Nurses' perception of the quality of nursing work life and related priorities for improvement in Ain shams university specialized hospital

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Abstract: Background and aim: The quality nursing care in health care organizations is only possible if there is working-life satisfaction among the nurses. This study aimed to assess nurses' perception of the quality of nursing work life and related priorities for improvement in Ain shams university specialized hospital. Methodology: This cross-sectional descriptive study was conducted at Ain shams university specialized hospital. It included a random sample of 265 staff nurses in various departments and ICUs. The data were collected by a self-administered questionnaire sheet that included a part for socio-demographic characteristics, a standard scale to assess the ONWL. and a similar scale for the priorities to improve the QNWL. Data collection was done during the period from March 2013 to May 2013. Results: Nurses' age ranged between 19 and 52 years. Only 20% had a bachelor degree. The highest domain of ONWL was that of work world (40.0%), while work context was the lowest (23.0%). As for improvement priorities, the highest was work life/home (55.8%) and the lowest the work world (39.2%). In total, 34.7% had perceived high QNWL and 47.9% highly perceived priorities for improvement. The perception of QWL was significantly higher with increasing age, experience years of ten or longer, and attending training courses; and was highest in emergency departments (27.2%) and lowest was in specialized units (12.1%). The correlations between nurses' QWL and corresponding priority dimensions and total scores were statistically significant, weak and negative. Conclusion and recommendations: Nurses in the study setting have generally low QWL, with higher perception of priorities for improvement, and these are negatively correlated. The findings indicate urgent need for improvements and hospital administration must take actions to improve these nurses' OWL through improving the work environment. Further research is proposed to assess the effectiveness of specific interventions in improving nurses' QWL through responding to identified improvement priorities.

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1. Introduction

The need for competent and dedicated people in the health care profession to render quality care could only be possible if there is work satisfaction among nurses and other providers (Ajayi, 2005). Effective management should create the work climate that help the goals of the organization to be attained and at the same time satisfy the psychological and social needs of its personnel (Omojola, 2010). Some conditions of work are so linked to universal human needs to the extent that their accomplishment may be equated to satisfaction of basic psychological needs (Gayathiri1 and Ramakrishnan, 2013). On the contrary, unhealthy work environments lead to low performance or conflict among nurses that drive them to leave the work setting or even the profession itself (Doran et al., 2012).

The concept of Quality of Work Life (QWL) is an attempt to understand the interactions between core facets of the working environment so that cause and effect can be distinguished, and interventions appropriately targeted (*Easton et al., 2013*). The term was first used by Irving Bluestone in the 1960s when

involved in designing programs to increase worker productivity. However, no single definition of terms emerged. The definitions of QWL vary according to researchers' approaches and theoretical views (*Easton et al., 2013*). However, the term QWL encompasses core components such as enhancing the dignity of employees, introducing changes in the organization's culture and improving the physical and emotional wellbeing of the employees (*Muller et al., 2011*).

Quality nursing care in health care organizations is only possible if there is working-life satisfaction among the nurses (Salawu, 2004). The trends towards more holistic views of human life highlighted the importance of working life in individual's overall enjoyment of life (Bruce and Blackburn, 2002). The quality of nursing work life reflects the extent of nurse's satisfaction with important personal needs as growth and safety as well as organizational requirements as decreased turnover while achieving the organization's goals (Brooks and Anderson, 2005). It encompasses dignity, introducing changes in the organization's culture and improving the physical and emotional wellbeing (Muller et al.,

2011). The need to ensure QWL of nurses demands that managements view employees as cooperating members of a single team. Thus, the manager must become less of a supervisor and more of a coach or helper available to provide assistance and support when the need arises. Hence, a high QWL cannot be established in a climate of mistrust and adversarial relationship (Noorjehan, 2006).

Significance of the study

In recent times, there has been a common assertion that nurses' attitude to work is poor. This has resulted in declined productivity in the hospitals. If nurses are closely observed at work, one may ask these questions: are nurses really satisfied with the quality of their working-life? What are the factors that may be associated with their working-life satisfaction or dissatisfaction? It is the concern of every manager to find ways of improving productivity of his/her personnel in order to attain set goals. It is for this reason the researcher sought to assess the QWL of nurses and the related improvement priorities.

Aim of the study

This study was aimed to assess nurses' perception of the quality of nursing work life and related priorities for improvement in Ain shams university specialized hospital.

2. Subjects and Methods Research design.

A cross-sectional descriptive study design was utilized in carrying out the study, where all the variables were collected at the same point in time.

Setting

The study was conducted at Ain shams university specialized hospital, providing inpatient and outpatient services in various specialties.

Study subjects

All staff nurses (471) working in various medical and surgical departments and ICUs Ain shams university specialized hospital, were eligible for inclusion in the study with the only inclusion criterion of working full time in the study setting during the time of the study.

Sample size:

This was estimated to determine the prevalence of high level of QWL of 30% *Elmahdy et al.*, 2011and 40% *Fakhry et al.*, 2011), with a 3% standard error and a 95% level of confidence and an adjustment for a dropout rate of about 15%. The nurses were recruited consecutively using a random sampling technique. The sample included nurses from medical (40), surgical (69), emergency (60) departments and specialized units (50) and intensive care (46) units.

Data collection tools.

The data were collected using selfadministered questionnaire sheets that includes three sections as follows.. The first was for nurse's sociodemographic characteristics such as age, marital status, qualification, experience, previous attendance of training courses, etc. The second section consisted of the standard scale used to assess the quality of nursing work life (Brooks, 2001). It has 42 questions categorized into four dimensions. The work/home life dimension consisted of 7 items such as balancing work and family needs, arranging child care while at work, and hospital policy offering child care. The work design dimension included 10 items such as feeling job satisfaction, having enough time to do the job efficiently, and having enough staff at work. The work context dimension had 20 items such as supervisor providing efficient supervision. opportunities for self-development at work, communication with other care providers, having comfortable room for nurses, and having the chance to continue study through work. The last dimension of work world consisted of 5 items such as salary being suitable to job, and feeling own work influences patients' lives and their families. The third section of the questionnaire was intended to solicit participant's viewpoint concerning the priorities for improve the QNWL. It has the same questions and the same domains as the previous one but the stem of the scale was modified by the researchers to ask about priorities rather than QNWL.

Scoring system.

The response for each of the items is on a five-point Likert type scale: "strongly agree," "agree," "uncertain," "disagree," and "strongly disagree." The responses "strongly agree," "agree," "uncertain," "disagree," and "strongly disagree" in each section were scored 5 to 1 respectively. The scores of each dimension were summed up and then converted into a percent score. A score of 60% or higher (corresponding to agree/strongly agree) were considered as "high QWL" or "agree" upon priorities.

Pilot study

A pilot study was conducted on 10% of nurses from different departments to assess the clarity of the questions. The tool was finalized based on the results of the pilot. The subjects who participated in the pilot study were not included in the main study sample. The pilot study also served to asses the tools' QWL scale reliability through measuring its internal consistency. The reliability turned to be high as shown by the values of Cronbach alpha coefficients ranged between 0.65 and 0.85 for the various domains and was 0.86 for the total QWL and 0.80 for the total priority scales.

Fieldwork

The fieldwork was started after finalization of the data collection tool, review by experts, testing it through the pilot study, and securing official permissions from relevant official authorities. The sampling procedure was then done. The researcher met with the director and heads of departments of the selected settings, with official letters indicating the purpose of the study, its rationale, and the field procedures. Their permissions were obtained to start the data collection process. The researchers met with the nurses in groups and explained to them the aim and procedures of the research and solicited their participation after obtaining their verbal consent. The questionnaire forms were handed to them with clear information about their filling, and collected after filling them up. The data collection was done during the period of March 2013 to May 2013.

Ethical considerations

Aim and procedures of the study were explained to staff nurse, with emphasis on the confidentiality of any obtained information. Moreover, the questionnaire form were anonymous. An informed verbal consent was secured from each subject after explanation of the rights to refuse participation and to withdraw at any time without giving reason, and without consequences, and confidentiality of any obtained information.

Statistical analysis

Data entry and statistical analysis were done using SPSS 16.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables. Qualitative categorical variables were compared using chi-square test. Spearman rank correlation analysis was used for assessment of the inter-relationships among scales and ranked variables. Statistical significance was considered at p-value <0.05.

3. Results

Table 1 indicates that the age of the nurses in the study sample ranged between 19 and 52 years with mean 29.7 years. The majority of the nurses were married (67.2%), and were having 1-3 children (67.2%). Only about one-fifth of them were having a bachelor degree (20%) . (17.4%) of them were head nurses. Their experience ranged between less than one year and 35 years, with mean 8.7 years. Slightly less than half of the nurses had attended training courses (47.9%).

Figure 1 describes nurses' total perception of QWL and priorities for improvement. It shows that the highest domain of QWL was that of work world (40.0%), while the lowest was that of work context (23.0%). As for improvement priorities, the highest

was that of work life/home (55.8%) where the lowest was the work world (39.2%). In total, approximately one-third of the nurses had perceived high of their QWL (34.7%), while slightly less than half of them highly perceived priorities for improvement (47.9%).

Table 1: Socio-demographic characteristics of nurses in the study sample (n=265)

	Frequency	Percent	
Age (years):			
<30	153	57.7	
30-	76	28.7	
40+	36	13.6	
Range	19.0-5	2.0	
Mean±SD	29.7±	7.9	
Marital status:			
Single	55	20.8	
Married	178	67.2	
Divorced /Widow	32	12.0	
No. of children:			
0	24	11.4	
1-3	137	65.2	
4+	49	23.3	
Job:			
Supervisor	46	17.4	
Nurse	219	82.6	
Nursing qualification:			
Diploma	212	80.0	
Bachelor	53	20.0	
Experience (years):			
<5	69	26.0	
<5 5-	90	34.0	
10+	106	40.0	
Range	<1-3	5	
Mean±SD	8.7±6.0		
Attended training courses	127	47.9	

Table 2 describes the relations between nurses' agreement upon the four dimensions and total of QWL and the related improvement priorities. It shows that higher percentages of the nurses disagreeing with improvement priorities were agreeing with the dimensions and total of QWL. All the relations were statistically significant except for the dimension of work design (p=0.17).

Table 3 indicates the Relation between nurses' quality of work life (QWL) and their socio-demographic characteristic. points to statistically significant associations between nurses perception of QWL and their age (p<0.001), experience years (p=0.02), and attending training courses (p=0.004). As the table indicates, the perception of QWL is higher with increasing age, experience years of ten or longer, and attending training courses. The table also shows that the highest percentage of agreement was in emergency departments (27.2%) whereas the lowest

was in specialized units (12.1%). The difference was statistically significant (p = 0.04).

Table 4 indicates that the Correlation matrix of nurses' QWL dimensions scores. It proved to be statistically significant moderate positive correlations among the scores of various QWL dimensions. The weakest correlation was between the dimensions of life/home and work world (r=0.376), while the strongest was between the dimensions of work context and design (r=0.617). Similarly, it demonstrates statistically significant weak to moderate positive correlations among the scores of various priority

dimensions. The weakest correlation was between the dimensions of life/home and work world (r=0.292), while the strongest was between the dimensions of work world and context (r=0.577).

The correlations between nurses' QWL and corresponding priority dimensions and total scores (Table 5) proved to be statistically significant weak and negative. The weakest correlation was between the dimensions of work design (r=-0.124), while the strongest was between the dimensions of work world (r=-0.284). The correlation between the total scores was **-0.354**.

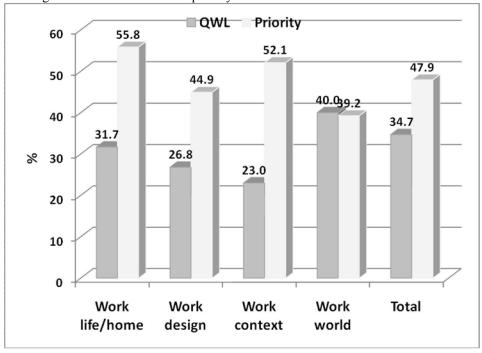


Figure 1: Nurses' total perception of QWL and priority of improvement

Table 2: Relation between nurses' total quality of work life (QWL) and their corresponding improvement priorities (n=265)

Quality of Work Life (QWL)		Improvement priority				
	1	Disagree		Agree		<i>p</i> -value
	No.	%	No.	%	Test	
Work life/home:						
Disagree	66	56.4	115	77.7		
Agree	51	43.6	33	22.3	13.68	<0.001*
Work design:						
Disagree	102	69.9	92	77.3		
Agree	44	30.1	27	22.7	1.85	0.17
Work context:						
Disagree	82	64.6	122	88.4		
Agree	45	35.4	16	11.6	21.21	<0.001*
Work world:						
Disagree	80	49.7	79	76.0		
Agree	81	50.3	25	24.0	18.17	<0.001*
Total QWL:						
Disagree	71	51.4	102	80.3		
Agree	67	48.6	25	19.7	24.31	<0.001*

^(*) Statistically significant at p<0.05

Table 3: Relation between nurses' quality of work life (QWL) and their socio-demographic characteristics (n=265)

	Qu	Quality of Work Life (QWL)				i
	High		Low		X ² Test	<i>p</i> -value
	No.	%	No.	%	Test	
Department:						
Specialized units	21	12.1	19	20.7		
Emergency	47	27.2	22	23.9		
Intensive care	22	12.7	15	16.3	9.92	0.04*
Medical	43	24.9	27	29.3		
Surgical	40	23.1	9	9.8		
Age (years):						
<30	88	57.5	65	42.5		
30-	52	68.4	24	31.6	15.46	<0.001*
40+	33	91.7	3	8.3		
Current marital status:						
Single	60	69.0	27	31.0		
Married	113	63.5	65	36.5	0.77	0.38
No. of children:						
0	12	50.0	12	50.0		
1-3	90	65.7	47	34.3	4.73	0.09
4+	37	75.5	12	24.5		
Job:						
Head nurse	31	67.4	15	32.6		
Nurse	142	64.8	77	35.2	0.11	0.74
Nursing qualification:						
Diploma	140	66.0	72	34.0		
Bachelor	33	62.3	20	37.7	0.27	0.61
Experience (years):						
<5	44	63.8	25	36.2		
5-	50	55.6	40	44.4	7.83	0.02*
10+	79	74.5	27	25.5		
Attended training courses:						
No	79	57.2	59	42.8		
Yes	94	74.0	33	26.0	8.21	0.004*

^(*) Statistically significant at p<0.05

Table 4: Correlation matrix of nurses' QWL dimensions scores

	Spearman's rank correlation coefficient QWL scores					
	Life/home	Design	Context	World		
QWL scores:						
Work life/home						
Work design	.491**					
Work context	.603**	.617**				
Work world	.376**	.393**	.530**			
Priority scores:						
Work life/home						
Work design	.365**					
Work context	.522**	.520**				
Work world	.292**	.343**	.577**			

^(**) Statistically significant at p<0.01

QWL scores	Spearman's rank correlation coefficient Priority scores					
	Work life/home	271**				
Work design		124*				
Work context			260**			
Work world				284**		
Total QWL					354**	

Table 5: Correlation matrix of nurses' QWL and corresponding priority dimensions scores

4. Discussion

This study assessed the quality of nursing work life (QWL) and related priorities for improvement in Ain shams university specialized hospital. The results demonstrated that the nurses have generally low QNWL, with better perception of the priorities for improvement. Nurses' perception of QWL and priorities are negatively correlated, with little influence of their socio-demographic characteristics on them.

According to the study findings, only approximately one-third of the nurses perceived their QWL as high, with the work context domain being the lowest. The findings are quite alarming since low QWL would lead to job dissatisfaction, burnout, and tendency to quit. All these possible consequences have negative effects on the nurses, patients, as well as the organization. In line with this, *Hayes et al.* (2006) emphasized that the practice environment impacts work content that in turn, determines intrinsic work motivation.

On the other hand, more nurses in the present study had high perceptions for urgent improvement priorities. As expected, the highest domain for improvement was that of work life/ home since all nurses in the sample are females and the majority are married and have children. This would add domestic loads to their work responsibilities. In agreement with this, Millicent and Richard (2010) clarified that nurses with families can experience more demanding family role tasks in addition to their potentially high demand work role tasks causing a further perception of a lack of balance. Thus, a number of studies identified the lack of work-life balance as an important factor having an impact on the OWL of nurses (Brooks and Anderson, 2004; Khani et al., 2008), and negatively influenced their lives (Hsu and Kernohan, 2006; Brooks et al., 2007).

In the work/home life dimension of quality of work life and related improvement priorities, the present study revealed higher improvement priorities with lower quality of life. This turned to be

statistically significant regarding balancing work and family needs, arranging child care while at work, and hospital policy offering child care. These associations reflect the significance of these improvement priorities in ameliorating the quality of work life of the nurses. They demonstrate the importance that focusing on meeting these needs. In line with this, studies reported that nurses thought on-site child care and daycare for the elderly were important for their QWL (Brooks and Anderson, 2004; Brooks et al., 2007; Khani et al., 2008).

The implications of the work schedule on an individual's ability to achieve a work-family balance are clear and previously demonstrated (Yildirim and Aycan, 2008). An employee's negative perception of a work schedule should increase the potential for the existence of work-family conflict through the perception of the scheduled hours as too excessive, irregular, or inflexible. These perceptions should increase pressures on the nurse's perception of ability to serve in the family role and fulfill expected demands (Millicent and Richard, 2010).

The present study included only female nurses so that no comparison by gender could be done. However, the high demand for improvement in work-life domain shown among them may be attributed to this fact since previous work-family conflict studies have shown a difference in levels of work-family conflict perception between males and females (Tausig and Fenwick, 2001; Tarpey and Nelson, 2009). The majority of pressure females experience comes from family demands rather than work demands especially when the family has children (Tausig and Fenwick, 2001). One possible explanation is that a larger portion of family role tasks that are time constrained typically falls on the female of the family.

The work design dimension of QWL came second lowest perceived domain among the current study nurses. The finding reflects low levels of satisfaction with the items of this domain, with more need for provision of the main work elements such as

^(*) Statistically significant at p<0.05

^(**) Statistically significant at p<0.0

manpower, time, and ability, and all three elements would influence job satisfaction. Thus, the improvement of this dimension of OWL would rest on achieving these needs as indicated by the significant associations between OWL items and related priority items. In congruence with these findings and their implications, Hayes et al. (2006) demonstrated that turnover behavior is influenced by organizational characteristics associated with workload, management style, promotional opportunities and work schedules. Moreover, it has been shown that each additional patient per nurse is associated with a 23% increase in the odds of burnout and a 15% increase in the odds of job dissatisfaction (Aiken et al., 2002). Also, the inadequacy of patient care supplies and equipment has been related to dissatisfaction among nurses (Al-Khaldi et al., 2002; Al-Khaldi and Al-Sharif, 2005).

The work context dimension of QWL was the lowest as perceived by the nurses in the present study. This dimension involved items focused on healthy work relations, good communication, and opportunities for self-development and advancement in career. It is evident that nurses in the current study lack these feelings, and therefore expressed a high need for related improvements as shown by the significant associations between QWL and priorities. In line with these results, previous research demonstrated that work context factors such as management practices, relationship with co-workers, professional development opportunities and the work environment actually influenced the QWL of nurses (Brooks et al., 2007). Similarly, a study in Saudi Arabia found that nurses were dissatisfied with the relationship with their coworkers, especially physicians, and had poor communication and interaction with them and this negatively influenced their job satisfaction and QWL (Alhusaini, 2006). Also, regarding the importance of self-development, prior research indicated the positive impact of professional development opportunities on the QWL of nurses (Webster et al., 2009).

The present study results showed that the work world dimension of QWL was the most highly perceived by nurses. Important items with significant and negative associations with their related improvement priorities were those of salary being suitable to job and feeling own work influences patients' lives and their families. These reflect the materialistic and psychological gains from work, which are essential for job satisfaction, and consequently the QWL. The study results reveal a low satisfaction with these items, associated with high related unmet needs. In agreement with this, factors as the salary and the image of nursing were reported sources of dissatisfaction for nurses (Alotaibi, 2008; Cabigao, 2009; Almalki et al., 2011), and were found

to explain 40% of the variance in QWL satisfaction (Lewis et al., 2001).

Concerning the importance of feeling the importance of their work in the life of others, as stressed by nurses in the present study, this has been shown to be critical in the perception of QWL among nurses. Thus, Almalki et al. (2012) reported that many participant nurses felt that people do not have an accurate image of the nursing profession. In Saudi Arabia, nursing is not ranked as highly as other medical jobs, such as medicine and pharmacy, and the public does not appreciate the role of nurses in providing health care, believing that nurses are no more than the assistants to physicians (Al Thagafi, 2006). This negative public stereotype of nursing is in-line with other countries such as Iran, Japan, Jordan and Kuwait, and it negatively affects nursing practice and retention (Almalki et al., 2012).

According to the current study, nurses' perception of QWL was higher with increasing age and experience years. This might be explained by the fact that as the nurses get older in age and gain more years of experience, they advance in their career and have higher job status, which has a positive reflection on their OWL. In line with this. McNeese-Smith and van Servellen (2000) highlighted that mature nurses have greater job satisfaction, productivity and organizational commitment. This may be attributed to the ability of older nurses to make a better adjustment to the work environment when compared with younger nurses (Shah et al., 2004). In terms of work experience, Davidson et al. (2007) and Lum et al. (2008) showed nurses with more experience are more satisfied and had less burnout. Meanwhile, Price and Mueller (2011) found that less experienced nurses tend to be younger, participate less in decisionmaking, which might lower their perception of OWL. However, it remains unclear whether it is work experience that it is related to the perception of OWL, or that age, work experience and tenure are inextricably linked (McCarthy et al., 2002).

Another important factor that influenced nurses' perception of QW: in the current study was the attendance of training courses, which seems to have a positive influence. This association might be related to the training itself as well as its impact on achieving the need for self-development, which is an important component of job satisfaction and consequently the quality of work life. However, less than half of the nurses had the opportunity of attending training courses. I congruence with this, the opportunities for professional development were reported by the respondents, in Saudi Arabia as unsatisfactory (Almalki et al., 2012). Similarly, Alhusaini (2006) found that 30.3% of nurses in

Riyadh were not offered any training courses or continuing education programs.

As the present study revealed, nurses' perception of QWL varied significantly among work department. It was highest in the surgical departments and lowest in the specialized units. This difference might be attributed to the nature of work in specialized units, which may need more vigilance, in addition to the type of patients dealt with in these units, e.g. dealing with renal failure patients in hemodialysis units and premature infants in incubators. In line with this, *Cartledge (2001)* found work-related stress to be a major contributor to nurse turnover in critical care units. Another study showed the effect of patient type on staff burnout *(Evers et al., 2002)*.

Lastly, the present study examined the intercorrelations among the scores of the various dimensions of quality of work life as well as the improvement priorities. The findings demonstrated statistically significant weak to moderate positive correlations among the scores of all four dimensions in both scales. These results add to the confirmation of the reliability of the two scales. The strongest correlations were revealed among the dimensions of work context and design and work world. This is expected since these three dimensions are more closely related to each other as compared with the dimension of work life/home.

Conclusion and recommendations

In conclusion, nurses in the study setting have generally low perception of QWL, with higher perception of priorities for improvement especially the work life/home dimension, and these are negatively correlated. The findings are alarming and indicate urgent need for improvements and need to be forwarded to hospital administration for taking actions to improve the ONWL of the nurses through improving the work environment. This necessitates special emphasis on the work context and work life/home dimensions with provision of more efficient supervision, opportunities for self-development and study, improving communication, provision of comfortable rooms for nurses, balancing work and family needs, and arranging child care while at work. Further research is proposed to assess the effectiveness of specific interventions in improving nurses' QWL through responding to identified improvement priorities.

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