



UNIVERSITY
of
LUSAKA

SCHOOL OF MEDICINE AND HEALTH SCIENCES

DEPARTMENT OF PUBLIC HEALTH

**ASSESSING FACTORS ASSOCIATED WITH STRESS AMONG NURSING
STUDENTS AT CHOMA COLLEGE OF NURSING IN CHOMA DISTRICT**

BY

NATASHA HAZEMBA

BSPH19216861

BSc PUBLIC HEALTH

SUPERVISOR: Lt Col MWANAMAKWA SAMANYAMA

**A research dissertation submitted to the University of Lusaka in partial fulfilment of
the requirements of a Degree in Bachelor of Science in Public Health**

DECLARATION

Name of student and ID: HAZEMBA NATASHA, Bsph19216168

I declare that this proposal is my creative work and to the best of my acquaintance has not been presented for a degree in any other institution.

Signature: N. Hazemba


Date: 21ST MAY, 2023

Supervisor Name: Brig Gen Mwanamakwa Samanyama

This dissertation has been submitted with my approval as a University of Lusaka (UNILUS) supervisor.

School of Medicine and Health Sciences, Department of Public Health

Signature:



Date: 21ST MAY, 2023

DEDICATION

I dedicate this dissertation to my parents, Rex Hazemba and Audrey Hazemba who have always supported me throughout this entire program regardless of the situation they were in. The love and support they showed me inspired me to do my best and kept me going even when I felt like giving up.

ACKNOWLEDGEMENT

First and foremost I want to thank God for his showers of blessings upon my life, for his love and mercy for it wouldn't have been possible without Him by my side. I also want to thank God for providing for me and guiding me all through this journey, for this is what led me to the successful completion of my research work.

I would like to prompt my deep and heartfelt appreciation to my parents, whose prayer, belief trust and support has helped me get this far in this journey regardless of the challenges I might have faced, they continued to encourage me to push and never give up, their words of encourage really kept me going, I honestly wouldn't be here without them.

My friends, Nothando Syanjelele, Patience Mbughi Nalwamba,, Abigail Nachinga, Misheck Mushota and Stephan Manianga you guys have been my biggest support system, I want to take this opportunity to thank you guys for being there, for understanding me and for reminding me how far we have come to give up. You guys have been there for me since day one and you were literally my second family in school. Thank you for pushing me beyond my educational limits for this is what contributed to a successful completion of this research work.

A special Thank you to my Best friend, Taonga Jeremiah Mwale for always being by my side, for encouraging me to push even when I most gave up, for being my shoulder to lean on when a needed one, thank you so much for being the best person in my life for it wouldn't have been easy without you. The effort and help you rendered wasn't in vain, you literally stressing like this project was yours definitely showed a lot. Thank you so much once more.

Last but not the least, I want to thank my supervisor Lt Col Mwanamakwa Samanyama whose been there for me from the beginning of this research till the end of it, for he guided me at every step of the way and never gave up on me even when I was slow to grasp the concepts.. His definitely the best supervisor that anyone would ask for, his patience was unmatched and I learnt a lot and certainly got a skill I didn't have , I count myself blessed for having him as my supervisor.

LIST OF TABLES

Table 1: Gender and Age group of the study participants

Table 2: Marital status and year of study of the participants

Table 3: Academic Factors Associated with stress

Table 4: Personal Factors Associated with Stress

Table 5: Environmental Factors Associated with Stress

Table 6: Stress Levels Associated with Stress

LIST OF FIGURES

Figure 1: Conceptual framework on the factors associated with stress among nursing students.

Figure 2: Stress level scores of study participants

Table of Contents

DECLARATION	2
DEDICATION	3
ACKNOWLEDGEMENT	4
LIST OF TABLES	5
LIST OF FIGURES	6
ABSTRACT	9
Background	9
Methodology	9
Results	9
Conclusion	9
CHAPTER ONE	11
1.0 INTRODUCTION	11
1.1 BACKGROUND	11
1.2 Statement of the Problem	12
1.3 Study Justification	13
1.4 General Objective	13
1.4.1 Specific Objectives	13
1.4.2 Research Questions	14
2.0 CHAPTER TWO LITERATURE REVIEW	15
2.1 Introduction	15
2.2. Academic factors associated with stress	15
2.3. Individual Factors associated with stress	16
2.4. Environmental Factors associated with stress	18
2.5 Theoretical Framework	19
2.6 Conceptual Framework	20
3.0 CHAPTER THREE METHODOLOGY	22
3.1 Introduction	22
3.2 Study Approach	22
3.3 Study Design	22
3.4 Study population	22
3.5 Study site	22
3.6 Sampling	22
3.6.1 Sampling Technique	22
3.6.2 Sample size	23
3.7 Data Collection	23

3.8 Data Analysis	23
3.9 Ethical Consideration	23
3.9.1 Inclusion criteria	23
3.9.2 Exclusion criteria	23
4.0 CHAPTER FOUR; RESULTS PRESENTATION	24
4.1 Introduction	24
4.2 Demographic Characteristics	24
4.3 Academic factors associated with stress among study participants	26
4.4 Personal factors associated with stress among study participants	27
4.5 Environment factors associated with stress among study participants	29
4.6 Stress levels among study participants	30
CHAPTER FIVE: DISCUSSION	32
5.0 Introduction	32
5.1 Discussion	32
5.1.1 Academic factors associated with stress among study participants	32
5.1.2. Personal factors associated with stress among study participants.	33
5.1.3. Environmental factors associated with stress among study participants	34
5.1.4. Stress levels associated with stress among study participants.	35
5.2. Study limitations	37
CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS	38
6.0 Introduction	38
6.1 Conclusion	38
6.2 Recommendations	38
REFERENCES	40
APPENDIX	43
WORK PLAN	43
FINANCIAL PLAN SUMMARY	44
QUESTIONNAIRE	46
APPENDIX PERMISSION LETTERS	50

ABSTRACT

Background

Stress is a sensation of emotive or physical pressure (MedlinePlus , 2022). Stress can originate from any incident or thought that makes one feel unfulfilled, annoyed, or anxious. Stress is also defined as any type of adjustment that causes physical, emotive, or psychological tension (Scott, 2022). This research assessed the factors associated with stress among nursing students at Choma College of Nursing. The researcher explored, academic factors, personal factors, environmental factors and stress levels.

Objective: to identify risk factors associated with stress among nursing students of Choma College of Nursing.

Methodology

The study espoused a quantitative study approach and the study design engaged was in this study was a cross-sectional study as it is considered the most operative when looking at factors associated with stress among nursing students. Data was collected using a structured survey and a professed stress scale for measuring stress levels for the stress scores was used.

Results

From the results obtained 79.6% of the sampled population showed high levels of stress and 20.4% showed moderate levels of stress. Among the sampled no participant showed low levels of stress. The study had more female participants 54.6% than males 45.4%. The findings showed academic factors, examinations to be the most stressful factor among the study participants though the results were statistically insignificant with a p-value $0.949 > 0.05$ which showed that there was no significant difference between the two groups (stress and examinations). Majority of the participants were above 20 years 77.6% and less than or equal to 20 years 22.4%, with mean age 24.32 and standard deviation 4.91622 of which the minimum age was 17 and maximum 40. The study consisted of the 1st, 2nd and 3rd years of which the majority of the students were the 3rd years 50.0%, 2nd year 31.6% and 1st years 18.4%.

Conclusion

This study provides some unique evidence that stress at Choma College of Nursing is prominent among students and is mostly as a result of academic factors. Academic factors

such as examinations, workload and assignments were reported as the most cause of stress among the students. High levels of stress have been under looked among students because there are no infringements that have been executed to help nursing students deal with stress in their learning environment.

CHAPTER ONE

1.0 INTRODUCTION

Stress has literally become part of students' academic life due to the various internal and external expectations placed upon their shoulders. In the fast wandered world, focus and productivity has become the main aim of college going students. Diverse factors are a source of strain among students, these comprise relationship with family and associates, examination deadlines, financial insecurity, future profession beliefs, depression, suicide, nervousness and poor management of time (Matthew Martin, 2006). Although stress can affect many people from different social-economic status, age and circumstances, college going students maybe at great risk of strain.

Stress is a sensation of emotive or physical pressure (MedlinePlus , 2022). Stress can originate from any incident or thought that makes one feel unfulfilled, annoyed, or anxious. Stress can also be defined as the any type of adjustment that causes physical, emotive, or psychological tension (Scott, 2022). Stress is one's physique's reaction to anything that obliges attention or action. Having defined stress, it is important that we look at it in terms of Academic stress, because we are looking at college going students' academic alarms are the most significant causes of prolonged and random stress worldwide. (Xin Zhing, 2022). Academic stress is defined as a student's psychosomatic state resulting from constant social and self-inflicted stress in a school setting that exhausts the learner's mental reserves. Students experience academic pressure all through their primary, secondary and university educational professions.

1.1 BACKGROUND

Choma College of Nursing and Midwifery is a government institution under the Choma General Hospital. The College was opened on the 8th of July, 2019 with about 135 students. The college is currently offering a three (3) year diploma in Registered Nursing. The college is fast growing and in January 2021, the institution started training a one year diploma program in-service registered Midwifery. The college then introduced new programs such as, Registered Nursing, Trauma and Emergency Nursing and Public Health Nursing.

The Choma College of Nursing is a competent institution whose main mission is to produce disciplined, innovative, caring and competent professional nurses who shall lead in addressing the current trends in nursing and midwifery practice and contribute positively quality health care in Zambia.

The institution fights and works towards training skilled and competent nurses who shall provide quality health care to the community and in an acceptable and conducive environment. (Choma College of Nursing and Midwifery, 2020).

Students at the Choma College of Nursing may be subjected to altered varieties of stressors, such as the stress of academics with a commitment to achieve undefined future with worries of incorporating into the organisation and meeting the school objectives. The undergraduates may also face collective, emotive, physical and personal difficulties which may distress their training ability and academic concert. (Nitasha Sharma, 2011).

According to (Nitasha Sharma, 2011), there is a rising gratitude of stressors elaborated in medical and nursing students, specifically freshmen, are a group particularly inclined to stress due to the intermediate change of nature in college life. Abundant stress among students can root somatic and psychological problem, which would hence reduce students' self-esteem and affect their academic performance.

1.2 Statement of the Problem

The topic of stress amongst nursing students is the issue that has approved much attention globally (Simuyemba, 2021). However, Zambia is doing very little to acknowledge the factors associated with stress among students. Nevertheless, this is expected from a country where complaining about academic stress means one is lazy (leale, 2022). A study conducted by Sikwilimba Benjamin, at Unza showed that, 97% of students were stressed and only 3% were not (Sikwilimba, 2018). Student in high ratio report that they are being faced with academic stress (Shafer, 2022). About 55% of students' world over indicate being stressed throughout their academic year and demanded their major stressor to be educational in nature (Nyu, 2022).

Nationwide, 53% of learners report having felt so strained such that they suspend going out with friends on one or more occasions. Studies show that minor quantities of strain for slight episodes of interval can be healthy, as noble strain can help encourage learners prepare for examinations or make affirmative modifications in their lives. Nevertheless, strain becomes

injurious when it happens extensively, when our bodies don't have a clear sign of when to return to regular operative.

Too much stress has numerous undesirable effects on college students, which interferes with studying or class attendance among the students and hence add to key health problems such as heart illness, high blood pressure, desolation and nervousness. In most cases students who experience chronic stress try to handle it in unhealthy activities, by taking alcohol too much or frequently, smoking, eating too much or emerging an eating condition, using substances (Cleveland Clinic, 2022), which has become a major problem among college students. Based on the foregoing, this study intends to examine stress among nursing students in a view of recommending measures that would help reduce the problem.

1.3 Study Justification

The proposed study seeks to explore factors associated with stress among nursing students at Choma College of Nursing, as such study has not been done at the college. Centred on the finding of the study, recommendations shall be made to the authorities at the college.

The study findings, will form baseline data for future researchers and contribute to the body of knowledge. Equally, the findings of the will help in the education sector in policy formulation so as guidelines can be made aimed at minimising stress among the learners in higher learning institutions.

1.4 General Objective

To identify risk factors associated with stress among nursing students at Choma College of Nursing.

1.4.1 Specific Objectives

1. To determine academic factors (i.e. lot of assignments, examination deadlines and competition among students) associated with stress among nursing students at Choma College of Nursing.
2. To identify individual factors (i.e. financial support and social relations) associated with stress among nursing students at Choma College of Nursing.
3. To assess environment factors (i.e. crowding and change of living places) associated with stress among nursing students at Choma College of Nursing.
4. To determine the levels of stress among nursing students at Choma College of Nursing.

1.4.2 Research Questions

1. What are the academic factors associated stress among nursing students at Choma College of Nursing?
2. What are the individual factors associated with stress among nursing students at Choma College of Nursing?
3. What are the environmental factors associated with stress among nursing students at Choma College of Nursing?
4. What levels of stress do nursing students at Choma College of Nursing experience?

2.0 CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

The literature revealed in this division covers the relevant studies on factors associated with stress such as; academic, individual and environmental factors as discussed below. Furthermore, the section will also highlight the theoretical and the Conceptual framework that have been used in the study.

2.2. Academic factors associated with stress

Academics has been quoted as main stress amongst college students. For instance conferring to a study conducted in China, by Sun et al (2013), reviewed students to be more stressed by their academics. (Sun, 2013). In another study conducted in Malaysia among Medical students by Yusoff et al (2011), it was discovered that most scholars were strained by tests, examinations, heavy workload, time restrictions and low grades in tests (Muhamad Saiful Bahri Yusoff, 2011). In tallying the way assessments and theory test are designed was found to be creating stress among learners. Also a study conducted by Anniko et al (2018), the author alluded that, school was the most cause of strain across all time-points, with females reporting extensive stress than males. They went on to say, when enquired, youths often report education (for instance, academic loads) to be one of the key causes. However, social factors were brought fourth such as, issues with parents, making friends and managing romantic relationships because more prevalent and relevant during adolescence especially for girls.

Reddy et al (2022), argued that, for the lengthy period, individuals anticipated that the student populace was the least affected by any sort of tension or difficulties. The only job learners were expected to undertake was studying which was never observed as stressful. However, parents' high anticipations for their children tuned out to be worrying because they ultimately become denser responsibilities that these children were unable to tolerate. Affording to the data from the National Crime Records Bureau, a student commits suicide once every hour. The agency recorded an 80% increase in suicide rate over a one year period and 1.8% of learners who committed suicide after failing an exam. (K.Jayasankara, 2022). In another study done in Ghana, Pulindo-Martos et al (2011), alluded that, academic pressure is one of the most prevalent sources of stress he reviewed, assignment and difficulties related with studying among others. He went on to say that not only workloads but also clinical factors are among the other causes of strain (such as fear of unidentified circumstances, faults with patients or management of technical tools). The student's education is mostly unchanged over the course of the several years. (PhD, 2011)

According to Miranda et al (2020), a study conducted in Coimbatore, findings showed that, about 30.2% of the respondents felt complexion of tasks and sessions as the most demanding and 22.9% of them felt study workload, 20.8% felt examination, 13.5% felt language difficulty and 12.5% felt work and study the most stressful academic factor. Similarly Soomro et al (2020), the researcher's study included, increased class workload, in conditions where there are huge extent of assignments to do, low grades, many hours of studies, difficulty of language and examinations as main sources of academic stress among students. (Mansoor Ahmed Soomro, 2020).

Kshirsagar and Seema (2016), in their study, their stressed out the issue of time management to be the main academic cause of stress among students in a way that, most students in colleges feel indolent and thus keep deferring their responsibilities and other works while finishing the work at the end, one will feel the pressure of doing the tire work together. Here pressure is triggered by not handling time in any of the circumstances faced by a college learner in a day to day life. In a similar survey conducted in India, by Shaik et al (2019), it was discovered that commonly reported academic sources of stress were, frequent examinations, time and scheduling pressures, intensive nature of work, clinical and laboratory course requirements, meeting course deadlines and high academic expectations. Sharik et al went on to say the resulting stress can lead to depression, anxiety, absenteeism, sleep problems and lower academic performance. (Parveen Shaik, 2019).

Most literatures were all focusing on examinations, study workloads, assignments and not really highlighting how these factors can be controlled and managed among students. Therefore, further studies can be done on how the Academic factors of stress can be controlled.

2.3. Individual Factors associated with stress

Individual or personal factors are factors that affect a particular person rather than another person as people vary in many ways: physically, mentally, knowledge and experience (Executive, 2022).

According the American Psychological Association (APA), money is the upper root of stress in the United States. In a 2015 review, the APA stated that 72% of Americans frazzled about finances. The majority of the study contributors described finance as being a substantial cause of pressure, with 77% feeling extensive anxiety about money. In a similar review conducted by Miranda et al (2020) in Coimbatore, findings showed that about 44.8% of the participants felt problems with associates as the most pressure under individual factor, 21.9% of the

participants felt monetary challenges as well as their own idealistic hopes as the most worrying individual factor. 10% of them felt health difficulties and 1.1% felt parental pressure as the most stressful individual factor.

According to Kshirsagar and Seema (2016), they examined finances as the cause of stress in an individual's life. It has developed into a familiarity fact that college training is touching heights in economical side. So they concluded that college tuition is pricey. Not all parents have the financial means to for college. However, those parents who cannot afford it but want to enrol their child in college are able to cover the costs. They put their child career ahead of their own desires and requires and requirements. This adds to the list of things that make stressed out. This truth is known to the individual, and it may cause tension by hunting in the individuals mind. They went on to add that, there are other financial difficulty ways which might lead to stress. If a student is not satisfied with his regular allowance or cannot make ends meet is ashamed in front of friends because he or she cannot afford to meet his or her own requirements which can cause stress.

Kshirsagar and Seema also stressed out the issue of social relationships as another main cause of stress among students in colleges. Most learners find relations in college. The affairs maybe of love or friendship. The initial phase of college, individuals may find it challenging to put up with and trust and make new friends, as a result, few students tend to become worried and disheartened. Students also face ups and downs in love relationships which cause stress them stress. Fights with partner, friends, close one or colleague gives students stress. The other cause is being introduced to new people and being friends and maintaining the relation with the people can be so stressful. (Seema, 2016).

Serik, et al. (2016) discovered that financial troubles, housing issues, and relationship status were sources of stress for nursing students. They observed that students who were married had less stress than those who were single and without a partner. Romantic relationships have been shown to be a source of stress relief, according to research. Zondi (2020) conducted a study and discovered that personal factors such as financial troubles, time management issues, and worries about the future can contribute to student stress levels. Financial stress specifically refers to an inability to meet financial responsibilities (Northern, et al., 2010). In Zondi's study, he found that final year medical students in particular experience high levels of stress due to worrying about unemployment after graduation. Poor time management was also identified as

a common cause of stress among students who struggle to effectively prepare for tests and assignments.

In a study by Soomro et al (2020), the researcher argued that, change in living environment may make the student feel uneasy to come out of the comfort zone, sleeping habits, the students sleeping habits may change because the student may remain awake to complete work and consequently feel sleepy in class which may lead to stress because the student may not focus on the lecture and lastly he brought out financial difficulties as a source of stress among them. In another study conducted in South Africa by Zondi (2018) among students, he reviewed individual factors to be, Unfortunate health conditions, monetary difficulties, deprived standard of living, lack of amusement, family issues and life deviations.

2.4. Environmental Factors associated with stress

In a study by Yikealo et al, (2018), alluded that due to the significant alterations in the learning structures, scholars may experience a mental, academic and social shock as they change from the school environment to the university setting. Students at this level must contend with new teaching techniques, academic standards, relationships between students and faculties, and even new relationships. (Dawit Yikealo, 2018).

In a similar study conducted by Qamar et el (2014), found that the environmental factors that where affecting the students were, homesickness, absence of family, stress from studies, study timetables. He later explained to say that, new learners felt home-sick and missed home and the amenities that present at home and the emotive care they could get right from parents and associates.

According to Kalaivani et al, (2018), findings showed that, lack of vacations or breaks and divorce of parents remain a serious cause of stress among the environmental factors of stress. Similarly Soomro et al (2020), alluded that, the human body requires some relaxation, but since there aren't any breaks or holidays, pupils may feel stressed from having too much work to do. Secondly, poor living conditions; peoples living arrangements create stress –inducing impressions and lastly he brought out students concerns about the future.

Zondi (2018), a study conducted in South Africa, reviewed poor infrastructure leads to stress in a way that, students living in unfortunate and communal accommodation are at a higher probability of being unsatisfied with the lodging hence get frazzled. For instance according to Cheunga et al, (2016), nursing learners who lived in noisy dormitories were more prone strain. (Zondi, 2018).

In all the studies reviewed, different researchers have studied the factors associated with stress among nursing students. However, most these studies were not done in Zambia. Very little, if none have been researched on this topic in this region or country. This is evident that on the fact that extremely little studies were found on Google search engine. Stress being a social problem is expected that different social groups have different factors associated with stress hence a pressing need to undertake this study and perhaps publish the findings.

2.5 Theoretical Framework

This research will adopt the social cognitive theory. This theory is best suited for this study because it emphasizes on the interaction between inner issues such as intellectual and figurative processing (i.e. attention, memory, motivation) and external factors (i.e. rewards and punishments) in determining behaviour. The knowledge that is acquired in the social context is underlined by the social cognitive theory. According to this perspective, individuals are active negotiators who have the power to both affect and be impacted by their environment.

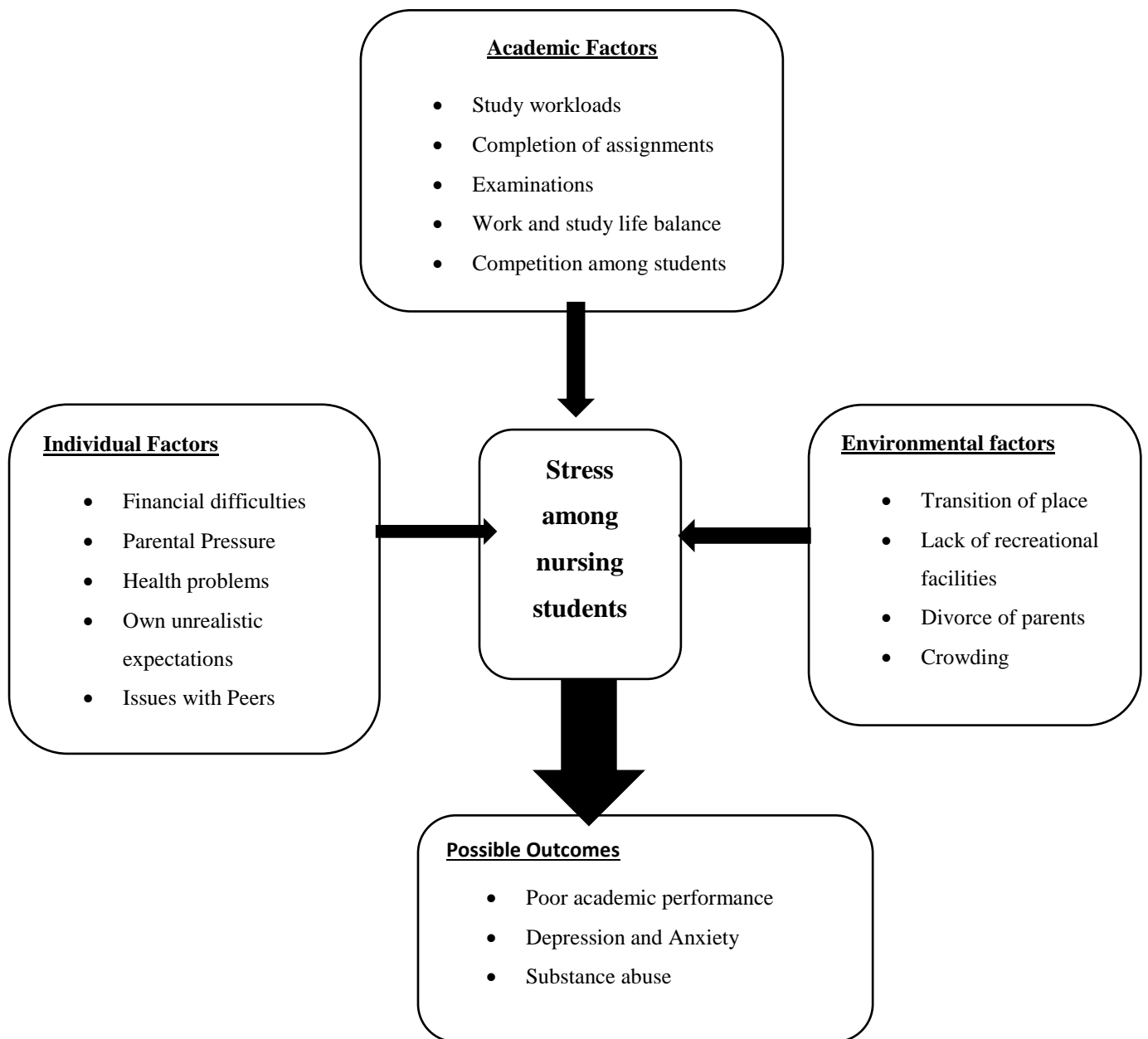
Albert Bandura's social cognitive theory of human functioning emphasizes the critical role of self-beliefs in human cognition, motivation, and behaviour. This theory gives distinction to self-system that allows persons to apply a degree of control over their judgements, moods, and responsibilities. (Rolando T. Lazaro PT, 2020). This theory will used to robust health behaviour change among the nursing students at Choma College of nursing. This will be done in a way that all the factors associated with stress will be elaborated to the students, hence students will have an insight of what's causing stress among them. When students are aware they will be able to know what stresses them and how they can or what can be done to avoid stress coming from the areas of concern, which are their behaviours and their physical environment. The theory also looks at three main constructs which can help change behaviour of students that contribute to stress. Individual aspects (age, cognitions, preceding experience with actions), Environmental aspects (access to resources, security, care from associates /families) and characteristics of the actions itself (behaviour results achieved as an outcome of performing a certain behaviour, capability of act). Effective efforts to alter behaviour will be made which will be determined by positive supports. For example students who want to improve their grades and yet they constantly postpone work, such students will be expected to do well because they will be stressed as a result of workload, but changing such behaviours will bring about positive behaviours.

However, when students are found in positive environments, where they get constant support from their families and friends and are assured safety, there will be less stress among such students. This theory will hence encourage students to associate themselves with positive environments. Students will also be advised to have confidence in their abilities to perform a positive behaviour. Moving forward students will develop positive behaviours towards their academics and put efforts on improving their environments will be made.

2.6 Conceptual Framework

The conceptual framework illustrates the independent variables, dependent variables and the potential results. It summaries the relationship between the independent variables and the dependent variables which gives out the general outcome of the study.

Figure 1: *Conceptual framework on the factors associated with stress among nursing students.*



Source: by the researcher, 2023

3.0 CHAPTER THREE METHODOLOGY

3.1 Introduction

This section will give an overview on the methods that the researcher is going to use to obtain data in order to respond to the study objectives. The research methodology is going to highlight the study approach, study site, study design, sampling methods, data collection methods, data analysis and ethical Consideration.

3.2 Study Approach

Quantitative approach was used, under this approach the type of data used was numerical data.

3.3 Study Design

Descriptive cross sectional study was used. This enabled the researcher to study potential factors that can influence and promote stress at a given point in time for a defined population.

3.4 Study population

The study population was focused on the nursing students at Choma College of Nursing in Choma District.

3.5 Study site

The study was conducted at Choma college of Nursing in Choma District. The college is located at plot number 1395, Mpile Street, Riverside, Choma. The college offers a three year diploma in registered nursing.

3.6 Sampling

3.6.1 Sampling Technique

Cluster sampling was used, where the population was divided into clusters (i.e. first, second and third years) and then ‘simple random sampling’ was used to hand-pick the sample from the clusters, where all students at the institution were under consideration and were given an equal chance of being selected as respondents in the study.

3.6.2 Sample size

The total population of nurses at Choma College of nursing is 300, the sample size was therefore, determined by using the Israel table where population size 300 at 5 % precision level and 95% confidence interval indicated that 172 sample size was appropriate for this study.

3.7 Data Collection

Data was composed via a structured questionnaire (for its authenticity, credibility and dependability) to collect data on the factors associated with stress. The questionnaire was the key data gathering tool for the researcher and it was self-administered and contained closed ended queries.

3.8 Data Analysis

The researcher used the Statistical Package for Social Sciences (SPSS) to analyse and organise the outcomes that were acquired from the surveys and a presentation of descriptive statistics and frequencies were used to infer the facts.

3.9 Ethical Consideration

The study obtained approval from the University of Lusaka Research Committee. The researcher also obtained permission from the Principle tutor of Choma College of Nursing. The study adhered to moral values of Autonomy, Beneficence, Justice and Non-maleficence and ethical rules of Veracity, Privacy, Secrecy and Dependability. Respondents were well guaranteed that the data gathered all through the study was to be held confidential by the researcher and the University of Lusaka and was exclusively for the purpose of education on the part of the investigator.

3.9.1 Inclusion criteria

All nursing students of Choma College of Nursing from first year to third year.

3.9.2 Exclusion criteria

All non-nursing students were not part of this study.

4.0 CHAPTER FOUR; RESULTS PRESENTATION

4.1 Introduction

The section focused on discussing the results of the study on “factors associated with stress among nursing students at Choma College of Nursing”. The section presented the demographic characteristics of the study participants, academic, personal and environmental factors associated with stress among study participants. Additionally, stress levels of the study participants were assessed and presented as tabulated below.

4.2 Demographic Characteristics

Data was collected from the students of Choma College of Nursing from the 3 different intakes namely, first, second and third year intake. The total number of students who participated in this research were 152 of which 54.6% with the mean frequency of 83 were females and 45.4% with mean frequency of 69 were males hence showing that the females were the dominant respondents of the study. Age was grouped into 2 categories of which the less than or equal to 20 were the least respondents with 22.4% with the mean frequency of 34 and the majority being the greater than 20 indicating 77.6% with mean frequency of 118. Marital status indicate that, majority of the respondents indicated single which showed 75.55% with the mean frequency of 115 and the remaining 24.3% stated married with mean frequency of 37.

Table 1: Gender and Age group of the study participants

Sex	Age Group		Total n (%)
	Less than or equal to 20 n (%)	Greater than 20 n (%)	
Female	23(15.1)	60(39.5)	83(54.6)
Male	11(7.2)	58(38.2)	69(45.4)
Total	34(22.4)	118(77.6)	152(100)

Table 1 showed that 152 participants were involved in the study of which majority of the participants were females (54.6%). Similarly, they were participants (77.6%) aged above 20 years than those (22.4%) aged less or equal to 20 year.

Table 2: Marital status and year of study of the participants

Marital status	Year of Study			Total n (%)
	1 st year n (%)	2 nd year n (%)	3 rd year n (%)	
Single	27 (17.8)	39 (25.7)t	49(32.2)	115(75.5)
Married	1(7)	9(5.9)	27(17.8)	37(24.3)
Total	28(18.4)	48(31.6)	76(50)	152(100)

Table 2 showed that amongst the 152 participants that were involved in the study, majority of the participants were single (75.5%) than those that were married (24.3%). Equally, they were participants (50.0%) in third year and (31.6%) in second year than those (18.4%) in first year.

Table 3: Academic Factors Associated with stress

Variables	Category	Year of Study			Total n(%)	P-value
		1 st n(%)	2 nd n(%)	3 rd n(%)		
Work load	Never	10(6.6)	14(9.2)	27(17.8)	51(33.6)	0.053
	Sometimes	3(2.0)	20(13.2)	20(13.2)	43(28.4)	
	Often	15(9.9)	14(9.2)	29(19.1)	58(38.2)	
	Total	28(18.4)	48(31.6)	76(50.0)	152(100)	
Examinations	Never	7(4.6)	9(5.9)	14(9.2)	30(19.7)	0.949
	Sometimes	5(3.3)	10(6.6)	17(11.2)	32(21.1)	
	Often	16(10.5)	29(19.1)	45(29.9)	90(59.2)	
	Total	28(18.4)	48(31.6)	76(50.0)	152(100)	
Completion of Assignments	Never	8(5.3)	8(5.3)	11(7.2)	27(17.8)	0.469
	Sometimes	7(4.6)	18(11.8)	30(19.7)	55(36.2)	
	Often	13(8.6)	22(14.5)	35(23.0)	70(46.1)	
	Total	28(18.4)	48(31.6)	76(50.0)	152(100)	
	Never	17(11.2)	25(16.4)	36(23.7)	78(51.3)	0.824

Class Competition	Sometimes	4(2.6)	9(5.9)	16(10.5)	29(19.1)	
	Often	7(4.6)	14(9.2)	24(15.8)	45(29.6)	
	Total	28(18.4)	48(31.6)	76(50.0)	152(100)	
Number of class Tests	Never	8(5.3)	11(7.2)	17(11.2)	36(23.7)	0.635
	Sometimes	7(4.6)	11(7.2)	26(7.1)	44(28.9)	
	Often	13(8.6)	26(17.1)	33(21.7)	72(47.4)	
	Total	28(18.4)	48(31.6)	76(50.0)	152(100)	

4.3 Academic factors associated with stress among study participants

Table 3 showed a cross tabulation of academic factors across year of study. These factors included workload, assignments, class competition, examinations and number of tests. Responses were grouped as “Never”, “sometimes” and “often”. Amongst the 152 sampled in the 3 different years of study, the majority of the participants reported examinations as the most stressful factor (19.7%) said never, (28.4) said sometimes and (59.2%) reported often which showed that most participants were more stressed by examinations. The results also showed those in 3rd year (50.0%) were more stressed by examinations than those in 2nd (31.6%) and 1st year (18.4%). Despite examination being reported as the most stressful factor, the results were statistically insignificant with $p\text{-value } 0.949 > 0.05$, which showed that there is no difference in the two groups (examination and year of study). With regards to workload (33.6%) said never, (28.4%) said sometimes and the remaining (38.2%) stated often. However, the results were statistically insignificant, with $p\text{-value } 0.053 > 0.05$ which showed that there is no association between work load and year of study. Regarding complexion of assignments (17.8%) said never, (36.2%) said sometimes and (29.6%) reported often. Concerning class competition (51.3%) said never, (19.1%) stated sometimes and (29.6%) said often. With reference to the number of class of tests given in a month (23.7%) stated never, (28.9%) said sometimes and (47.4%) reported often.

Table 4: Personal Factors Associated with Stress

	Variables	Sex Of Nursing Students		Total n(%)	P-value
		Female n(%)	Male n(%)		
Family Expectations	Never	23(15.1)	24(15.8)	47(30.9)	0.234
	Sometimes	21(13.8)	22(14.5)	43(28.3)	
	Often	39(25.7)	23(15.1)	62(40.8)	
	Total	83(54.6)	69(45.4)	152(100)	
Health Conditions	Never	33(21.7)	32(21.1)	65(42.8)	0.519
	Sometimes	20(13.2)	18(11.8)	38(25.0)	
	Often	30(19.7)	19(12.5)	49(32.2)	
	Total	83(54.6)	69(45.4)	152(100)	
Personal Expectations	Never	19(12.5)	20(13.2)	39(25.7)	0.572
	Sometimes	25(16.4)	22(14.5)	47(30.9)	
	Often	39(25.7)	27(17.8)	66(43.5)	
	Total	83(54.6)	69(45.4)	152(100)	
Peer Pressure	Never	48(31.6)	28(18.4)	76(50.0)	0.095
	Sometimes	24(15.8)	26(17.1)	50(32.9)	
	Often	11(7.2)	15(9.9)	26(17.1)	
	Total	83(54.6)	69(45.4)	152(100)	
Financial Difficult	Never	16(10.5)	16(10.5)	32(21.1)	0.335
	Sometimes	21(13.8)	23(15.1)	44(28.9)	
	Often	46(30.3)	30(19.7)	76(50.0)	
	Total	83(54.6)	69(45.5)	152(100)	

4.4 Personal factors associated with stress among study participants

Table 4 showed personal factors namely, family expectations, health conditions, personal expectations, peer pressure and financial difficulties across sex of nursing students. The responses were categorised as “never”, “sometimes” and “often”. Amongst the 152 assessed on personal factors associated with stress, with regards to family expectations, (30.9%) said never, (28.3%) said sometimes and (40.8%) stated often. With regards to family expectations the results were statistically insignificant with p-value $0.234 > 0.05$. Concerning financial

difficulties, most of the students reported financial difficulties as the most stressful factor with (50.0%) stating often and (28.9%) reported sometimes and (21.1%) said never. However, the results were statistically insignificant, with a p-value $0.335 > 0.05$, which showed that there is no association between financial difficulties and stress. With regards to peer pressure majority of the participants reported peer pressure as least stressing factor with (50.0%) said never, (32.9%) said sometimes and (17.1%) reported often also showing that males were the most stressed by peer pressure compared to the females with 9.9%. With regards to health conditions (42.8%) said never, (25.0%) said sometimes and (32.2%) said often. Concerning personal expectations, (25.7%), said never, (30.9%) said sometimes and the remaining (43.5%) stated often. However, the results were statistically insignificant, with p-value $0.572 > 0.05$ which showed no association between stress and personal expectations.

Table 5: Environmental Factors Associated with Stress

Variables	Category	Sex of nursing students		Total n(%)	P-value
		Female n(%)	Male n(%)		
Overcrowded Environment	Never	28(18.4)	23(15.1)	51(33.6)	0.468
	Sometimes	30(19.7)	28(18.4)	58(38.2)	
	Often	25(16.4)	18(11.8)	43(28.3)	
	Total	83(54.6)	69(45.4)	152(100)	
Lack of recreation	Never	28(18.4)	24(15.8)	52(34.6)	0.814
	Sometimes	25(16.4)	26(17.1)	51((36.6)	
	Often	30(19.7)	18(11.8)	49(32.2)	
	Total	83(54.6)	69(45.4)	152(100)	
Divorce	Never	36(23.7)	38(25.0)	74(48.7)	0.282
	Sometimes	19(12.5)	15(9.9)	34(22.4)	
	Often	28(18.4)	16(10.5)	44(28.9)	
	Total	83(54.6)	69(45.4)	152(100)	
Change of Environment	Never	18(11.8)	18(11.8)	36(23.7)	0.796
	Sometimes	33(21.7)	27(17.8)	60(39.5)	
	Often	32(21.7)	24(15.8)	56(36.8)	
	Total	83(54.6)	69(45.4)	152(100)	

4.5 Environment factors associated with stress among study participants

Table 5 showed a cross tabulation of sex of nursing students across the stress factors which are Overcrowded environment, lack of recreation, divorce and change of environment. Amongst the 152 sampled, with reference the above factors, results showed that females were more affected (54.6%) than males (45.4%). Similarly, the majority of the participants reported divorce as the least stressful factor with (48.7%) stating never, (22.4%) said sometimes and (28.9%). With regards to lack of recreation (34.6%) said never, (36.6%) said sometimes and (32.2%) said often. Concerning change of environment (23.7%) said never, (39.5%) said sometimes and (36.8%). Which showed change of environment as a major contributing factor of stress. With regards to overcrowded environments, findings showed that, (33.6%) said never, (38.2%) said sometimes and (28.3%) stated often, which also showed that females were more affected by overcrowded environments with (54.6%) compared to males (45.4%). Conversely, the finding of the study showed no association between environmental factors and stress, because they all had a p-value <0.05.

Table 6: Stress Levels Associated with Stress

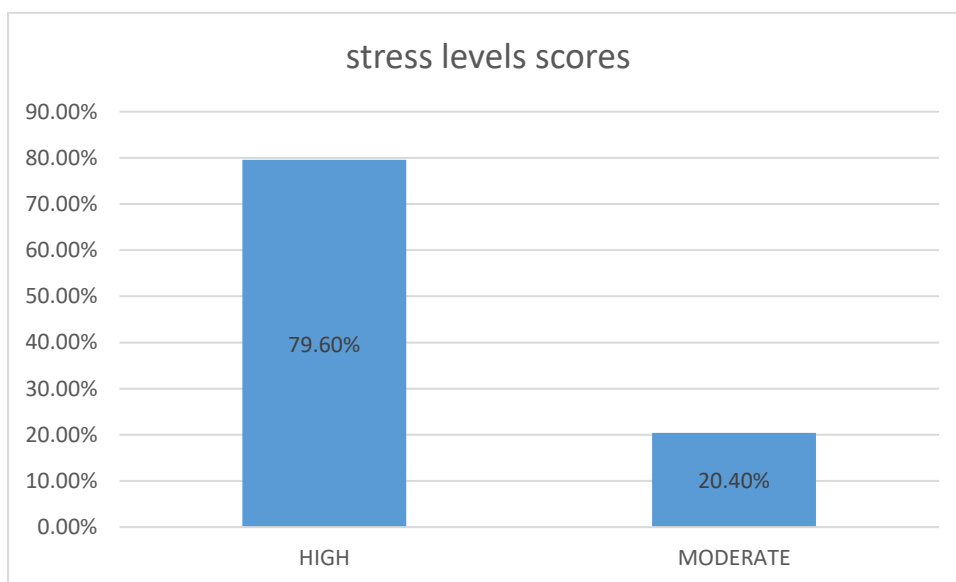
Variables	Category	Stress Level		Total n(%)	P-Value
		High n(%)	Moderate n(%)		
Sex of Nursing students	Female	65(42.8)	18(11.8)	83(54.6)	0.665
	Male	56(36.8)	13(8.6)	69(45.4)	
	Total	121(79.6)	31(20.4)	152(100)	
Marital Status	Single	86(56.6)	29(19.1)	115(75.7)	0.009
	Married	35(23.0)	2(1.3)	37(24.3)	
	Total	121(79.6)	31(20.4)	152(100)	
Year of Study	1 st year	19(12.5)	9(5.9)	28(18.4)	0.122
	2 nd year	37(24.3)	11(7.2)	48(31.6)	
	3 rd year	65(42.8)	11(7.2)	76(50.0)	
	Total	121(79.6)	31(20.4)	152(100)	

Age Group	Less than or equal to 20	25(16.4)	9(5.9)	34(22.4)	0.318
	Greater than 20	96(63.2)	22(14.5)	118(77.6)	
	Total	121(79.6)	31(20.4)	152(100)	

4.6 Stress levels among study participants

Table 6 showed that 152 participants were involved in the study of which majority of the participants were females reporting high levels of stress (54.6%) than their male counterparts (45.4%). However, results were statistically insignificant with the p-value $0.665 > 0.05$, which showed that there is no difference between the variable gender and stress level. Similarly, there were (75.7%) single participants reporting higher levels of stress than those (24.3%) who were married. Therefore, results were statistically significant with p-value $0.009 < 0.05$, showing an association between stress level and marital status. With regards to year of study, those in 3rd and 2nd year experienced higher levels of stress (50.0%) and (31.6%) than those in 1st year (18.4%). Results were statistically insignificant with p-value > 0.05 which showed that there is no difference between the two groups, year of study and stress level. Age group showed that those above 20 were more stressed (77.6%) than those (22.4%) less or equal to 20. Nevertheless, results showed that there is no association between age group and stress level.

Figure 2: Stress level scores of study participants



The figure above shows stress level scores with their corresponding scores, high scores ranged from 27-40, moderate ranged from 14-26 and low stress score ranged from 0-13. The bar chart reported that 79.6% of the study participants showed high levels of stress and 20.4% experienced moderate stress levels. Low stress level was not reported because none of our study participants reported low levels of stress.

CHAPTER FIVE: DISCUSSION

5.0 Introduction

This chapter represented the discussion of the findings in relation to the exiting literature review in chapter 2.

5.1 Discussion

The study aimed at investigating the factors associated with stress among nursing students of Choma College of Nursing. The data gathered and analysed from the Choma College students from three different intakes namely; first, second and third years. The total number of students who participated in the research amounted to 152 of which 54.6% were females with the mean frequency of 83 and 45.4% were males with the mean frequency of 69. The dominant respondents were the female students. The age of our respondents was grouped into two categories with those less than or equal to 20 being the least and those above 20 being the majority. The age grouping showed that the dominant age was above 20 which indicated 77.6% with the mean frequency of 118 and respondents less or equal to 20 indicated 22.4% with the mean frequency of 34. Marital status of the respondents indicated that the majority of the respondents were single with the mean frequency of 115 which is 75.5%. The remaining 24.3% with the mean frequency of 37 stated married.

5.1.1 Academic factors associated with stress among study participants

The first objective was to determine the academic factors associated with stress among the nursing students which was accompanied by the research question; what are the academic factors associated with stress among nursing students? The study explored quite a number of academic factors which included workload, assignments, class competition, examinations and number of tests. Responses were grouped as “Never”, “sometimes” and “often”. This existing study assessed several academic factors which are; workload, examinations, completion of assignments, class competition and number of tests taken in a month. Amongst the 152 sampled in the 3 different years of study, the majority of the participants reported examinations as the most stressful factor, with 30 (19.7%) said never, 43 (28.4) said sometimes and 90 (59.2%) reported often which showed that they were stressed by examinations. With regards to workload 51 (33.6%) said never, 43 (28.4%) said sometimes and the remaining 58 (38.2%) stated often. Regarding completion of assignments 27 (17.8%) said never, 55 (36.2%) said sometimes and 70 (29.6%) reported often. Concerning class competition 78 (51.3%) said never, 29 (19.1%) stated sometimes and 45 (29.6%) said often. With regards to the number of class of tests given in a month 36 (23.7%) stated never, 44 (28.9%) said sometimes and 72 (47.4%)

reported often. The findings of this study reported that the majority of the study participants were more stressed by examinations and tests, these findings agree with a similar study from the literature review above conducted in Malaysia by Yusoff et al (2011), the author alluded that most students were stressed by tests and examinations. The findings of this study are also in agreement with a similar study conducted in Coimbatore, by Miranda et al (2020), whose finding showed that, about about 30.2% of the respondents felt complexion of tasks and sessions as the most demanding and 22.9% of them felt study workload, 20.8% felt examination, 13.5% felt language difficulty and 12.5% felt work and study the most stressful academic factor. However, the study conducted by Zondi found that final year nursing students in particular experience more stress due to worrying about unemployment after graduation. Poor time management was also identified as a common cause of stress among students who struggle to effectively prepare for tests and assignments. Alzayyat and Al-Gamal (2014) conducted a study to examine stress among nursing students during their clinical education. They found that academic-related stressors, such as heavy workloads and exams, were significantly associated with increased stress. However in their study identified clinical-related stressors, such as fear of making mistakes and the responsibility for patient care, as contributors to stress among nursing students. Most of the students are scared to make mistakes which make them to be stressed more besides academics.

5.1.2. Personal factors associated with stress among study participants.

The second objective was to identify individual factors associated with stress among study participants which was guided by the research question, what are the individual factors associated with stress among study participants? The study assessed personal factors namely, family expectations, health conditions, personal expectations, peer pressure and financial difficulties. The responses were categorised as “never”, “sometimes” and “often”. Amongst the 152 assessed on personal factors associated with stress, with regards to family expectations, 47 (30.9%) said never, 43 (28.3%) said sometimes and 62 (40.8%) stated often. Concerning financial difficulties, most of the students reported financial difficulties as the most stressful factor with 76 (50.0%) stating often and 44 (28.9%) reported sometimes and 32 (21.1%) said never. These findings were in agreement with the study in the above literature by the American Psychological Association (APA), who found money as the upper root of stress in the United States. In a 2015 review, the APA stated that 72% of Americans frazzled about finances. The majority of the study contributors described finance as being a substantial cause of pressure, with 77% feeling extensive anxiety about money. In a similar review conducted by Miranda et

al (2020) in Coimbatore, findings showed that about 44.8% of the participants felt problems with associates as the most pressure under individual factor, 21.9% of the participants felt monetary challenges as well as their own idealistic hopes as the most worrying individual factor. With regards to peer pressure majority of the participants reported peer pressure as least stressing factor with 76 (50.0%) said never, 50 (32.9%) said sometimes and 26 (17.1%) reported often also showing that males were the most stressed by peer pressure compared to the females with 9.9%. With regards to health conditions 65 (42.8%) said never, 38 (25.0%) said sometimes and 49 (32.2%) said often. Concerning personal expectations, 39 (25.7%), said never, 47 (30.9%) said sometimes and the remaining 66 (43.5%) stating often. However, Kshirsagar and Seema also stressed out the issue of social relationships as another main cause of stress among nursing students in colleges. Most learners find relations in college of which the affairs maybe of love or friendship. The initial phase of college, individuals may find it challenging to put up with and trust and make new friends, as a result, few students tend to become worried and disheartened. Students also face ups and downs in love relationships which cause stress them stress. Fights with partner, friends, close one or colleague gives students stress. The other cause is being introduced to new people and being friends and maintaining the relation with the people can be so stressful. (Seema, 2016).

5.1.3. Environmental factors associated with stress among study participants.

The third objective was to assess environmental factors associated with stress among study participants which was accompanied by the research question, what are the environmental factors associated with stress among study participants? Studies highlight the association between stress among nursing students and various environmental factors, including academic demands, clinical experiences, lack of social support, and work-life balance. The findings are consistent with a broader body of literature that identifies these factors as significant contributors to stress among nursing students. However, this study explored different environmental factors which included; overcrowded environments, lack of recreation activities, divorce and change of environment. The category responses were “never”, “sometimes” and “often”. Amongst the 152 sampled, the majority of the participants reported divorce as the least stressful factor with 74 (48.7%) stating never, 34 (22.4%) said sometimes and 44 (28.9%). However the findings of our study are in disagreement with the finding from the literature above, in a study conducted by Kalaivani et al, (2018), his findings showed that, lack of vacations or breaks and divorce of parents remain a serious cause of stress among the environmental factors of stress. With regards to lack of recreation 52 (34.6%) said never, 51

(36.6%) said sometimes and 49 (32.2%) said often. Concerning change of environment 36 (23.7%) said never, 60 (39.5%) said sometimes and 56 (36.8%) stated often. These findings are agreeing with a study indicated in the literature review above by Zondi (2018), a study conducted in South Africa, reviewed poor infrastructure leads to stress in a way that, students living in unfortunate and communal accommodation are at a higher probability of being unsatisfied with the lodging hence get frazzled. For instance according to Cheunga et al, (2016), nursing learners who lived in noisy dormitories were more prone strain. (Zondi, 2018). Which showed change of environment as a major contributing factor of stress. Qamar et el (2014), also found that environmental factors that where affecting the students were, homesickness, absence of family, stress from studies, study timetables. He later explained to say that, new learners felt home-sick and missed home and the amenities that present at home and the emotive care they could get right from parents and associates, which was also in total agreement with our study findings concerning change of environment. With regards to overcrowded environments, findings showed that, 51 (33.6%) said never, 58 (38.2%) said sometimes and 43 (28.3%) stated often, which also showed that females were more affected by overcrowded environments with 83 (54.6%) compared to males 69(45.4%).

5.1.4. Stress levels associated with stress among study participants.

Labrague et al. (2017) conducted a study to investigate stressors among nursing students during clinical practice. They found that the emotional demands of dealing with illness and suffering, lack of support from clinical instructors, and fear of negative evaluation were associated with increased stress levels among nursing students. The findings of Labrague et al. (2017) are consistent with other studies. Ribeiro et al. (2016) found that emotional demands and the responsibility for patient care were sources of stress among nursing students during clinical experiences. The study by Hamaideh (2011) also identified lack of support from clinical instructors as a stressor among nursing students.

McNeely-Johnson and Hooper (2016) conducted a study in Nigeria to explore stress and coping strategies among nursing students. They found that difficulties in managing time, inadequate rest and leisure activities, and strain on personal relationships were associated with increased stress levels among nursing students, the study by McNeely-Johnson and Hooper (2016) aligns with previous research. Pulido-Martos et al. (2012) found a positive correlation between difficulties in managing time and stress levels among nursing students. Similarly, other studies have highlighted the impact of work-life balance on stress among nursing students (Wolf et al., 2014; Labrague et al., 2019).

According to Labrague et al (2018), conducted a study on stress and coping mechanisms among nursing students. They found that lack of social support from faculty, peers, and clinical preceptors was associated with higher stress levels among nursing students. Several studies have supported the association between social support and stress among nursing students. Hamaideh (2011) identified inadequate support from faculty as a stressor among nursing students. Additionally, studies have shown that social support networks, including mentorship and peer support, can mitigate stress and promote well-being among nursing students (Ali et al., 2019; Labrague et al., 2018).

However, the fourth objective of this study was to determine the stress levels among the study participants which was guided by the research question, what levels of stress do the study participants experience? 152 participants were involved in the study of which majority of the participants were females reporting high levels of stress (54.6%) than their male counterparts (45.4%). However, results were statistically insignificant with the p-value $0.665 > 0.05$, which showed that there is no difference between the variable gender and stress level. Similarly, there were (75.7%) single participants reporting higher levels of stress than those (24.3%) who were married. The finding of our study were agreeing with the findings by Serik, et al. (2016) who discovered that financial troubles, housing issues, and relationship status were sources of stress for nursing students. They observed that students who were married had less stress than those who were single and without a partner Therefore, results were statistically significant with p-value $0.009 < 0.05$, showing an association between stress level and marital status. With regards to year of study, those in 3rd and 2nd year experienced higher levels of stress (50.0%) and (31.6%) than those in 1st year (18.4%). Results were statistically insignificant with p-value > 0.05 which showed that there is no difference between the two groups, year of study and stress level. These findings were also agreeing with Zondi's study, where he found that final year students in particular experience high levels of stress due to worrying about unemployment after graduation. He also went further to say poor time management was also identified as a common cause of stress among students who struggle to effectively prepare for tests and assignments.

Age group showed that those above 20 were more stressed (77.6%) than those (22.4%) less or equal to 20. Nevertheless, results showed that there is no association between age group and stress level.

5.2. Study limitations

The researcher encountered a few challenges during the process of carrying out the study. Below are some of the challenges;

1. Some of the questionnaires distributed were not answered which required a redistribution of the questionnaires to reduce the number of missing data.
2. The students were very busy which prolonged the time allocated to data collection.
3. Assembling data was a challenge due to rescheduling of when to go to the site and collect the data because of their busy clinical schedules.
4. Chasing around the busiest group of students was cumbersome in terms of communication and getting full data of what the research needed.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter comprises of the conclusion and proposed recommendations of the research conducted.

6.1 Conclusion

The aim of the study was to assess factors associated with stress among nursing students of Choma College of Nursing. The finding of the study gave us an understanding that female students experience high levels of stress as compared to male counterparts. The findings of this study also confirmed that stress amongst nursing students is highly dependent on academic factors such as examinations. Reduction of stress levels on this population should be a priority.

The study reported, Academic factors, Personal factors, and environmental factors as the main causes of stress among nursing students of Choma College of Nursing. However, academic factors among study participants contributed more to their stress compared to the other factors. The success of a stress free learning environment depends on the on the members of staff to reduce the amount of stress felt by the students, inclusion of recreational activities that students can engage in to release their daily stress to improve their performance, monitoring trends of the results of stressed students so as to implement interventions that reduce stress and increase optimum performance and frequent evaluation of the students' performance.

6.2 Recommendations

Most students experience significant amount of stress. This can significantly affect their health, happiness, relationships and their grades. Learning ways of how stress can be managed can help students avoid negative effects in these areas.

The following recommendations can be made in order to reduce and manage stress among students.

- Evidence-based guided support, a psychological strategy to lessen the likelihood of burnout.
- A number of self- care interventions can be proposed, acting directly on essential needs, recreational activities and specific stress reduction techniques, such as mindfulness-based interventions, diaphragmatic respiration and acting on self-efficacy.

- Strategies that encourage the nursing students to have a positive health approach towards their work has increased chances of reducing stress and this is important because it is an aspect that all students should look upon in order to increase the quality of health among the nursing students.
- A lot of attention must be paid must be paid on communication, providing accurate updates in order to lower stress levels as much as possible, fostering a perception of control .
- The school should encourage its students to attend to their work and avoid piling up work which can cause stress.
- Students must also be encouraged to get enough rest, because students may find it hard or difficult to learn when one is tired.
- Further research should be conducted in order to enrich knowledge base for policy formulation on more stress interventions.

REFERENCES

Amp, R. & D.Vohs, K., 2022. *Stress Appraisal Theory (primary and secondary appraisal)*.

[Online] Available at: <http://www.sk.sagepub.com>[Accessed 18 september 2022]

Charllotte Nickerson, 2022. *Social Cognitive Theory; How We Learn From Behaviour of Others*. [Online] Available at: www.simplypsychology.org/social-cognitive-theory [Accessed 11 November 2022].

Choma College of Nursing and Midwifery, 2020. *Background*. [Online]

Available at: <http://www.chomanursingschool.edu.zm> [Accessed 02 September 2022].

Cleveland Clinic, 2022. *Stress*. [Online]

Available at: <http://www.my.clevelandclinic.org> [Accessed 03 September 2022].

Cleveland Clinic, 2022. *Stress ; Coping with Life's Stressors*. [Online]

Available at: <http://www.my.clevelandclinic.org> [Accessed 20 september 2022].

Dawit Yikealo, B. Y. I. K., 2018. The level of academic and Enviromental stress among college students. *Open Journal of Social Sciences*, 06(11), p. 18.

Dawit Yikealo, w. t. i. K., 2018. the level of stress among college students. *ResearchGate*, 3i4(4), pp. 3-4.

Executive, H. a. S., 2022. *Individual Factors*. [Online] Available at: www.hse.gov.uk [Accessed 11 October 2022].

GETTO, A., 2011. *SPOTTING THE SIGNS OF STRESS*. [Online] Available at: <http://www.nursingtimes.net> [Accessed 16 SEPTEMBER 2022].

K.Jayasankara, k. r. m. a. a. t., 2022. *Academic Stress and Sources Among University Students*. [Online] Available at: <http://www.biomedpharmajournal.org> [Accessed 20 september 2022].

leale, H., 2022. *Volunteer and supporter*. [Online] Available at: <http://www>. [Accessed 12 october 2022].

Mansoor Ahmed Soomro, d. m. s. d. g. a. m. & s. r., 2020. A Study of Stress Factors and Ttheir Impacts on Students Academic Performance at University Level. *Grassroads*, 56(1), pp. 103-104.

- Matthew Martin, a. k. g. k. w., 2006. *ResearchGate*. [Online] Available at: <http://www.ResearchGate.net>[Accessed 30 August 2022].
- McLeod, D., 2015. *stress Management*. [Online] Available at: <http://www.simplypsychology> [Accessed 20 september 2022].
- MedlinePlus , 2022. *MedlinePlus*. [Online] Available at: <http://www.medlineplus.gov> [Accessed 30 August 2022].
- MindTools, 2022. *Managing Stress, Defining, Understanding and Overcoming stress*. [Online] Available at: <http://www.mindtools.com>[Accessed 20 september 2022].
- Muhamad Saiful Bahri Yusoff, a. f. a. a. b. & a. r. e., 2011. Medical Students Selection Process and its Pre-Admission scores Association with the New students' Academic Performance in University Sains Malaysia. *International Medical Journal* , 4(18), pp. 327-331.
- Nitasha Sharma, a. k., 2011. factors associated with stress among Nursing students. *SAGE journals*, 7(1), pp. 12-13.
- Nyu, 2022. *facts on stress*. [Online] Available at: <http://www.nyu.edu> [Accessed 03 September 2022].
- Parveen Shaik, s. p. & c. p., 2019. Factors affecting stress among students in dental colleges of neo-capital state in India. *Journal of Indian Association of Public Health Density*, 1(17), p. 41.
- PhD, m.-m., 2011. Sources of stress in nursing students. *international Nursing review*, 59(1), pp. 15-25.
- Rolando T. Lazaro PT, P. D., 2020. *Social Cognitive Theory*. [Online] Available at: <http://www.ScienceDirect> [Accessed 12 October 12].
- Scott, E., 2022. *The Main Causes of Stress*. [Online] Available at: <http://www.verywellmind.com>[Accessed 16 September 2022].
- Scott, E., 2022. *VeryWellmind*. [Online] Available at: <http://www.verywellmind.com> [Accessed 31 August 2022].

Seema, r. k. & a., 2016. A Conceptual Framework on Stress Among Undergraduate Students.. *IJMIE*, 6(8), pp. 2249-0558.

Shafer, 2022. *Shafer*. [Online] bAvailable at: <http://www.shafer.com> [Accessed 03 September 2022].

Simuyemba, M. C., 2021. A study on burnout amongst doctors at the university teaching hospital. *Medical Journal Of Zambia*, 46(4), p. 1.

Sun, h. d. m. h. x.-y. & x. a., 2013. Educational stress among Chinese adolescents: individual, family, school and peer influences. *Educational Review*, 3(65), pp. 284-303

The learning Center, 2022. *College Stress*. [Online] Available at: <http://learningcenter.unc.edu>[Accessed 14 September 2022 oolshero, 2022.

Toolshero, 2022. *Transactional theory of stress and copying*. [Online] Available at: <http://www.toolshero.com>[Accessed 19 September 2022].

University, S. H., 2022. *Organising Academic Research papers; Theoretical Frameworks*. [Online] Available at: <http://www.library.sacredheart.edu>[Accessed 04 11 2022].

Webster, M., 2022. *Cognitive*. [Online] Available at: <http://www.merriam-webster.com> [Accessed 10 11 2022].

Yusoff, M.S.B., 2010. Stress, stressors and coping strategies among secondary school students in a Malaysian government secondary school: Initial findings. *ASEAN Journal of Psychiatry*, 11(2), pp.1-15.

Zondi, Z., 2018. Factors Contributing to Stress Among Students At A Selected University *Dissertation*, pp. 10-11

Zondi, Z.P., 2018. *Factors contributing to stress among Students at a selected university, South Africa* (D

APPENDIX
WORK PLAN

ACTIVITY	NOV 2022	DEC 2022- JAN-2023	JAN-MAR- 2023	APR-JUN- 2023
Finalize research proposal				
Ethical clearance from UNILUS-REC				
Data collection management				
Data Analysis				
Draft report writing				
Submission of first Draft report and finalization				

FINANCIAL PLAN SUMMARY

NARRATIVE	AMOUNT(K)
Transport	350
Stationary and Printing	950
Bundles and Internet	450
Ethical Clearance	500
Assistants	400
Lunch	200
Total	2800

1: Table used for sample selection Sample size for $\pm 5\%$, $\pm 7\%$ and $\pm 10\%$ Precision Levels
 Where Confidence Level is 95% and $P=.5$.

Size of sample size (n) for precision (e)

Population	$\pm 5\%$	$\pm 7\%$	$\pm 10\%$	Population
100	81	67	51	100
125	96	78	56	125
150	110	86	61	150
175	122	94	64	175
200	134	101	67	200
225	144	107	70	225
250	154	112	72	250
275	163	117	74	275
300	172	121	76	300
325	180	125	77	325
350	187	129	78	350
375	194	132	80	375
400	201	135	81	400
425	207	138	82	425
450	212	140	82	450

(Israel, 2012).

QUESTIONNAIRE

STUDY ON THE FACTORS ASSOCIATED WITH STRESS AMONG NURSING STUDENTS AT CHOMA COLLEGE OF NURSING IN CHOMA DISTRICT

Dear participants, my name is Natasha Hazemba, I am a 4th year student at the University of Lusaka pursuing my Bachelor's degree in public health in the school of health sciences. In partial fulfilment of the requirements for the bachelor's degree, I am expected to carry out a research regarding **The Factors Associated with Stress among Nursing Students at Choma College of Nursing** and produce results. I humbly request for your help in filling out this questionnaire as is it designed to help me collect data needed to carry out this task. Please note that you have been randomly selected and the information gained will not be used in the public domain without prior authorisation from this institution. Your response will be highly appreciated.

Name

Signature

PART A. Demographic information,

1. Please tick (✓) where applicable from the options given.

Male Female

2. Age 18 – 20 21 – 25 25 – 30 30 and above

3. Marital status

Single Married other

4. What is your year of study?

1ST 2ND 3RD

PART B

S/No	Item	Tick (✓) the appropriate response				
		Never	Almost Never	Sometimes	Fairly often	Very often
1.	Does study workload at school stress you?					
2.	Do assignments and deadlines make you stress?					
3.	Does preparation for examinations stress you?					
4.	Does preparation for class tests stress you?					

5.	Does class competition among your fellow students stress you?					
S/No	Item	Tick (√) the appropriate response				
		Never	Almost Never	Sometimes	Fairly often	Very often
6.	Does peer pressure at school stress you?					
7.	Does change of environment cause you stress at school?					
8.	Does Divorce of parents stress you?					
9.	Does crowding in class stress you?					
10.	Does lack of recreational activities at school stress you?					
11.	Does expectations from family stress you?					
12.	Do financial difficulties stress you?					
13.	Do you have any health condition make you stress in school?					
14.	Do personal expectations about the future stress you?					
15.	Does financial support at school stress you?					

PART C; STRESS LEVELS

S/No	Item	Tick (✓) the appropriate response				
		Never	Almost never	Sometimes	Fairly often	Very often
01	In the previous month, how frequent have you been distressed because of something that happened suddenly?					
02	In the previous month, how frequent have you felt that you were incapable of controlling important things in your life?					
03	In the previous month, how frequent have you felt anxious and strained?					
04	In the previous month, how often have you felt assured about your capacity to handle your personal difficulties?					
05	In the previous month, how frequent have you felt that things were going your way?					
06	In the last month, how often have you felt that you could not cope with all the things that you had to do?					
07	In the previous month, how often have you been able to control irritations in your life?					
08	In the previous month, how frequent have you felt that you were on top of things?					
09	In the previous month, how often have you been angered because of things that happened that were outside of your control?					
10	In the previous month, how frequent have you felt problems were piling up so high that you could not overcome them?					

THANK YOU

APPENDIX PERMISSION LETTERS

SCHOOL OF MEDICINE AND HEALTH SCIENCES LEOPARDS HILL CAMPUS

Plot No. 37413, Off Alick Nkhata Mass Media. P. O Box 36711, Lusaka.
Phone: +260211258505, 258409 Fax +260211233409; Cell +260976075850, 961917862,
E-mail:unilus@zamnet.zm,ictar@zamnet.zm

<p>SCHOOL OF MEDICINE AND HEALTH SCIENCES RESEARCH ETHICS COMMITTEE</p>

Ref no: IORG0010092-2023/043

Date: 15th DECEMBER, 2022

NATASHA HAZEMBA - BSPH19216861

**Re: RESEARCH TITLE: ASSESSING FACTORS ASSOCIATED WITH STRESS
AMONG NURSING STUDENTS AT CHOMA COLLEGE OF NURSING IN CHOMA
DISTRICT**

The above research was submitted to the research ethics committee for review. The study has no major ethical problems and is approved subject to the following:

1. The study cannot be changed without express permission of the UNILUS Research ethics committee
2. Approval from the Lusaka District health Management or equivalent health authorities should be sought.
3. The study tools should be added.
4. An informed consent form should be attached and filled by all study participants (If dealing with primary data)
5. The risks and benefits should be included in the consent form.
6. Ensure before commencement that approval is sought from ZNHRA Congratulations and the committee wishes you success in your work.



Prof Kasonde Bowa

MSc(Glasgow),M.Med(UNZA),FRCS(Glasgow),FACS,FCS,DPH(LSTMH),MPH(UCL)

Chairman- UNILUS REC

Professor of Urology and Consultant Urologist

Executive Dean

University of Lusaka and University Teaching Hospital School of Medicine and Health Sciences.

**SCHOOL OF MEDICINE AND HEALTH SCIENCES LEOPARDS
HILL CAMPUS**

Plot No. 37413, Off Alick Nkhata Mass Media. P. O Box 36711, Lusaka.

Phone: +260211258505, 258409 Fax +260211233409; Cell +260976075850, 961917862,

E-mail:unilus@zamnet.zm,ictar@zamnet.zm

Date: 15th DECEMBER, 2022

.....
.....
.....

**PERMISSION FOR NATASHA HAZEMBA - BSPH19216861 TO CONDUCT A
RESEARCH STUDY AT YOUR FACILITY/ INSTITUTION/ORGANIZATION**

Reference is made to the above subject matter

The University of Lusaka, School of Medicine and Health Sciences here by requests for permission for **NATASHA HAZEMBA** Public Health Student to conduct research at your facility/ institution/ organization, entitled; **ASSESSING FACTORS ASSOCIATED WITH STRESS AMONG NURSING STUDENTS AT CHOMA COLLEGE OF NURSING IN CHOMA DISTRICT**. The research is in partial fulfillment of the requirements for the degree of Bachelor of Science Public Health. This is purely for academic purposes and information gained in such a way will not be used in the public domain without prior authorization from the institutions/ organizations involved.

The research topic has been cleared by the University of Lusaka, School of Medicine and Health Sciences Research Ethics Committee as per the attached copy. Data collection is expected to be done from **1st January, 2023 to 31st March, 2023**.

The University of Lusaka avails itself of this opportunity to review to your office the assurances of its highest considerations and looks forward to your timely and favorable response.



Prof Kasonde Bowa

MSc(Glasgow),M.Med(UNZA),FRCS(Glasgow),FACS,FCS,DPH(LSTMH),MPH(UCL)

Chairman- UNILUS REC

Professor of Urology and Consultant Urologist

Executive Dean University of Lusaka and University Teaching Hospital School of Medicine and Health Sciences.

0770720824

**SCHOOL OF MEDICINE AND HEALTH SCIENCES LEOPARDS
HILL CAMPUS**

Plot No. 37413, Off Alick Nkhata Mass Media, P. O Box 36711, Lusaka.

Phone: +260211258505, 258409 Fax +260211253409; Cell +260976075850, 961917862.

E-mail: unilus@zamnet.zm, iclar@zamnet.zm,

Date: 15th DECEMBER, 2022

**PERMISSION FOR NATASHA HAZEMBA - BSPH19216861 TO CONDUCT A
RESEARCH STUDY AT YOUR FACILITY/ INSTITUTION/ ORGANIZATION**

Reference is made to the above subject matter

The University of Lusaka, School of Medicine and Health Sciences here by requests for permission for **NATASHA HAZEMBA** Public Health Student to conduct research at your facility/ institution/ organization, entitled; **ASSESSING FACTORS ASSOCIATED WITH STRESS AMONG NURSING STUDENTS AT CHOMA COLLEGE OF NURSING IN CHOMA DISTRICT**. The research is in partial fulfillment of the requirements for the degree of Bachelor of Science Public Health. This is purely for academic purposes and information gained in such a way will not be used in the public domain without prior authorization from the institutions/ organizations involved.

The research topic has been cleared by the University of Lusaka, School of Medicine and Health Sciences Research Ethics Committee as per the attached copy. Data collection is expected to be done from **1st January, 2023 to 31st March, 2023**.

The University of Lusaka avails itself of this opportunity to review to your office the assurances of its highest considerations and looks forward to your timely and favorable response.



Prof Kasonde Bowa
MSc(Glasgow), M.Med(UNZA), FRCS(Glasgow), FACS, FCS, DPHI, STMB, MPH(UCL)
Chairman- UNILUS REC
Professor of Urology and Consultant Urologist
Executive Dean University of Lusaka and University Teaching Hospital School of Medicine
and Health Sciences.



NATIONAL HEALTH RESEARCH AUTHORITY

NATIONAL HEALTH RESEARCH AUTHORITY

Lot No. 18961/M, off Kasama Road, Chalala, P.O. Box 30075, LUSAKA

Tell: +260211 250309 | Email: znhrasec@nhra.org.zm | www.nhra.org.zm

Ref No: NHRA00005/8/04/2023

Date: 8th April, 2023

The Principal Investigator,

Natasha Hazemba,

University of Lusaka, Lusaka, Zambia.

Dear Ms. Hazemba,

Re: Request for Ethical Clearance and Authority to Conduct Research

The National Health Research Authority is in receipt of your request for ethical clearance and authority to conduct research titled “Factors Associated with Stress among Nursing Students at Choma College of Nursing in Choma District”.

I wish to inform you that following submission of your request to the Authority, our review of the same and in view of the ethical clearance, this study has been approved on condition that:

- 1. The relevant Provincial and District Medical Officers where the study is being conducted are fully appraised;**
- 2. Progress updates are provided to NHRA bi-annually from the date of commencement of the study;**
- 3. The final study report is cleared by the NHRA before any publication or dissemination within or outside the country;**

4. After clearance for publication or dissemination by the NHRA, the final study report is shared with all relevant Provincial and District Directors of Health where the study was being conducted, University leadership, and all key respondents.

Yours faithfully,

NATIONAL HEALTH RESEARCH AUTHORITY

A handwritten signature in black ink, appearing to be 'Prof. Godfrey Biemba', written in a cursive style.

Prof. Godfrey Biemba,

DIRECTOR/CHIEF EXECUTIVE OFFICER