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Identify level of stress among new graduate registered nurses (RN's) working in emergency room settings

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Abstract

Aim: To identify level of stress and factors related to it among new graduate registered nurses (RN's) working in Emergency Room settings.

Methodology: A type of cross-sectional study was conducted among 50 new graduated nurses working in emergency room settings. The method of data collection used was a self-administered questionnaire. This contained various items on psychosomatic symptoms, self-perceived health, job satisfaction, emotional load and social support from peers. Self-reported stress level was measured by the question: 'How stressful do you perceive your present job? The response could be ranked by a ten point scale from the lowest level of perceived stress (1) to the highest (10). Based on the responses the participants were categorized into one of the three following groups: low (1-3 scores), medium (4-6 scores) and high (7-10 scores) stress levels. As to the frequency of psychosomatic symptoms, the following self-reported symptoms were investigated: tension headache, back-pain, sleeping problems, chronic fatigue. These items were from the Psychosomatic Symptom Checklist [13]. The aim of this measure was to obtain information on the frequency of these symptoms during the past 12 months.

Results: Among the 50 enrolled nurses, 76% were females and 24% were males. 68% of nurses belonged to 20-25 years of age group, while 32% belonged to more than 25 years of age group. 82% nurses were unmarried and 18% were married. Out of 1-10 stress level likert scale, 22% participants had low (1-3 scores), 52% had moderate (4-6 scores), and 26% had high stress levels (7-10 scores). Majority of the participants had often tension headache (36%), seldom back pain (42%), seldom sleeping problems (24%), and chronic fatigue occasionally (36%). Out of 50 participants, 30% were rather satisfied, 42% were so-so satisfied, and 32% were rather dissatisfied with the job.

Conclusion: Newly graduated nurses working in emergency departments have a moderate to high level of stress. It can be suggested that nurse managers, preceptors, and/or mentors can provide support to nurture new graduates and possibly incorporate coping behaviors into the curricula of (new) RN orientation. This can be achieved through simulation, case studies, role play, reflection activities, and role modeling in the clinical work environment. Assisting newly-graduated nurses in identifying transferrable (life) skills may help decrease anxiety that can be associated to work-related stressors. This study also suggests that having supportive relationships with peers may reduce the occurrence of nurses' high stress levels. Beyond improving social support and the psychosocial climate in the workplace, special emphasis should be put on identifying those who are at special high vulnerability for work-related stress.

Keywords: Psychosomatic, stress, strain headache, nurses

Introduction

According to the U.S. National Institute of Occupational Safety and Health, job stress is a harmful response physically and emotionally when the employee's skills, resources, and needs could not fulfill the requirement of the job [1]. Nurses are the frontline staff of a health care team, and many of them experience work-related stress. Studies have reported that nurses work under great pressure due to heavy workload, poor staffing, dealing with death and dying, and interstaff conflict [2] and also because of lack of resources, little training, excessive paperwork, and limited shared governance in decision making [1].

Stress as a general episode of organizations, and a person's competence to positively confront stressors would determine the individual's success in overcoming the related stress reactions [3]. In general, past research reports the negative impact of stressful situations on health outcomes: psychologically, physically, and functionally [4]. The issue of stress amongst health care professionals is currently a major concern in health policy. Health professionals are exposed to a great number of stressors in their job. The main psychological stressors at work - beyond the physical ones - can be linked to the type of task(s) undertaken; degree of responsibility; the presence of possible role conflict; interpersonal relationships with peers, supervisors and patients; organisational climate; irregular work schedule, and maintenance of professional training [5].

Occupational stress is a process in which some characteristics of the work or the workplace have harmful consequences for employees [6]. The three sources of stressors in the workplace are the task and its characteristics, interpersonal relationships, and the characteristics of the organization as a whole. If any one of these elements of die workplace causes an employee strain, that feature can be described as a stressor for the employees [7]. The effects of occupational stress on employees include many possible physiological, psychological, and behavioral disorders that are assumed to be strains experienced by individuals under uncommon stress, (e.g. job dissatisfaction, high labour turnover, depression, insomnia, anxiety or other symptoms) [8].

All in all, nursing is invariably assumed to be a stressful area within the health service. Nurses experience a variety of occupational stress, the most common source being the pressure of workload [9]. Insufficient time for patient care, poor work environment and difficult patients are also frequently mentioned as main sources of occupational stress. Moreover, perceived lack of social support from supervisors and peers can also produce stress in the workplace [10]. Hence the present study was undertaken with the aim to identify level of stress and factors related to it among new graduate registered nurses (RN's) working in Emergency Room settings.

Materials and Methods
A type of cross-sectional study was conducted among 50 new graduated nurses working in emergency room settings. The method of data collection used was a self-administered questionnaire. This contained various items on psychosomatic symptoms, self-perceived health, job satisfaction, emotional load and social support from peers.
Regardless of an employee's opinion, it cannot be said that he/she experiences occupational stress unless they evaluate a job as being stressful [5]. Thus the individual's appraisal of an environmental situation as stressful is a cognitive process [11]. Self-reported stress level was measured by the question: 'How stressful do you perceive your present job?' [12]. The response could be ranked by a ten point scale from the lowest level of perceived stress (1) to the highest (10). Based on the responses the participants were categorized into one of the three following groups: low (1-3 scores), medium (4-6 scores) and high (7-10 scores) stress levels.
As to the frequency of psychosomatic symptoms, the following self-reported symptoms were investigated: tension headache, back-pain, sleeping problems, chronic fatigue.

These items were from the Psychosomatic Symptom Checklist [13]. The aim of this measure was to obtain information on the frequency of these symptoms during the past 12 months.

Results
Among the 50 enrolled nurses, 76% were females and 24% were males. 68% of nurses belonged to 20-25 years of age group, while 32% belonged to more than 25 years of age group. 82% nurses were unmarried and 18% were married.

Table 1: Demographic details

Variables		Number	%
Gender	Male	12	24
	Female	38	76
Age group (in years)	20-25	34	68
	>25	16	32
Marital status	Unmarried	41	82
	Married	9	18

Out of 1-10 stress level likert scale, 22% participants had low (1-3 scores), 52% had moderate (4-6 scores), and 26% had high stress levels (7-10 scores).

Table 2: Stress levels

Stress level scale (1-10)		Number	%
'How stressful do you perceive your present job?	Low (1-3 scores)	11	22
	Medium (4-6 scores)	26	52
	High (7-10 scores)	13	26

Majority of the participants had often tension headache (36%), seldom back pain (42%), seldom sleeping problems (24%), and chronic fatigue occasionally (36%).

Table 3: Presenting symptoms of stress

Symptoms		Low (n=11)	Medium (n=26)	High (n=13)	Total (n=50)
Tension headache	Never	3	1	0	4 (8%)
	Often	1	10	7	18 (36%)
	Occasionally	2	9	4	15 (30%)
	Seldom	5	6	2	13 (26%)
Back pain	Never	3	1	1	5 (10%)
	Often	2	3	4	9 (18%)
	Occasionally	2	8	5	15 (30%)
	Seldom	4	14	3	21 (42%)
Sleeping problems	Never	3	8	2	13 (26%)
	Often	0	3	4	7 (14%)
	Occasionally	2	6	4	12 (24%)
	Seldom	6	9	3	18 (36%)
Chronic fatigue	Never	0	0	0	0 (0%)
	Often	2	7	8	17 (34%)
	Occasionally	4	10	4	18 (36%)
	Seldom	5	9	1	15 (30%)

Out of 50 participants, 30% were rather satisfied, 42% were so-so satisfied, and 32% were rather dissatisfied with the job. Majority of high stress level participants were dissatisfied with the job. 50% of participants had experienced occasional emotional load at work. Only 28% participants were able to receive social support from peers regularly, while 42% had occasional peer support at work.

Table 4: Job satisfaction, emotional load and social support from peers

Questions	Answer	Low (n=11)	Medium (n=26)	High (n=13)	Total (n=50)
'How much are you satisfied with your present job?'	Rather satisfied	7	6	2	15 (30%)
	So-so	4	13	4	21 (42%)
	Rather dissatisfied	2	7	7	16 (32%)
'How often do you experience emotional load at your work?	Never	2	4	1	7 (14%)
	Often	3	5	3	11 (22%)
	Occasionally	4	14	7	25 (50%)
	Seldom	2	3	2	7 (14%)
'How often do you receive social support from your peers when facing difficult situations at your work?	Never	0	0	0	0 (0%)
	Often	5	8	1	14 (28%)
	Occasionally	4	12	5	21 (42%)
	Seldom	2	6	7	15 (30%)

Discussion

Socialization of new graduates into the workplace included the complex and ongoing process of a new nurse learning the knowledge, skills and behaviors of the nursing profession, which in turn assisted them to develop their professional identity. Socialization and acceptance by others in the unit was achieved by various methods and was found to positively influence confidence and competence during new graduate transition. Socialization was affected by workplace culture, professional and supportive relationships and support structures built into the environment.

Self-reported indices of health (e.g. the perception of one's own health) are widely used in health surveys. A number of studies have reported that self-perceived health is related to the presence of psycho physiological symptoms and emotional distress [14]. This finding suggests that in nurses the evaluation of one's own health might also be indicative of work related stress.

Generally transition programs exist to support the transition of nurses to practice, and one view is that new graduate nurses should graduate ready to meet workplace expectations [15]. The rival view is that due to a demonstrated theory-practice gap and patient safety risk, there is an imperative need to provide support to graduates during the first year of practice to build relationships that increase their patient care capacity, confidence, competence, job satisfaction, and retention rates [16, 17]. Although new graduates experience the transition process differently [18], the first year of practice is recognized as a stressful period. In many health care environments, new graduates are also commencing in specialist practice areas, and these feelings are amplified when transitioning into a critical care environment [19].

Research has highlighted that a theory-practice gap is evident in role-related knowledge, skills and clinical thinking, and that reality shock occurs as new graduates enter the nursing workplace [15]. While there was research about the effectiveness of new graduate transition interventions [20], there was an overall lack of research about the readiness of new graduates entering critical care areas [21]. We found one study about how nursing students felt about their perceived readiness to work in critical care areas [22] however this did not relate to new graduates experiencing this transition.

In a study by Nied (2009) [23], each new graduate in a nurse residency program was designated a preceptor and a mentor. The preceptor was a nurse who worked clinically, one-on-one with the new graduate. The mentor was an external senior nurse, who provided guidance and emotional support. Mentors believed there was significant improvement of new graduates' clinical skills following the residency, while preceptors perceived only a slight improvement of clinical skills. The cause of this contrast in perception is unknown. Mentors, as senior nurses, had the administrative power to authorize new graduates to work autonomously. At times, there was a mismatch between the mentors' and preceptors' assessment of new graduates' competence possibly resulting in graduates being elevated to independent practice before they were ready. This is a concern for patient and staff safety if the preceptor's assessment of the graduate were valid [23].

In critical care nursing fields, several models for new graduate and novice nurse transition exist with differing degrees of effectiveness [16, 20]. Educational support frameworks in nursing are inconsistent [24] and vary in duration, structure, program components, rotations, financial support and content [15, 20]. As such, the requirements needed to deliver effective education to new graduate and novice nurses entering a specialty nursing field, that best facilitates learning and transition are not clear [25].

In our study, only 28% participants were able to receive social support from peers regularly, while 42% had occasional peer support at work. The present study suggests that health care managers who wish to reduce their employees' work-related stress should increase the opportunities for social support in the workplace. Beyond improving social support and the psychosocial climate in the workplace, special emphasis should be put on identifying those who are at special high vulnerability for work-related stress.

Conclusion

Newly graduated nurses working in emergency departments have a moderate to high level of stress. It can be suggested that nurse managers, preceptors, and/or mentors can provide support to nurture new graduates and possibly incorporate coping behaviors into the curricula of (new) RN orientation. This can be achieved through simulation, case studies, role play, reflection activities, and role modeling in the clinical work environment. Assisting newly-graduated nurses in identifying transferrable (life) skills may help decrease anxiety that can be associated to work-related stressors. This study also suggests that having supportive relationships with peers may reduce the occurrence of nurses' high stress levels. Beyond improving social support and the psychosocial climate in the workplace, special emphasis

should be put on identifying those who are at special high vulnerability for work-related stress.

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