ORIGINAL ARTICLE

Burnout and quality of life in nurses of a tertiary care hospital in Pakistan

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Abstract

Objectives: To determine the relationship of burnout and quality of life among nurses of different departments at a tertiary care hospital.

Method: The observational, cross-sectional study was conducted at Mayo Hospital, Lahore, from November 2013 to May2014, and comprised nurses recruited by convenience sampling. Maslach Burnout Inventory was used to assess burnout and World Health Organisation Quality of life instrument's BREF version was used to assess quality of life of the subjects. Data was analysed using SPSS 16.

Results: Of the 106 nurses with a mean age of 35.5±7 years, 83(79%) were experiencing severe burnout and a low quality of life. Nurses of Surgery and Obstetrics/Gynaecology departments who worked longer hours on the night shift scored higher on burnout and lower on quality of life.

Conclusion: Burnout in nurses was very common because of increasing workload and can negatively affect their quality of life leading to compromised patient care.

Keywords: Burnout, Nurses, Quality of life, Tertiary care hospital, Pakistan. (JPMA 66: 532; 2016)

Introduction

Burnout is defined as a physical and mental syndrome which entails physical exhaustion, fatigue and the emotions of hopelessness and desperation with a negative attitude towards work, life and other people.[1] The work of nurses involves helping people protect their health against diseases. They also have an influence on creating positive habits related to health.[2] Measuring burnout among nurses is important because their well-being has implications for stability in the healthcare workforce and the quality of care provided.[3] Burnout is an important issue and researchers have tried to restrain the level of burnout to minimise its negative consequences.[4]

Quality of life (QOL) is one of the most important aspects of human health. It is embedded in a physical, cultural, and social context. Poor QOL is strongly associated with reduced work performance, burnout and early retirement.[5] Work-life balance provides an opportunity to nurses to be able to balance their work and other commitments in life instead of only focusing on work. QOL is associated with work and the work environment such as relationships with supervisors, peers and colleagues.[6] A stressful environment may lead to high turnover in nurses.[7]

Previous studies have documented that burnout and QOL can be influenced by multiple factors.[8] A recent study done in 12 European countries confirmed the impact of the hospital work environment on QOL. Nurses reported workload as being in a mediating position between nurse practice surroundings and burnout. This stressful situation negatively affects the QOL of psychiatric care nurses.[9,10] Nurses in Third World countries such as Pakistan are not valued as highly as their counterparts in Western countries which is evidenced by their much lower salaries and poor work environments. Consequently, their physical and emotional health can be neglected in the course of their duties with neither their physician colleagues nor hospital administrators paying appropriate attention to their problems. This can lead to a significantly negative impact on patient care as well as the health of nurses. The current study was done to raise awareness about this serious issue in Pakistan and its surrounding countries. It was planned to determine the relationship between burnout and QOL among nurses of different departments in a tertiary care setup.

Subjects and Methods

The cross-sectional study was conducted in Mayo Hospital, Lahore, from November 2013 to May2014 after approval was granted by the Ethical Review Board of Kind Edward Medical University, Lahore. The sample size was determined using the criteria given in literature[11] ($N \geq 50+8k$, where k = all the predictors: age, time period worked, shift worked, department, marital status, burnout, QOL). The sample size needed was 106 (K=7).

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Two scales were used for data collection. The Maslach Burnout Inventory (MBI) contains 22 items and three subscales. The Emotional Exhaustion subscale includes 9 items, the Depersonalisation scale has 5 items and the third subscale is Personal Achievement which includes 8 items. Scoring is done on a 7-point rating scale ranging from 0 (Never) to 6 (Always). Alpha coefficient ranging from 0.79 to 0.95 has been reported for the three subscales.[12]

The World Health Organisation (WHO) QOL-BREF instrument includes 26 questions and four domains. There are also two items that are examined separately. Physical Health includes 7 items, Psychological Domain has 5 items, Social Relationships includes 3 items and Environment Domain includes 8 items. Alpha coefficient ranging from 0.71 to 0.86 has been found for the four subscales.[13]

The subjects were selected by using convenience sampling from different departments of the hospital. All nurses working in the relevant departments who were involved in direct patient care were eligible to participate in the study. Questionnaires were given to the nurses about age, marital status, years worked and departments.

Data was analysed using SPSS 16. The level of statistical importance was at 0.05 or below. Spearman correlation coefficient was used to see the relationship between burnout and QOL scores.

Demographic variables were evaluated using Two Means Test (t-test) and one-way analysis of variance (ANOVA) for comparison. Frequencies and percentages were calculated for categorical variables, and means and standard deviations for continuous variables.

Results

A total of 120 nurses were approached and 106(88.33%) agreed to participate. Of them, 18(17%) nurses belonged to Psychiatry Department, 17(16%) to Neurology, 20(19%) Medicine, 23(21.6%) Surgery and 28(26.4%) to Obstetrics/Gynaecology Department. All the 106(100%) respondents were female with a mean age of 35.5±7 (range: 20-50 years). Overall, 65 (61%) nurses were

Table-1: Mean-SD cross-correlation of 3 dimensions of burnout with demographic factors and working conditions.

Demographic Variables	n	Emotional exhaustion Mean ± SD	p- value	Depersonalization Mean ± SD	p- value	Personal accomplishment Mean ± SD	p- value
Age							
20-30	42	48.2 ± 10.2		26.5 ± 5.1		24.5 ± 5.2	
30-40	35	53.2 ± 8.9	0.02	29.6 ± 4.7	0.01	21.4 ± 3.3	0.01
40-50	29	52.1 ± 7.9		28.5 ± 4.2		21.3 ± 3.6	
Working Time Period(years)							
1-5	47	48.9 ± 10.4		26.5 ± 5.2		24.2 ± 5.2	
5-10	22	55.2 ± 6.6		30.4 ± 4.4		21.4 ± 3.1	
10-15	19	52.2 ± 9.1	0.09	28.9 ± 3.9	0.03	20.8 ± 2.9	0.01
15-20	11	52.4 ± 8.8		28.2 ± 4.4		22.9 ± 4.1	
20-25	7	48.3 ± 7.7		28.1 ± 5.2		19.8 ± 3.9	
Shift time							
Morning	57	49.1 ± 10.5		26.5 ± 4.9		23.1 ± 5.2	
Evening	29	51.5 ± 7.7	0.02	28.4 ± 5.5	0.01	22.0 ± 4.0	0.40
Night	20	54.9 ± 6.8		30.7 ± 2.9		21.9 ± 2.9	
Departments							
Psychiatry	18	48.7 ± 10.3		28.8 ± 4.4		24.3 ± 4.7	
Neurology	17	48.8 ± 11.9		25.1 ± 6.3		23.0 ± 5.6	
Medicine	20	53.6 ± 8.5	0.01	27.4 ± 5.9	0.05	23.1 ± 3.7	0.24
Surgery	23	46.9 ± 7.5		28.4 ± 4.1		21.4 ± 3.0	
Gynae	28	55.8 ± 6.7		29.5 ± 3.4		21.8 ± 4.9	
Marital Status							
Married	65	51.4 ± 8.7		28.1 ± 5.1		21.9 ± 4.6	
Unmarried	41	50.9 ± 10.5	0.53	27.9 ± 4.7	0.36	23.6 ± 4.2	0.05

SD: Standard deviation.

Table-2: Summary of Inter-correlations of Scores on 3 factors of MBI and 4 factors of WHOQOL-BREF.

Factors	MBI F1	MBI F2	MBI F3	QOL F1	QOL F2	QOL F3	QOL F4	QOL Total
MBI F1 Emotional Exhaustion	---	0.46**	-0.18	-0.06	-0.18	-0.09	-0.08	-0.13
MBI F2 Depersonalization	---	---	-0.19*	-0.13	-0.15	-0.19	-0.11	-0.19
MBI F3 Personal Achievement	---	---	---	0.51**	0.42**	0.27**	0.39**	0.59**
QOL F1Physical	---	---	---	---	0.42**	0.37**	0.22*	0.69**
QOL F2 Psychological	---	---	---	---	---	0.41**	0.43**	0.76**
QOL F3 Social	---	---	---	---	---	---	0.30**	0.62**
QOL F4 Environment	---	---	---	---	---	---	---	0.74**
QOL Total	---	---	---	---	---	---	---	---

df =105, *p<0.05, **p<0.001
MBI: Maslach Burnout Inventory
WHOQOL: World Health Organisation Quality of Life BREF: ??

married, while 41(39%) were unmarried (Table-1). Correlation analysis showed a strong negative relationship between burnout and QOL in nurses (Table-2). Three factors of MBI and four factors of WHOQOL-BREF significantly correlated negatively with each other which indicated that high burnout led to a poor QOL in nurses. Overall, 83(79%) nurses scored severe, 8(7%) scored moderate and 15(14%) scored low on the factor of Emotional Exhaustion of burnout. Likewise, 86(82%) nurses scored severe, 7(6%) scored moderate and 13(12%) scored low on the factor of Depersonalisation of burnout. Also, 88(83%) nurses scored low and 18(17%) nurses scored high on the factor of Personal Achievement. Nurses in the Obstetrics/Gynaecology Department were found to be more prone to burnout and to have a low QOL (28 nurses; 26%) compared to nurses in the other departments like surgery, medicine, psychiatry and neurology. Twenty nurses (20%) were working on the night shift and they were more prone to burnout and low QOL as compared to evening (29 nurses; 27%) and morning shifts (57 nurses; 53%). Those working on the night shift were more prone to burnout and low QOL compared to those in the other shifts. Married nurses (n=65; 61%) scored high on burnout and low on QOL compared to unmarried nurses (n=41; 39%). Results showed that nurses between 20-30 years of age with 5-10 years' working experience had more burnout and a poor QOL.

Discussion

We found a significant relationship between burnout and QOL among nurses. Only one previous study in Pakistan has looked at burnout among nurses.[14]

According to our study, married, older nurses experienced higher burnout and home/work stress compared to younger, unmarried nurses. Multiple researches in the United Kingdom and the United States,[9,10] have highlighted the important issue of burnout and QOL in nurses. In our study, 78-81% nurses scored high on burnout and low on QOL. Nurses in the Obstetrics/Gynaecology Department scored higher on burnout compared to those in the other departments.

Nurses in these departments have a more difficult working environment due to multiple factors such as having to deal with patients in pain, multiple health problems associated with pregnancy, and repeated, rapid surgeries as well as significant noise. In the Surgery D, a death during their work shift can cause significant stress for the staff. Multiple deaths can also cause emotional exhaustion. In the Psychiatry Department, nurses have to deal with patients who have multiple psychological problems, including patients who are potentially violent and aggressive. This can lead to greater stress and higher levels of burnout in these nurses.

Nurses who work on the night shift scored high compared to those in the other shifts. This may also be due to multiple factors, including having to leave their homes and children at night with concomitant emotional distress in the children, being unable to give adequate time to their families, and high levels of fatigue. Therefore, they burn out easier and earlier compared to their counterparts who work on day shifts.[15] In Japan, one research reported that nurses working in General and Internal Medicine wards had somewhat higher scores on burnout compared to nurses of Obstetrics/Gynaecology ward.[16] In Europe, a recent study reported that nurses working longer shifts were more likely to experience burnout, job dissatisfaction and they intended to leave the job.[17]

Our study found that nurses 20-30 years of age having

10-15 years; working experience showed more burnout and a lower QOL. Some recent studies in China, Europe and the USA concluded that younger nurses reported higher level of burnout and were more likely to experience feelings of agitation. They were also less likely to engage in techniques to manage these feelings.[2,8,18] When nurses first start their careers, their stress level is low. As responsibility increases and work piles up, they begin to experience stress. Multiple issues related to the increasing number of patients increase the level of stress.[19] With the passage of time, they learn to cope with the situation and become more resilient. Thus, nurses who have worked for longer periods of time are less prone to burning out easily and their QOL is maintained.

Married nurses have higher levels of burnout compared to single nurses. These findings are similar in China and the USA.[20,21] In Japan though, research has reported that there was no distinguishable difference between married and single nurses on three subscales of burnout.[16] It has also been reported that married nurses feel less emotionally consumed by the job, are more humane towards patients and feel more fulfilled by their profession.[22] In a country like Pakistan though, cultural and religious opposition, particularly for married nurses working on the night shift, may cause serious problems which causes high burnout in this group. Nurses who are unmarried, on the other hand, do not have to face those issues. Therefore, they may be less prone to burnout.

Burnout in nurses is a serious issue impacting the health of both nurses and their patients. In our study of 106 nurses at a large tertiary care academic hospital in Lahore, we found high levels of emotional exhaustion and burnout.

Nurses play a critical role in protecting health and creating positive health habits. There is an urgent need to assess and treat the problem of burnout in nursing staff, especially in developing countries like Pakistan to improve patient care as well as to prevent negative health consequences in nurses. Like most developing countries, Pakistan has a severe shortage of qualified nurses and needs to maintain and optimise the health of its existing nursing staff population. Failure to do so can negatively impact both patient care and nurses' health.

Acknowledgement of this problem would be a good starting point. Regular feedback from nurses should be a part of their training programme. They should have a supportive environment such as a healthy balance between family life and work, and available medical and mental health services.

Our study was limited to certain departments in the hospital where we felt nurses were more stressed. A larger sample size and broader sampling of other departments may present a more comprehensive picture of burnout being experienced by nurses. While we would expect similar results if we sampled nurses of the same departments in other tertiary care hospitals, our results cannot be generalised to all nurse practice settings in the country.

Conclusions

The study highlights the severity of burnout and the poor QOL in nurses. Major changes are required at the organisational level to prevent and address this serious issue because effects of burnout are broad with consequences not only for the individual personally and professionally, but also for patient care and healthcare systems. Further studies that assess the impact of nurses' mental and physical well-being on their life and their work performance as well as studies examining institutional factors contributing to this serious problem working are urgently required.

Declaration of Interest: The authors have no financial or personal concern that might lead to a conflict of interest with regards to this study.

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