STRESS, TYPES OF STRESSORS AND COPING STRATEGIES AMONGST SELECTED NURSING SCHOOLS STUDENTS IN SOUTH-WEST, NIGERIA

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ABSTRACT: *Stress among other things contributed immensely to the development of an individual positively and negatively depending on adopted coping strategies, hence, this study explored stress, types of stressors and coping strategies among student nurses. Methodology: A cross sectional descriptive design was adopted, with 285 respondents' selected using multi-stage sampling technique. Three standardized instrument were used; Self-Reported questionnaire; perceived stress scale and coping inventory scale. Result: The mean age of respondents were 20.24 ± 2.3 of which female dominated (87.7%). The level of stress expression were mild (50.2%), moderate (33.7%) and severe (16.1%). Stress from assignment /workload was the highest among stressors reported with mean value of 9.40 ± 3.68. There is a positive correlation between the total stress and total coping behaviour utilized by the respondents. Conclusion: The study concluded that the respondents utilized appropriate coping strategies in addressing minimal stress level exposure.*

KEYWORDS: Stress, Coping Strategies and Student Nurses

INTRODUCTION

Background of the Study

Students undergoing training in Schools of Nursing seem to possess a substantially higher level of potential for encountering pressure and challenges compared to other college students (Gibbons, Dampster & Mautray 2007). The stressful challenges encountered may include insecurity about clinical competence and interpersonal relations with patients, the pressure resulting from the fear of elimination from the training, time pressure, lack of motivation, poor social life coupled with the transition from the family background to the school environment, interacting with dying patients and interpersonal conflicts with other nurses, others are assignment submission, excessive homework, assessment deadlines, unclear assignments, uncomfortable classrooms and relations with faculty members (Nancy, 2011).

The situation that seems to be stressful to the student nurses may cause some negative changes in their psychosocial lives and in their long term physical and mental well-being, They may become irritable, show lack of concentration, decreased academic performance, poor inter-personal relations, insomnia and absenteeism (Dahlin, Joneborg, & Runeson., 2005). It could result into emotional exhaustion, depersonalization, and decreased personal achievements (Gibbons, 2010). They could also experience deterioration in academic performance which may result into attrition from nursing programs and can lead to shortage of nurses entering

clinical career. (Watson, Deary, Thompson, & Li, 2008). Studies also have confirmed that one third of student nurses experience stress severe enough to induce mental health problems such as depression and anxiety (Screevany, 2007).Since student nurses experience diverse types of stresses and the consequences, the ability to cope with stress is essential for them to succeed and adopting appropriate coping strategy is very important for counteracting the negative effects of stress. Studies have shown that when coping with stress is successful, adaptation takes place and promotes health, psychological well-being and social functioning (Soares & Oliveira, 2013). Coping strategies protects an individual by reducing the threat and frustration. It is done by eliminating or modifying conditions giving rise to the problems and also by controlling the meaning of the experience in the manner, which neutralizes its problematic character (Asuzu, 2009).

Dembeck & Wells-Moran (2006) define coping strategies as the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events. They classified coping strategies into problem-solving strategies which are efforts to do something active to alleviate stressful circumstances and emotion-focused coping strategies which involve efforts to regulate the emotional consequences of stressful or potentially stressful events. MacArthur (2014) further categorized coping strategies into active and avoidant coping strategies. Active coping strategies are either behavioral or psychological responses designed to change the nature of the stressor itself or how one thinks about it, whereas avoidant coping strategies lead people into activities (such as alcohol use) or mental states (such as withdrawal) that keep them from directly addressing stressful events. Generally speaking, it was observed that active coping strategies, whether behavioral or emotional, are thought to be better ways to deal with stressful events, and avoidant coping strategies appear to be a psychological risk factor or marker for adverse responses to stressful life event

The stress experienced by students can be altered and influenced by the coping strategies they choose to employ. Effective coping strategies help students to perform markedly better in regards to their studies; coping strategies also aid in relieving students' stress (Khater, Akhu-Zaheya & Shaban, 2014). Also coping with stress for a student nurse is a dynamic and ongoing process, aimed at survival, growth, maintenance of the individual integrity and by using various coping strategies whether healthy or unhealthy, the imbalance and disequilibrium is restored (Nancy,2011).

High level of stress is believed to affect students' health and academic performance. Stress in nursing students comes from many sources especially academic aspect which is highly stressful for students and may lead to drop out of study program. Students cannot avoid stress but their ability to cope with these stressors is important in achieving success in the academic performance. So managing stress effectively and seeking coping strategy in an appropriate way is very important for preventing the negative effects of stress. Nancy, (2011) also observes that such stress may results in psychological distress, physical complaints, behavioral problems and poor academic performances among the student nurses and at times students can get involved in illegal and illicit drug use as a coping strategies (Soares & Oliveira, 2013). Although studies have been extensively conducted on the topic in developed countries, there is dearth of information on the types of stress and the adopted coping strategies among student nurses in Nigeria.

The Objectives of the study are to:

1. determine the demographic profile of the student's nurses;

2. identify the types of stress experienced by the students nurses;
3. ascertain the level of stress experienced by the students nurses;
4. assess the coping strategies employed by the students nurses in managing the stress.

Research Questions

1. What are the demographic profile of the students' nurses?
2. What types of stressors are commonly experienced by the nursing students?
3. What are the level of stress the student nurses expressed?
4. What are the coping strategies adopted by the students in Schools of Nursing in Southwestern Nigeria?

Hypothesis: A null hypothesis was tested in this study Vis: There is no significant correlation between stress and coping behavior.

Theoretical Framework

The theoretical framework for this study is Roy Adaptation model. Within the context of the Roy Adaptation Model, individuals and groups are regarded as adaptive systems whose behavior is a response to environmental stimuli. Environmental stimuli are directly related to coping processes (Roy, 2009) and both directly and indirectly related to the modes of adaptation (Fawcett, 2003). Adaptation refers to the process and outcome whereby thinking and feeling persons as individual or group use conscious awareness and choice to create human and environmental integration. Adaptation level represents the condition of life processes. Three level are described by Roy; integrated, compensating and compromise life processes.

Coping processes in the Roy adaptation model include both innate coping mechanisms and acquired mechanism. Innate coping processes are genetically determined or common to species. They are viewed as automatic response, In contrast to acquired coping processes which are learned or developed through customary responses. The process for coping in the Roy adaptation model are further categorized as the regulator and cognator subsystems as they apply to individuals and the stabilizer and innovator subsystems as applied to groups. A basic type of adaptive processes, the regulator subsystem responds through neural, chemical, and endocrine coping channels.

Stimuli from the internal and external environment acts as inputs through the senses to the nervous system, thereby affecting the fluid, electrolyte and acid base balance as well as endocrine system. This information is all channeled automatically with the body producing automatic unconscious response. The second adaptive process, the cognator subsystem responds through four cognitive-emotional channels:

1. Perceptual and information: includes activities of selective attention, coding and memory

2. Learning: includes imitation, reinforcement and insight

3. Judgment: includes problem solving and decision making

4. Emotion: defenses which are often used to seek relief from anxiety and make affective appraisal and attachment

The cognator regulator and stabilizer innovator subsystems function to maintain integrated life processes. These life processes whether integrated, compensatory or compromised are manifested in behavior of the individual or group. Behavior is viewed as an output of the human system and takes the form of either adaptive responses or ineffective responses. These responses serve as feedback to the system, with the human system the information to decide whether to increase or decrease its efforts to cope with the stimuli. Although one can identify the specific processes inherent in the regulator, Cognator subsystems, it is not possible to directly observe the functioning of the systems. The behaviors can then be observed in four categories or adaptive modes; Physiological or physical, self-concepts, role concept and interdependent. In the Roy adaptive model, three classes of stimuli form the environments; the focal stimulus, contextual stimulus and residual stimulus.

Relevance of the model to the study: Environmental stimuli are directly related to coping processes .The environmental stimuli confronting the students can be internal or external. Academic challenges, clinical challenge, submission of assignments, inadequate upkeep, meeting the demand of the school etc. can serves as a stressor for the students. According to this study, the stress experienced by the nursing students include stress from taking care of patients, stress from assignments and workload, stress from lack of professional knowledge and skills, stress from the environment and stress from peers and daily life and this has direct or indirect influence on the coping strategies utilized by the students. The stimuli or stressor influence the students to take a step in order to overcome the challenges through the coping strategies either negatively or positively.

The students nurse can make use of either active or passive coping strategies in overcoming the challenges. Avoidance, problem Solving, stay optimistic and Transference are coping strategies considered in this study. The environment stimuli which are the stressor and the coping processes or strategies are both directly and indirectly related to the modes of adaptation (Fawcet, 2003).This means that the stress perceived by the nursing students will influence the coping strategies employed by them. Thus affects the level of adaptation. Roy adaptation theory observes that an individual can use the regulator or cognator as the coping processes in managing the stress or stimuli experienced from the environments. The regulator coping process encompasses basic neural, chemical, and endocrine channels that process stimuli in an automatic, unconscious manner. The cognator coping process encompasses four cognitive-emotive channels for stimulus processing--perceptual/information processing, learning, judgment, and emotion which is the focus of this study about the coping strategies.

Ability to cope with stress by the students will influence the level of adaptation and this can be manifested in the performance of students academically and in their interpersonal relationship. When the stress experienced by the students do not commensurate with the coping strategies employed, the students can develop symptoms of illness.

METHODOLOGY

Design: The study adopted cross sectional descriptive design to assess the stress, and coping strategies among the students nurses. This design was adopted based on the researcher interest in describing the variables according to it succession in the study without being manipulated.

Setting: the research was carried out in southwest, Nigeria in selected School of Nursing within the zone. Sixteen (16) schools of nursing were accredited by the Nursing and Midwifery

Council of Nigeria. Multi stage sampling technique was used to select the respondent. There are sixteen (16) schools of nursing in south west. All the 16 nursing schools in southwest was stratified based on ownership into federal, state and private schools. i.e. 6 federal schools of nursing, 6 state school of nursing and 4 private (mission school inclusive). Simple random sampling was used to select 2 federal schools, 2 state schools and 1 private school of nursing (5 schools of nursing).The students in each school were stratified by their classes: year one, two, and three. Equal numbers of the respondents were recruited in each class and systematic sampling method was used to select the respondents. The selected schools Baptist School of Nursing, Saki; School of Nursing, Eleyele, Ibadan; Obafemi Awolowo University Teaching Hospital Complex School of Nursing, Ile-Ife; School of Nursing, Osogbo; and Wesley Guide Hospital School of Nursing, Ilesha. All selected Schools have various degree of students from part one to part three.

Study Population: the study population was the student nurses from the selected school of Nursing in South west Nigeria.

Sample Size Determination and Sampling technique: A total of 285 nursing students were recruited for the study.

Taro Yamane (1962) formula was used to determine the sample size:

$$n = \frac{N}{1 + N(e)2}$$

Where: N=Sample size

N =Total population=2400 students

e =absolute precision or error margin=0.05(5%)

n= desired sample size (unknown)

Therefore Sample Size = 261 students nurses

10% attrition rate is 26

Therefore, the sample size selected through calculation were 285 student nurses.

Using a simple ratio, approximately, 57 student nurses were selected from each school and 19 students from each class using systematic sampling technique

Instrumentation: The study utilized a self-reported questionnaire, which is composed of demographic data, and Perceived Stress Scale (PSS) and a Coping Behaviour Inventory (CBI). Demographic data included: age, gender, ethnicity, religion, and family type, position among the full siblings, average income per month, and any reason to repeat a class. CBI was used to identify nursing coping strategies. It was developed by Sheu et al. It consists of 19 items scored on a 5-point likert scale (0=never; 1=infrequently; 2=sometimes; 3=frequently; 4=always). The 19 items of the scale are divided into four subscales. Subscales included avoidance behaviors' (6 items); problem-solving behaviours (6 items); optimistic coping behaviours (4 items) and transference behaviours (3 items). The total score range from 0-76. Higher score: scores greater than 70% indicate the strategy mostly used while lower score: scores less than 70% indicate the strategy rarely used by the students. PSS was used to assess the stress level of the students and the types of stressor. It consists of 29 items of 5-point likert scale. The five possible

responses range from "never" to "always" and are scored from 0-4. Items in the scale grouped into six factors related to the sources of stress. The six factors include stress from taking care of patients (8 items), stress from teachers (6 items), stress from assignments and workload (5 items), stress from peers and daily life (4 items), stress from lack of professional knowledge and skills (3 items) and stress from the school environment (3 items). The total score range from 0-116 for each respondent and was computed in percentage (100%). Lowest score: scores less than 30% indicates mild degree of stress while the scores of 30 to 59% indicates moderate level stress and scores above 60% means high level of stress in each item.

Psychometric Properties of Instrument: The reliability of the instrument was assessed in different studies and revealed Cronbach's alpha coefficient of 0.76 (Chan et al., 2009); 0.80 (Sheu et al., 2002); 0.76 (Khater et al 2014). In this study, the Cronbach's alpha was 0.75.Regarding the Perceived Stress Scale (PSS) which was used to assess the stress level of the students and the types of stressor experienced by the students, previous studies have demonstrated the adequate reliability of the instrument; Cronbach's alpha of 0.86 (Chan et al., 2009), 0.89 (Sheu et al., 2002), 0.90 (Khater et al, 2014) and the content validity index was 0.94 (Chan et al., 2009). In this study, the Cronbach's alpha was 0.86 which has the same result with Chan, et al. This was achieved through test retest method.

RESULTS

Table 1: Demographic profile of respondents

s/n	Item	Variables	Frequency	Percentage (%)
1	**Gender**	Male	35	12.3
		Female	250	87,7
		Total	285	100
2	**Ethnicity**	Yoruba	260	91.2
		Igbo	18	6.3
		Hausa	7	2.5
		Total	285	100
3	**Religion**	Christianity	242	84.9
		Islam	43	15.1
		Total	285	100
4	**Family type**	Monogamous	245	86.0
		Polygamous	40	14.0
		Total	285	100
5	**Nature of School**	Federal	114	40.0
		State	114	40.0
		Private	57	20.0
		Total	285	100
6	**Level**	Year One	95	33.3
		Year Two	95	33.3
		Year Three	95	33.3
		Total	285	100
7	**Had any reason to repeat class**	Yes	10	3.5
		No	275	96.5
		Total	285	100

8	Are Parent still together?	Yes	254	89.1
		No	30	10.9
		Total	285	100
9	Position among Siblings	1st	87	30.5
		2nd	75	26.3
		3rd	55	19.3
		4th	33	11.6
		5th	16	5.6
		6th	10	3.5
		7th	6	2.1
		9th	11	0.4
		11th	2	0.7
		Total	285	100
10	Is father alive?	Yes	255	89.5
		No	31	10.5
		Total	285	100
11	Is mother alive?	Yes	277	97.2
		No	8	2.8
		Total	285	100
s/n	MEAN(SD)			
1		Age	20.24±2.3	
2		Siblings	3.61±1.94	
3		Average upkeep per month (Naira).	6,984±4,029.24	

Table1, reflects the socio-demographic characteristics of the nursing students. The total number of nursing students was 285. The ages of the student ranged from 17-40 years with a mean age of 20.24 years (SD= 2.3). Majority of the students were females (87.7%) and 91.2% belonged to Yoruba ethnic group. Percentage of Christian students were 84.9% and 86.0% came from monogamous family. Forty percent each attended the Federal and State institution and only 10% of the students had repeated a class while 33.3% were recruited from each level. Average upkeep of the respondents was #6,984 (SD=4029. 24). Majority of the students' father (89.1%) were alive while only 82.8% of the students had lost their mothers and 30.5% of the students were the first child in their families.

Table 2: Type of stress expressed by the respondents

s/n	Types of stress	Mean	SD
1	Stress from taking care of patients	8.75	4.69
2	Stress from assignment and workload	9.40	3.68
3	Stress from lack of professional knowledge and skills	2.95	2.52
4	Stress from the environment	4.51	2.35
5	Stress from peers and daily life	7.09	3.22
6	Stress from teachers and nursing staff	8.93	4.14

Table 2, reveals the types of stressors experienced by the nursing students. The major type of stressor experienced was from the assignment and workload (M=9.40, SD=3.68). Followed by stress from teachers and nursing staff (M=8.93, SD=4.14). The least stressor was stress from lack of professional knowledge and skills (M=2.95, SD=2.52).

Table 3: Expression of stress level by the respondents

Item	Variables	Frequency	Percentage
Stress Level	Mild	143	50.2
	Moderate	96	33.7
	Severe	46	16.1
	Total	285	100

From table 3, it was deduced that respondents stress levels were 50.2% for mild, 33.7% for moderate and 16.1% for severe.

Table 4: Perceived Stressors by the respondents

Statement	Never No%	Infrequently No%	Sometimes No%	Frequently No%	Always No%	Mean (SD)
STCP1	112(39.3)	55(19.3)	102(35.8)	12(4.2)	4(1.4)	1.09±1.02
STCP2	91(31.9)	61(21.4)	92(32.3)	28(9.8)	13(4.6)	1.34(1.56)
STCP3	70(24.6)	60(21.1)	129(45.3)	19(6.7)	7(2.5)	1.41(1.01)
STCP4	88(30.9)	81(28.4)	106(37.2)	5(1.8)	5(1.8%)	1.15(0.94)
STCP5	118(41.4)	62(21.8)	83(29.1)	11(3.9)	11(3.9)	1.07(1.1)
STCP6	172(60.4)	64(22.5)	36(12.6)	11(3.9)	11(3.9)	0.62(0.9)
STCP7	152(53.3)	44(15.4)	48(16.8)	13(4.6)	13(4.8)	1.02(1.33)
STCP8	114(40.0)	68(23.9)	86(3.2)	9(3.2)	9(3.2)	1.05(1.04)
SAW1	40(140)	40(14.0)	104(36.5)	35(12.3)	66(23.2)	2.16(1.31)
SAW2	19 (6.7)	42 (14.7)	124 (43.5)	58(20.4)	42(14.7)	2.21(1.08)
SAW3	44(15.4)	54(18.9)	131(46.0)	34(11.9)	22(7.7)	1.78(1.1)
SAW4	55(19.3)	64(22.5)	85(29.8)	40(14.0)	27(9.5)	1.62(1.25)
SAW5	69(24.2)	64(22.5)	85(29.8)	40(14.0)	27(9.5)	1.62(1.25)
SLPK1	108(37.9)	63(22.1)	99(34.7)	10(3.5)	5(1.8)	1.09(1.01)
SLPK2	129(45.3)	79(27.7)	63(22.1)	12(4.2)	2(0.7)	0.8(0.94)
SLPK3	124(43.5)	73(25.6)	63(22.1)	10(6.3)	7(2.5)	0.99(1.06)
SFE1	43(15.1)	37(13.0)	120(42.1)	47(16.5)	38(13.3)	2.00(1.2)
SFE2	129(45.3)	74(26.0)	68(23.9)	11(3.9)	3(1.1)	0.89(1.0)
SFE3	50(17.5)	66(23.2)	129(45.3)	23(8.1)	17(6.0)	1.62(1.03)
SFP1	23(8.1)	42(14.7)	95(33.3)	51(15.7)	74(26.0)	2.39(1.24)
SFP2	50(17.5)	45(15.8)	106(37.2)	39(13.7)	45(15.8)	1.91(1.28)
SFP3	55(19.3)	43(15.1)	112(39.3)	43(15.1)	32(11.2)	1.84(1.23)
SFP4	137(48.1)	65(22.8)	60(21.1)	15(5.3)	8(2.8)	0.92(1.10)

SFT1	57(20.0)	54(18.9)	122(42.8)	33(11.6)	19(16.7)	1.66(1.12)
SFT2	122(42.8)	66(23.2)	67(23.5)	18(16.3)	12(4.2)	1.06(1.14)
SFT3	44(15.4)	54(18.9)	144(50.5)	28(9.8)	15(5.3)	17.00(1.02)
SFT4	41(14.4)	55(19.3)	114(40.0)	44(15.4)	31(10.9)	1.89(1.16)
SFT5	68(23.9)	63(22.1)	199(41.8)	23(8.0)	12(4.2)	1.47(1.070
SFT6	112(39.3)	56(19.	89(31.2)	19(6.7)	9(3.2)	1.15(1.11)

Cronbach's Alpha is 0.85

NOTE: Refer to the Appendix 1 for the meaning of the abbreviation

Table 4, shows the level of stress experienced by nursing students measured by The Perceived Stress Scale. The mean of the stress perceived by the nursing student was 1.43 (SD=1.12). About 43.9% students reported "Experience Competition from Peers in school and Clinical Practice" ranged from frequently to always as a form of stress event. Some of the other stress components reported by the students were: Worry about bad grades (35.5%), Pressure from the nature and quality of clinical practice (35.1%), Feeling pressure from teachers who evaluate students' performance by comparison (29.3%), Feeling that clinical practice affect one involvement in extracurricular activities (26.3%), Feeling that dull and inflexible clinical practice affect's one family and social life (23.5%). Feeling that one's performance does not meet teacher's expectation (19.6%) and Feeling that requirements of clinical practice exceed one's physical and emotional endurance (18.3%). Also 18.3% of the students reported Experience discrepancy between theory and practice, Not knowing how to help patients with physio-psycho-social problems (14.4%) and 14% Feel stressed from the rapid change in patient's condition.

Table 5: correlation among total stress, total coping behavior, sub stress domain and sub coping domain.

	1	2	3	4	5	6	7	8	9	10	11	12
Coping	1											
Stress	0.185**	1										
STCP	0.041	0.718**	1									
SAW	0.219**	0.754**	0.384**	1								
SLPK	0.100	0.615**	0.430**	0.285**	1							
SFE	0.191**	0.655**	0.370**	0.464**	0.406**	1						
SFP	0.148*	0.660**	0.222**	0.532**	0.266**	0.370**	1					
SFT	0.118*	0.741**	0.383**	0.453**	0.356**	0.349**	0.426**	1				
CBA	0.505**	0.361**	0.252**	0.216**	0.203*	0.217*	0.234**	0.353**	1			
CBPS	0.773**	-0.009	-0.101	0.121*	-0.109	0.109	0.015	-0.086	0.22	1		
CBSO	0.729**	0.40	-0.021	0.137*	0.014	0.051	0.040	-0.027	0.079	0.603**	1	
CBT	0.485**	0.07	-0.026	0.061	0.060	0.081	0.092	0.066	0.124*	0.145*	0.201**	1

Table 5 -correlation among total stress, total coping behavior, and sub stress domain

 NOTE: Refer to the Appendix III for the meaning of the abbreviation

** Correlation is significant at the 0.05 level (2-taled)

*correlation is significant at the 0.01 level (0.01)

Table 4.8 reveals the correlation among total stress, total coping behavior, sub stress domain and sub coping domain. There is Positive correlation between the total stress and total coping behavior utilized by the students. (r=0.185, P=0.002).This indicates that as the stress increases, the total coping behavior increase.

DISCUSSION OF FINDINGS

Majority of the nursing students participated in this study were females with age ranged of 17 to 40 years, the mean age of 20.24 and standard deviation of 2.3. This is in line with Eswi, Radi & Youssri (2013) on Stress/Stressors as Perceived by Baccalaureate Saudi Nursing students which reveals mean age of 22.5 and Standard deviation of 2.6.

Nature of the nursing students' family was assessed and the results found that 86% of the students came from monogamous family and 84.9% of the students were Christian .This finding is in consonance with the Charanjeev, Sunita , & Ravinder(2011) in their study on the level of stress and coping strategies used by nursing interns in which 84.1% belong to monogamous family. The mean of the stress level perceived by the students' nurses in this study is 1.43, SD=1.12; 50.2%, 33.7% and 16.1% experienced mild, moderate and severe stress respectively. This result was in consonance with Prasad, Suresh, Thomas, Pritty, Beebi & Multazim (2013) study on the level of stress and coping mechanism adapted by year 1 undergraduate nursing students which indicated that majority of the nursing students had mild stress. The same findings was also reported by Chan, So & Fang (2009) in their study among Hong Kong baccalaureate nursing students on stress and their coping strategies in clinical practice. Kumar (2011) however reported otherwise that nursing students experienced severe to moderate level of stress during their training. Students who experienced severe stress has potential to be in a state of distress and according to the study carried out by Tully in 2004 among psychiatric nursing students reported that many of the students are in the state of distress which has possibility of influencing their health and wellbeing. Distress do not only influence health of the students but increases the difficulty of learning and achieving expected outcome (Pullido-Martos, Augusto-Linda & Lopez-Zafra, 2012). Moreover, a study among undergraduate nursing students also revealed that the students experienced severe level of stress (Prasad, Suresh, Thomas, Pritty, Beebi & Multazim,2013) while Khater, Akhu-Zaheya & Shaban (2014) made an inference that average Baccalaureate nursing students had stress levels above the mean. Charanjeev, Sunita, & Ravinder (2011) in their study among nursing interns also discovered that nursing interns had moderate level of stress. The highest stress was from competition from peers in school and clinical practice (M=2.39), Pressure from the nature and quality of clinical practice (M=2.21), worry about bad grades (M=2.16) and stress in hospital environment where clinical practice takes place (M=2.0). This indicates that students develop stress more when they decide to be ahead of their colleague either in clinical practice or academic environment. The least stress was from students being unable to provide patients with good nursing skills (M=0.62), unfamiliar with professional nursing skills (M=0.87),

10

unfamiliar with ward facilities (M=0.89) and unfamiliar with patients treatment and diagnoses (M=0.99).This implies that the students do not have any problem with core nursing courses.

The reported types of stressors perceived by the students were from the assignment and workload (M=9.40), stress from teachers and nursing staff (M=8.93) , stress from taking care of patients (M=8.75), Stress from lack of professional knowledge (M=2.95) and stress from peers and daily life (M=7.09), This is in line with Al-Zayyat and Al-Gamal (2013) research on perceived stress and coping strategies among Jordanian nursing students during clinical practice that the highest reported types of stressors were stressor from taking care of patients, stressor related to teachers and nursing staff and from assignment and workload. A study by Charanjeev, Sunita, & Ravinder (2011) also inferred that the students exhibited maximum stress due to assignments and workload, followed by taking care of patients and from teachers. Chan, So and Fang (2009) has contrary report that the most common stressor was lack of professional knowledge and skills. Phuekphan (2009) reported that finding new friends and work with the unfamiliar people were the main source contributing to interpersonal stress while the main stressor was from academics in his study. Khater, Akhu-Zaheya & Shaban (2014) also made an inference that the common type of stressors perceived by the students were related to assignment followed by stress related to patients' care and stress from nursing staff and teachers.

Coping is a stabilizing factor that may assist individual in maintaining psychosocial adaptation during stressful situation. The coping strategies considered in this study are problem solving, Avoidance, Transference and Stay optimistic. The results revealed that majority of the students utilized problem solving (M=17.32) and stay optimistic (M=10.32) often while Avoidance (M=6.99) and transference (M=6) were least used by the students. The report of Al-zayyat & Al- Gamal (2013) also revealed that the most utilized coping strategy by the students was problem solving. Sheu, Lin and Hwang (2002) in their study on relationship between coping strategies and perceived stress level discovered that the most effective coping behavior utilized by the students was optimistic attitude followed by the problem solving. They further reported that the level of stress in participant with an optimistic attitude were lower than those in avoidance. Gibbons, Dempster & Moutray (2008) also reinforced optimistic attitude as a good coping strategy. However, Chan, So and Fang (2009) revealed that most frequently used coping strategies was transference in their study. They further explained that students who perceived higher level of stress from taking care of patients were more likely to choose the problem solving and avoidance coping behavior.

Avoidance was the least coping strategy utilized by the students according to this study and this may be the reason why they were experiencing mild stress. Avoidance coping creates an anxiety and ravages self-confidence. It is the major factor that differentiates people who have common psychological problems and those who are not (Boyes, 2013).This result shows that students used standard coping strategies (Problem Solving and stay optimistic) because avoidance had negative main effects on the students and increase the level of stress (Sheu, Lin & Hwang,2002). Chan, So and Fang (2009) also corroborates the investigations that avoidance is one of the bad coping behavior because students who perceived higher levels of stress were using avoidance coping strategies and those that used good coping behavior exhibit lower levels of stress. Tully (2004) also inferred that students in the state of distress often have limited way of coping with stress.

Trying to reason with parents and compromise (73%) and going along with family rules (68%) were the coping strategies employed by Iranian students' nurses according to Seyedfatemi,

Tafreshi & Hagani (2007). But according to this study having "confidence in overcoming difficulties"(82.1%), "to keep an optimistic and positive attitude in dealing with everything in life" (75.4%) ; "to adapt different strategies to solve problems" (71.6%); "to set up objectives to solve problems" (68.1%); "to have confidence in performing as well as senior school mates"(67.4%); "to see things objectively" (65.9%); "to employ past experience to solve problems" (58.4%) and "to find the meaning of stressful incidents"(55.4%) were the most utilized coping strategies.

A study by Thomas, Carpenter, Tyler, & Amy (2011) on Religious Coping, Stress, and Depressive Symptoms among Adolescents: A Prospective Study reported that negative religious coping significantly moderated the effects of stress and a high stress exposure is noted in high negative religious coping moreover the exacerbating effects of negative religious coping on the stress-depression relationship were strongest for youth with high personal religious commitment. Avoidance coping behavior was least utilized by the students in this study and religion is statistically significant to avoidance coping behavior (p=0.03). Christian students nurses use avoidance (M=7.2, SD=3.7) more than Muslim students nurses (M=5.8, SD=4.1). Moreover, the nature of family either monogamous or polygamous family influence the utilization of avoidance coping behavior (p=0.03) with higher usage among monogamous family (M=7.3, SD=3.8) compared to students nurses from polygamous family (M=5.3, SD =3.3). This is in consonance with Jessica (2014) that Muslims utilized less avoidance because their religion involves using of strict rules, regulation and belief.

There is significant difference among students who failed and the stress from peers and daily life (p=0.023). Students who repeat a class do have lower stress from the peers and daily life (M=4.9) compared with those who are not (M=7.2). Depression might set in due to the incidence of failure and can result in withdrawal from colleague or peers because of low self-esteem moreover since the highest mean stress experienced by the students nurses was from competition from peers in school and clinical practice, those who had repeated may not bother to compete any longer. Gender influence the use of Transference coping strategies (p=0.044). Female utilized transference coping strategies (M=6.1) more than male (M=5). Also the death of the parents had influenced on the use of transference coping behavior (P=0.044). Students who had lost their mother were less likely used transference coping strategy. This finding is in consonance with Evans and Kelly (2004) that transference coping strategy may be easy and more convenient to use compared with other strategies and this may be the reason why female students and those who had lost their mothers used it more.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made in order to reduce the level of stress among students' nurses and encourage appropriate usage of coping strategies.

1. Student Nurse - tutor forum should be established in various schools of nursing and should provide opportunity for students to express themselves without any restriction. During the forum, tutors should be ready to give answers to the students question with love and care.

2. There should be a workshop for clinical staff and teachers on mentor mentee relationship. They should be taught on how to provide leadership for the younger ones.

3. Religious activities should be encouraged more in various schools of nursing. Since many of them used it as a coping strategies, it must be included as part of the extracurricular activities.

Implication for Nursing Practice: The students utilized appropriate coping strategies and this resulted into low level of stress experienced by the students. Religion affiliation affects the level of stress experienced by the students. Therefore religious activities should be encouraged in order to cope with the stress level. The stressors indicated in this study are mainly from workload and assignment and from teachers and clinical staff. Therefore mentorship and mentee relationship should be reinforced in the school of nursing in order to facilitate relationship and communication. There should be students- tutors' forum whereby student can able to discuss their plight with the tutors. Teachers and the clinical staff should provide appropriate guidelines on how to solve the assignment.

Limitation of the Study: Students in each class have different calendar. A level might be in clinical posting while others in block posting. Therefore different time was allotted for each set to collect the data. Also the content of the instruments were much which seems to be stressful to the students but they were encouraged.

Conclusion: The study has shown that the nursing students utilized appropriate coping strategies and they experienced minimal level of stress. However, the study reveals that the students experienced highest level of stress from assignment and workload and from clinical staff and teachers.

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APPENDIX 1

Stressors perceived by student abbreviation

STCP1: Lack of experience and ability in providing nursing care and in making judgments

STCP2: Do not know how to help patients with physio-psycho social problems

STCP3: Unable to reach one's expectation

STCP4: Unable to provide appropriate responses to doctors, teachers and patient's question

STCP5: Worry about not being trusted or accepted by patients or patient's family

STCP6: Unable to provide patients with good nursing care

STCP7: Do not know how to communicate with patients

STCP8: Experience difficulties in changing from role of a student to that of a nurse

SAW1: Worry about bad grades

SAW2: Experience pressure from the nature and quality of clinical practice

SAW3: Feel that one's performance does not meet teacher's expectation

SAW4: Feel that the requirements of clinical practice exceed one's physical and emotional endurance

SAW5: Feel that dull and inflexible clinical practice affects one's family and social life

SLPK1: Unfamiliar with professional nursing skills

SLPK2: Unfamiliar with medical history and terms

SLPK3: Unfamiliar with patients' treatment and diagnoses

SFE1: Feel stressed in the hospital environment where clinical practice takes place

SFE2: Unfamiliar with ward facilities

SFE3: Experience competition from peers in school and clinical practice

SFP1: Feel pressure from teachers who evaluate student's performance by comparison

SFP2: Feel that clinical practice affects one's involvement in extracurricular activities

SFP3: Cannot get along with other peers in the group

SFP4: Experience discrepancy between theory and practice

SFT1:   Do not know how to discuss patient's illness with teachers or medical and nursing personnel

SFT2: Feel stressed that teachers' instruction is different from one's expectation

SFT3: Doctors lack empathy and are not willing to help

SFT4: Feel that teachers do not give fair evaluation on students

SFT5: Lack of care and guidance from teachers

SFT6: Lack of experience and ability in providing nursing care and in making judgments