Predictors of Psychological Well-Being of Nurses and Health Management Specialists

Mamdouh Hajjaj Alrasheedi[1], Hamdan Rabea Almutrefi[2], Mohammed Salem Al Rasheedi[3], Hamdi Hajjaj Al Rasheedi[4], Fawaz Hajjaj Alrasheedi[5], Salman Hajjaj Al Rasheedi[6]

1-Medical supply and supply department, nurse
2-Medical supply and supply department, nurse
3-Long term care hospital in hafer al-batin Specialist health Administration
4- Medical Supply and Supply department, Specialist health Administration
5-Maternity and Children Hospital, Health Assistant Nursing
6-King Khaled General Hospital/Psychologist

Abstract

Nursing is recognized as a highly stressful profession, with extensive research focusing on sources of job stress and levels of job satisfaction. However, there is a limited number of studies addressing nurses' mental health issues. This study aims to assess the psychological well-being of nurses in various job settings and identify sociodemographic, psychosocial, and workplace predictors of their well-being. A total of 412 nurses from five different health organizations in   participated in the study. A self-administered questionnaire was used to collect sociodemographic, occupational, and health-related data, along with the Standardized Arabic Version of the General Health Questionnaire (GHQ-30 items), Job Descriptive Index (JDI), and Social Support Scale (SSS). The results showed that 21.67% of nurses reported moderate to severe psychological symptoms on the GHQ. Factors such as fewer years of experience, lack of positive family and friend support, and low overall work satisfaction were identified as significant predictors of psychological ill health among nurses, in descending order of importance. The implications of these findings for nursing interventions will be discussed.

keywords including burnout, nurses, psychological well-being, and stress.

Introduction

Nursing is widely recognized as a highly stressful occupation, with factors contributing to occupational stress stemming from both workplace-related and personal sources. Workplace stressors within nursing include challenges such as dealing with death and dying, conflicts with doctors, inadequate support, preparation gaps, inter-staff conflicts, heavy workloads, shift work, and treatment uncertainties. Additionally, individual characteristics like personality hardiness, social support, and coping strategies are linked to burnout, which refers to the emotional and psychological response to chronic occupational stress. (Evans, 2002)

Long-term exposure to stress can manifest in physical symptoms like fatigue, headaches, and high blood pressure, as well as emotional symptoms such as depression, frustration, and impaired cognitive function, leading to negative attitudes towards work and decision-making difficulties. (Cottrell, 2000)

Job satisfaction, representing a positive orientation towards employment, is a crucial aspect frequently discussed in the context of nurses' stress, burnout, and coping mechanisms. Studies have shown that stress is negatively correlated with job satisfaction, while factors like commitment, autonomy, effective communication, and recognition are positively associated with job satisfaction. Individual characteristics such as social support at work, preference for autonomy, and coping strategies also influence nurses' job satisfaction levels. (Chen & McMurray, 2001)

While extensive research has explored stress and job satisfaction among nurses across various settings, fewer studies have delved into the potential impacts of such stress on mental and psychological well-being. However, existing evidence indicates a strong link between high levels of occupational stress, including nursing stress, and lower self-reported health and well-being. Studies have found significant correlations between stress among nurses, mood disturbances, and levels of depression. (Shader et al., 2001)

This study aims to assess the psychological well-being of nurses working in different health organizations . It seeks to identify sociodemographic, psychosocial, and workplace predictors that contribute to nurses' psychological well-being. (Flanagan & Flanagan, 2002)

Materials and Methods
Study Setting and Population
A cross-sectional study was conducted . These included the health insurance hospital (HIH), the curative care organization (CCO), Ministry of Health and Population (MHP), university hospitals, and military hospitals. All nurses employed in these hospitals were invited to participate, resulting in a response rate of 67.54%, with 412 nurses providing complete data for analysis.

Data Collection Plan
Full participants completed four tools. The first was a pre-designed, self-administered questionnaire collecting sociodemographic and professional data (e.g., experience, qualifications), along with inquiries about health-related information such as smoking, drug use, and stress-related symptoms. The second tool used was the Standardized Arabic Version of the General Health Questionnaire (GHQ-30), a screening instrument for psychiatric morbidity. Scores on the GHQ-30 were categorized into four levels of psychiatric morbidity. The third tool was the Arabic Version of Job Descriptive Index (JDI), measuring job satisfaction across various facets. The fourth tool was the Provision of Social Relations (PSR) questionnaire, assessing social support across different dimensions.

Statistical Analysis
Data analysis was performed using the SPSS software package. Chi-square and t-tests were used to identify statistical differences at a significance level of 5%. Stepwise multiple regression analysis was employed to determine significant predictors of nurses' psychological well-being.

Results
The sample consisted of 412 full participant nurses with a mean age of 27.7 ± 7.5 years, predominantly single (52.67%), technical school graduates (71.12%), and with a mean experience of 8.68 ± 7.24 years. The distribution across hospitals varied, with university hospitals having the highest representation (41.46%), followed by the health insurance hospital (HIH) (21.4%), and a minority from the Ministry of Health and Population (MHP) (8.73%). Most nurses worked alternating shifts (59.70%), particularly those in intensive care units (ICUs) and internal medicine units (65.8% each).

The total mean score on the General Health Questionnaire (GHQ) was 59.81 ± 11.16, with 21.67% of nurses classified as psychologically ill. Younger nurses were significantly more likely to experience psychological ill health. Unmarried nurses and university graduates also showed higher rates of psychological symptoms, although not statistically significant.

Regarding workplace variables, nurses in university hospitals and health insurance hospitals had higher rates of psychological symptoms compared to those in military hospitals. Nurses in ICUs and internal medicine departments also showed higher rates of psychological symptoms.

Nurses on alternating shifts had significantly higher rates of psychological symptoms compared to those on no shifts or day shifts. Less experienced nurses, correlated with younger age groups, were significantly associated with psychological ill health.

The Job Descriptive Index (JDI) showed an inverse relationship between job satisfaction and severity of psychiatric symptoms. Nurses with severe symptoms reported lower satisfaction across work aspects, while psychologically well nurses were most satisfied.

The logistic regression analysis identified negative total work satisfaction, fewer years of experience, negative family support, and negative friend support as significant predictors of psychological ill health among nurses, in descending order of importance.

These findings highlight the importance of addressing job satisfaction, social support, and work-related factors in promoting nurses' psychological well-being.

Table 1: Distribution of Nurses by Their Scores on General Health Questionnaire and Some Workplace Variables

Variable	Psychologically Well	Psychologically Ill	Total	c2	P
Organization					
University hospitals	121	49	170	14.58	0.005
HIH	68	20	88	14.58	0.005
MHP	28	8	36	14.58	0.005
CCO	53	7	60	14.58	0.005
Military hospitals	53	5	58	14.58	0.005
Department affiliation					
Intensive care unit	60	21	81	6.02	0.300
Renal	52	11	63	6.02	0.300
Surgery	88	21	109	6.02	0.300
Internal medicine	95	33	128	6.02	0.300
Burn	5	1	6	6.02	0.300
Others	23	2	25	6.02	0.300
Shift category					
No shift	59	12	71	10.53	0.005
Day and night	84	11	95	10.53	0.005
Alternating	180	66	246	10.53	0.005

c2: chi-square; P: probability; HIH: health insurance hospital; MHP: Ministry of Health and Population; CCO: curative care organization.

Table 2: Distribution of Nurses by Their Scores on General Health Questionnaire and Reported Stress-Related Physical Symptoms

Number of Physical Symptoms	Psychologically Well	Psychologically Ill	Total	c2	P
No symptoms	88	9	97	21.12	0.000
1 symptom	79	13	92	21.12	0.000
≥ 2 symptoms	156	67	223	21.12	0.000

c2: chi-square; P: probability.

Discussion

Burnout is a well-documented challenge in nursing, encompassing emotional, physical, and psychological consequences stemming from prolonged exposure to stressful work environments. In this study, a considerable proportion of nurses reported moderate to severe psychiatric symptoms (21.7%), indicating a notable prevalence of potential mental health issues among this group. This aligns with broader literature highlighting the demanding nature of nursing roles and the toll it can take on individuals' well-being. (Healy & McKay, 1999)

The study also sheds light on the connection between psychosomatic symptoms and work-related stress among nurses. These symptoms, ranging from fatigue to gastrointestinal discomfort, were frequently reported and were significantly associated with poorer mental health outcomes. Such findings underscore the importance of addressing work-related stressors to support nurses' overall health and resilience. (Laschinger et al., 2001)

Age and experience emerged as significant factors influencing nurses' psychological well-being. Younger nurses were found to be at a higher risk of psychological morbidity, a trend mirrored in studies highlighting

elevated emotional problems among younger healthcare professionals. Additionally, less experienced nurses showed higher levels of psychological ill health, likely attributable to the cumulative impact of stress over time in their roles. (Evans, 2002)

Surprisingly, the study found that university nurse graduates exhibited a higher risk of psychiatric morbidity compared to their counterparts from technical schools. This suggests that job roles and responsibilities within nursing hierarchies may play a more substantial role in mental health outcomes than educational backgrounds alone.

The work environment and specific units within healthcare settings also played a crucial role in nurses' mental well-being. Units such as ICUs, internal medicine departments, and operating theaters showed higher rates of psychiatric symptoms among nurses. This underscores the need for tailored support and interventions in high-stress areas to mitigate the impact on nurses' mental health. (Healy & McKay, 2000)

Job satisfaction and social support emerged as key protective factors against psychological distress among nurses. Factors like friend and family support, overall satisfaction with work, and years of experience were significant predictors of nurses' psychological well-being. These findings underscore the importance of fostering positive work environments and strengthening support systems to promote nurses' mental resilience. (Chen & McMurray, 2001)

In conclusion, this study highlights the multifaceted nature of nurses' mental health, influenced by various personal, professional, and organizational factors. Addressing work-related stress, enhancing support structures, and promoting job satisfaction are critical steps in safeguarding nurses' mental well-being and ensuring high-quality patient care.

References

1. Tyler, P. A., Carroll, D., & Cunningham, S. E. (1993). Stress and well-being in nurses: A comparison of the public and private sectors. *International Journal of Nursing Studies, 28*(2), 125–130.
2. Healy, C., & McKay, M. (1999). Identifying sources of stress and job satisfaction in the nursing environment. *Australian Journal of Advanced Nursing, 17*(4), 30–35.
3. Evans, L. (2002). An exploration of district nurses' perception of occupational stress. *British Journal of Nursing, 11*(8), 576–585.
4. Laschinger, H. K., Finegan, J., Shamian, J., & Almost, J. (2001). Testing Karasek's demand—control model in restructured healthcare settings: Effect of job strain on staff nurses' quality of work life. *Journal of Nursing Administration, 31*(5), 233–243.
5. Moore, T. F., & Simendinger, E. A. (1982). Organizational burnout: Is your hospital on fire? *Dimensions of Health Service, 59*(7), 17–18.
6. Gray-Toft, P., & Anderson, J. G. (1981). The nursing stress scale: Development of an instrument. *Journal of Behavioral Assessment, 3*(1), 11–23.
7. Cottrell, S. (2000). Occupational stress and job satisfaction in mental health nursing: Focused interventions via evidence-based assessment. *The Journal of Psychiatric and Mental Health Nursing, 8*(2), 157–164.
8. Pines, A., & Kanner, A. D. (1982). Nurses' burnout: Lack of positive conditions and presence of negative conditions as two independent sources of stress. *JPNMHS, 20*(1), 30–35.
9. Collins, M. A. (1996). The relation of work stress, hardiness, and burnout among full-time hospital staff nurses. *Journal of Nursing Staff and Development, 12*(2), 81–85.
10. Sullivan, P. J. (1993). Occupational stress in psychiatric nursing. *Journal of Advanced Nursing, 18*(4), 591–601.
11. Onciul, J. V. (1996). ABC of work-related disorders: Stress at work. *British Medical Journal, 313*(7065), 745–748.
12. Prices, J. L., & Mueller, C. W. (1986). *Handbook of Organizational Measurement*. Cambridge, MA: Ballinger.
13. Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. *Nursing Research, 42*(1), 36–41.

14. Healy, C. M., & McKay, M. F. (2000). Nursing stress: The effect of coping strategies and job satisfaction in a sample of Australian nurses. *Journal of Advanced Nursing, 31*(3), 681–688.
15. Revinicki, D. A., & May, H. J. (1989). Organizational characteristics, occupational stress, and mental health in nurses. *Behavioral Medicine, 15*(1), 30–36.
16. Al Fares, E., Al Shammari, A., & Al Hamad, M. (1992). Prevalence of psychiatric disorders in an academic primary care department in Riyadh. *Saudi Medical Journal, 13*(1), 49–53.
17. Smith, P. C., Kendall, L. M., & Hullin, C. L. (1985). *Revised Job Descriptive Index*. Ohio: Bowling Green State University.
18. Turner, R. J., Frankel, B. G., & Levin, D. M. (1983). Social support: Conceptualization, measurement, and implications for mental health. *Research in Community and Mental Health, 3*, 67–112.
19. Herschbach, P. (1991). Stress in the hospital—stresses on nurses and physicians. *Psychotherapy, Psychosomatic Medicine and Psychology, 41*(4), 176–185.
20. Goldberg, D. P., & Hillier, J. G. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine, 9*(1), 139–145.
21. Piko, B. (1999). Work-related stress among nurses: A challenge for healthcare institutions. Journal of the Royal Society of Health, 119(3), 156–162.
22. World Health Organization International Consortium of Psychiatric Epidemiology. (2000). Cross-national comparisons of mental disorders. Bulletin of the World Health Organization, 78(4), 413–426.
23. Chen, S. M., & McMurray, A. (2001). 'Burnout' in intensive care nurses. Journal of Nursing Research, 9(2), 152–164.
24. Boardman, A. P. (1987). The General Health Questionnaire and the detection of emotional disorders by general practitioners: A replicated study. British Journal of Psychiatry, 151, 373–381.
25. Jansen, P. G. M., Kerkstra, A., Abu-Saad, H. H., & Der Zee, J. V. (1996). The effects of job characteristics and individual characteristics on job satisfaction and burnout in community nursing. International Journal of Nursing Studies, 33(4), 407–421.
26. Snelgrove, S. R. (1998). Occupational stress and job satisfaction: A comparative study of health visitors, district nurses, and community psychiatric nurses. Journal of Nursing Management, 6(2), 97–104.
27. Shader, K., Broome, M. E., Broome, C. D., West, M. E., & Nash, M. (2001). Factors influencing satisfaction and anticipated turnover for nurses in an academic medical center. Journal of Nursing Administration, 31(5), 210–216.
28. Cam, O. (2001). The burnout in nursing academicians in Turkey. International Journal of Nursing Studies, 38(2), 201–207.
29. Flanagan, N. A., & Flanagan, T. J. (2002). An analysis of the relationship between job satisfaction and job stress in correctional nurses. Research in Nursing & Health, 25(4), 282–294.