Novice Nurses Experience of Clinical Stress in a Tertiary Care Teaching Hospital

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Abstract: *Among all health care professionals, nursing is said to be a highly ranking profession who are the victims of stress. Novice nurses have a period of transition before they become competent to provide patient care. It may be very strenuous for the novice nurses to get orientation about the new work environment, rendering patient care, learning new roles and responsibilities, meeting the expectation of colleagues and superiors. The objective of the study was to evaluate the clinical stress among novice nurses and to associate the clinical stress among novice nurses with their selected socio demographic variables. Using a cross sectional research design , study was conducted in Narayana Medical College and Hospital, Nellore.120 Nurses were selected by non probability purposive sampling technique. The instrument used to collect data was Expanded Nursing Stress Scale. Data was analyzed by using descriptive statistics such as frequency, percentage, mean and standard deviation and inferential statistics such as one way ANOVA .Results revealed that frequent stressful event was rated to be the uncertainty concerning the treatment, workload, death and dying, problems with supervisors, conflict with physicians, problems with peers, inadequate emotional preparation, patients and their families and discrimination. Age, marital status, educational qualification , area of work and duration of work showed a statistical significant difference in observation with each of the nine subscales denoting stress in ANOVA analysis (p=0.001,p=0.01,p=0.05). The study concludes that novice nurses experience a highest stress. Managing stressor is vital to prevent employee turnover. Motivation, cultivating confidence and promoting interpersonal skills will facilitate the reduction of stress and increases job satisfaction.*

Keywords: *Expanded Nursing Stress Scale, New graduate nurses, Novice, Nurses ,Stress.*

I. Introduction

Stress is a common phenomenon that affects anyone's life. Among all health care professionals, nursing is said to be a highly ranking profession who are the victims of stress. The trend of shortage of nurses was increasing day by day. Nurses who are newly graduating and entering in the profession often fall a prey for it and many feel to quit the job itself.

Novice nurses have restrictions in the use of technical skills and may be lacking skills to provide a comprehensive health care to the patients. Hospital administrators feel that all the novice nurses may not be able to provide secure and efficient patient care[1].Novice nurses have a period of transition before they become competent to provide patient care. It may be very strenuous for the novice nurses to get orientation about the new work environment, rendering patient care, learning new roles and responsibilities, meeting the expectation of colleagues and superiors[2].

Novice nurses experience high levels of stress due to reality shock. The gap between the theory and practice are considered to be the cause. This can place a large amount of emotional stress and strain which can even affect the physical well being[3]. If the novice nurse feel dissatisfied in the job, high stress, burn out may predispose them to think about quitting the job. If they leave, the economic input given for preparing a graduate nurse will be in vain.

The demands placed by the physician and nursing superiors are high on novice nurses. Some factors which are considered to cause high stress were idealistic expectation, insufficient authority, conflict in work environment and demands from the patient and family members[4].

Job hassle such as increased workload and time pressure are considered to be an important source of stress. Zhang, Yuanyuan et al two main factors were identified for the intention of leaving the profession was clinical stress and professional identity [5] . The process of evolution from student nurse to registered nurse is stressful.

1.1 Background of the study

In a qualitative study conducted on nurses revealed few themes like inadequate skills in terms of knowledge, practice and communication, workplace factors like work environment and climate, patient challenges like their health demands, family demands and behavior and behavior of colleagues and superiors which are the main factors of stress and the intention for the nurses to leave the profession[6] .

A study conducted in south Ethiopia reports that job related stress mean & SD was 58.46 ± 12.62 .The main factors for the stress was caring for death and dying, ambiguity in patient treatment, workload and least factor being sexual harassment [7].

A theory has been postulated on the socialization process of nurses entering newly in the work place which can be divided into four phases. First phase aims on learning skills for work and unit, second phase in fitting with co-workers, third phase is accommodating to ethical annoyance and fourth phase is declaration. Nurses may go through all the phase and sometime they may undergo the phases in different order [8,9].

Kramer"s (1974) theory identified four phases in the socialization of new nurses to the work place. During the first phase, new nurses focus on learning the necessary skills for work and the unit routines. Difficulties in negotiating in this phase can lead to feelings of being overwhelmed and threaten their self-confidence. In the second phase, the new nurses" main concern is fitting in with coworkers. The third phase is moral outrage characterized by anger or frustration related to the discrepancy between their school-learned, professional values and the bureaucratic values that they encounter in the work place. Finally, phase four is resolution when the new nurse chooses which values she is going to uphold. Kramer theorized that the phases are not necessarily chronological and that they are independent of one another; thus not every nurse would go through all four, nor would they go through them in the same order [10].

87.4% of the nurses have occupational stress and the significant factors were time demands, handling work and home situations, work load, job demands[1] . In a selected tertiary care hospital almost 50% of the nurses reported extreme stress and conflict with doctors, inadequate preparation, dealing with patient and their families, discrimination in workplace were considered to be the factors [12].

The burden on the nursing workload is contributed by inadequate nurse patient ratio which is 1:2250 in India [13].The nurse patient ration in India (2016) is 1:60 whereas the actual desired ratio is 1:4 [14] .

Health issues, absenteeism, decrease in quality of patient care, medical errors, aggressive behaviors' and changing career are stress related issues faced by the novice nurses [15,16].

Guiyuan Qiao, Sijian Li, Jie Hu, 2011 found that role transition from student to staff nurse is difficult as they are not adequately prepared. Also it is noted that denial was the common coping strategy used. Caring for dying and death was considered as a workplace stressor. Planning, acceptance and positive reframing were the coping strategies used [17]. Hence the investigator felt to evaluate the newly graduate nurses experience of stress in the clinical area .

1.2 Statement of the Problem

A study to evaluate the clinical stress among novice nurses in tertiary care teaching hospital, Nellore.

1.3 Objectives
* ❖ To evaluate the clinical stress among novice nurses
* ❖ To associate the clinical stress among novice nurses with their selected socio demographic variables

II.   Methods

2.1 Research Design

A cross sectional research design was used for the study. The setting chosen for the study was Narayana Medical College and Hospital, Nellore. It is a teaching Super specialty hospital with 1750 beds.

2.2 Sample

The study was conducted among 120 nurses who joined with an experience of six months. Samples were chosen by non probability purposive sampling technique.

2.3 Instrument

The instrument used to collect data was Expanded Nursing Stress Scale (Gray-Toft & Anderson, (1981) [18]. This scale has 59 items which is grouped under nine subscales. The subscales measures stress related to death and dying (7 items), conflict with physicians (5 items), inadequate preparation (3 items), problems with peers (6 items), problems with supervisors (5 items), workload (9 items), uncertainty concerning treatment (8 items), patients and their families (8 items), discrimination (3 items).Each item was rated by the sample on a five point rating in terms of never stressful, occasionally stressful, frequently stressful, extremely stressful and does not apply. The scores were summed up o each scales and again all subscale scores are summed up to obtain

the total stress score .The total stress score is ranged with a minimum score of 59 and a maximum score of 295.The nine subscales are again grouped into three categories namely physical, psychological, and social dimensions. Physical dimension is grouped with the subscale of workload, psychological dimension by death and dying, inadequate preparation, and uncertainty concerning treatment, social dimension by conflicts with physicians, problems with peers, problems with supervisors, patients and their families, and discrimination.

2.4 Data Collection Procedure

After obtaining permission from Institutional Ethics Committee, Medical superintendent, Nursing Dean, data collection was started. Informed consent was obtained from the nurses. Confidentiality of shared information was assured. Questionnaires were administered to the nurses. Nurses were asked to rate the response in each item of the scale. It took 30-45 minutes for completing the questionnaire. Collected data was coded and grouped.

2.5 Data Analysis

Data was analyzed by using descriptive statistics such as frequency, percentage, mean and standard deviation and inferential statistics such as one way ANOVA.

III.   Results

Table 1 Distribution of nurses based on the socio demographic variables (N=120)

Socio demographic variables	%
Age in years	
21	8
22	88
23	4
Gender	
Male	8
Female	92
Marital Status	
Single	92
Married	8
Religion	
Hindu	32
Christian	68
Educational Qualification	
GNM	20
B.Sc.(N)	80
Area of Work	
ICU	67
Emergency	10
Wards	33
Duration of work	
< 2 months	52
2-4 months	36
4-6 months	22
Type of Family	
Nuclear	73
Joint	27

Area of living	
Rural	18
Urban	82

Table 1 shows nearly 88% were in age group of 22 years, 8% in 21 years and 4% in 23 years. With regard to gender 8% were male and 92% were female. In considering marital status 92% were single and 8% was married.32% follow Hindu religion and 68% follow Christianity .In the level of educational qualification 80% studied B.Sc (N) and 20% studied GNM. In the place of work 67% work in ICU, 33% in wards, 10% in emergency department. In duration of work,52% work for < two months,36% for 2-4 months and 22% for 4-6months .73% live in nuclear family and 27% live in joint family. In the area of living 82% come from urban area and 18% from rural area.

Table 2 Distribution of Mean and Standard Deviation of Stress based on subscales among Nurses (N=120)

Subscales	M	SD
Inadequate Emotional preparation	2.32	1.2
Conflict with physicians	2.51	1.52
Death and dying	2.63	1.17
Problems with peers	2.5	1.24
Problems with supervisors	2.53	1.43
Workload	2.65	1.27
Uncertainty concerning treatment	2.73	1.48
Patients and their families	2.24	1.59
Discrimination	1.2	1.42

Table 2 reveals that the most stressful experience was encountered with the uncertainty concerning the treatment (M=2.73, SD=1.48) and the least rated stressful experience is discrimination (M=1.2, SD=1.42).It is also found that workload (M=2.65, SD=1.27), death and dying(M=2.63, SD=1.17),problems with supervisors (M=2.53, SD=1.43) and conflict with physicians (M=2.51, SD=1.52) are within the first five rankings of stressful experiences. Problems with peers (M=2.5, SD=1.24), Inadequate emotional preparation (M=2.32, SD=1.2), patients and their families (M=2.24, SD=1.59) are on the ratings of least stressful experiences.
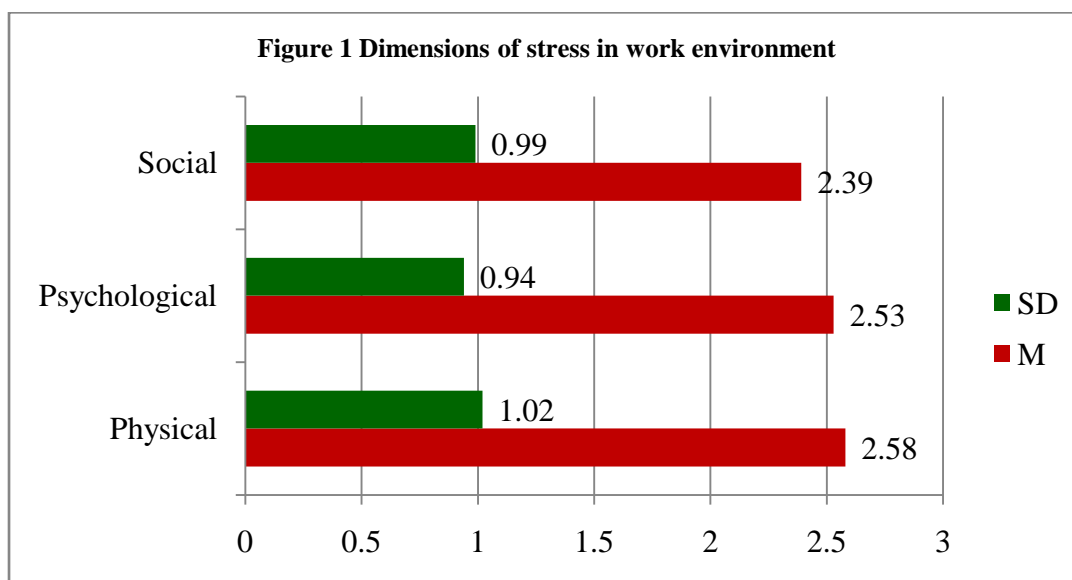

Figure 1 depicts the dimensions of stress in work environment which shows that physical dimension (workload) with a highest rating (M=2.58, SD=1.02), followed by psychological dimension (M=2.53, SD=0.94) and the least being the social dimension (M=2.39, SD=0.99).

Table 3 One way ANOVA –association of Stress based on subscales with socio demographic variables among nurses (N=120)

Subscales	Age	Marital Status	Educational Qualification	Area of Work	Duration of Work
	F(p)	F(p)	F(p)	F(p)	F(p)
Death and dying	5.92 (0.001)**	6.97 (0.01)*	3.43 (0.05)	4.98(0.01)*	5.14(0.01)*
Conflict with physicians	2.89 (0.05)	2.1 (0.05)	3 (0.05)	5.12(0.01)*	5.49(0.01)*
Inadequate Emotional preparation	5.01(0.01)*	3.43 (0.05)	3.92 (0.05)	5.42(0.01)*	5.79(0.01)*
Problems with peers	4.92(0.01)*	3.01 (0.05)	3.55 (0.05)	2.16 (0.05)	2.36 (0.05)
Problems with supervisors	5.47(0.01)*	7.01(0.01)*	3.72 (0.05)	5.32 (0.01)*	4.32 (0.01)
Workload	2.69 (0.05)	7.32(0.01)*	3.89 (0.05)	2.69 (0.05)	4.98 (0.05)*
Uncertainty concerning treatment	2.56 (0.05)	3.27 (0.05)	7.21(0.01)*	2.33 (0.05)	2.33 (0.05)
Patients and their families	2.48 (0.05)	2.1 (0.05)	3.72 (0.05)	2.01 (0.05)	2.01 (0.05)
Discrimination	1.27 (0.05)	1.60(0.05)	7.33(0.01)*	2.32 (0.05)	2.32 (0.05)

Age, marital status, educational qualification , area of work and duration of work showed a statistical significant difference in observation with each of the nine subscales denoting stress in ANOVA analysis. Age (21 years) had statistical significant in the subscale of death and dying (p=0.001), inadequate emotional preparation, problems with peers and problems with supervisors (p=0.01). In regard to marital status, being single had a significant association in subscales of death and dying, problems with supervisors and workload (p=0.01).In educational qualification ,nurses who studied GNM had had a significant association in uncertainty concerning treatment and discrimination (p=0.01).This could be due the majority of the nurses had studied B.Sc (N).In the area of work, nurses working in ICU'S had a significant association on the subscales of inadequate emotional preparation, problems with supervisors, death and dying and conflict with physicians, (p=0.01). In the duration of work, nurses working for <2 months had a significant association on the subscales of death and dying, conflict with physicians, inadequate emotional preparation, problems with supervisors (p=0.01) and workload (p=0.05).

IV. Discussion

Findings of this study suggest that nurses in the beginning of the carrier are uncovered to the stressful situation as the component of their daily routine work activities. Most stressful to least stressful events were rated by the nurses using the expanded nursing stress scale. Frequent stressful event was rated to be the uncertainty concerning the treatment, workload, death and dying, problems with supervisors, conflict with physicians, problems with peers, inadequate emotional preparation, patients and their families and discrimination.

The most common stressful events was identified as uncertainty concerning the treatment due to the fright of doing blunders in treating patient, inadequate experience and fear of physicians. This is similar to the study finding of Murphy .F (2004) which identified inadequate knowledge, less experience, unable to provide proper information about patient to the family members are considered to be the frequent stressful event[19].

Workload is considered to be a major stressor as more work is assigned to them, they were asked to continue the shift of work, assigned with non nursing task, working without breaks and not getting emotional support to meet the needs of patient. Santos ,et.al (2003) stated increased demands at work, use of advanced equipments, inadequate staff and lack of independence in work are the main factors affecting the nurses [20].

Death and dying was another stressor as the nurses are not adequately prepared to face this and facilitating grief is not available. Compassionate care on the patient could be a reason for the experience of stress. Shivaprasad (2013) reported that 60% of nurses felt death and dying are the important stressor in their professional carrier [21] .

Gates, Gillespie, Succop (2013) stated in their study that violence in physical or psychological form on behalf of patient is a great stressor for nurses [22]. This is concurrent with the present study finding of dealing with patient and their family is a very common source of stress. Irrational demands made by the family when things go wrong and dealing with rude family members are the main reason for stress. Nurses also feel loss of self respect, significant anguish while dealing with the patient families.

Problems with supervisors is another factor of stress as newly joined nurse expect the administrators to be supportive in their work and lack of support leading to workplace issues which coincides with findings of where 52% nurses felt support from lack of supervisor support is an vital cause of stress Mehta et al 2014 [23].

Conflict with physicians is another stressor due to unavailability of physician during emergency, critics by doctors and unclear orders .The study finding is similar to the findings of Li J, Lambert VA. (2008) who reports nurses are forced to take decision in absence of physician which may yield a negative result on patient and criticism from the physician which impose stress on nurses [24] .

Problems with peers is considered as a main reason for stress as nurses can't share anything openly with peers some nurses may find difficulty to work with a particular nurse due to difference in their views . Inadequate emotional preparation was another stressor factor for nurses because they have to take up multiple roles and completion of responsibilities. Elizabeth MA 2006 reports learning the new routines of the hospital, policies, protocols of workplace completion of work on time are the areas where nurses are not adequately prepared during the training period [25].

Dealing with patients and their families is mainly due to the demands from the family members, whether families report the care as inadequate and managing visitors as it disturbs the care for the patient. Discrimination was the least stressful factor perceived by the nurses as it is also stated by Kamal et.al (2012) who found that discrimination and harassment are the least stress factor for nurses [26] .

In comparison of the dimensions of stress workload is identified as major source of stress, followed by the psychological and social dimension. This is similar to the study finding of Rajeswari.H, Dr.B.Sreelekha (2016) where job organization and work load is high (M=1.34, SD= 0.497) ,Work organization (M=1.751,SD= 0.839) Personal (M=1.52,SD= 0.6) and Interpersonal relationship at work (M=1.537,SD= 0.685) [27] .

It was noted in the present study that the age of 21 years had a significant association with stress as this could be due to the transition from adolescence to adulthood and change from the student role to the staff nurse role. Being single had a significant association with stress as compared to the married nurses. This present study finding is consistent with the findings of   Randa Abdalla Mohamedkheir (2016) which notes that married nurses experience less stress than comparing to single nurses [28]. Less than one third of the nurses studied GNM and ANOVA reported a significant association with the stress. Samar M. Kamal (2012) reported that nurses who had higher level of education had lower stress than comparing to the other nurses [29]. Working for less than 2 months has a significant association which is identical with the findings which specified work period of one month had a significant negative relation to stress as reported by Ming-chen Yeh and Hui-Mei Huang (2007) [30]. Nurses working in ICU'S and emergency area had a significant stress. Study by Hajjaj K 2007 supported the present study finding which states that nurses working in ICU have highest stress and also it depends on the specialized areas they are working on [31] .

V.   Conclusion

The study concludes that novice nurses experience a highest stress. Managing stressor is vital to prevent employee turnover. It is essential to assist the nurses in their work period to identify their skill and help to convert their knowledge into practice. Motivation, cultivating confidence and promoting interpersonal skills will facilitate the reduction of stress and increases job satisfaction. Administrators need to have a special focus on the most stressful areas which formulating policies. Stress management strategies' need to be regularly implemented for nurses so that there is an increased productivity in terms of quality patient care.

Acknowledgements

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