THE NEW ARMENIAN MEDICAL JOURNAL
Vol.5 (2011), No 4, p.63-66

ANXIETY IN PHYSICIANS AND NURSES WORKING AT INTENSIVE CARE UNITS IN YEREVAN HOSPITALS

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Abstract

Stress could be defined simply as the rate of wear and tear of the body systems caused by life. Stress at work is a huge problem. Nursing is a demanding work and often stressful occupation. Thus, nurses' health could be affected by stress dangerous consequences. Stress perception is highly subjective, and so the complexity of nursing practice may result in variation between nurses in their identification of stress sources, especially when the workplace and roles of nurses are changing, as is currently occurring in the United Kingdom health service.

The purpose of this research was to determine the amount and type of anxiety in nurses and physicians working at intensive care units and to explore possible relationships between these variables.

The study included 106 participants: nurses and physicians working at 10 intensive care units in 4 hospitals of Yerevan City in Armenia. They completed the Questionnaires containing Berger's Anxiety scale with 40 items.

Relationships between age, gender, education, history by years, marital status, type of family, working schedule during the day and month were examined. For data collection we used two questionnaires: Demographic Questionnaire with 10 items and Berger's Anxiety Questionnaire with 40 items: situational anxiety with 20 items and personality anxiety with 20 items.

Upon data collection and coding, the analysis was done with SPSS 15. Study findings showed that among 106 participants 76 belonged to nursing staff of 70 (66%) female and 6 (5.7%) male nurses. Among 30 physicians 5 (4.7%) were male and 25 (23.6%) were female. Mean age in nursing staff was 40 years and 36 years in physicians. Mean scores of situational anxiety in physicians were 39.40 (SD=4.22) and in nurses: 46.96 (SD=7.36), while mean scores of personality anxiety in physicians were 36.73(SD=4.22) and 40.96(SD=7.36) in nurses. The sample representing various human service professions (physicians, nurses) was eligible for the study.

In conclusion, this study provides valuable insight into the actual and perceived stressful experiences of critical care nurses, thus contributing to the ongoing effort to reduce burnout in this population. The findings also establish a basis for further nursing stress research in the context of the Adaptation Nursing Model.

Key words: *anxiety, nurses, physicians, intensive care units.*

INTRODUCTION

Stress was first defined in 1950s with the description of the general adaptation syndrome as a state where several systems of the organism move away from their normal resting conditions due to a non-specific agent, which causes stress through the activation of a chain of reactions, due to the release of catecholamine. Stress could be defined simply as the rate of wear and tear on the body systems caused by life [*Stranks J., 2005*]. The stress occurs, when a person has difficulty dealing with life situations, problems, and goals [*Videbeck S., 2007*]. Stress has physical, emotional, and cognitive effects. Although everybody has the capacity to adapt to stress, not everyone responds to similar stressors exactly the same [*Timby B., 2008*]. Stress and burnout are major

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factors that nurses have to deal with often while in their work environment. Nursing involves activities and interpersonal relationships that are often stressful. The proposed stress management techniques have varied across a wide spectrum of approaches, ranging from managing the work environment to reducing external sources of stress to managing the individuals' intrapersonal factors [*Firth-Cozens J., Payne R., 1999*]. Nursing care for clients, who are experiencing high levels of anxiety, can be stress provoking for nurses [*White L., 2000*]. Stress is considered to be one of the main themes in the research for the last two decades, and a significant growth is observed in researchers' interest as a concern to both employers and employees [*Hochwarter W. et al., 2007*].

Workplace and work-related activities of nurses are of threatening factors creating anxiety [*Chacko J. et al., 2007; Dominique P., 2009*]. Intensive care unit is one of the stressful environments for its staff. These stresses have negative effects on the mental health and performance of nurses and doctors. The urgency conditions, taking care of the dying, lack of equipment and facilities and not having communication with other colleagues are all stressful for nurses and doctors [*Mayer J., Saovey P., 1990*]. Coping has been viewed as a stabilizing factor that may assist individuals in maintaining psychosocial adaptation during stressful events. Thus, the actual reaction to an environmental event may be as important as the event itself [*Walton R., 2002*].

Stressors can be of social, physiological, or environmental origin [*Mimura C., Griffiths P., 2003*]. The practice of the nursing occurs mostly in hospital environments, demanding more involvement from the professional. In-patients suffer considerably because of hospital-related situation. Being away from home, from work, and the lack of information about what is happening and what will happen to him/her causes an intense emotional overload. It is up to nurses to provide him/her with the necessary comforts for recovery [*Middlebrooks J., Audage N., 2008*].

Considering the above mentioned, we conducted a study on anxiety in physicians and nurses working at intensive care units in Yerevan hospitals.

MATERIAL AND METHODS

This cross-sectional study utilized a Questionnaire to obtain information about the health care worker's job content and psychological stress. Physicians and nurses of intensive care units in 4 hospitals of Yerevan City in Armenia were the study group of this cross-sectional study performed in 2009-2011. At the time of study, among 106 participants there were 76 nurses and 30 physicians working in 16 intensive care units of Yerevan hospitals. They were asked to respond to 20-item Situational Questionnaire with Likert-scale responses (i.e., "never", "seldom", "often" and "most of the time") and they were asked to respond to 20-item Personality Questionnaire (i.e., "never", "sometimes", "often" and "most of the time"). Demographic variables, including gender, age, marital status and type of family, working hours per day, working hours per month, were included in the analyses. We examined the relationship between age, gender, education, history by years, marital state family type, work time in a day and month. For data collection we used two questionnaires**:** Demographic Questionnaire with 10 items and Berger's Anxiety Questionnaire of 40 items (situational anxiety with 20 items and personality anxiety with 20 items). Upon gathering, the encoded data were analyzed using SPSS 15.

RESULTS

Research findings showed that among 106 participants there were 76 nurses: 70 (66%) female and 6 (5.7%) male. Among 30 physicians 5 (4.7%) were male and 25 (23.6%) were female. The mean age in

Table 1.

Distribution frequency and comparison of mean scores of situational anxiety between physicians and nurses in Armenia

Situational anxiety / Group	Number (Percent)	Mean	STD Deviation	T- VAL	DF	Sig
Nurses	76 (71.70%)	46.96	7.36	5.399	104	0.000
Physicians	30 (28.30%)	39.40	4.22			

Table2:

Distribution frequency and comparison of mean scores of personality anxiety between physicians and nurses in Armenia

Personality Anxiety / Group	Number (Percent)	Mean	STD Deviation	T- VAL	DF	Sign
Nurses	76(71.70%)	40.96	7.48	2.731	104	0.000
physicians	30(28.30%)	36.73	8.03			

participants was 40 years among nurses and 36 years in physicians (as of 2011).

The mean score of situational anxiety in physicians was 39.40 (SD=4.22) and in nurses it made 46.96 (SD=7.36) (Table 1). The statistical analysis of obtained data (*T*-test) showed significant difference between mentioned mean values of situational anxiety in physicians and nurses (p=0.000).

The mean score of personality anxiety in physicians was 36.73(SD=4.22) and in nurses it made 40.96 (SD=7.36) (Table 2). The statistical analysis of data (*T*-test) showed significant difference between mean values of personality anxiety in physicians and nurses is significant (p=0.064).

The sample consisted of various human service professions (physicians, nursing staff) eligible for the study. All 76 nurses had bachelor science degree, and all physicians were specialists in medical science. Among the nurses 32 (30.2%), were married and 37 (34.9%) were single; 4 (3.8 %) were separated, 2 (1.9%) were divorced and 1 person was widowed. Among 30 physicians 15 (14.2%) were single, 12 (11.3%) were married, 2 (1.9%) were separated, and 1 (0.99%) was divorced.

DISCUSSION

This is the first study in Yerevan to investigate occupational stress in nurses and physicians. Almost all nurses and physicians in state-owned intensive care units were involved in the survey as our target population. The level of situational anxiety experienced at work by nurses (M=46.96) is higher than that experienced by physicians (M=39.40), and the level of personality anxiety experienced at work by nurses (M=40.96) is higher than that experienced by physicians (M=36.70). Extreme cases, long-term stress, or traumatic events at work may lead to psychological problems and be conductive to psychiatric disorders resulting in absence from work, being unable to work again. The results of the study showed that human service workers experience high level of stress (in nurses it was higher). Stress and crises are inevitable in every one's life. Human beings experience stress early, even before they are born. A certain amount of stress is normal and necessary for survival. The studies conducted by Hsiu-Chuan Shen and co-workers in a study on stress in nurses of psychiatry institutions in Taiwan showed that occupational stress was associated with the young age, being widowed, divorced, separated, as well as with the high psychological demand and threat associated with work [*Shen H.-C. et. al., 2005*]. S. Sehlen and associates in their study entitled "Job stress and job satisfaction of physicians, radiographers, nurses and physicists working in radiotherapy" demonstrated that workplace environment has a negative impact on stress levels and the satisfaction of the radiotherapy staff reveals similar results in this study [Sehlen S. *et al., 2009*]. We concluded that nurses and physicians in intensive care units are under significant stress related to work factors. The healthcare work environment as a source of overwork and stress has been implicated in today's nursing shortage.

CONCLUSION

There is a necessity to teach proper methods of coping with stress to the physicians and nurses, community, as well as the necessity for supportive service. Under stress, people find it difficult to maintain a healthy balance between work and non-working life. At the same time, they may be engaged in unhealthy activities, such as smoking, drinking and abusing drugs. All employers should carefully consider the systems that they have in place for assessing, preventing, and otherwise managing work stress.

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Acknowledgment

This study was funded by the Yerevan State Medical University and carried out in the Republic of Armenia. The author would like to acknowledge the staff of Yerevan Hospitals for assistance in data collection and all the physicians and nurses who participated in the study.