT

Background: Quality of life refers to persons' sense of well-being based on their satisfaction with the important areas of their life. Work related stresses causes various physical and mental health problems to the nurses which reduces their quality of life. The study aimed to find out the quality of life of the nurses.

Methods: A descriptive cross sectional, study was conducted among 135 nurses working in different units of a Tertiary Hospital, Kathmandu. Non-probability purposive sampling technique was used. Self- administered WHO Quality of Life–BREF Version tool was used to collect the data. Pearson Correlation was used to find out the relationship between actual quality of life and perceived quality of life of participants at p-value ≤ 0.05.

Results: More than two third (71.1%) of the participants had good perceived quality of life (Mean$\pm$SD$=3.7\pm0.63$) and 65.2% were satisfied with their health (Mean$\pm$SD $=$ 3.52$\pm$0.80). Similarly, nearly half of the participants (48.1%) had below average mean score of quality of life. Overall mean score of quality of life obtained by participants was 60.74$\pm$9.02. The obtained mean score was highest in social domain (66.17$\pm$10.86) and lowest in environmental domain (52.8$\pm$10.6). There was significant correlation between actual quality of life and perceived quality of life of participants.

Conclusions: As nearly half of the participants had below average quality of life, concerned authorities should pay attention to improve nurse's working environment and physical health to improve their quality of life.

Keywords: Nurses; quality of life; tertiary hospital; WHOQOL- BREF.

INTRODUCTION

Nurses are exposed to many physical and emotional challenges which can result in overall reduction in Quality of Life (QOL).[1] Current working environment of the nurses are very challenging due to a high workload, role conflict, inadequate equipment and staffing, patients in adverse health conditions, interpersonal conflicts, inappropriate relationships, irregular work schedule, work shifts, and lack of promotion.[2] Nurses are suffer physically, psychologically, spiritually, and emotionally due to these challenges. [3]

To provide good care to the patients and keep them healthy, safe, and well; nurses should have good health, safe and well themselves.[4] But nurses have hectic lifestyles, very challenging working environment and need to struggle to maintain a balance between different components of their personal life.[1, 3] Less attention is paid to nurses' physical as well as psychological health especially in developing countries.[5] Studies regarding nurses' QOL are limited. This study was aimed to find out the QOL of nurses working in a tertiary hospital, Kathmandu.

METHODS

A descriptive cross- sectional design was used to find out the QOL among nurses working at a tertiary level government teaching hospital. All the nurses were working as staff nurse in different units such as Intermediate Critical Care Unit (ICCU), Surgical Intensive Care Unit (SICU), Medical Intensive Care Unit (MICU), Intensive Care Unit (ICU), Post-Operative ward, Neonatal Care Unit (NICU), Pediatric Intensive

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Care Unit (PICU) and Emergency ward of Tribhuvan University Teaching Hospital (TUTH) were considered as study population. Data were collected from 1st to 28th September, 2019. Ethical approval was obtained from Institutional Review Committee of Institute of Medicine, Tribhuvan University [Ref. No.- 108/ (6-11) E²/076/077]. Non probability purposive sampling technique was used and sample size was 135, which was calculated using Cochran formula[6] i.e., required sample (no) $=z^2pq/d^2$ with confidence interval (z) at 95%, p=44.0% (Based on study conducted on Iranian nurses)[1] and allowable error (d) was =5.0%. Calculated number was 378.

After adjusting the finite population (N = 190), sample size was 127. Lastly, adding 10% as non-response rate, the final sample size (n)= 140. Those nurses who were involved in direct patient care and were worked at respective units for at least six months were included in the study. Pre-tested, structured, self-administered questionnaire was used to collect the data. The questionnaire consisted of two parts. Part one included questions related to socio demographic characteristics and job-related information. Part two was World Health Organization Quality of Life Brief version (WHOQOL-BREF).[7,8] This tool is in public domain and can, use without taking any permission. It is a validated standard tool and frequently used in research carried out in Nepalese contest.[9,10] WHOQOL of 26 statements were rated in Likert Scale 1-5 (1- not at all, 2- a little, 3- moderate amount, 4- very much, 5- extremely). Among 26 questions two questions (Q1 and Q2 were rated separately). Twenty four statements were categorized into 4 domains. They were:

Domain 1 (Physical): Q3, Q4, Q10, Q15, Q16, Q17, Q18

Domain 2 (Psychological): Q5, Q6, Q7, Q11, Q19, Q26

Domain 3 (Social Relationship): Q20, Q21, Q22

Domain 4 (Environmental): Q8, Q9, Q12, Q13, Q14, Q23, Q24, Q25

Q3, Q4 and Q26 were negative statements and to make the statements positive recoding was done by reverse coding. Raw score was transferred to 0-20, and then further transferred to 0-100 scale according to the WHOQOL manual of scoring system. Then data were analysed on the basis of obtained transferred score. Validity of the part I instrument was established by reviewing literature, consulting subject expert, and peers. Based on their valuable feedback, necessary modifications were done. Pretesting of the instrument was carried out among 10.0 % (14 nurses) of the total sample in Man Mohan Cardio-thoracic, Vascular and Transplant Centre, Maharajgunj, Kathmandu. Reliability of the test was established based on the result with Cronbach alpha (α) value of 85.7%.

Objectives of research were explained to participants; then written informed consent was obtained from each participants prior to the data collection. Research instruments were given to the participants; and they were requested to rate their life how they experienced and how much they were satisfied with their life. then they were asked to fill the questionnaire within 20-30 minutes. Confidentiality of the information was maintained by not disclosing the information of the participants with others and using the information only for the study purpose. Anonymity was maintained by assigning code number to the questionnaire. Participants' dignity was maintained by giving right to reject or discontinue from the research study at any time.

Among 140 questionnaires, 135 were completed and returned. Collected data were then edited, coded, classified and summarized in a master sheet and then analysed in Statistical Package for the Social Sciences (SPSS) program version 20. Data were analysed using descriptive statistics such as frequency, percentage, mean and standard deviation. Karl Pearson's coefficient correlation was used to find out the relationship between actual quality of life and perceived quality of life of participants at p-value ≤0.05.

RESULTS

Regarding the socio-demographic characteristics of the participants, majority of the participants (71.9%) were from the age group 20-29 years, the mean age was 28.04±4. 57, more than two third (68.1%) were married., slightly more than half (53.3%) were Brahmin/Chhetri and 58.5% were from nuclear family. Similarly, 47.4% of participants had completed Bachelor in Nursing Science followed by B.Sc. Nursing (32.6%). Regarding socio-economic status, 39.3% of the participants' income was found sufficient for one year, whereas 9.6% had income sufficient only for less than six months (Table 1).

Concerning about job related variables of the participants, more than one fourth (27.4%) participants were working in emergency ward; 97.8% worked as staff nurse; and 41.5% in contract basis. Of all, 42.2% participants each had work experience of ≤4 years and 5-9 years and 81.5% had experience of working for≤5

years in current ward (Table 2).

Table 1. Socio-demographic characteristics of the participants. n=135

Characteristics	Number	Percent
Age groups (in completed years)		
20-29	97	71.9
30-39	34	25.2
40-49	4	3.0
Marital status		
Married	92	68.1
Unmarried	43	31.9
Ethnic group		
Brahmin/chhetri	72	53.3
Janajati	58	43.0
Madeshi	3	2.2
Dalit	2	1.5
Type of family		
Nuclear	79	58.5
Joint	56	41.5
Level of education		
Proficiency certificate level	24	17.8
Bachelor level	108	80.0
Masters level	3	2.2
Monthly family income		
Sufficient for one year	53	39.3
Sufficient for one year and surplus	52	38.5
Sufficient for six months	17	12.6
Sufficient for less than six months	13	9.6

Table 2. Job related variables of the participants. n=135

Variables	Number	Percent
Working area		
Emergency	37	27.4
ICU	33	24.4
SICU	18	13.3
ICCU	11	8.1
MICU	11	8.1
PICU	10	7.4
POW	8	5.9
NICU	7	5.2
Designation		
Staff nurse	132	97.8
Nursing officer	3	2.2
Nature of job		
Contract	56	41.5
Permanent	42	31.1
Temporary	37	27.4
Work experience (in completed years)		
≤4	57	42.2
5-9	57	42.2
10-14	10	7.4
≥15	11	8.1

More than two third (71.1%) of the participants were perceived as good quality of their life and mean score was 3.7±0.63. More than half (65.2%) were satisfied with their health and mean score was 3.52±0.80 (Table 3).

Table 3. Self-perceived quality of life among the participants. n=135

Statements	No. (%) Very poor /Dissatisfied	No. (%) Poor/ dissatisfied	No. (%) Neither poor/ dissatisfied nor good/ satisfied	No. (%) Good/ satisfied	No. (%) Very good / satisfied	Mean± SD
Perceived quality of life	2(1.5)	4(3.5)	30(22.2)	96(71.1)	3(2.2)	3.7±0.63
Satisfaction with own health	3(2.2)	16(11.9)	26(19.3)	88(65.2)	2(1.5)	3.52±0.80

Mean (±SD) raw score of QOL in different four domains were 13.71±1.44. Participants scored high on social domain (Mean±SD=14.58±1.73) and low on environmental domain (Mean±SD=12.44±1.69). Overall mean (±SD) of transferred score of QOL obtained by participants was 60.74±9.02. The highest score (Mean±SD=64.66±12.6) was obtained in psychological domain whereas the least score (Mean±SD=52.8±10.6) was obtained in environmental domain. (Table 4). Less than half (48.1%) of the participants had below average QOL and 51.9% had above average QOL (Figure 1).

Table 4. Quality of life score in different domains. n=135

| Domains (Items)	Minimum	Maximum	Mean ±SD
Raw Score			
Physical domain	8.00	17.71	13.49±1.94
Psychological domain	8.67	18.00	14.35±2.016
Social domain	9.33	17.33	14.58±1.73
Environmental domain	8.00	16.00	12.44±1.69
Total	8.79	16.66	13.71±1.44
Transferred score			
Physical domain	25.0	85.71	59.33±12.17
Psychological domain	29.17	87.5	64.66±12.6
Social domain	33.33	83.33	66.17±10.86
Environmental domain	25.0	75.0	52.8±10.6
Total	29.91	79.13	60.74±9.02
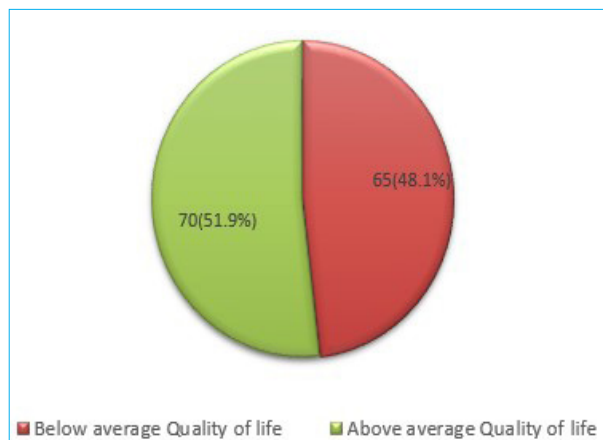
Figure 1. Level of quality of life of participants. (n=135)

There is significant positive correlation between actual QOL and perceived QOL. Likewise, there is significant positive correlation between actual QOL and perceived health status among the participants (Table 5).

Table 5. Relationship between actual quality of life, and perceived quality of life and perceived health status. n=135

		Perceived quality of life	Perceived health status
Actual Quality of Life	Pearson Correlation	0.502	0.443
	p- value	0.001	0.001

Level of significance: < 0.05

DISCUSSION

In this study, 51.9% of the participants had above average QOL and 48.1 % of participants had below average QOL. These findings are different from the study conducted in Pakistan, where majority (79.0%) of nurses were experiencing low QOL.[5] This differences might be due to population and setting of the study. In present study, the mean score of participants' overall QOL and general health were 3.70±0.63 and 3.52±0.809 respectively. Similar findings were reported in the study conducted in India where mean score of QOL was 3.87±0.62 for perceived general QOL and 3.91±0.65 for perceived general health.[11]

In present study, more than half of the participants perceived their QOL as good and majority (65.2%) of participants were satisfied with their health. Similar findings were reported in Iranian study where more than one third (44.1%) of participants were satisfied with their health and 45.3% of participants perception towards QOL was neither good nor poor.[1]

In present study, raw score was transferred to 0-100 score and the highest transferred score was obtained in social domain (66.17±10.86) and lowest transferred score was obtained in environmental domain (52.8±10.6). Score obtained in physical domain was 59.33±12.17 and in psychological domain was 64.66±12.6. These findings are supported by Jose et al., in which the highest score was in social domain (71.6%) and least score was in environmental domain (59.4).[11] Likewise, the study conducted by Jathanna and D'Silva also reported the highest score was in social domain (70.62±16.159).[12] This revealed that nurses in these studies were satisfied with their personal relationship, sex life and support from their friends like in the present study. The study findings of all above studies are similar because all the study used WHOQOL BREF to assess the QOL of participants.

In present study, in regards to raw score, social domain had highest score (14.58±1.737) and least score was in environmental domain (12.44±1.69). Similar finding was reported by the study in Iran where environmental domain had the least score (13.9) but in contrast physical domain score was highest (15.26).[1] In another study of Iran also environmental domain score was least (11.2±2.6) but physical domain score was highest (13.8±2.7).[13]

In contrary to the present study, study conducted by Santos and Beresin showed highest score (17.08) was in environment domain and lowest score was in social domain (11.37).[14] Study conducted by Aykar et al. also showed the similar results where physical domain had the highest score (14.52). However, study done in oncology units in Turkey found lowest score in environmental domain (11.78).[15] These differences might be difference in population characteristics, study settings and sample size and technique.

In present study, the findings didn't show any statistical significance between overall QOL and selected variables such as age, marital status, ethnic group, professional qualification, type of family, economic status of family, type of job and total work experiences (P<0.05). Similarly, study conducted in Iran also didn't show any significant association between work experience and job position.[1] In contrast to the findings of present study, study conducted in India reported that there was statistical association between QOL and marital status (p<0.001) and association was also observed between total years of experiences.[11] Similarly, in study conducted in Pakistan[5] also reported that there was association between QOL with marital status and total year of experiences (p<0.001 and p<0.05 respectively). These differences might be due to differences in population characteristics, study setting, sample size and technique.

There was significant correlation of overall percpetion of QOL with actual QOL of the nurses in our study. Similar finding was also seen in study done by Jathanna and D'Silva.[12]

This study was conducted in only one setting with purposive sampling technique. So, it lacks the generalization in other settings and population.

CONCLUSIONS

In conclusion, more than half of the nurses had above average quality of life. Highest quality of life score was in social domain and least score was in environmental domain. There was significant positive correlation in perceived QOL and actual QOL of the nurses.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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