A Descriptive Study to Identify the Stressors Experienced By Novice Nursing Students during Their Clinical Training Studying In Selected Nursing Institutes at Bangalore.

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Abstract

Background: During nursing education and training, novice nursing students are frequently exposed to various stressors which may directly or indirectly impede their learning and performance. Students face many challenges in the complex and dynamic clinical environment and these have been identified as stressors. Stressors can be broadly defined as situations or events that have potential to affect health. These stressors are the stimuli which cause stress among nursing students during their academics as well as clinical training.

Objective: To identify the stressors experienced by novice nursing students during their clinical training.

Material methods: Descriptive survey research design was used for the present study, 100 first year General Nursing and Midwifery and 100 first year Basic B.Sc. Nursing Students studying in selected nursing institutes at Bangalore were selected by using non- probability convenient sampling technique. The Kezkak bilingual questionnaire is used to identify the stressors affecting novice nursing students during their clinical training.

Result: The result showed that the most common stressors experienced by subjects during their clinical training were assignments and workload (mean= 1.07, SD= 0.87, mean percentage= 11.88), emotional environment (mean= 1.1, SD= 0.90, mean percentage= 9.16) and interpersonal relationship with patient (mean=1.09, SD=0.96, mean percentage=9.08).

The lowest stressors experienced by subjects during their clinical training were lack of professional knowledge and skills (mean= 1.11, SD= 0.87, mean percentage= 4.62) and patient pain and suffering (mean= 1.04, SD= 0.90, mean percentage= 4.95).

Conclusion: Based on the study result, the appropriate and effective actions need to be taken to educate the novice nursing students to overcome stressful situation.

Keywords: stressors, novice nursing students, clinical training.

Introduction

Nursing course involves demanding clinical training which requires ability to withstand stressful situations and emergencies. It also requires the ability to be on the feet while on duty, withstand sleepless nights, cope with emergencies, and handle difficult situation by staying calm and providing support and care to patients and their families.

All these facets have to be acquired during the training period. [1] The nursing program has the desired end of producing skilled and qualified nurses who are capable of utilizing their knowledge and skills in the practice of the profession.

Therefore, student nurse's clinical training should be appropriately designed for them to develop cognitive, affective, and psychomotor skills that are essential for ascending the nursing career path. [2]

Most nursing curricula allocate more than half of the nursing student's time for clinical exposure using advanced technical instrumentation and perform nursing skills that may cause severe impairment to their patients, therefore increasing their worry of creating errors. Learning challenges of the students in clinical practice may cause stress which may directly or indirectly hinder their performance. It indicates that stress during student training is similar to that experienced by registered nurse. [2]

Clinical practice is an essential part of nursing education as it provides the nursing students the opportunity to apply knowledge as well as developing their psychomotor skills.

The first clinical experience helps the novice nursing students to establish a link between theoretical knowledge and its applications but also allows the development of psychomotor skills that forms the basis in nursing practice and development of communication skills. The first clinical experience in nursing education is a factor of stress for novice nursing students. [2]

During nursing education and training, novice nursing students are frequently exposed to various stressors which may directly or indirectly impede their learning and performance. Students face many challenges in the complex and dynamic clinical environment and these have been identified as stressors. Stressors can be broadly defined as situations or events that have potential to affect health.

These stressors are the stimuli which cause stress among nursing students during their academics as well as clinical training. [2]

Some of the clinical sources of stressors includes; unfamiliar with professional skills when dealing with the patient, difficulty in integrating into the team work, afraid of causing physical and psychological harm to the patient, unable to respond to the patient expectations, inability to communicate with the patient, difficulty in changing from the role of student to that of a nurse, unable to provide appropriate responses to health care professionals, fear of being infected by the patient, fear of being infected with contaminated needle, unfamiliar with patient's medication etc. [3]

Clinical practice or education contributes the environment in which novice nursing students come across stress, which can be assessed as challenging or difficult to manage, causing anxiety. The stress is an important psycho-social factor which affects the student's academic performance and well being during training. [4]

Even though everyone experiences stress, research have shown that novice nursing students experience numerous stressors that affect daily grind. Stress is only harmful when it is excessive, much of the stress that all people experience is helpful and stimulating. But if

stress is handled inappropriately leads to physiological distress, physical complaints, behavioral problems and poor academic performance. [5]

Therefore, a stressful student loses confidence in patient's care, since student will not be able to observe the needs of the patient's properly. Hence, there has been a growing awareness about the problems of novice nursing students which leads to severe stress among them, which requires adequate coping behaviors to deal with the situation. [5]

Materials & Method

A. Study Design: The study used descriptive research design.

B. Variables: Study variables for the study includes age, Gender, marital status, residence, percentage in pre university course (PUC), educational level, selecting nursing as a career option, father and mother education, father and mother occupation and family income (monthly).

C. Setting of the study: The study was conducted in DR. B.R Ambedkar institute of nursing, Bangalore. The criteria for selecting this setting were geographical proximity, feasibility of conducting the study, availability of the samples and familiarity of the investigators with the settings.

D. Sample size: 100 first year General Nursing and Midwifery and 100 first year Basic B.Sc. Nursing students.

E. Sampling technique: convenient sampling technique was used to select the samples.

F. Inclusion and exclusion criteria

Inclusion criteria

1. Novice nursing students who are willing to participate in the study.

Exclusion criteria

1. Novice nursing students who:

Are not available at the time of data collection

G. Development of tool: After an extensive review of literature and discussion with the experts the standardized tool was used to identify the stressors experienced by novice nursing students during their clinical training.

The tool consisted of two parts:

Section A: Socio-demographic data

Includes socio-demographic characteristics which had 12 items Age, Gender, marital status, residence, percentage secured in second Pre-university course (PUC), educational level, selecting nursing as a career option, father and mother educational status, father and mother occupational status and household income (monthly).

Section B: Kezkak bilingual questionnaire was used to identify the stressors experienced by novice nursing students during their clinical training. This standardized tool was developed by Xabier.Zupiria Gorostidi (2003). It contains total of 6 domains and 31items.Each item is rated on a 4 point Likert scale, which had 4 alternatives "not at all", "a little", "quiet" and "a lot". Scores ranging from 0 to 3.

H. Validity: The tool was validated by 12 nursing experts. As per suggestion given by the experts, the modification and changes were made in the final tool.

I. Reliability: The reliability of Kezkak bilingual Questionnaire was assessed by Cronbach's Alpha test. The reliability of the tool was $\alpha = 0.95$.

J. Ethical clearance: The ethical clearance for this study was obtained from the ethics committee of Ramaiah Institute of Nursing Education and Research.

K. Pilot study: Pilot study was conducted at Baptist College of nursing, Bangalore. A total of 20 novice nursing students were selected for the study. On

completion of pilot study, it was found that it was feasible to undertake main study.

L. Data collection procedure: The data were collected in Dr. B.R Ambedkar College of Nursing, Bangalore. A total of 200 subjects, 100 from first year General Nursing and Midwifery and 100 from first year Basic B.Sc. Nursing students who met the selection criteria were selected by using non probability convenient sampling technique. The student researcher introduced herself, explained the purpose of the study to each subjects and obtained consent after assuring the confidentiality. Data was collected from 20-30 subjects were selected per day. Tool (questionnaire) was distributed to each subjects and informed to read and follow the instructions carefully. Subjects were requested to respond for the questions in the tool. Time taken to answer the questions in the tool by the subjects was around 15 minutes. The collected data were coded and entered in the master sheet.

M. Statistical method: Keeping in view the nature of research problem and objective of the study following statistical methods were used for analyzing the data:

Descriptive statistics

1. Frequency and percentage distribution were used to describe sociodemographic variables.

2. Range, Mean, Standard deviation and Mean percentage were used to identify the ratings on the six domains of stressors.

3. Mean and standard deviation were used to identify the stressors experienced by novice nursing students.

Results

The collected data were analyzed according to the objectives of study. The findings are presented below.

Sn.	Socio- demographic variables	Frequency(f)	Percentage (%)
1	Age (in years)		
	18	97	48.5
	19	103	51.5
2	Gender		
	Male	88	44.0
	Female	112	56.0
3	Marital status		
	Married	2	1.0
	Unmarried	198	99.0
4	Residence		
	Home	14	7.0
	Relatives	8	4.0
	Hostel	178	89.0
5	Percentage secured in Second Pre-university certificate (PUC)		
	50-70	111	55.5
	71-90	89	44.5
6	Educational level		
	1st year General nursing and midwifery	100	50.0
	1st year Basic B.Sc. Nursing	100	50.0
7	Selecting nursing as a career option		
	By your own choice	97	48.5
	Guided by someone	58	29.0
	Forced to opt	16	8.0
	Other	29	14.5
8	Father's educational status		
	No formal education	11	5.5
	Primary level	50	25.0
	Secondary level	43	21.5
	Pre-university course (PUC)	53	26.5

	Degree and above	43	21.5
9	Mother's educational status		
	No formal education	27	13.5
	Primary level	49	24.5
	Secondary level	30	15.0
	Pre-university certificate (PUC)	54	27.0
	Degree and above	40	20.0
10	Fathers occupation		
	Unemployed	14	7.0
	Government employee	34	17.0
	Private employee	55	27.5
	Business	97	48.5
11	Mother's occupation		
	Unemployed	132	66.0
	Government employee	22	11.0
	Private employee	17	8.5
	Business	29	14.5
12	Household income (per month)		
	3500-33500	176	88.0
	33501-63500	21	10.5
	More than 63500	3	1.5

The above table depicts that the frequency and percentage distribution were computed for socio-demographic characteristics of the subjects. It is observed that majority of the subjects, (51.5%) belongs to the age groups of 19 years. Majority of the subjects (56%) were female. Majority of the subjects, (99%) were married. (89 %) of the subjects were staying in hostel. (50%) of the subject were 1st year GNM and 1st year B.Sc. Nursing. Most of the subject (48.5%) had selected nursing as a career option by their own choice. The majority of the subjects (26.5%) father's education was Pre-university course (PUC).majority of the subjects (27%) mother's education was Pre-university certificate (PUC). Majority of the subjects (48.5%) father's occupation was business. Majority of the subjects (66%) mothers were unemployed. Majority of

the subjects (88%) household income (per month) was in the range of Rs.3500-33500.

Range, Mean, Standard deviation and Mean percentage of the ratings on the six domains of stressors. n= 200.

SL NO	STRESSORS	RANGE	MEAN	SD	Mean %
1	Lack of professional knowledge and skills	0-24	1.11	0.87	4.62
2	Patient pain and suffering	0-21	1.04	0.90	4.95
3	Nature of clinical practice	0-15	1.15	0.94	7.66
4	Interpersonal relationship with patient	0-12	1.09	0.96	9.08
5	Emotional environment	0-12	1.1	0.90	9.16
6	Assignments and workload	0-9	1.07	0.87	11.88
Total		0-93	6.56	5.44	47.35

The above table depicts that the most common stressors experienced by subjects during their clinical training were assignments and workload (mean= 1.07, SD= 0.87, mean percentage= 11.88), emotional environment (mean= 1.1,

SD= 0.90, mean percentage= 9.16) and interpersonal relationship with patient (mean= 1.09, SD= 0.96, mean percentage= 9.08).

The lowest sources of stressors experienced by subjects during their clinical training were from lack of professional knowledge and skills (mean= 1.11, SD= 0.87, mean percentage= 4.62) and patient pain and suffering (mean= 1.04, SD= 0.90, mean percentage= 4.95).

Mean and Standard deviation of stressors experienced by novice nursing students during their clinical training. n=200

SL NO	STRESSORS	MEAN	SD
1	Lack of ability to deal with critical situation	1.44	1.040
2	Feel that I can't help the patient	1.34	1.109
3	Feel anxious that I can't get along with my peers	1.30	0.845
4	Fear of making mistakes when caring for a patient	1.25	1.039
5	Unable to deal with terminally-ill patients	1.21	0.767
6	Fear of getting emotionally involved with the patient	1.21	1.019
7	Fear to perform procedures that cause pain to patient	1.20	0.833
8	Don't know how to communicate with the patient	1.20	1.036
9	Unfamiliar with patient medication	1.19	0.847
10	Being with a patient with whom it is difficult to communicate	1.19	0.870
11	Experience pressure while receiving contradictory instructions	1.19	0.792
12	Feel that my responsibility for caring for patient is too much	1.17	0.851
13	Unable to reach the doctor when the situation requires his/her presence	1.16	0.786
14	Fear of being infected with a contaminated needle	1.12	1.025
15	Not feeling integrated into team work	1.13	1.045
16	Don't know how to help patients with physio-psycho-social problems	1.11	1.072
17	Experience pressure from teachers while evaluating clinical performances	1.10	1.004
18	Experience difficulty in changing from the role of student to that of a nurse	1.09	0.825
19	Fear of being infected by the patient	1.08	1.016
20	Afraid that I may cause psychological harm to the patient	1.05	0.849
21	Lack of ability in making judgements	1.04	0.876
22	Don't know how to respond to the patient's expectations	1.03	1.034
23	Unable to provide appropriate responses to health care professionals	1.01	0.776
24	Feel stressed while seeing a patient dying	0.95	0.893
25	Don't know how to conclude conversation with a patient	0.94	0.911
26	Don't know how to respond when the patient disrespects me	0.93	0.914
27	Feel that the requirements of clinical practice exceed my physical and emotional endurance	0.92	0.823
28	Don't know the answers to questions asked by the clinical instructors	0.89	0.841
29	Unfamiliar with professional skills when dealing with the patient	0.88	0.731
30	Feel stressed from the rapid change in patient condition	0.83	0.758
31	Afraid that I may cause physical harm to the patient	0.81	0.733

The above table depicts that the most common stressors experienced by subjects during their clinical training were from lack of ability to deal with critical situation (mean=1.44, SD=1.040), feel that they can't help the patient (mean=1.34, SD= 1.109), Feel anxious that they can't get along with peers (mean=1.30, SD=0.845) and fear of making mistakes when caring patient (mean= 1.25, SD=1.039).The lowest stressors experienced by the subjects during their clinical training were from causing physical harm to the patient (mean= 0.81, SD=

0.733) and rapid changes in patient condition (mean= 0.83, SD= 0.758).

Discussion

The findings have been organized and discussed according to the objective. To identify the stressors experienced by novice nursing students during their clinical training. The findings of the present study showed that the most common source of stressors experienced by subjects during their clinical training were from assignments and workload (mean = 1.07, SD= 0.87, mean percentage= 11.88), percentage= 9.16) and interpersonal relationship with patient ((mean=1.09, SD=0.96, mean percentage=9.08). The study finding supported by a descriptive study was conducted on stress, stressors and stress response of student nurses in a government nursing school in Samar state university at Philippines. A total of 61 B.Sc. nursing students were selected from government nursing school.

The data were collected utilizing the Perceived Stress Scale (PSS) and Physio-psycho-social Response Scale (PPSRS). The study was analyzed by using descriptive statistics. The study result shown that stress from assignments and workload [mean (SD) =2.68 (0.58)] was the most common stressors identified, while emotional symptoms [mean (SD) =1.82 (0.67)] were the most common response to stress. The study concluded that the nursing administrators should diligently evaluate and rectify nursing student's clinical stressors. [25]

The study finding supported by a descriptive cross sectional study was conducted on Nursing students stress and coping strategies during clinical training at University of Hail, Saudi Arabia. A total of 125 nursing students were selected by simple random sampling technique. A self- administered questionnaire was administered, socio demographic profile, perceived stress scale (PSS) and the coping behavior inventory (CBI) were used to collect the required data. The study result shown that the most common stressors were related to assignments and workload (M=2.68, SD=0.85) and emotional environment (M=1.58, SD=1.07). The study concluded that the standard protocol by institution is required to help the nursing student to reduce the stress.[16] The present study also revealed that the lowest source of stressors experienced by subjects during their clinical training were from lack of professional knowledge and skills (mean= 1.11, SD= 0.87, mean percentage= 4.62) and patient pain and suffering (mean= 1.04, SD= 0.90, mean percentage= 4.95). These study findings was contradicted by a cross sectional study was conducted on perceived stress and coping strategies of baccalaureate nursing students in clinical practice at Amity College of nursing, Haryana. A total 205 baccalaureate nursing students were selected by using convenient sampling technique. A self-administered survey including demographics, perceived stress scale (PSS), physio-psycho-social response scale (PPSRS) and coping behaviour inventory scale (CBI) were used. The findings revealed that students perceived a moderate level of stress (mean 2.10(SD) =0.44) and were in good physiopsycho- social health (mean (SD) =1.40(0.65)). The most common stressor came from "lack of professional knowledge and skills" (mean (SD) =2.34(0.63)). Emotional symptoms commonly occurred in response to clinical stress. Students frequently used transference coping strategy; which they found most effective in dealing with stress in clinical practice. [31]

Limitations

➢ Authenticity of the information is obtained based on the response of the subjects.

> Since the study was conducted only in 200 novice nursing students, the findings of the study may not be generalized.

Conclusion

The present study findings indicated that the most common source of stressors experienced by novice nursing students were from assignments and workload, emotional environment and interpersonal relationship with patient. The lowest source of stressors experienced by novice nursing students during their clinical training was from lack of professional knowledge and skills and patient pain and suffering.

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