Assessing Stress level and Adaptation Capacity among Bangladeshi Nursing students during Clinical Practice.

SUBMITTED BY
Name: Mst. Maria Sultana
ID: 0242220007273055

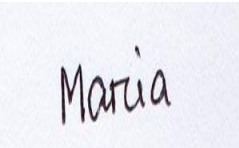
Submitted To
Prof. Dr. ABM Alauddin Chowdhury
Head
Department of Public Health

04.10.2024

DECLARATION

It is politely declared by me that the dissertation titled " **Assessing Stress level and Adaptation Capacity among Bangladeshi Nursing students during clinical practice** "- is conducted for the degree of Master of Public Health (MPH) program under the Faculty of Allied Health Sciences, Daffodil International University of Bangladesh was completed under the steerage of Dr. ABM Alauddin Chowdhury, Professor and Head, Department of Public Health, DIU.

Regards,

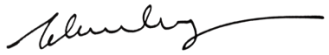


Mst. Maria Sultana
Student ID: 0242220007273055
Department of Public Health, DIU

Certification

This is to certify that Mst.Maria Sultana MPH, Student-ID No: 0242220007273055 has completed the thesis work as partial necessity of the degree under my guidance and submitted the thesis entitled " **Assessing Stress level and Adaptation Capacity among Bangladeshi Nursing students during clinical practice**."

I have the trust concerning the originality of her data and I also explicit that the thesis is up to my expectation.



Dr. ABM Alauddin Chowdhury
Professor and Head
Department of Public Health, DIU

List of the Tables:

List of the figures:

Abbreviation list

DIU - Daffodil International University

WHO - World Health Organization

MPH-Masters of Public Health

SD-Standard Deviation

RNC -Royal Nursing College

SFMMKPJ NC- Sheikh Fazilatunnessa Mujib Memorial Nursing College

TANC -Turag Adhunik Nursing College

SPSS-Statistical Package for social Science

REC - Research Ethics Committee

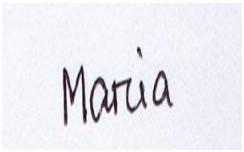
FHLS - Faculty of Health and Life Sciences

ACKNOWLEDGEMENT

All thanks to Almighty Allah, by who's endless grace I have been able to complete this dissertation entitled " **Assessing Stress level and Adaptation Capacity among Bangladeshi Nursing students during clinical practice** " which was conducted for the concern of the degree of Master of Public Health (MPH).
Firstly, I am extremely grateful to my supervisor Dr. ABM Alauddin Chowdhury for his suggestion and guidance throughout this dissertation work.

I express my heartfelt thanks to all my teachers for their support and valuable guidance and encouragement and also for their valuable criticism at every stage of the work.

Finally, I would like to express my deepest gratitude to all my respondents who were co-operated to conduct this study. I am indebted to all my friends and well-wisher for encouraged me in everu stage of this study.



Mst. Maria Sultana
Student ID: 0242220007273055
Department of Public Health, DIU

Abstract

This is descriptive cross-sectional study that was conducted from different college of Nursing in Dhaka with a view to **Assessing Stress level and adaptation capacity among Bangladeshi Nursing students during clinical practice** ". Data were brought from 207 respondents who fit the inclusion criteria. The age range was 18-24 years of the respondents. The mean age of the respondents was 21(SD±2.16) years and the majority (26.08%) of the respondents were in age 21 years, followed by 20years (23.19%),22years (20.77%),23years (14.98%),19years (06.28%),24years (3.86%). The majority 82.6%(n=171) of the respondents were female and the 17.4%(n=36) of the respondents were male. The maximum 67.1%(n=139) of the respondents got A and the17.9%(n=37) got A+ and the 13%(n=27) got A- and the 1.9%(n=4) got B and no respondent got grade C. The result shows that the majority 60.4%(n=125) of the respondents enrolled in BSc in Nursing and the 39.6%(n=82) respondents enrolled in Diploma in Nursing Science and Midwifery. The majority 38.2%(n=78) of the respondents were in 2nd year, respectively 32.8%(n=67), 20.6%(n=42) and 8.4%(n=20) respondents were in 3rd,4th and internee students. Of them the majority 50.7%(n=105) of the respondents did placement in govt. hospital and the 49.3%(n=102) respondents did placement in private hospital. The result shows that the maximum of the respondents said sometimes (2) .and the average result also sometimes for Perceived stress scale. And according to respondents the majority 50%(n=104) of the respondents said moderate and the other respondents said respectively 26%(n=54), 16%(n=32). 8%(n=17) normal, mild and severe stress. Our study reveals that the stress level was moderate. The result showed that the majority 81.2%(n=168) of the respondents choose Nursing willingly and the 18.8%(n=39) respondents did not. The majority 90.8%(n=188) of the respondents felt excited to do clinical practice and the 9.2%(n=19) respondents did not. The majority 55.6%(n=115) of the respondents said no and the 44.4%(n=92) respondents said yes about feel heavy workload during clinical practice. About lacking of knowledge the majority 70.7%(n=147) of the respondents said yes and the 29.3%(n=60) respondents said no. The majority 62.6%(n=129) of the respondents said guidance and the other respondents said respectively 31.1%(n=64), 3.4%(n=7). 2.9%(n=6) self-reliance, Seeking and Adopt for problem solving technique. To cope in clinical practice, the majority 43%(n=90) of the respondents said self-confidence and the other respondents said respectively 27%(n=55), 19%(n=39). 11%(n=23) lab practice, observation in the practice and increase the hour of practice. According to CBI the majority of the respondents said sometimes (2) .and the average result also sometimes.so the coping capacity of the respondent was average. And according to respondent the majority 63%(n=131) of the respondents said normal and the other respondents said respectively 21%(n=43), 10%(n=20). 6%(n=13) medium, high and low. And our study reveals that the adaptation capacity was medium. Stress and adaptation capacity has become a much pervasive condition. So the student nurses have to cope up to an entirely new experience by participating clinical practice. The age and gender of the respondent, religion, type of family, family income were associated with the level of stress and adaptation capacity significantly. Therefore, there is a need to arrange programs of stress management and motivation to cope up during their clinical practice.

List of content

CHAPTER-1

1.1 INTRODUCTION

Nursing is a noble profession where every nursing student need to have comprehensive theoretical expertise and skills in clinical practicum. Generally Nursing department composed of the theory based and practical based courses that strengthen and assist each and every one. In theory section, Education have provided in classrooms and labs through various audio visual aids like lectures, multimedia, case studies, and directive instructions to advance the students' expertise, knowledge, and utility. In clinical placement section, bed side teaching has provided for better understanding the theory knowledge. Furthermore, clinical training enhances students' ability to handle patient by developing clinical skills, and enlarge their anticipations of their incoming careers.

By advance use of automation and transform the policy of health care organization, clinical teaching in Nursing can improve easily. In the majority of Nursing courses, hospital practice begins in the initial period and continues up to commencement ceremony. Usually from the beginning of clinical training the maximum nursing students have been announced tension, commonly in the first steps of clinical training. Clinical training is an important section of nursing training but the stress in this section may decline their interest to unique learning.

Some studies finding prove that students of Nursing have low to excessive tension and anxiety compared to other health care-related students. Some studies shown that almost all student nurses have moderate to severe stress in the period of clinical training for their lack of knowledge, skills etc.

Adaptation capacity of an individuals are behavioral and cognitive strategies to adapt perceived stressors that may be positive or negative. Positive coping strategies focused to reduce stress by ensuring positive appraisals and finding solutions. On the other hand, negative coping strategies focused to live with stressful events by controlling poor behaviors with negative thoughts by avoiding.

Determination of the level of stress and adaptation capacity of every nursing learner will under supervision to the nursing teachers for decreasing the effects of negative stress and ensuring an effective training in hospital practice. But, the teaching during placement for nursing students vary from country to country, and the factors influencing stress may vary from country to country.

The target of this study to find out the stressors types, adaptation capacity, and the factors affecting nursing students' adaptation capacity during the preliminary phase of the clinical practice.

1.2 JUSTIFICATION

- Mental stress can influence academic and clinical performance, and compromise the quality of care provided to diverse populations and adaptation capacity may help to cope up.
- By addressing key questions such as the predominant stressors, coping mechanisms, and potential impacts on academic and career trajectories, this research aims to contribute to the cultivation of a resilient and mentally healthy nursing workforce in Bangladesh.
- This research aligns with the broader goals of promoting mental health as an integral component of overall well-being, ensuring the future effectiveness and resilience of healthcare workforces on a global scale.
- This study looks for filling this void by find out the primary stressors contributing to mental stress and adaptation capacity within nursing students in Bangladesh.

1.3 Research Question:

1. What is the level of stress among Bangladeshi Nursing students during clinical practice?
2. What is the adaptation capacity among Bangladeshi Nursing students during clinical practice?

1.4 OBJECTIVES:

General objectives:

- To explore the "Stress level and adaptation capacity among Bangladeshi Nursing students during clinical practice."

Specific objectives:

- To identify the socio-demographic characteristics of the respondents.
- To assess the level of stress within the respondents.
- To identify the adaptation capacity of the respondents.
- To determine the association between the stress level and adaptation among respondent.

1.5 LIST OF VARIABLES:

Independent Variables

Socio-Demographic Factors:

- Age
- Gender
- Domicile
- Religion
- Course
- Family Income

Dependent Variable

- Stress
- Adaptation capacity

Others related variables

- Result
- Feelings
- Perception
- Relaxation
- Fear
- Problem solving technique
- Argue
- Difficulties

CHAPTER-2

2.1 Literature review

A research was conducted on the title of "**Origin of stress in nursing learners: a systematic review of quantitative studies" in 2012. The findings of** this thesis was frequently causes of stress similar to academic activities like workload, reviews and problems associated with study. There are many other sources of stress along with clinical sources as like mishandling with patients fear of unfamiliar states, or mishandling of hospital equipment. Generally, there is no difference between the different stages of nursing education (Pulido-Martos M et al., 2012). [9]

A research was conducted on **stress and coping techniques in nursing scholars in 2017. The finding of this study was the** range of stress level was moderate to high among nursing students. This research identifies the stressor factors was assignments and workloads, fear for caring of patients, and poor interactions with hospital members. The most common strategies for increase adaptation capacity used by students was investigating techniques such as preparing objectives for infestigations, adopting techniques to solve various problems, and finding the coping technique in stressful events (Labrague LJet al., 2017). [10]

A research was conducted on Stress and anxiety among nursing students: A review of intervention strategies in literature between 2009 and 2015. The undergraduate students of nursing department experiences momentous anxiety and stress, inhibiting knowledge and increasing deterioration. The study sorts out and evaluated and updated a systematic review on targeting the categories of: (a) stressors, (b) coping, or (c) appraisal for intervention. And the intervention aimed to reduce the numbers of stressors through improve students' adaptation capacity and curriculum development. (Turner K, McCarthy VL 2017). [11]

An exploration was conducted on Factors influencing Adaptation on Clinical Practice in Nursing Learners In KOREA. This is a type of descriptive study whose aims to find out the factors that influence adaptation capacity during clinical practice of the nursing students. There was collected one hundred and eighty data from nursing students between 26th April to 4th May, 2018. A set of question was developed, which consist with 17 questions about transition shock, 24 questions regarding social support, a couple of question about the preparedness for clinical practice, and fourteen questions for the degree of coping style in clinical placement. The recorded data was analyzed by using one-way analysis of variance, t-test and by calculating the Pearson correlation coefficient. The level of adaptation of the respondents during clinical practice had a positive correlation with the levels of preparedness. The degree of adaptation had a negative correlation with their transition shock. According to respondents the greates affecting factors on the degree of adaptation during clinical practice was transition shock Hence, For the improvement of the degree of adaptation capacity during clinical practice should be individual's preparedness during clinical practice and support from others and measures for reducing transition shock. (Kim SY, Shin YS., 2018). [12]

A study was conducted on Stress and coping strategies among nursing scholers during the beginning period of the clinical practicum: A cross-section study. A cross-sectional study design was carried out in 2017. The participants were recruited from a selected hospital in Zhejiang Province in China. A convenience sampling method was used. The demographic criteria related questionnaire, the Stressor Scale used for collected data, and a questionnaire with Simple Coping Style also used to collect data. [13] 158 nursing students were selected for collecting data, most of the respondents were female and living in rural areas. Subject's perceived a moderate level of stress from the preliminary period of the clinical practice. There is a crucial for knowledge and skills to reducing stress. Most of the respondents adopts positive coping techniques for adaptation. The undergraduate Nursing students were only children and having higher level of stress than the junior college students, not only children. The undergraduate nursing students have the positive coping styles than junior college students. (Liu J et al., 2022). [13]

A research was conducted on Nursing scholar's faces of coping to clinical placement in the situation of COVID-19 pandemic. This study was described the overall adaptation capacity during clinical practice among the nursing students during the pandemic situation of COVID-19. This is a qualitative study and data were collected between May to August 2022 from open coding questions. Data analysis emphases that the core category was the method of holding the location of knowledge while adhering to the limitations of the era of pandemic situations and involve of four like adjustment, withdrawal, confusion, and growth. The participants used interactional techniques such as thinking positive, protect things and produce purposeful learning. The result of these techniques were coping capability in this situations and "strengthening the results of adaptation capacity. For understanding the adaptation experiences of the nursing students during clinical practice in pandemic situation of COVID- 19. The results of this experiences guide the nursing teachers to promote teaching strategies for better support of nursing students in a time of crisis period. (Kwon S et al., 2022). [14]

Research was conducted on Exchanges in stress situations and managing strategies among Finnish nursing scholars in Finland. Nursing scholars may witness significant stress in their hospital literacy terrain and can utilize managing strategies to palliate this stress. still, there's little empirical substantiation on how this stress and managing strategies change over the times of study. The purpose of this research was to broaden differences in stress situations and managing strategies from nursing scholars in a clinical literacy terrain. Nursing scholars were observed during the 1st and alternate time of study. Nursing scholars endured maximum stress during their alternate hospital practice with the compares of their first day, where the mean scores was 1.03 and 1.66, independently. Stress due to the lack of proper knowledge and skills and chops remained the main stressor while transfer was the first managing strategies during the couple of times of work. Nursing preceptors would help nursing scholars grow effective managing strategies for hospital stressors, especially those related to lack of education and expertise and chops, and mentally ready their scholars for the hospital training. (Bhurtun HD et al., 2021). [16]

An exploration was conducted on nursing scholars and stress managing strategies during clinical training in KSA Albaha University, Aqiq, KSA. A cross-sectional descriptive study was conducted using the simple arbitrary slice fashion in one hundred and twenty-five nursing scholars during their hospital practice. Data collection was done by using a well prepared questionnaire conforming of demographic data and the managing geste force. Amomg respondents, 48% were men and the rest respondents were women. 21 was the mean age and 110 (88%) were substantially single. About 52% actors were veritably pleased and the rest were gratified with their hospital trainig. Noise is the main stressors, for trip was nine, for social commerce was seven and for particular illness was only 5 %. Perceived stressors have patient care, tasks and pressure for work, lack of proper education and chops, practice field was only 0.4%, par and diurnal life 0.6%., and preceptors and sanitarium nurse 0.7%. The techniques used by scholars to minimize stress along with espousing a problem- working approach, maintaining sanguinity, transfer and neglegency. (Ahmed WA, Mohammed BM., 201).

An exploration on the position of satisfaction and anxiety during clinical training among nursing scholars was carried out in 2023. A descriptive and logical study design, cross-sectional was used. The exploration was conducted at the Faculty of Nursing, Assiut University and Alnamas and Bisha Colleges of Applied Medical lores, Bisha University. A convenience slice fashion was used. A sample of 1052 undergraduate nursing scholars. Data were collected through a structured questionnaire covering sociodemographic characteristics and nursing scholars' satisfaction with sanitarium and laboratory training. In addition, the tone- Standing Anxiety Scale(SAS) was espoused to measure the position of anxiety. The average age of the study sample was 21.9 ± 1.83 times and 56.9 were women. In addition, 90.1 and 76.4 of nursing scholars were satisfied with their sanitarium and laboratory training. In addition, 61.1 and 54.8 of scholars have mild situations of anxiety regarding their training in the sanitarium and laboratory training, independently (Kabir R et al., 2021).

CHAPTER-3

3 - METHODOLOGY

3.1Introduction

Chapter-3 describes the method that used in this research. It discusses the research design, the study sample, the study population, the research tools, the procedure and data analysis, limitation and ethical consideration.

3.2 Place of Study

This research was carried out in selected nursing institute & college situated in Dhaka, Bangladesh. The name of the selected colleges are- Sheikh Fazilatunnessa Mujib Memorial Nursing College, Royal Nursing College and Turag Adhunik Nursing College.

3.3 Research Design:

A cross sectional descriptive research design was used in this study.

3.4 Duration of Study:

March 2024 – August 2024

3.5 Study population:

The nursing students enrolled in clinical placement at any academic level were study population.

3.6 Selection criteria

Inclusion criteria:

- Who were Nursing Students
- Who were attending clinical placement for more than six months
- Who were willing to respond

Exclusion criteria:

- New 1st year students were excluded.
- Who were not willing to respond
- Who were seriously ill

3.7 Sampling Techniques & Sample Size

- **Sampling Techniques**

Non-probable purposive sampling techniques was used to collect data for this research.

- **Sample Size**

Sample was calculated by following formula -

$n=z^2pq/d^2$

Where,

n= desired sample size

z = 1.96 (95% confidence interval)

p = Level of mental stress among Nursing students = 41% = 0.41 (Parvin N et al., 2021).

q = 1-p = 1-0.41 = 0.59

d = 5 %

So,

n = (1.96) 2 (0.41 X 0.59)/ (0.05) 2

= 372

However, the period for data collection was short and the resources were limited.So for this reason, only 207 respondents were recruited using a non-probability-purposive sampling technique.

3.8 Data collection procedure:

A well-structured questionnaire was used to collect data by face to face meeting after taking consent from the respondents. A perceived stress level was measured by using Perceivd Stress Scale (PSS) collected by Sheu (Sheu et al.,2002) and an adaptation capability was measured by using coping behavioral inventory scale also promoted by Sheu (Sheu et al., 2002). It is a 5 point Likert Scale utilized to identify nursing student's adaptation capacity. Responses of every question were ranged from always to never (4= always, 3= frequently, 2= sometimes,1=rarely and 0= never).

And the **score was Low if (0-13), moderate =14-26, High= 27-40).**

3.9 Research Instrunent/Tools:

A well-structured questionnaire was accustomed in this study.

3.10Method of Data Analysis:

After data collection checked all the interviewed questionnaires for correctness and internal consistency and completeness to find out invalid or inconsistent data and those were rejected. Right data was set to Statistical Package for social Science (SPSS) statistical software version 26 and Microsoft excel also used for the data analysis. To find the associations between different variables I used Pearson's chi-square (χ^2) test. The p-value level of < 0.05 and 95% CI was considered to test statistical significance.

3.11 Limitations:

The study findings may not represent the whole country as the sample size was small and chosen purposively due to time constrain. And the recruited participants from only three nursing college. In oncoming days, I will exclude the predictive factors regarding stress and adaptation skills in the clinical practice time in a longitudinal multi-center study.

3.12 Ethical Consideration:

The study proposal has been submitted to "FAHS Research Ethics Committee, DIU" for approval. An informed consent was taken from the respondents before interview. The names and identity of

all respondents were removed from the survey and result documents, because of protecting the participant's anonymity and privacy and also for maintaining confidentiality.

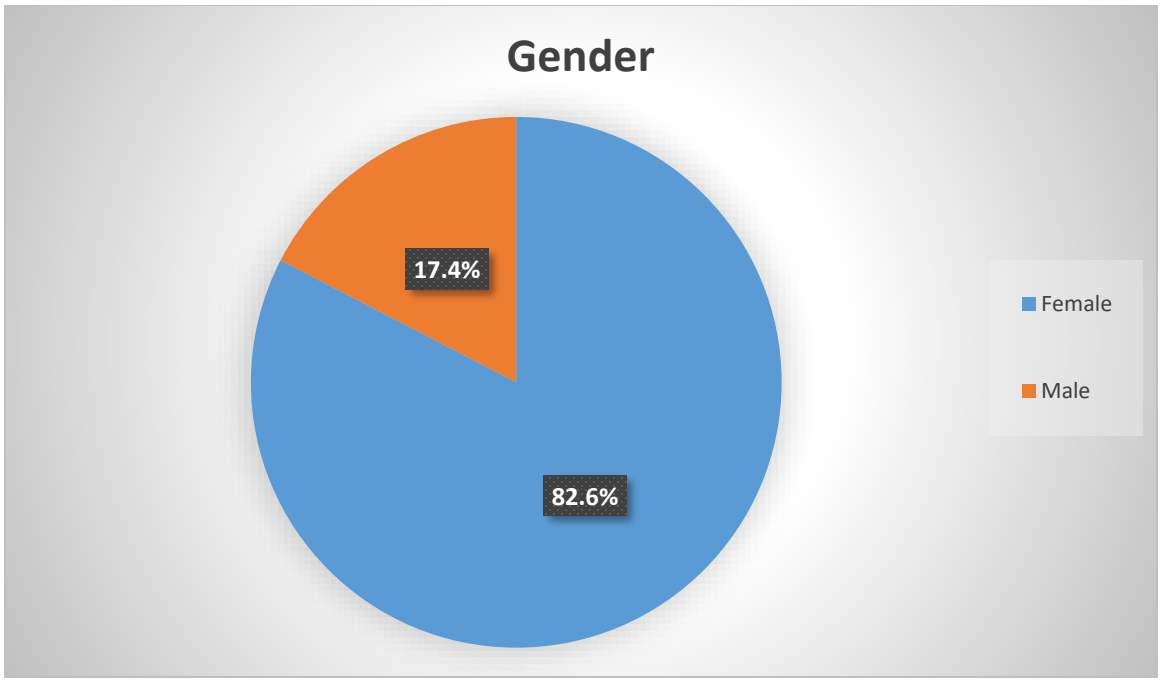
CHAPTER-4
RESULT

Table 1: Distribution of the respondents according to age (N=207):

Age in years	Frequency(F)	Percentage(%)
18	10	4.84
19	13	6.28
20	48	23.19
21	54	26.08
22	43	20.77
23	31	14.98
24	08	3.86
Total	207	100
Mean±SD	21±2.16	

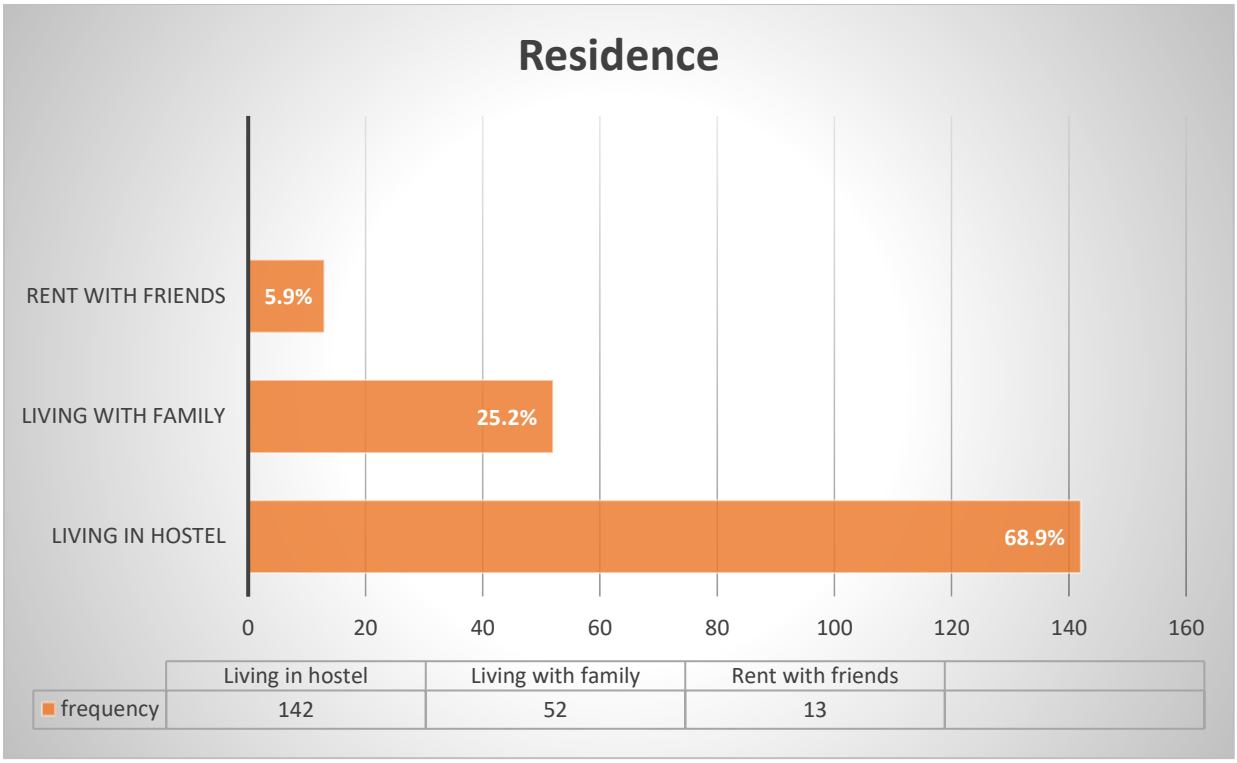
This table showed that the majority (26.08%) of the respondents were in age 21 years, followed by 20years (23.19%),22years (20.77%),23years (14.98%),19years (06.28%),24years (3.86%). And the respondent's mean age was 21.

Figure-1: Distribution of the respondents according to gender(N=207):



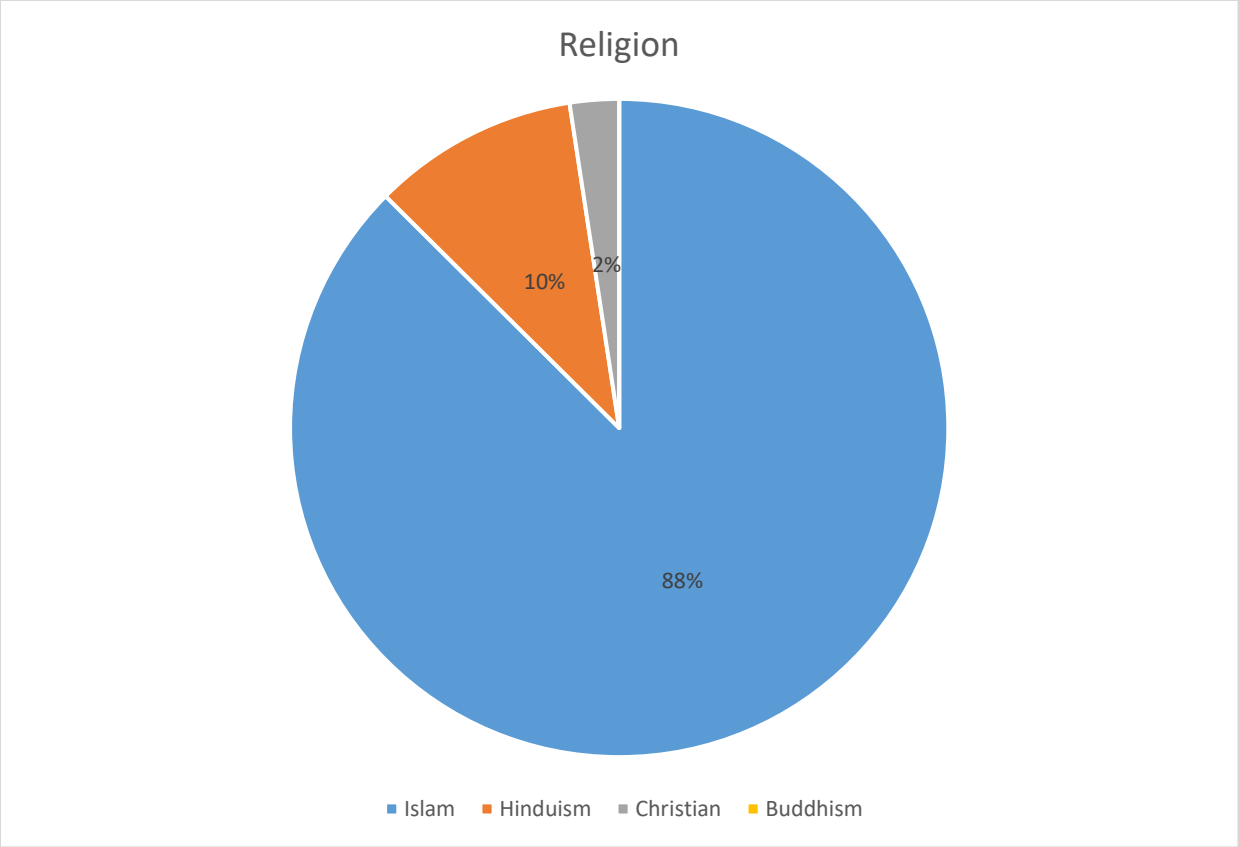
This figure shows that the majority 82.6%(n=171) of the respondents were female and the rest of the respondents were male17.4%(n=36).

Figure-2: Distribution of the respondents according to residence(N=207):



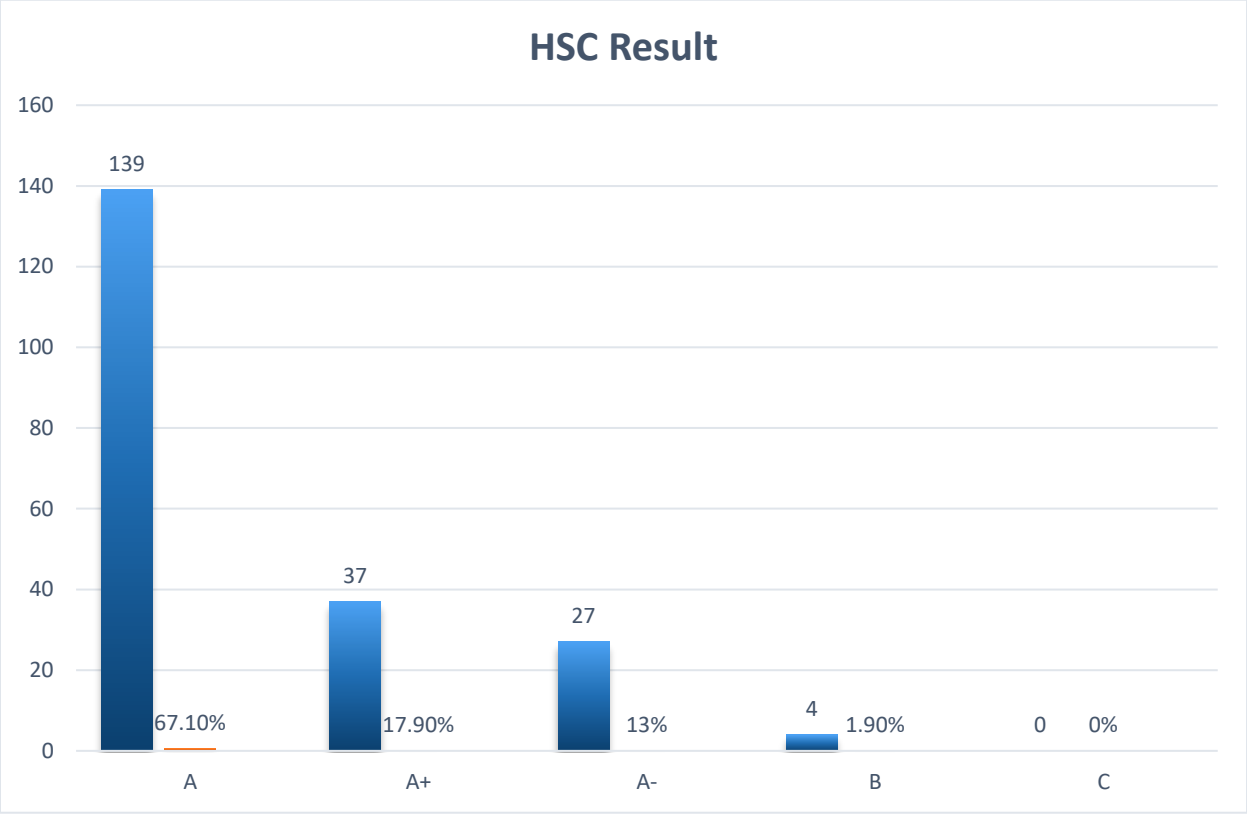
This figure shows that the majority 68.9%(n=142) of the respondents were living in hostel and the25.2%(n=52) were living with family and the 5.9%(n=13) were living in rent with friends.

Figure-3: Distribution of the respondents according to religion(N=207):



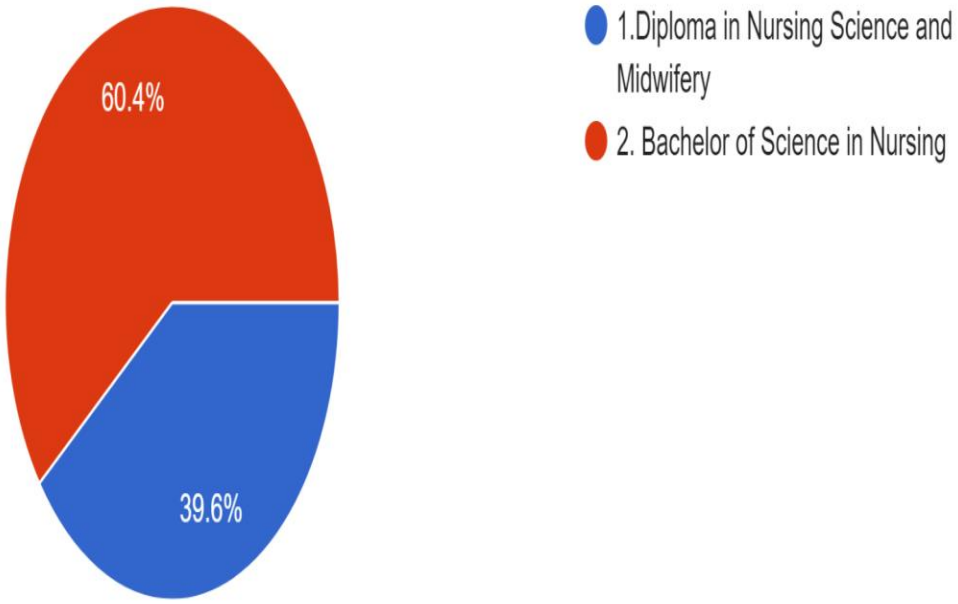
This figure shows that the majority 88%(n=181) of the respondents were Muslim and the10%(n=21) were Hindu and the 2%(5) were Christian and no respondent were buddhism.

Figure-4: Distribution of the respondents according to HSC result (N=207):



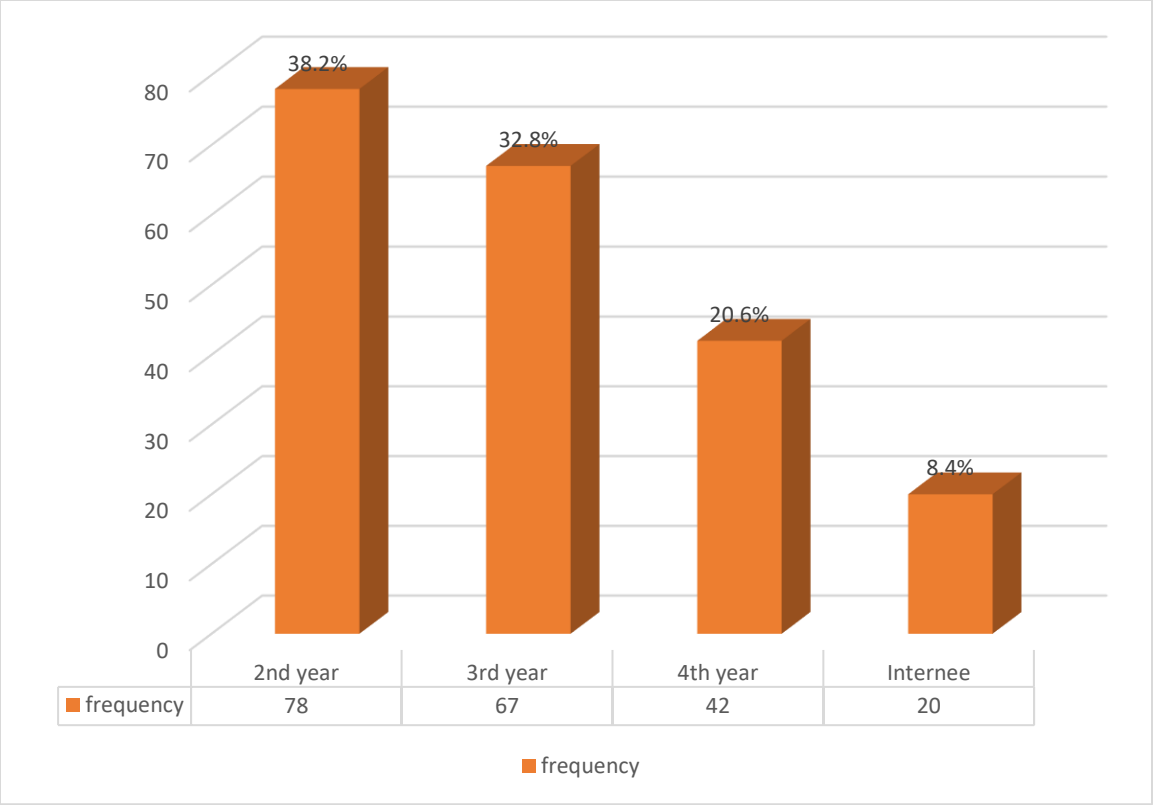
This figure shows that the majority 67.1%(n=139) of the respondents got A and the17.9%(n=37) got A+ and the 13%(n=27) got A- and the 1.9%(n=4) got B and no respondent got grade C.

Figure-5: Distribution of the respondents according to course (N=207):



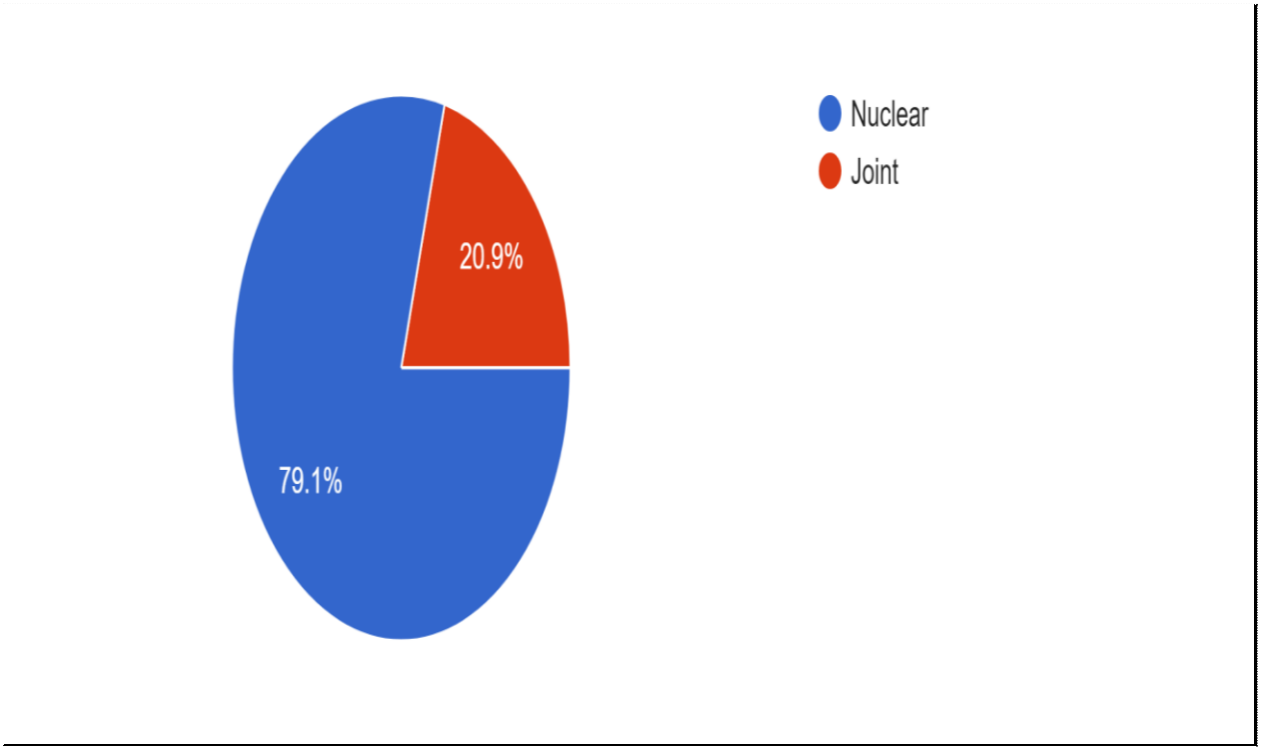
This figure shows that the majority 60.4%(n=125) of the respondents enrolled in BSc in Nursing and the 39.6%(n=82) respondents enrolled in Diploma in Nursing Science and Midwifery.

Figure-6: Distribution of the respondents according to year of study(N=207):



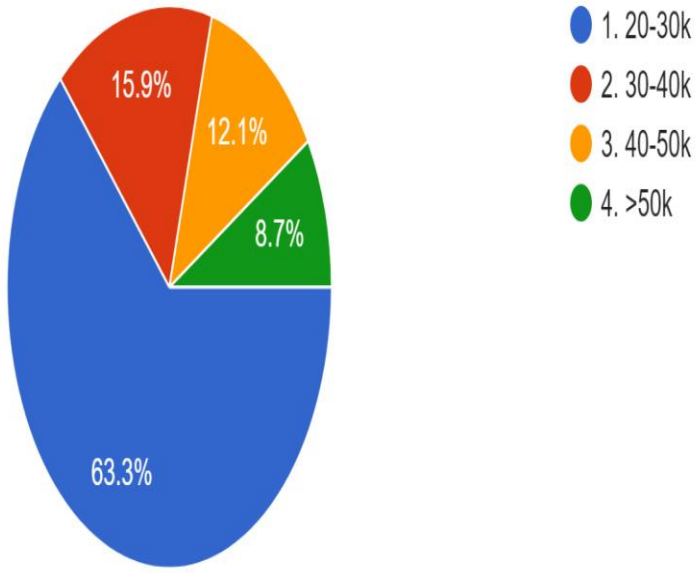
This figure shows that the majority 38.2%(n=78) of the respondents were in 2nd year, respectively 32.8%(n=67), 20.6%(n=42) and 8.4%(n=20) respondents were in 3rd,4th and internee students.

Figure-7: Distribution of the respondents according to family(N=207):



This figure shows that the majority 79.1%(n=163) of the respondents live in nuclear and the 20.9%(n=44) respondents live in joint family.

Figure-8: Distribution of the respondents according to family income(N=207):



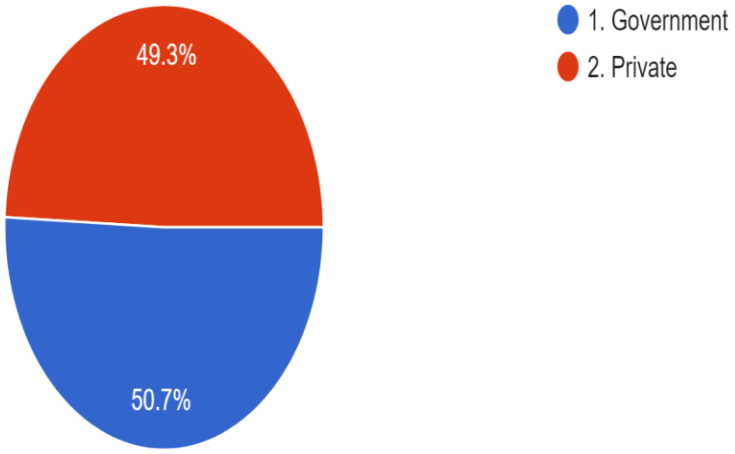
This figure shows that the majority 63.3%(n=131) of the respondents family income was 20-30k, respectively 15.9%(n=33), 12.1%(n=25) and 8.7%(n=18) respondents family income were30-40k,40-50kand more than 50k.

Table-2: Distribution of the respondents according to name of college(N=207):

College name	Frequency	Percentage(%)
RNC	66	31.88
SFMMKPJ NC	98	47.35
TANC	43	20.77
Total	207	100

This table shows that the majority 47.35%(n=98) of the respondents were studing in SFMMKPJ NC and the 31.9%(n=66) respondents study in RNC and 20.77%(n=43) study in TANC.

Figure-9: Distribution of the respondents according to type of placement hospital(N=207):



This figure shows that the majority 50.7%(n=105) of the respondents did placement in govt. hospital and the 49.3%(n=102) respondents did placement in private hospital.

Table-3

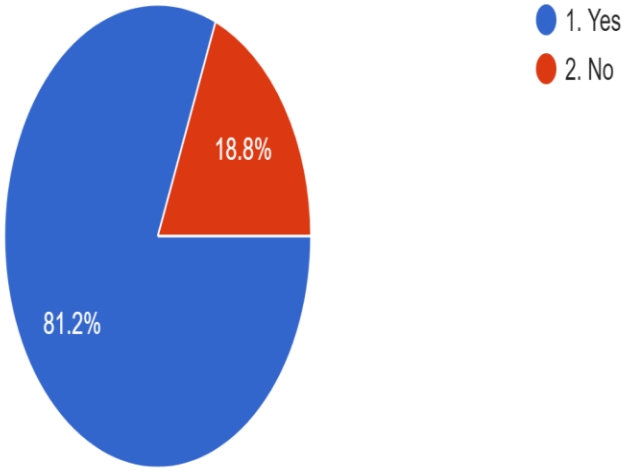
Section B- Perceived stress during placement

SN	PSS	Never(0)		Rarely(1)		Sometimes(2)		Frequently(3)		Always(4)	
		F	P%	F	P%	F	P%	F	P%	F	P%
01	In the last placement how often have you been upset?	54	26.1	32	15.5	**104**	**50.2**	7	3.4	10	4.8
02	In the last placement how often have you felt that you are unable to handle patient?	54	26.1	40	19.3	**81**	**39.1**	19	9.2	13	6.3
03	In the last placement how often have you felt that you weren't effectively coping with clinical placement?	68	33	34	16.5	**77**	**37.4**	12	5.3	16	7.8
04	In the last placement how often have you felt confident to do the nursing procedure?	7	3.4	19	9.2	61	29.1	31	15	**89**	**43.2**
05	In the last placement how often have you argued with others?	**115**	**55.9**	35	16.7	35	16.7	11	5.4	11	5.4
06	In the last placement how often have you controlled your temper?	14	6.8	24	11.6	41	19.8	14	6.3	**114**	**55.6**
07	In the last placement how often have you felt difficulties during placement?	36	17.4	38	18.4	**117**	**56.5**	8	3.9	8	3.9
08	In the last placement how often have you failed to meet your expectation?	39	18.8	44	21.3	**101**	**48.8**	8	3.9	14	6.8
09	In the last placement how often have you felt that it's requirements exceed your physical or emotional edurance?	36	17.1	45	22	**104**	**50.2**	10	4.9	12	5.9

This Table shows that the majority of the respondents said sometimes(2) .and the average result also sometimes. And the sum of the score was less than 26. So the strees level of the respondents were moderate stress.

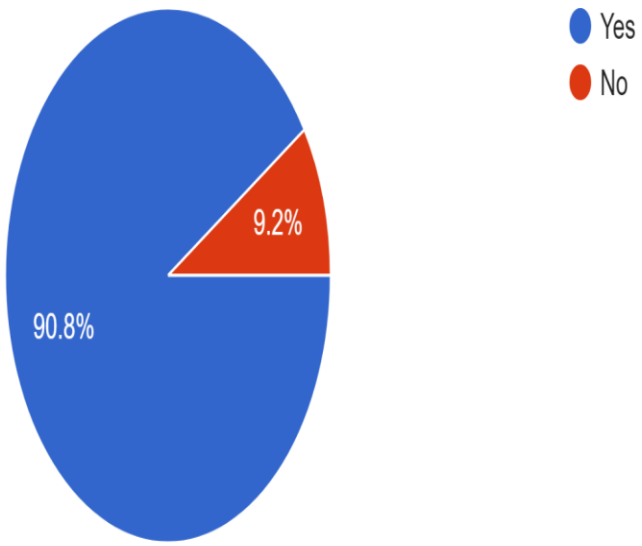
NB: Stress score (0-13=Low,14-26=moderate,27-40=High - perceived stress)

Figure-10: Distribution of the respondents according to choose Nursing willingly(N=207):



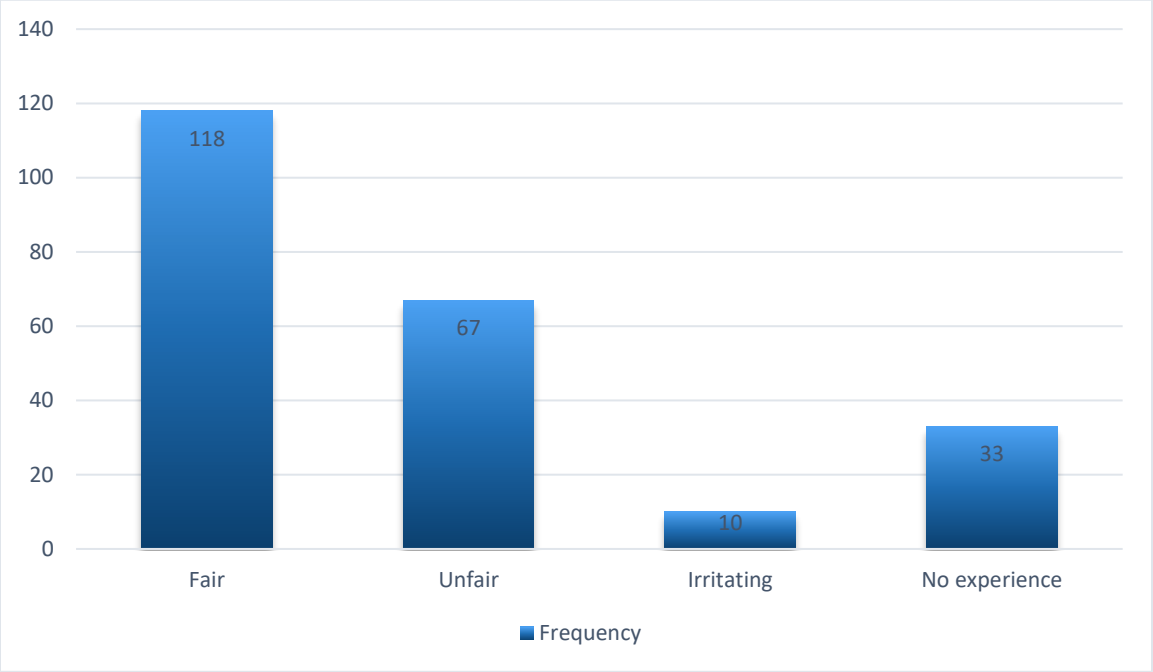
This figure shows that the majority 81.2%(n=168) of the respondents choose Nursing willingly and the 18.8%(n=39) respondents did not.

Figure-11: Distribution of the respondents according to feeling excitement to do clinical practice(N=207):



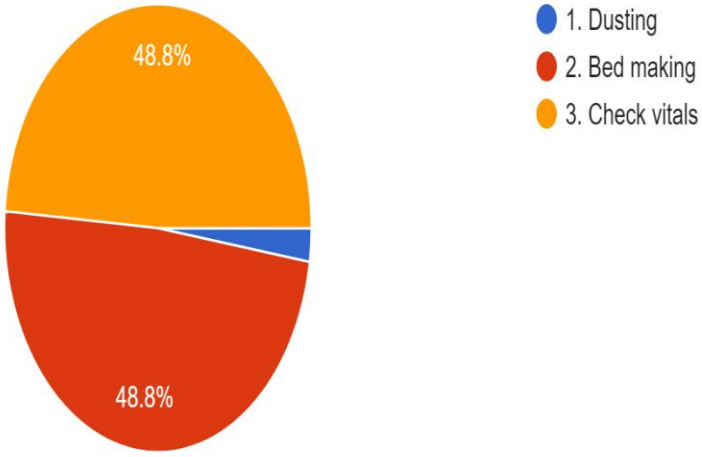
This figure shows that the majority 90.8%(n=188) of the respondents felt excited to do clinical practice and the 9.2%(n=19) respondents did not.

Figure-12: Distribution of the respondents according to feeling about night duty(N=207):



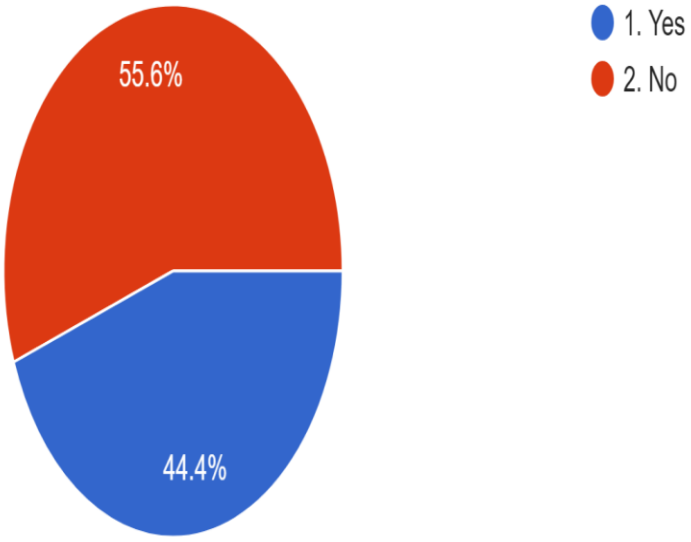
This figure shows that the majority 52%(n=118) of the respondents felt fair about night duty and the 29%(n=67) respondents felt unfair, the 4%(n=10) felt irritating and the 14%(n=33) hadn't experience .

Figure-13: Distribution of the respondents according to first work during clinical practice(N=207):



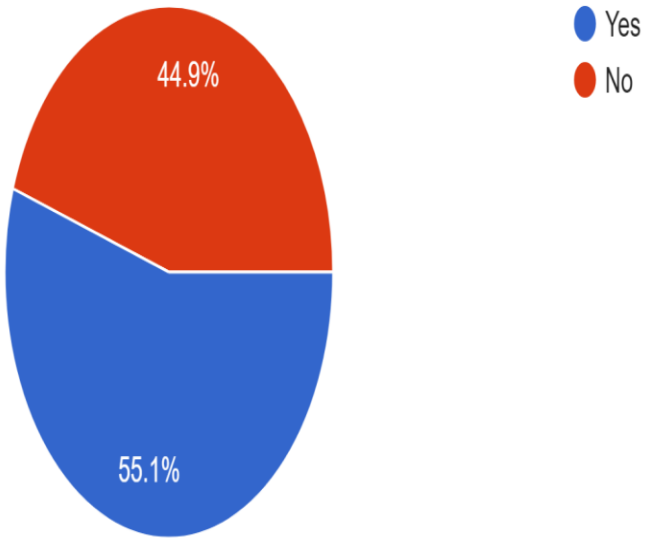
This figure shows that the majority 48.8%(n=101) of the respondents first work was check vitals and bed making inclinical practice and the 2.4%(n=5) respondents did dusting.

Figure-14: Distribution of the respondents according to feel heavy workload during clinical practice(N=207):



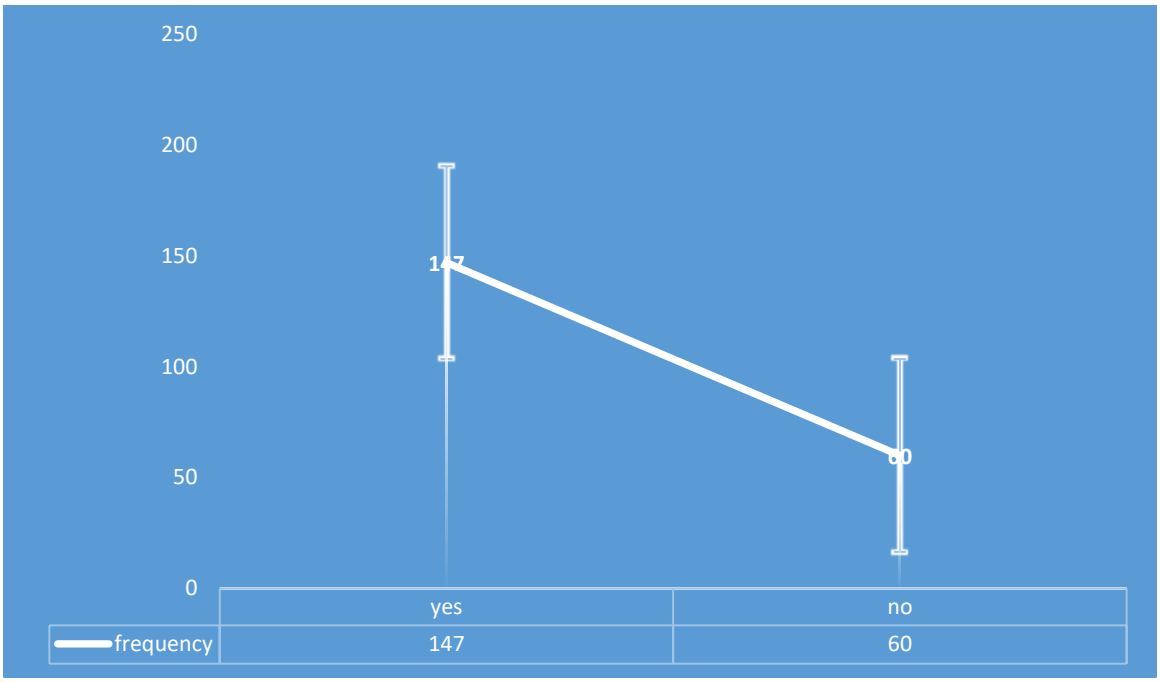
This figure shows that the majority 55.6%(n=115) of the respondents said no and the 44.4%(n=92) respondents said yes.

Figure-15: Distribution of the respondents according to feel fear while performing clinical practice(N=207):



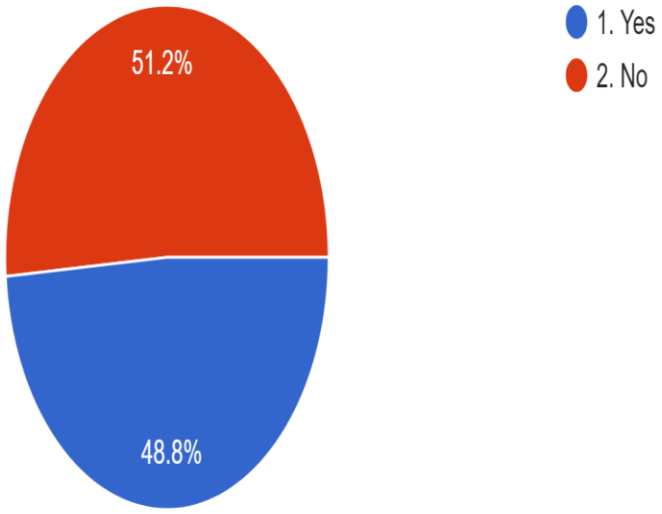
This figure shows that the majority 55.1%(n=114) of the respondents said yes and the 44.9%(n=93) respondents said no.

Figure-16: Distribution of the respondents according to feel lacking of knowledge(N=207):



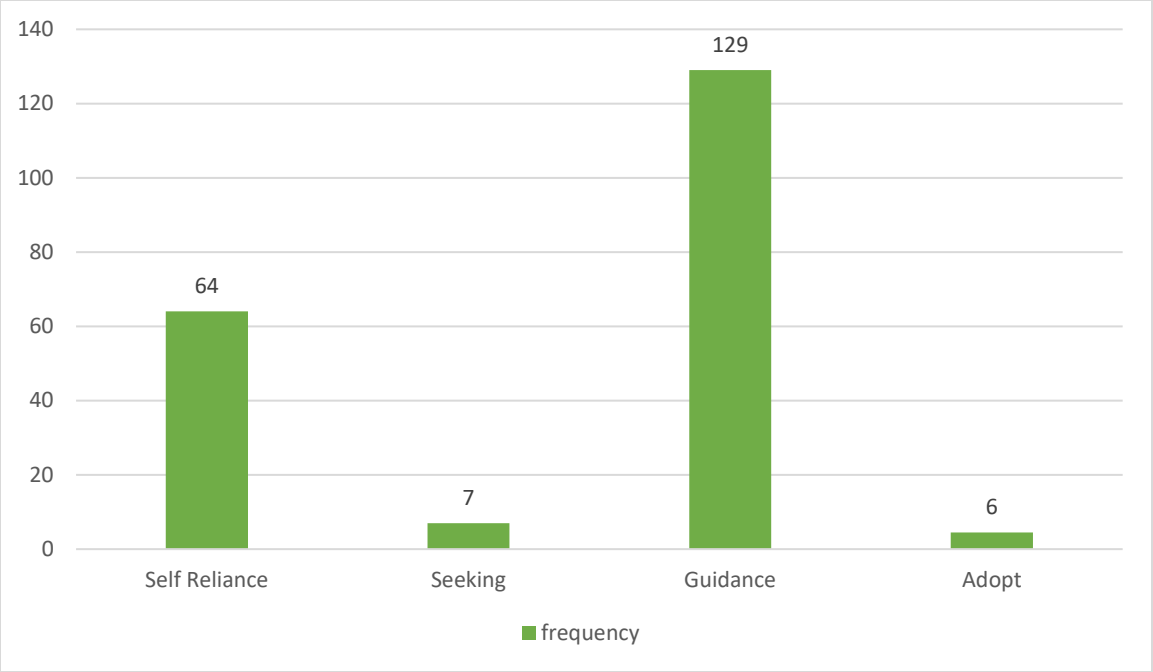
This figure shows that the majority 70.7%(n=147) of the respondents said yes and the 29.3%(n=60) respondents said no.

Figure-17: Distribution of the respondents according to feel problem with hospital environment or facility:



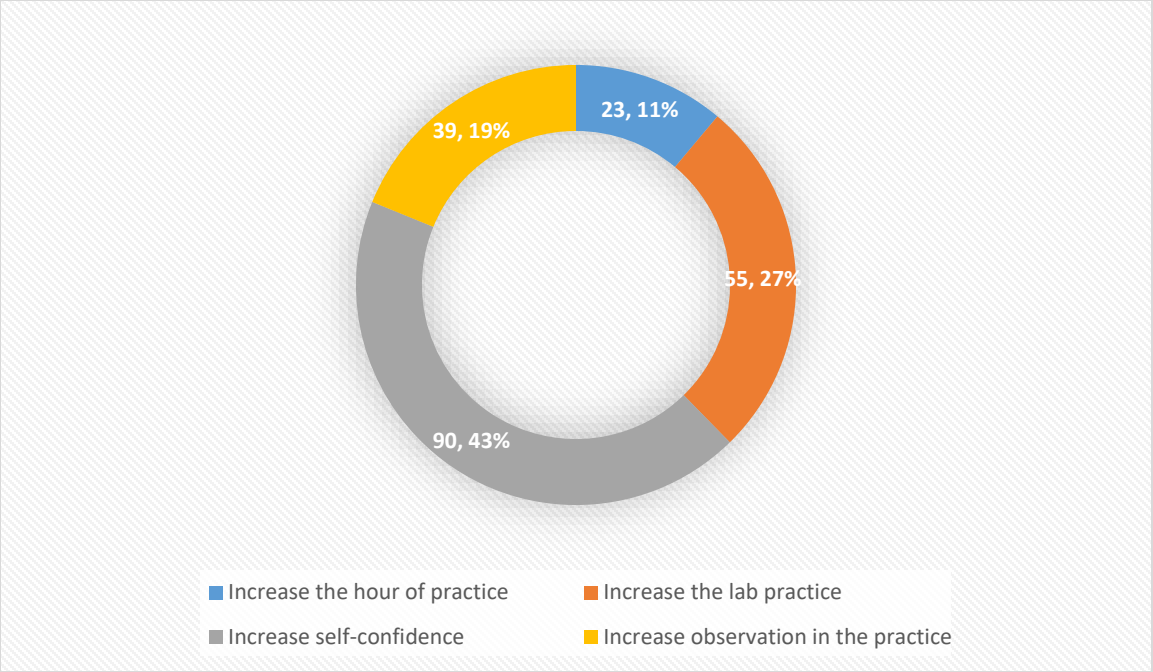
This figure shows that the majority 51.2%(n=106) of the respondents said no and the 48.8%(n=101) respondents said yes.

Figure-18: Distribution of the respondents according to problem solving techniques:



This figure shows that the majority 62.6%(n=129) of the respondents said guidance and the other respondents said respectively 31.1%(n=64), 3.4%(n=7). 2.9%(n=6) self reliance,Seeking and Adopt.

Figure-19: Distribution of the respondents according to cope in clinical practice:



This figure shows that the majority 43%(n=90) of the respondents said self-confidence and the other respondents said respectively 27%(n=55), 19%(n=39). 11%(n=23) lab practice, observation in the practice and increase the hour of practice.

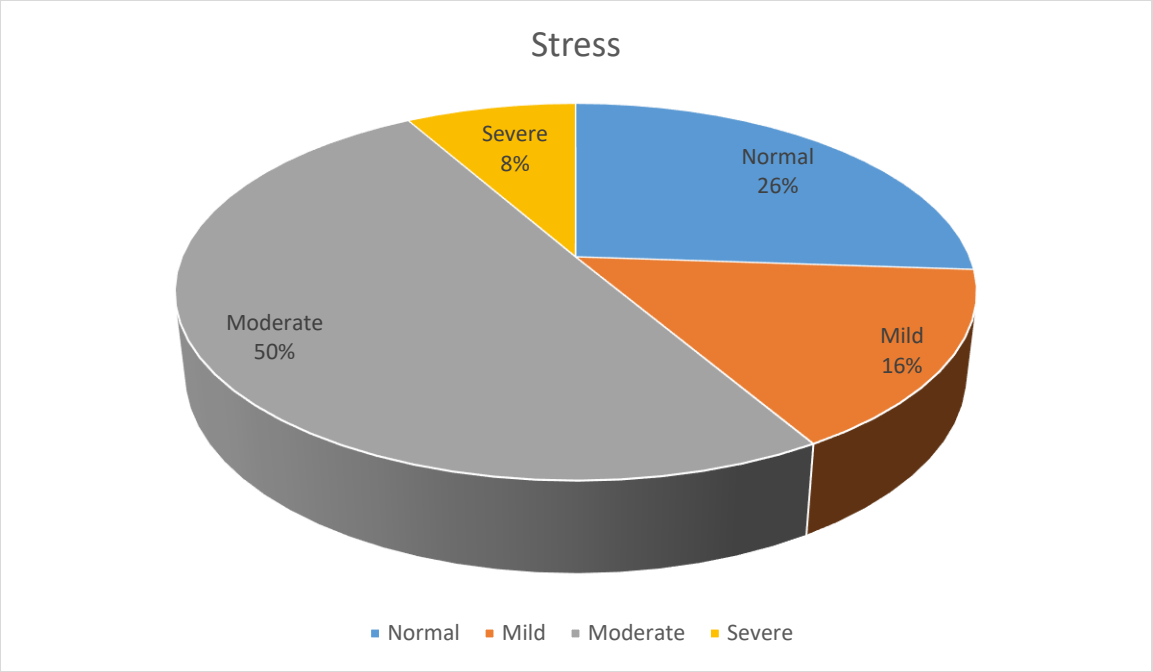
Section –C.2 Coping behavior inventory

Table-4

SN	PSS	Never(0)		Rarely(1)		Sometimes(2)		Frequently(3)		Always(4)	
		F	P%	F	P%	F	P%	F	P%	F	P%
01	To avoid difficulties during clinical practice.	62	30	25	12.1	**88**	**42.5**	4	1.9	28	13.5
02	To quarrel with others and lose temper.	**119**	**57.5**	28	13.5	45	21.7	5	2.4	10	4.8
03	To expect miracles to solve difficulties.	64	30.9	33	15.9	**74**	**35.7**	9	4.3	27	13
04	To expect others help.	22	10.6	25	12.1	**118**	**57**	10	4.8	31	15
05	To adopt strategies to solve the difficulties.	12	5.8	22	10.6	**94**	**45.4**	13	6.3	66	31.9
06	To employ skills and experience to solve the defficulties.	10	4.9	10	4.9	**83**	**40.7**	18	8.8	**83**	**40.7**
07	To keep a positive attitudes for dealing the difficulties.	11	5.3	9	4.3	43	20.8	13	6.3	**131**	**63.3**
08	To cry ,feel moody, sad and helpless	68	32.9	32	15.5	**89**	**43**	7	3.4	11	5.3

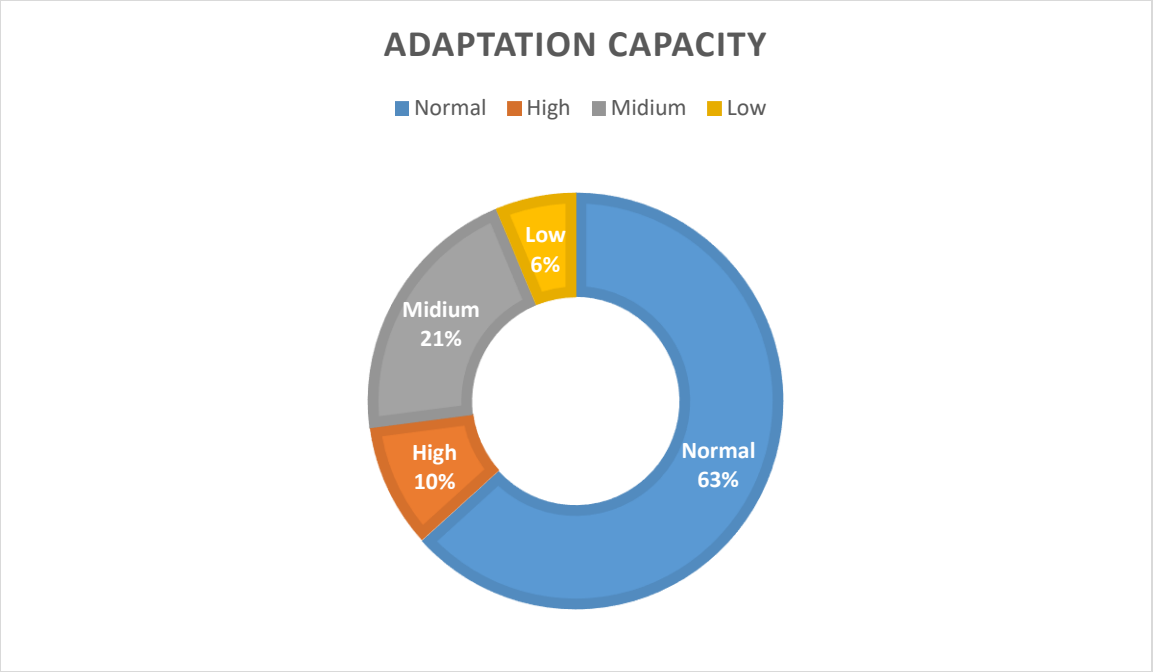
This Table shows that the majority of the respondents said sometimes(2) .and the average result also sometimes.so the coping capacity of the respondent was normal.

Figure-20: Distribution of the respondents according to level of stress:



This figure shows that the majority 50%(n=104) of the respondents said moderate and the other respondents said respectively 26%(n=54), 16%(n=32). 8%(n=17) normal, mild and severe.

Figure-21: Distribution of the respondents according to level adaptation capacity:



This figure shows that the majority 63%(n=131) of the respondents said normal and the other respondents said respectively 21%(n=43), 10%(n=20). 6%(n=13) medium, high and low.

Table-5

Association between stress and sociodemographic variables

Variables		Stress		x^2 value	P value
		No (%)	Yes (%)		
Age	18	19 (9%)	5 (2.1%)	30.6	0.00
	19	4(1.9)	22(11.0)		
	20	16(8)	50(24)		
	21	20(10)	51(25)		
	22	3(1)	5(2)		
	23	2(0.9)	6(3)		
	24	1(0.1)	3(1)		
Gender	Male	11 (5)	23 (10)	0.22	0.50
	Female	67 (30)	126 (56)		
Study year	2nd	38(18)	40(19)	18.6	0.00
	3rd	17(8)	50(24)		
	4th	21(10)	21(10)		
	Internee	15(7)	5(2)		
Enroll Course	Diploma in Nursing	22 (11)	60 (29)	6.3	0.01
	BSC in Nursing	55 (27)	70 (34)		
Hospital	Government	45(22)	60(29)	2.92	0.05
	Private	32(15)	70(34)		

This table shows that stress was found to be associated with age (p=0.00), study year (p = 0.00), enroll course (P = 0.01) and hospital (P = 0.05) However stress was not associated with gender(p=0.50).

(Significant Correlation is at the 0.05 level)

Table-6

Association between stress and adaptation capacity variables

Variables		Stress		x^2 value	P value
		No (%)	Yes (%)		
Choose Nursing willingly	Yes	68(33)	100 (48)	4.10	0.02
	No	9 (4)	30 (14)		
Having difficulty for lack of knowledge	Yes	90(43)	57 (28)	13.3	0.00
	No	20 (10)	40(19)		
Having fear for performing clinical practice	Yes	14(7)	100(48)	5.4	0.01
	No	23(11)	70 (34)		
Having difficulty for hospital environment	No	26 (13)	80(39)	7.7	0.00
	Yes	10 (5)	91 (44)		
Problem solving techniques	Guidance	09 (4)	120(56)	8.35	0.02
	Self-reliance	14(6)	60(28)		
	Seeking help	2(0.9)	5(2)		
	Adopt	1 (0.1)	5(2)		
Feel Heavy work load	Yes	22(22)	33(33)	0.41	0.70
	No	20(21)	24(24)		

This table shows that stress was found to be associated with willingly choose Nursing (P=0.02), lack of knowledge(P=0.00), fear for performing (P=0.01) and hospital environment (P=0.00) and problem solving techniques (P=0.02). However, stress was not associated with heavy work load (p=0.70).

(Significant Correlation is at the 0.05 level)

CHAPTER-5

DISCUSSION

In the present study, Data were collected from 207 respondents who fulfil the inclusion criteria. The range of age of the respondent was 18-24 years. The mean age of the respondents was 21(SD±2.16) years and the majority (26.08%) of the respondents were in age 21 years, followed by 20years (23.19%),22years (20.77%),23years (14.98%),19years (06.28%), 24years (3.86%). Previously about 38.5% of the respondents (majority) were 21 years and the mean age of the respondents was 20. And for both majority respondents were Muslim and female (Parvin N et al., 2021).

The result of PSS shows that the majority of the respondents said sometimes(2) .and the average result also sometimes for Perceived stress scale. And according to respondents the majority 50%(n=104) of the respondents said moderate and the other respondents said respectively 26%(n=54), 16%(n=32). 8%(n=17) normal, mild and severe stress. Our study reveals that the stress level was mild to moderate. Previous study showed that 41% respondent had mild level of stress ,36.8% had normal, 22.2%had moderate. 0.41 (Parvin N et al., 2021).

The result showed that the majority 81.2%(n=168) of the respondents choose Nursing willingly and the 18.8%(n=39) respondents did not. The majority 90.8%(n=188) of the respondents felt excited to do clinical practice and the 9.2%(n=19) respondents did not. The majority 55.6%(n=115) of the respondents said no and the 44.4%(n=92) respondents said yes about feel heavy workload during clinical practice. About lacking of knowledge the majority 70.7%(n=147) of the respondents said yes and the 29.3%(n=60) respondents said no.

The majority 62.6%(n=129) of the respondents said guidance and the other respondents said respectively 31.1%(n=64), 3.4%(n=7). 2.9%(n=6) self-reliance, Seeking and Adopt for problem solving technique. Previous study also showed that problem solving approach was taken for coping strategies. The CBI scale responses were approximately similar for both.
(Ahmed W et al., 2019).

The results of this study are same as to those study in terms of age, gender, religion, level of stress, coping strategies, problem solving etc. So the result of this study are significant.

CHAPTER-6
RECOMMENDATION AND CONCLUTION

RECOMMENDATION

- Create counseling sessions to improve students coping skills.
- Ensure psychological support services on campus for early intervention.
- Encourage activities like exercise and relaxation techniques to maintain a healthy balance.
- Raise Awareness and Reduce Stigma: Promote open dialogue and consciousness about mental health to encourage help-seeking behavior and reduce stigma and enhance adaptation capacity.
- This study recommended a further research with a larger sample size.

CONCLUTION

- Among the 207 study respondents, majority (26.08%) respondents were in age 21 years old, their Mean ± SD is 21±2.16. Most of them are women (82.6%)
- Among the respondents level of stress 26% are normal, 16% are having mild levels of stress, 50% are having moderate levels of stress, 8% are having severe levels of stress.
- Among the respondents the maximum 63% of the respondents said normal and the other respondents said respectively 21%, 10% and 6% medium, high and low.
- Chi square test are revealed that age, gender, course, year of study, choosing nursing willingly, having difficulty for lack of knowledge, having fear for performing clinical practice, having difficulty for hospital environment, Problem solving techniques are associated with stress.

REFFERENCE

1. Doyle K, Sainsbury K, Cleary S, et al.. Happy to help/happy to be here:Identifying components of successful clinical placements for undergraduate nursing students. *Nurse Edu Today*. 2017;49:27–32.
2. Ahmed, W. A. M., & Mohammed, B. M. A. (2019). Nursing students' stress and coping strategies during clinical training in KSA. *Journal of Taibah University Medical Sciences, 14*(2), 116–122. https://doi.org/10.1016/j.jtumed.2019.02.002
3. Chan C.K., So W.K., Fong D.Y. Hong Kong baccalaureate nursing students' stress and their coping strategies in clinical practice. *J Prof Nurs.* 2009;25(5):307–313.
4. Blomberg K, Bisholt B, Kullén Engström A, et al.. Swedish nursing students' experience of stress during clinical practice in relation to clinical setting characteristics and the organisation of the clinical education. *J Clin Nurs*. 2014;23:2264–71.
5. Flott EA, Linden L. The clinical learning environment in nursing education: a concept analysis. *J Adv Nurs*. 2016;72:501–13
6. Moffat KJ, McConnachie A, Ross S, Morrison JM. First year medical student stress and coping in a problem-based learning medical curriculum. *Med Educ*. 2004;38:482–91.
7. Zheng, Y. X., Jiao, J. R., & Hao, W. N. (2022). Stress levels of nursing students: A systematic review and meta-analysis. *Medicine, 101*(36), e30547. https://doi.org/10.1097/MD.0000000000030547
8. R.S. Lazarus, S. Folkman-Transactional theory and research on emotions and coping
9. Pulido-Martos M, Augusto-Landa JM, Lopez-Zafra E. Sources of stress in nursing students: a systematic review of quantitative studies. International Nursing Review. 2012 Mar;59(1):15-25.
10. Labrague LJ, McEnroe-Petitte DM, Gloe D, Thomas L, Papathanasiou IV, Tsaras K. A literature review on stress and coping strategies in nursing students. Journal of mental health. 2017 Sep 3;26(5):471-80.
11. Turner K, McCarthy VL. Stress and anxiety among nursing students: A review of intervention strategies in literature between 2009 and 2015. Nurse Education in Practice. 2017 Jan 1;22:21-9.
12. Kim SY, Shin YS. Factors influencing adaptation on clinical practice in nursing students. Journal of the Korea Academia-Industrial cooperation Society. 2018;19(9):234-42.
13. Liu J, Yang Y, Chen J, Zhang Y, Zeng Y, Li J. Stress and coping styles among nursing students during the initial period of the clinical practicum: A cross-section study. International journal of nursing sciences. 2022 Apr 1;9(2):222-9.
14. Kwon S, Kim Y, Bang M, Ryu M. Nursing students' experiences of adapting to clinical practice in the COVID-19 pandemic. The Journal of Korean academic society of nursing education. 2022;28(1):57-69.
15. Bahadır-Yılmaz E. Academic and clinical stress, stress resources and ways of coping among Turkish first-year nursing students in their first clinical practice. Kontakt. 2016 Sep 1;18(3):e145-51.

16. Bhurtun HD, Turunen H, Estola M, Saaranen T. Changes in stress levels and coping strategies among Finnish nursing students. Nurse education in practice. 2021 Jan 1;50:102958.
17. Ahmed WA, Mohammed BM. Nursing students' stress and coping strategies during clinical training in KSA. Journal of Taibah University Medical Sciences. 2019 Apr 1;14(2):116-22.
18. Kabir R, Isha SN, Chowdhury MT, Siddika N, Jahan SS, Saha AK, Nath SK, Jahan MS, Sivasubramanian M, Mahmud I, Hoque Apu E. Depression among the non-native international undergraduate students studying Dentistry in Bangladesh. International Journal of Environmental Research and Public Health. 2021 May 28;18(11):5802.
19. (Parvin, N., Mondal, S., & Afrose, S. (2021). Stress among nursing students during initial clinical practice in Bangladesh. OIRT Journal of Scientific Research, 1(2), 29-35. Doi: https://dx.doi.org/10.53944/ojsr-2107)