ORIGINAL ARTICLE

FREQUENCY OF STRESS AND DEPRESSION IN FEMALE NURSES WORKING IN A TEACHING HOSPITAL

Shamaila Khalid,[1] Uzma Irfan[2], Salma Sheikh[3], Mahvish Faisal[4]

ABSTRACT

Objective: *To study the frequency of stress and depression in female nurses working in a teaching hospital.*

Material and Methods: *This cross-sectional study was conducted at Abbasi Shaheed Hospital with convenient sampling method. Seventy nurses who fulfilled inclusion /exclusion criteria were assessed for depression with the help of Hamilton Rating scale .The data was analyzed by Statistical Package for Social Sciences SPSS (version 11.0).*

Results: *Our results showed that 30% of nursing staff had mild depresive illness, 42.9% had moderate depresive illness, 8.6% severe depresive illness and 18.6% had no symptoms of depression. Work experience and age had significant association with anxiety and depression (P value < 0.01). The major problems faced by the nurses were poor environment (27.1%), heavy work load (21.4%), hostile behavior (15.7%), problem related to transport (14.3%) and occupational hazard (12.9%). Majority of nurses suggest improving the working environment of hospital.*

Conclusion: *The frequency of depression among nurses is reasonably high. Prolonged exposure to such depression without correct coping strategies, may emerge as a potential risk factor for the disease. This suggests that immediate steps should be taken for their control and management. This study invites further research to explore, implement and evaluate intervention strategies for prevention of depression.*

Key Words: *Depression, Nurses, Stress.*

This article may be cited as: Khalid S, Irfan U, Sheikh S, Faisal M. Frequency of stress and depression in female nurses working in a teaching hospital. KUST Med J 2010:2(1): 10-14.

INTRODUCTION

Depression is a common mental disorder that affects the functioning and thinking process of the individual, greatly diminishing his/her social role and productivity.[1] The prevalence of this disease in society in men is 3% and in women is 4-9%.[2] Depression is projected to become the leading cause of disability and second leading contributor to the global burden of disease by the year 2020.[3] Depression occurs in all persons, of all genders, ages and background.

Epidemiological studies show that the lifetime risk of experiencing depression varies with culture and gender. Females are more likely to suffer from depression, with a lifetime risk of 20-25% as compared to males whose lifetime risk is 7-12.[4] A large study at Jinnah Post Graduate Medical Center, Karachi back in early 1990s[5] showed that twice as many women as men sought psychiatric care and that most of these women were between 20s and mid 40s.

In work perimeter physical, psychological and social stimulants can account as factors for creating stress.[6] In nurses, this stress could be a cause of depression and despair.[7] Abandonment of nursing profession, decrease participation of volunteers in nursing field and job dissatisfaction lead nurses to complain.[8] As in any other profession, discouragement and disillusionment among nurses leads to abandon their profession.[9] Thus, 75.6% nurses have been reported having various degrees of job stress.[10]

ICD 10 Criteria - Depressive Episode (WHO 1992)

In typical depressive episodes of all three varieties (mild, moderate, and severe) described below, the individual usually suffers from depressed mood, loss of interest and enjoyment, and reduced energy leading to increased fatigability and diminished activity. Marked tiredness after only slight effort is common.Other common symptoms are:

1 Dow University of Health Sciences (D.U.H.S.) Karachi

2 Institute of Professional Psychology, Bahria University, Karachi

3 Sind Institute of urology and transplantation (S.I.U.T) Karachi

4 Abbasi Shaheed Hospital, Karachi.

Address for correspondence

Shamaila Khalid

Lecturer,
D.U.H.S. Karachi
E mail: shamaila.khalid1@gmail.com
Date Submitted: 22 October 2009
Date Revised: 16 June 2010
Date Accepted: 20 June 2010

- Reduced concentration and attention;
- Reduced self-esteem and self-confidence;
- Ideas of guilt and unworthiness (even in a mild type of episode);
- Bleak and pessimistic views of the future
- Ideas or acts of self-harm or suicide;
- Disturbed sleep;
- Diminished appetite

Mild Depressive Episode: Depressed mood, loss of interest and enjoyment, and increased fatigability are usually regarded as the most typical symptoms of depression. None of the symptoms should be present to an intense degree. Minimum duration of the whole episode is about 2 weeks.

Moderate Depressive Episode: At least two of the three most typical symptoms noted for mild depressive episode should be present, plus at least three (and preferably four) of the other symptoms. Several symptoms are likely to be present to a marked degree.

Severe Depressive Episode without Psychotic Symptoms: In a severe depressive episode, the sufferer usually shows considerable distress or agitation, unless retardation is a marked feature. Loss of self-esteem or feelings of uselessness or guilt are likely to be prominent, and suicide is a distinct danger in particularly severe cases. It is presumed here that the somatic syndrome will almost always be present in a severe depressive episode[11].

Work place emotional stress and age are associated with increase odds of depression. The implementation of which are reflected in poor patient care and physical symptom of stress in nurses. Sources of occupational stress for nurses in hospitals are heavy clinical workload, difficulty in relationships, poor recognition of hard work, non conducive organizational climate, immense personal responsibility, managerial role difficulties, home/work imbalances and daily hassles.[12]

This study was aimed to evaluate the frequency of stress and depression in female nurses working in a teaching hospital, to find out the level of depression due to stress in female nurses in order to address its cause and solution so that their output and performance in dealing with patients can be improved.

MATERIAL AND METHODS

This cross sectional observational descriptive study was conducted at various wards of Abbasi Shaheed Hospital on 70 Nurses and duration of study was one month. Study participants were selected by non probability convenience sampling method, satisfying following criteria:

- ❖ ***Inclusion Criteria:*** All female nurses who were on job for at least 5 years and those having working hours of more than 6 hrs.
- ❖ ***Exclusion Criteria:*** All nurses who were above 50 years of age and also those who were not interacting with patients i.e. they were on reception or teaching side.

DATA COLLECTION PROCEDURE: Through a questionnaire designed on Hamilton Rating Depression Scale. Questionnaires were filled by interviewing selected nurses. The questionnaire was based on 21 variable Hamilton rating scales for depression. In the response of questionnaire, each question was answered by the subjects and scored from according to the rating categorized as normal (below 10), mild (10-13), mild-moderate (14-17), moderate - severe (above 17).

DATA ANALYSIS: Data was analysed by SPSS (statistical package for social sciences) version 14.0.

RESULTS

The sample comprised of 70 female nurses. Age distribution was as follows (Figure 1): 31 nurses were included in the age group ranging between 25-29 years, 23 nurses included in the age group ranging between 30-34 years, 16 nurses were included in the age group ranging between 35 to 40 years. While looking at all age groups we concluded that nurses of 25-29 years group had the highest frequency of depression while nurses of 35-40 yrs age group had the highest severity of depression (Table I).

AGE DISTRIBUTION

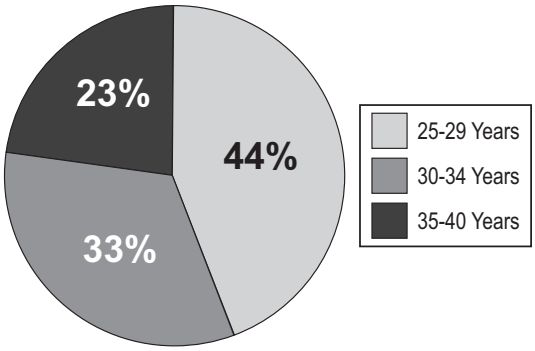

Fig. I

Seventy five percent of nurses had 5-9 years of service (Figure II). Majority of nurses had mild (30%) or moderate (42%) degree of depression (Figure III).

Nurses with 5-9 yrs length of service had the highest frequency (71.3%) of depression (Table II). Nurses with 10-14 yrs length of service had the highest severity of depression (66.7%). Poor environmental conditions and increased work load were their major problems

LENGTH OF SERVICE DISTRIBUTION

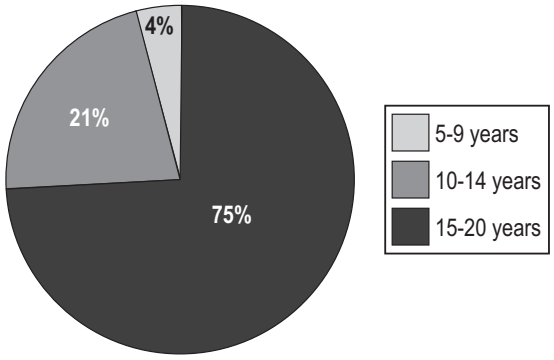

Fig. II

FREQUENCY OF DEPRESSION

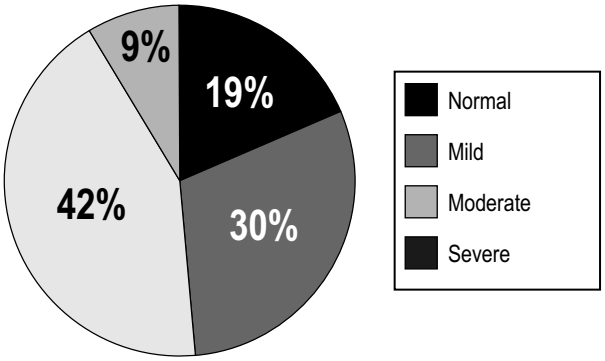

Fig. III

(Figure IV). Nurses suggested changes in the working environment and work load reduction as the key measures to be taken for releiving the stress among nurses (Figure V).

DISCUSSION

Nurses are the backbone of our health care system. They take care of the patients round the clock and are constantly under physical and mental stress. In order to perform their duties with care and dedication they must be stress free and satisfied with the job environment. Their job dissatisfaction can produce stress and depression with resulting down fall in job performance.

Based on the present study, it is evident that depression attributed to nurses has already taken its root among them, and it is matter of great concern. The study has also focused on ergonomic factors contributing to the occurrence of this problem.

The questionnaire was based on 21 variable Hamilton rating scales for depression. It has been the gold standard for the assessment of depression for more than 40 years. It was an interview questionnaire. In the response of questionnaire, each question was answered by the subjects and scored from according to the rating categorized as normal (below 10), mild (10-13), moderate (14-17) and severe (above 17).

In our study mild, moderate and severe depression was seen in 30%, 42.9% and 8.6% of nursing staff respectively while another study from Iran reported mild, moderate and severe symptoms of depressive illness in 73.1%, 21.5% and 5.4% of nursing staff respectively.[13]

Job stress leads to poor performance at work and negatively affects the health of an individual. Stress leads to poor quality of care, affects career longevity, and causes personal distress. This study showed that mild-moderate level of depression prevails among nurses. The nurses complained of poor working environment of the hospital with shortage of room and washrooms facility. Workload was identified in the research as being one of the most important source of stress and depression. The most obvious source of excessive workload is nursing staff shortage. The number of patients attended by the nurses in Pakistan is much more than internationally followed patient nurse ratio. According to international standard the nurses are required to attend 10 general beds, while other nurse is supposed to act as a reliever, but in Abbasi Shaheed Hospital the strength of nurses is quite low as compared to the growing number of patients. According to one nurse she has to attend 30

ASSOCIATION BETWEEN AGE AND DEPRESSION

Age in years	Severity of depression				Total
	Normal	Mild	Moderate	Severe	
25-29	12	19	0	0	31
30-34	0	1	20	2	23
35-40	1	1	10	4	16
Total	13	21	30	6	70

P-value < 0.01 (significantly associated)

Table I

ASSOCIATION BETWEEN LENGTH OF SERVICE AND DEPRESSION

Length of service interval	Severity of depression				Total
	Normal	Mild	Moderate	Severe	
	12	18	22	0	52
10-14 years	1	3	7	4	15
15-20 years	0	0	1	2	3
Total	13	21	30	6	70

P-value < 0.01 (significantly associated)

Table II

PROBLEMS FACED BY THE NURSES

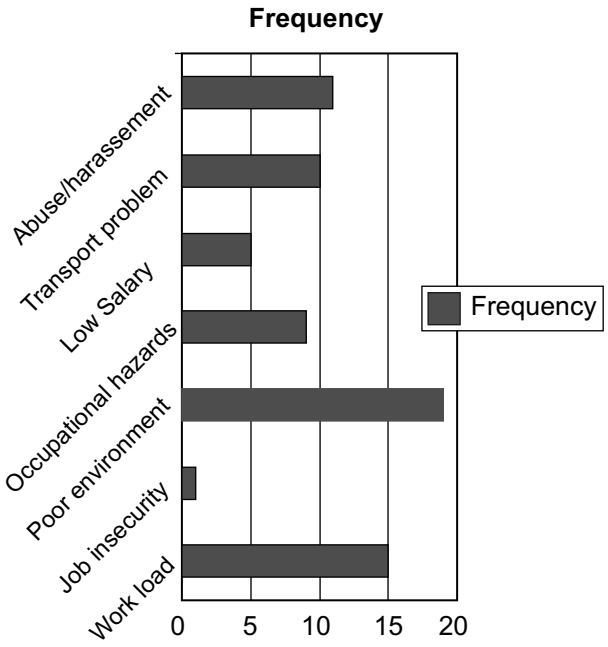

Fig. IV

RECOMMENDED SUGESSTIONS

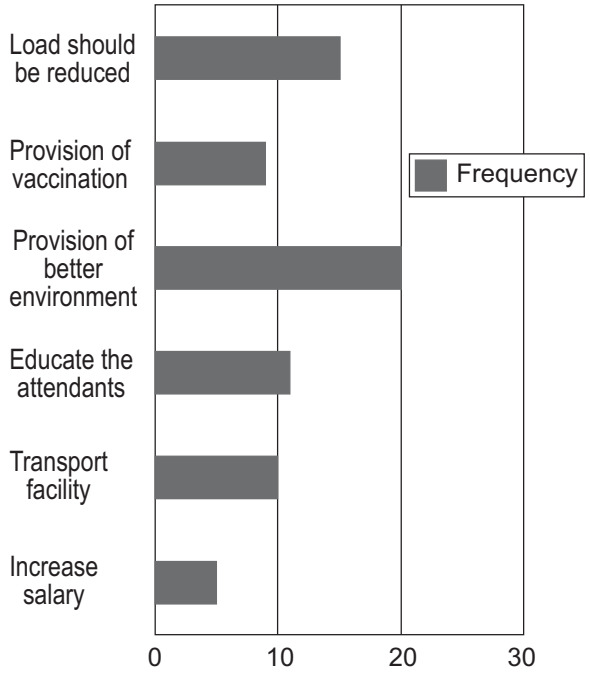

Fig. V

general beds per day. The suggestion given by them was that their working environment should be friendly and comfortable. Room facilities with attached bath should be provided. Disposable masks, gloves, aprons and torches should be provided. Medical facilities should be provided like regular medical check up and vaccination.

The best way to deal with the stress is to eliminate it at its origin i.e., the stress should be dealt in terms of preventive rather than as a curative strategy. Recognizing problems and dealing with them positively and proactively, is the cost-effective way forward in the management of stress. These results imply that the focus of change should be on prevention at the primary level. For example, providing transport facility and better working environment, appropriate pay and benefits, revising job plans, regular vaccination programme, ensuring adequate hours of work and adequate number of nurses to share the workload and responsibilities and provision of adequate resources and physical working conditions. In addition, the role of social support and relaxation techniques as stress coping strategies should not be overlooked as contributory factors for the well being of the nurses.[14-16] Thus an integrated approach for successful occupational stress management should be advocated, which seeks to manage stress at the individual and organizational levels. Individual approaches include stress management training and one-to-one psychological service - clinical, occupational and health counseling while organizational interventions ranging from structural (for example work schedules, physical environment) to psychological (for example social support, control of overwork, participation). However, it is also necessary that

nurses are encouraged to use these services. Studies have been conducted to evaluate the effects of coping strategies and job satisfaction to relieve the nursing work related stress.[17] The key interventional strategies for managing work-related stress in relation to nursing are prevention, timely reaction and rehabilitation.[18]

CONCLUSION

The frequency of depression among nurses is reasonably high. Prolong exposure to such depression without correct coping strategies, may emerge as a potential risk factor for the diseases.

By evaluating the contribution of these multiple variables upon the development of professional depression, in a stressfull occupation like nursing, there is immediate need for providing more supportive setting, provide education material geared towards designates and principles of diagnosis and management of depression. They should be encouraged to maintain their occupational links. The nurses should be encouraged to support the evidence of exercise and good nutrition.

In short, this work provides some insight about the level of depression among nurses. It acknowledges the need for further research to explore source of depression among nurses their possible solution and preventive measures and also to determine the effect of any change secondary to implementation of preventive strategies at different levels.

REFERENCES

1. Goodwin G. Mood disorder. In: Companion to psychiatric studies, sixth edition. Churchill Livingston: Harcourt Brace and Company Limited Edinburgh 1998; 551-64.
2. Kaplan HJ, sandock BJ. Synopsis of psychiatry, behavioral sciences, Clinical Psychiatry (5th Ed.) Baltimore: Williams & Wilkins 2001.
3. Murray CJ, Lopez AD. The Global Burden of Disease: A comprehensive assessment of Mortality and Disability from Disease, Injury and Risk Factors in 1990 and projected to 2020. Boston: Harvard School of Public Health, WHO and World Bank, 1996.
4. Al-Shammari SA, Khoja TA, Al-Sabaie A. Anxiety and Depression among primary care patients in Riyadh.Int J Ment Health 1993; 22(3): 53-64.
5. Naem S. Psychological risk factors for depression in Pakistani women. (Dissertation) College of Physicians and Surgeons, Karachi; 1990.
6. Kalimo R. Psychosocial factors at work. WHO, Geneva 2000, p. 2.
7. Gallaghere D. Is stress ripping nursing a part? NSNA; 2003: 59-63.
8. Faulkner N, Mackay EC. Stress in the work place public health and hospitals nurses. The Canadian Nurse, April-2000 pp 40.
9. Ostooie ND. Considering of selection motivation of nursing profession and appointment of measure of job satisfaction of occupying nurses in Tehran instructional hospital, Thesis of Ph. D of nursing college, the center of Aran Medical Sciences University, Tehran 2003.
10. Paiamy BM. Considering of state of social supports and it's relation with job wearing of nurses, cares of specially Ph. D nursing instruction – tendency of comprehensive hygiene of medical sciences college – university of education of teacher 2000.
11. WONCASIG Psychiatry and Neurology Culturally specific depression guidelines_october2004. Available from URL:"_http://www.globalfamilydoctor.com/aboutWonca/sig/FinalguidelinedepressionSIG_Version1.0.pdf
12. Nizami A, Rafique I, Aslam F, Minhas FA, Najam N Occupational Stress and Job Satisfaction among Nurses at a Tertiary Care Hospital. J Pak Psychiat Soc 2006; 3: 25.
13. Kavari H, Helyani M, Dehghani V. A Study of Depression Prevalence in Nurses and it's Effective Factors in Shiraz Namazi Hospital. Rawal Med J 2007; 32: 184-6.
14. Norbeck JS. Types and sources of social support for managing Job stress in critical care nursing. Nursing Res 2001; 34: 223-25.
15. Macabee. Ocupational stress and burnout in the nursing profession, model of prevention. AAO HNJ 1991; 39: 568-585.
16. Morano J. Relationship of workplace social support to perceived work-related stress in many staff nurses. J Post Anesth Nurse 2000; 8: 395-402.
17. Healy CM, McKay MF. Nursing stress: The effects of coping strategies and job satisfaction in a sample of Australian nurses. J Adv Nurs 2000; 31: 681-688.
18. Cox T. Griffiths A, Cox S. Work-related stress in nursing: Controlling the risk to health. Working paper, International Labour Office Geneva,1996.

CONFLICT OF INTEREST
Authors declare no conflict of interest