

Social Support, Peer relations and Depression among Second- and Third-year Medical
Students of Makerere University

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A research Dissertation submitted to Makerere University School of Psychology in partial
fulfillment of the requirements for the Award of a Bachelor of Community Psychology
Degree of Makerere University.


November, 2022

Declaration

We Nanume Penina Sharon, Aketch Winfred, Amach Maria and Gyagenda Esther Hadassah, declare that this is an original work of ours and has never been submitted to Makerere University or any other institution of higher learning for an award of a degree.

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Approval

This is to certify that this dissertation titled 'Social Support, Peer Relations and Depression among second- and third-year Medical Students of Makerere University College of Health Science in Kampala Uganda' has been written under my supervision and is now ready for submission with my approval as a supervisor.

Signature.....

Dr. Rosco Kasujja

Supervisor

Date.....10/11/2022.....

Dedication

I Nanume Penina Sharon dedicate this research to the Almighty God for his guidance, protection and provision throughout my journey of education. My Mastercard Foundation sponsors and my parents especially Mr. Tasamba Sams and my family members for their love, support, patience and understanding. And finally, to all my friends.

I Aketch Winfred dedicate this proposal to the Almighty God for His guidance, protection and provision throughout my academic journey. I dedicate this work to my beloved parents, (Ogut Tophil and Aketch Teddy), my brothers and sisters who have been my support system from the beginning. In in a special way, I dedicate this work to MasterCard Foundation sponsors who have enabled me to reach this far. You all mean a lot to me, thank you.

I Amach Maria, I am glad to use this opportunity and chance to appreciate and dedicate this proposal to heavenly father for his guidance, care and protection through my years of academic performance .I also dedicate this work to my supervisor, DR Rosco for helping by giving us directions in different areas and finally I thank my entire family for their endless support both financially and mentally .Not forgetting my team mates for the wonderful corporation throughout this journey. Bless you all.

I, Gyagenda Esther Hadassah wish to thank my parents for their tireless support financially, my father, Mr. Jamada Gyagenda Kikomeko and my mother, Betty Kikomeko Gyagenda. I would not make it this far, in my education if not for them, I thank you mom and dad for loving me and nurturing me with the best you had to give, I also give special thanks to my mentor and spiritual father Apostle Grace Lubega because his teaching have built my endurance and increased my desire to attain excellence and stand out, to honor and love God whom my at most honor and gratitude for any success and milestone in my life goes to, the Almighty Father and King of Glory, who has preserved my life and blessed me with amazing parents, a second father and mentor to teach me in the paths of the Heavenly Kingdom, the best team mates, Aketch Winfred, Nanume Penina Sharon, Amach Maria and even equally great, a dedicated and thoughtful professor and supervisor, Dr. Roscoe Kasujja, without whom this research would not be possible, I honor you sir and May God bless every one of you and supply all your needs according to the riches of His glory in Christ Jesus.

Acknowledgment

We would wish to acknowledge and appreciate the valuable contribution of my lecturer and supervisor Dr. Roscoe Kasujja who tirelessly guided me through my study. We would like to thank our classmates for their cooperation, guidance and support. Finally, we would like to thank all the other various individuals and colleagues who rendered to us any assist during the period of this research.

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
CES-D	Center for Epidemiologic Studies–Depression scale
CHS	College of Health Science
H&P	Hospitalized patient and clinical Practicum
HIV	Human Immune Virus
MakCHS	Makerere University College of Health Science
MBChB	Bachelor of Medicine and Bachelor of Surgery degrees
PHQ9	Patient Health Questionnaire 9
SPSS	Statistical Package for Social Sciences

Abstract

Depression in Medical school has been a rising issue for the past two decades. In Uganda the Medical school duration is of a maximum of six years that are hectic, full time consuming, consisting a lot of stressors to the students. Multiple enhancers of depression among these students have been studied however less has been done in factors of peer relations – social support- depression triad. Our study showed how the three parameters interact with each other especially at MakCHS among Second and Third year students since they are more susceptible to depression as by multiple studies. Our study targeted all genders and all ages as long as they were eligible according to our criteria. Data from medical students aged 20-32 years was obtained ($n=57$) and included in the data analysis with a higher frequency recorded at the age of 22. Most data were obtained from female participants with a percentage of 50.9. The Correlation results showed no significant relationship between depression and peer relations. ($r=1$, $P>0.05$). Correlation results showed no significant relationship between social support and depression ($r=1$, $P>0.05$). Correlation results showed a significant relationship between social support and peer relations. ($r=1$, $P<0.05$). In conclusion, social support and peer relations should be put into consideration while dealing with depression among students at MakCHS.

Chapter One

Introduction

Background

Depression in school has lately been a growing issue worldwide. This follows the numerous research showing positive results that have been carried out in different nations, schools and universities. The World Health Organization report showed that the prevalence of depression worldwide is currently 4.4%. However, depression prevalence in medical students reports to be 3–10 times higher (11.5–48.2%) as by 2022. (WHO, 2017). In Uganda, post COVID 19, numerous research has been carried out to determine the prevalence of depression in Ugandan Universities and have shown that most students are struggling with depression knowingly or unknowingly. (Kaggwa et al., 2022) (Najjuka et al., 2021). One study undertaken at Makerere University among medical students indicated that 21.5% and 64.1% had high and moderate levels of depression respectively (Olum et al., 2020). At Makerere University like any other universities, a high prevalence of depression expected and predicted to be among medical students. Although recent studies have shown that all students are candidates to depression, Medical students are more prone because of a number of reasons which resonate from personal wellbeing, academics, finance, and the long duration of study with an unpredicted future(Moir et al., 2018)(Phomprasith et al., 2022). The medical culture and setting are so frustrating and full of challenges that cause depression to students.

Depression is characterized by primary symptoms of recurrent sadness, lack of pleasure that eventually lead to secondary symptoms of impaired person functionality, poor relations, victimization and tertiary symptoms that may be suicidal . Depression is the most concerning mental health problem in medical students (Mihăilescu et al., 2016) A detailed understanding of the drivers, interactions of depression and the drivers, impact and association is necessary if feasible and sustainable interventions are to be designed and implemented. A number of studies

have proposed depression interventions ranging from the institutions to counselling and student sensitization (Goebert et al., 2009). Previous researchers have found co-relations of depression with factors such relationships, self and social support, sleep quality, pessimism and inadequate motivational factors (Limsricharoen, 2014). Our study seek to build onto what others have started to determine the relationship between social support, peer relations and depression among the medical students

Problem Statement

The Environment of medical school at Makerere University involves training of medical students which is one of the most highly competitive department of education that takes a minimum of six years in Uganda. It involves studying large volumes of work which must be retained, understanding the difficult names of the medicines, understanding the signs and symptoms of different diseases and how to prescribe medicines, large workload, also accompanied with a lot of pressure from self, lecturers and family. The academic requirement consists of time pressure therefore limiting their social and peer interaction. It is of no doubt that the low social support and peer interaction has an effect on the wellbeing of these students and we therefore seek to find out to what extent these factors interact with the wellbeing and emergency of depressive conditions

Purpose of the Study

To explore the relationship between social support, peer relations and depression among second- and third-year MakCHS students.

Specific Objectives

1. To explore the relationship between social support and depression among second- and third-year medical students of MakCHS
2. To identify the relationship between peer relations and depression among second- and third-year medical students of MakCHS.
3. To identify the relationship between peer relations and social support among second- and third-year medical students of MakCHS.

Study Hypotheses

- There is no relationship between peer relations and social support
- There is no relationship between social support and peer relations
- There is no relationship between peer relations and social support

Scope of the Study

The study was undertaken at Makerere College of Health Sciences (MakCHS) among second- and third-year students. This is because they are susceptible to depression, peer relations and social interactions. Depression is a mental disorder characterized by low mood for at least two weeks. It is often accompanied by low self-esteem, loss of interest in normally enjoyable activities, low energy, decreased or increase in appetite, insomnia or hypersomnia, psychomotor agitation or retardation, and diminished concentration or indecisiveness. (Olum et al., 2020) Social support refers to spiritual and material support obtained from social relations of family members, relatives and friends, colleagues, organizations and communities therefore social support is one of the factors affecting individual depression. Social support is emotional and instrumental assistance from family, friends or neighbors and has an important but different on individuals mainly depending on contextual factors (Qing & Li, 2021). Peer relationships are interpersonal relationships established and developed during social

interactions among peers or individuals with similar levels of psychological development, and are a form of social support.

Significance of the Study

This study is beneficial to all Makerere University stakeholders especially the University Administration, College Administration, University Guild leaders and MakCHS students and Makerere Counseling and Guidance Center as it shows level potential depression mitigation routes among medical students. This is because it raises awareness of coping strategies of depression through positive peer relations and social support. This knowledge is to create opportunities for exploration of healthier and appropriately more effective ways of coping with depression among these students. The study aims to educate other university students and the general public about the drivers and interaction of depression with social support and peer relations.

Theoretical Framework

The conceptual framework adopted for this study is that depression (dependent) affects social support (independent) through loss of interest in interacting with others the depressed student, peer relations also lead to depression through limited personal time students have with their peers, poor peer relations limits social support through past negative experiences as shown in the figure 1 below

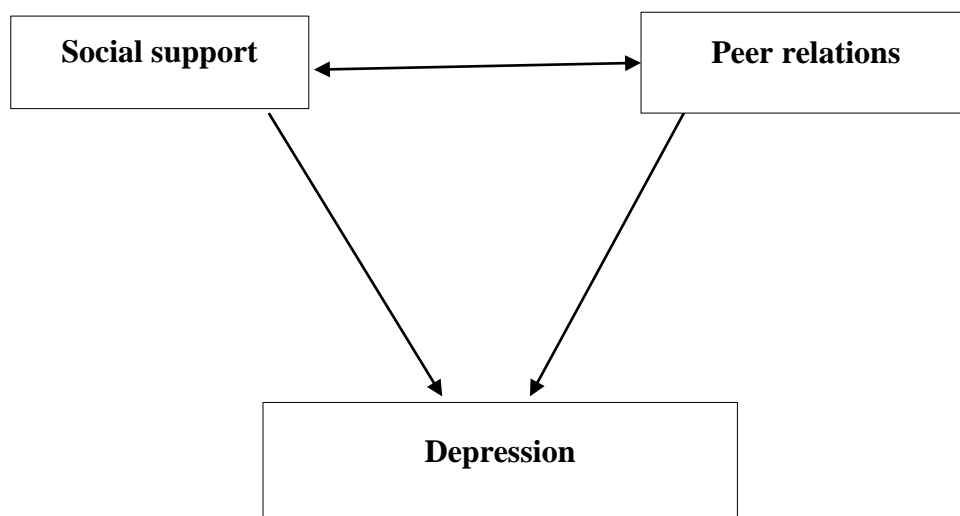


Figure 1: A conceptual framework showing the relationship between social support, Peer relations and Depression among second- and third-year Medical Students of Makerere University

Chapter Two

Literature Review

Introduction

Globally, the total number of people with depression by 2015 was estimated to exceed 300 million according to the World Health Organization. It was reported that Africa alone had 29.19 million depression cases that was 9% of the global depression crisis. In Uganda, the depression prevalence was reported to be 4.6%. The depression cases among university students in Uganda ranged between 4.0 and 80.7% (Nsereko et al., 2014) (WHO, 2017).

Depression today is ranked by WHO as the single largest contributor to global disability. Depression can be caused due to a number factors; social factors, psychological factors and biological predisposition of an individual. American medical association made a study on medical students and 27% of them show signs of depression, 11% have suicidal ideation, 16% seek psychiatric help and while there's no particular cause of depression among these studies most studies hint to the nature of the medical curriculum, the personality of students like type A personalities, and pressures of their physical environment. (Rotenstein et al., 2016)

Table 1: The table above shows social factors, psychological factors biological factors causing depression

Social factors	Psychological factors	Biological factors & setting
Social economy	Cognitive schemas	Genetics
Social support and peer relations	Problem solving	Culture
Social rejection	Beliefs	Race
Social skills	Optimism or pessimism	Age
Life events and hassles	Information processing	Gender

Previous research has showed that medical schools provide a toxic psychological environment (WOLF, 1994) which is a very potential source of depression where academic pressure, workload, financial hardships, sleep deprivation are stressors factors. Some of the problems associated with depression especially among university students is anxiety, burn out and suicide which makes coping strategies like talking to family and friends, positive reframing, engaging in leisure activities and exercising very useful and an issue to be emphasized among students as a way to deal with the stress or burnout. (Najjuka et al., 2021)

Medical students are believed to be the most vulnerable group in terms of being susceptible to depression according to the survey and it also brings more insight in gaps the school curriculum which are more likely to trigger depression. 1 in 4 medical students suffer from depression due to the emotional distress and 11% experience suicide ideation (Smith, 2016). Scientific studies pointed out that university students have sleeping problems due to

psychological challenges and adaptation, changing from the high school to the professional environment especially the medical students who work in night shifts hence being unable to use proper coping mechanisms for sleeping disturbances. (Dinis & Bragança, 2018). In addition, the added pressure studies among the university students would increase levels of psychological distress. (Ovuga, 2006)

In sub-Saharan Africa high levels of depression, Epidemiological data suggested that prevalence of depression increased by 18.4% from 2005 to 2015. (Mirza et al., 2021) and was seen to lead to low grades in school and high use of drugs according to research the female gender experiences depression at a higher percentage than the male gender. (De Matos et al., 2003).

Regional distribution showed a high frequency of depression in the Middle East with a prevalence of 32.8% followed by North America with an incidence of 30.3%, Asia (30.1%), South America 26.8% and Europe 20%. The estimated frequency of depression or its manifestation in medical students around the world was 27.2% according to a recent systematic review and meta-analysis. (Islam, 2018). A study carried out among Sudanese medical students, states that the prevalence of depression is high ranging from 30 to 50%. (Dafaalla et al., 2016) .

A couple of approaches have been come up with by different psychiatrists in regard to depression and how to treat it. This has included behaviorists and psychodynamic theorists who believe behavior is influenced by innate forces. Preventive intervention have been suggested in previous studies ranging from the faculty education, medical students counseling and medical students' education (Phomprasith et al., 2022). In previous studies by Zamani-Alavijeh et al., (2017) showed the need for social support. To individuals against stressful events, promotes sense of security and physical mental health, self-efficacy

Social Support and Depression

Social support in response to depression has been defined and explained in various ways by many authors. Tardy, (1985) gives a more detailed way of explaining social support i.e. Direction specification (support can be given and/or received), disposition (availability vs. utilization of support resources), description of support versus evaluation of satisfaction with support, content (what form does the support take?), and network (what social system or systems provide the support?).

Several studies have shown that depression is related to the quality and quantity of social support which is an external protective factor for psychological diseases. Numerous research has shown that the inadequacy of social support is directly related to the severity of psychological, physical symptoms or acts as a buffer between stressful life events and depressive symptoms (Zimet et al., 1988)

According to the interpersonal model, individual with low social support level is prone to depression when they are faced with stressful life events. Also, international mechanisms of social support in relation to depression in adolescents include main effects and stress buffering effect. Social support can alleviate the impact of individual stressful events and reduce the incidence of depression.(Qing & Li, 2021)

Numerous researchers believe that good social support is beneficial to health while bad social relationships are harmful to physical and mental health, for example, loneliness and lack of emotional support may lead to depression among medical students. Social support can be described as a network of family friends, neighbors, and community members available in times of need to give psychological, physical, and financial help.

Social support is emotional, instrumental, and informative and also in terms of appraisal according to the According to the interpersonal model, individual with low social support level is prone to depression when they are faced with stressful life events. Also, international

mechanisms of social support in relation to depression in adolescents include main effects and stress buffering effect. Social support can alleviate the impact of individual stressful events and reduce the incidence of depression. (Qing & Li, 2021)

Social support helps to regulate stress levels, when people are around others they feel less lonely, it helps them against developing a trauma related psychopathology and depression, studies show that men and women without ties are more likely to die from heart diseases, studies show that men and women without ties to others are more likely to suffer from heart diseases therefore increasing high morbidity and mortality rates (Ozbay, 2007).

Social relationships may influence mental health outcomes through multiple mechanisms including influence on the health-related behaviors, engagements in social activities, transfer of social support, access to material resources. On an empirical level, social isolation and negative social interactions with depression and suicide. (Teo et al., 2013).

Medical students have limited time to attain social support from their friends, family, relatives and other groups and organizations due to the fact that their course is broad and hectic they spend most of their time in the libraries doing research, reading a lot of books, trying to memorize the different types of medicines and attending to patients in the wards. Their Social support is interfered by the tight schedule hence the levels of depression are bound to rise. This limits them from socializing with others hence high levels of depression.

The Coronavirus 2019 (COVID-19) further halted impersonal medical interactions especially among the second- and third-year students given these are the most active years of MBChB. (Mayer et al., 2016) Some medical students suffered psychologically during the COVID-19 therefore low social support was a strong factor to those with poor mental status and depression than those with high levels of social support, the depressive symptoms were found to be at low rate.

Social support may relieve depression among the medical students through improving self-esteem and decreasing negative cognitions (Zang et al., 2017). Medical students will have depression when they lack social support according to research by (Andersen et al., 2005) and these people are less capable of attaining relationships and performance in studies

Peer Relations and Depression

The rise of depression during medical training is not university reported. Studies show that depression decreases from the first to second year of medical training and between preclinical and clinical years. Indeed (Dyhye et.al) suggest that this prevalence varies depending on the age of medical student stages of medical training, the methodology for evaluating depression and location. Medical students' depression was linked to substance abuse, suicide and improved professional function, interpersonal skills, and professionalism, physical and mental health.

The stress of medical school drains the coping strategies but social and health beneficial activities may restore. Medical students with small coping strategies or few positive inputs are at greater risk of distress including burnout.

Peer relationships are perceived via acceptance, reliability and intimacy with friends and peers. Those broad aspects of peer relationships provide an overview of adolescent's, self-reported quality of relationships and interactions with friends and acquaintance (DeWalt et al., 2013). Peer intimacy with friends which refers to a sense of closeness, attachment, coherence and self-disclosure with their friends that allows sharing sensitive and personal information. This may not be seen among medical students due to the limited time they have with their peers and friends (Frontiers, 2022)

It's with no doubt that lack of peer relations can be a determinant of mental health problems so this research determines to what extent, Recent research shows that when

individuals perceive social rejection, they have distant peer relations and are likely to have lower trust levels than socially accepted individuals. This influences cooperative behaviors, hence poor peer relations were associated with stronger depressive symptoms (Adedeji et al., 2022).

Depression

Most studies claim that few students come out to seek for help when depressed due to social stigma and common trait of medical students of finding it hard to seek help which makes prevalence of depression persistent in universities.

Research carried out by University of Auckland, Faculty of Medical and Health Sciences showed that depression affects one third of medical students worldwide and this due to anxiety, burn out and stress levels they face because of the nature of the medical curriculum.

The weakness in help seeking behavior, support services and which leads to prevalence in depression among medical students, these articles emphasize the importance of exercising, positive reframing and talking to family and friends.

In the study that was carried out among the Chinese university students, depression has become the most common psychological stress among the college students and this influence their living and learning negatively. The study demonstrated that 29.8% experience depressive symptoms like stress, suicidal thoughts and so on (Tang et al., 2021)

The research made in the sub-Saharan Africa explains that high levels of depression lead to low grades in school and high use of drugs according to research the female gender experiences depression at a higher percentage than the male gender.

A systematic review estimated that the mean prevalence of depressive disorders in university students was 30.6% which was considerably higher than rates reported in general population. Epidemiological data suggested that prevalence of depression increased by 18.4% from 2005 to 2015 (Mirza et al., 2021).

According to a study carried out in Pakistani, the highest rate of depression was diagnosed in medical students of second year. Studies also evaluated that depression, anxiety and depression among medical students especially second and third year due to the poor academic and working rounds in the wards, long working hours hence having inadequate time for non-academic activities.

Regional distribution showed a high frequency of depression in the Middle East with a prevalence of 32.8% followed by North America with an incidence of 30.3%, Asia (30.1%), South America 26.8% and Europe 20%. The estimated frequency of depression or its manifestation in medical students around the world was 27.2% according to a recent systematic review and meta-analysis.

A study that was carried out in Malaysia on the factors associated with depression among university students, challenges like independent living, academic stress, as well as planning for their future expose them to depression. Also, various risk factors for depression among university students have been identified such as lower socioeconomic status, poor academic performance and life satisfaction, high levels of alcohol consumption, smoking, gambling, life stressors, post-traumatic stress disorder, physical inactivity, overweight or obesity, and sleeping problems, the process of transition from adolescence to adulthood. (Amir Hamzah et al., 2019)

A study conducted by Phomprasith et al., (2022), they proposed a preventive intervention for depression which consisted of faculty education, medical students counseling and medical students' education. The study explored the protective factors associated with depression among Thai medical students to be beneficial for developing a prevention program on the effects of depression such as, relationship problems, lack of support systems, poor sleep quality, lack of motivation to study medicine and pessimism.

A study conducted in Makerere University by states that many university students have lived through a variety of difficulties, including high levels of poverty, loss of traditional social support and HIV/AIDS epidemic. In addition, the added pressure studies among the university students would increase levels of psychological distress. (Ovuga et al., 2006). Medical students especially on private sponsorship from poor families often face challenges in completing the tuition due to the fact that the course is expensive.

A study carried out among Sudanese medical students, states that the prevalence of depression is high ranging from 30 to 50%. Previous studies showed that depression leads to high rates of suicide among medical doctors. Medical students experienced a decline in academic performance due to stress that leads to increased anxiety and depression which results into their engagement in potentially harmful methods of coping such as excessive consumption of alcohol.(Dafaalla et al., 2016)

Scientific studies pointed out that university students have sleeping problems due to psychological challenges and adaptation, changing from the high school to the professional environment especially the medical students who work in night shifts hence being unable to use proper copying mechanisms for sleeping disturbances. (Dinis & Bragança, 2018)

Zamani-Alavijeh et al.,(2017)conducted a study on perceived social support among medical students and pointed out that pressures and challenges along with cognitive changes of this course manifest the need for social support. This protects individuals against stressful events, promotes sense of security and physical mental health, gives positive attitude towards school assignment and a sense of belonging to the school, and develops emotional intelligence and sense of self efficacy.

According to a study carried out by Mirza et al., (2021), depression and anxiety cause hindrance to medical students' academic career and later to their social life. It is suggested that these factors should be considered among medical students and they should be provided with

psychological counselling in their early academic years, students' support unit should help them in alleviating their associated factors that may limit their future career.

In a research conducted by Tang et al., (2021), they pointed out that high depression among university students is related to the quality of social support which is a factor for psychological dysfunction that is to say researcher believed that good social support is beneficial to health while social relationships are harmful to physical and mental health.

One study also confirmed that loneliness and perceived lack of emotional support had the most cause of depression and students with poor social support like those with financial difficulties lived a poor relationship with their families and loved ones thus high depression rates.

Still in the study carried out in China by Tang et al., (2021) it was found out that medical students in fourth and fifth year have high levels of depression and anxiety because of heavier academic loads and competition among the students.

A couple of approaches have been come up with by different psychiatrists in regard to depression and how to treat it including behaviorists who believe behavior is influenced by environment, psychodynamic theorists who believe behavior is influenced by innate forces, in fact a renown

Respondents with a history of depression had higher rates of probable mild to moderate depression and probable major depression. Differences in sleep duration, with less sleep being reported by respondents who had major or mild depression, were expected, because affective disorders result in poor quality and quantity of sleep.

Social support and Peer Relations

Peer relations provide social support known as peer support which is a form of social emotional support offered by an individual with a shared and lived experience. Peer support helps people feel enough and successful, it improves their talents and raises their self-esteem

to develop effective ways of coping with stress enabling them receive social support from families, friends, and teachers (Turner, 1999).

Lack of social support from friends, family and teachers affect children's feelings of belonging to a group negatively, and cause a risk of school dropout or absenteeism due to its links with isolation and alienation (Sali & Akyol, 2010). Previous research suggests associations between poor peer relations in adolescence and poorer socioeconomic and health outcomes in later adulthood (Bean et al., 2019),

Very busy students and children have been seen not to participate cannot participate in these activities often since they do not have much spare time to spend with friends or much economic power. Therefore, they cannot share enough with their friends, cannot develop strong peer relationships, and cannot receive enough support from them. Students with good family relationships, communication have been seen to be more likely to have better peer relations than those who only have good relations with academic instructors or with their peer (Engels & Ter Bogt, 2001).

Students with good social support from lectures have been seen to have good peer relations. However some previous studies have also shown that as family social support decreases, there are high peer relations, this can be accounted to the dependence and inclination of individuals to their peers for support in terms of need where family isn't able to help (Rupika et al., 2017).

Chapter Three

Methodology

Study Design

A descriptive cross-sectional study with quantitative approach or research was carried out.

Study Setting

The study was operated at Makerere University College of Health Sciences (MakCHS) a College of Makerere University founded in 2007 and located approximately 4kilometres north of the city's central business center and North-East of the main campus. The college shares premises with Uganda's main Referral Hospital at Mulago Hill in Kampala city, Uganda.

Study Population

Second- and Third-year undergraduate students pursuing a Bachelor of Medicine and Bachelor of Surgery (MBChB) at MakCHS were the only considered study population due to their high susceptibility to depression.

Sample Techniques

We selected purposive/accidental/judgmental sampling technique that involved identifying our respondents. In this sampling technique any element or member who or which is part of the population and happens to be within the reach of the researcher is included in the sampling.

Sample Size Estimation

The study used Cochran's 1963 formula that provides a reasonable sample size for unknown population size as shown below;

$$n = \frac{Z^2 pq}{e^2}$$

where; n is the sample size required for the study, Z_{α} is the standard normal value, α is the level of significance which is 0.1 at 90% confidence level ($Z_{\alpha} = 1.545$), p is the proportion of individuals with characteristics of interest ($p=0.5$), q is the proportion of individuals without characteristics of interest (0.5) and e is the permissible error ($e=0.1$)

$$n = \frac{1.545^2 * 0.5 * 0.5}{0.1^2}$$

$n = 59.6756 \sim 60$ participants

Eligibility Criteria

Inclusion criteria

All MakCHS 2nd or 3rd year students who were pursuing a Bachelor of Medicine and Bachelor of surgery (MBChB) were the eligible group for the study and were the only included people. The study had no limitations to age, marital status, and other demographics. Gender equality inclusion was put into consideration during data collection

Data Instrument Measures, Tools and Procedure

Closed ended self-administered questionnaires were used to collect data from respondents they were easier to answer, data can be quickly coded, entered and analyzed, and this type of questionnaire requires little skill to administer. The questionnaire had three sections namely A, B and C Section A comprised the multidimensional scale of perceived social support, section B had Cayci for peer relations and section C has PHQ9 for depression. The questionnaire consisted of a sub-section where respondents give their consent to take part in the study as shown in Appendices 1

The Multidimensional Scale of Perceived Social Support

The Multidimensional Scale of Perceived Social Support (Zimet et al., 1988) is a 12-item measure of perceived adequacy of social support from three sources: family, friends and significant others. It uses a 5-point Likert Scale (0=strongly disagree, 5= strongly agree). Circle 1=strongly disagree, Circle 2 =strongly disagree, Circle 3 = mildly disagree Circle 4 =neutral, Circle 5= mildly agree, Circle 6= strongly agree, Circle 7 =very strongly agree.

The Cayci Peer Relationships

This is a research tool used in communities and youth collaborative institutes, school experiences, surveys for externalizing and internalizing behaviors among peer relationship. Its measures are free and available to use with tools that include valid and reliable surveys, assessments and scales to help school stakeholders to identify and assess school climate and other conditions for learning. This screening tool was founded by Annahita Ball, Samantha Bates, Anthony Amorose, and Dawn Anderson-Butcher members of Ohio State University (USA), the CAYCI-SES also are valuable evaluation tools used to inform school planning and improvement efforts.

The Patient Health Questionnaire-9 (PHQ-9)

The PHQ-9 is a certified tool used for screening, diagnosing, and measuring the severity of depression among university students (Adewuya et al., 2006). This too was employed in our study to measure depression. It consisted of 9 items and depression was calculated by assigning scores of 0, 1, 2 and 3 to the response categories “not at all,” “several days”, “more than half days” and “nearly every day” respectively. The sum values of the responses give the level of depression of the respondent. 0-4 means minimal depression, 5-9 means mild depression, 10-14 means moderate depression, 15-19 means moderately severe depression and 20-27 means severe depression

Data Collection Procedure

A self-administered tool was used to enroll participants in the study. Hard-copy questionnaires were used to collect data. The research will be carried out on MakCHS premises, Questionnaires comprised of factual and opinion questions and organized in a table form with ambiguous and leading questions with not more than fifteen questions.

Data Control

The copies of the questionnaires were kept both in hard and soft copy by the researchers and as for those with responses they are kept in a folder and kept securely by one specific researcher as well as the field notes to avoid information from being scattered. Confidentiality is guaranteed because respondents stayed incognito while answering the questions as it wasn't mandatory to put one's name.

Data Management and Analysis

Data was arranged and coded according to the results obtained from the questionnaires. Collected data was cross checked for completeness and entered in MS Excel 2019 for editing and coding. The data was then analyzed using the Statistical package for social sciences (SPSS 22). The descriptive analysis was obtained from frequencies and percentages A correlation matrix was computed to explore the bivariate associations between aspects of adolescent peer relationships, social support and depressions Correlation coefficients were interpreted as small ($r = 0.10$), medium ($r = 0.30$), or large ($r = 0.50$) (Cohen, 2013) and p -values <0.05 were considered significant.

Ethical Considerations

Approval from the College of humanities, School of Psychology through our research supervisor and Administrative approval from the Principal of MakCHS were obtained prior to the study. Consent was obtained from respondents prior to interviews and confidentiality

was obtained through assigning random numerical numbers to the individual respondents and a random gender- based system of questionnaires was used during the study. Written information from respondents was not shared unnecessarily unless it was to help respondent at risk of self-harm or harm to other students.

Chapter Four

Results

This chapter presents results from data analysis presented in four sections. The first section presents the descriptive information about the respondent 's gender, frequencies and percentages, the second, third and fourth sections presents results of Spearson Rank Order Correlation Coefficient (r) between depression and peer relations, social support and depression, then social support and peer relations respectively.

Background Information

Respondents were asked to indicate their gender, age, course of study and year of study. Frequencies were obtained and transportation into percentages as shown in table 1.

Univariate Analysis

Table 2: Respondent Gender, Frequency and Percentage

		Frequency	Percentage
Age	20-25	49	86.1
	26-30	13	12.4
	Above 30	1	1.5
	Total	57	100
Gender	Male	28	49.1
	Female	29	50.9
	Total	57	100

Data from medical students aged 20-32 years was obtained ($n=57$) and included in the data analysis with a higher frequency recorded at the age of 22. Most data were obtained from female participants with a percentage of 50.9 as shown in the Table 2 below.

Table 3: Respondent gender, frequency and percentage

Gender	Frequency	Percentage
Male	28	49.1
Female	29	50.9
Total	57	100

Data from medical students aged 20-32 years was obtained ($n=57$) and included in the data analysis with a higher frequency recorded at the age of 22. Most data were obtained from female participants with a percentage of 50.9.as shown in a table 3 above.

Bivariate Analysis

Table 4: Pearson correlation matrix for depression and peer relations

		Depression	Peer Relations
Depression	Pearson Correlation	1	.173
	Sig. (2 tail)		.221
	N	55	52
Peer Relations	Pearson Correlation	.173	1
	Sig. (2 tail)	.221	
	N	52	55

Correlation results showed no significant relationship between depression and peer relations. ($r=1$, $P>0.05$). The null hypotheses is therefore retained and it's concluded that there is no significant relationship between depression and peer relations

Table 5: Pearson correlation matrix level for social support and depression

		Social Support	Depression
Social Support	Pearson Correlation	1	-.267
	Sig. (2 tail)		.056
	N	54	52
Depression	Pearson Correlation	-.267	1
	Sig. (2 tail)	.056	
	N	52	55

Correlation results showed no significant relationship between social support and depression ($r=1, P>0.05$). The null hypotheses is therefore retained and it's concluded that there is no significant relationship between social support and peer relations

Table 6: Pearson correlation matrix for social support and peer relations

		Social Support	Peer Relations
Social Support	Pearson Correlation	1	.383
	Sig. (2 tail)		.011
	N	54	51
Peer relations	Pearson Correlation	.383	1
	Sig. (2 tail)	.011	
	N	51	54

Correlation results showed a significant relationship between social support and peer relations. ($r=1, P<0.05$). The null hypotheses is therefore rejected and it's concluded that there is a significant relationship between social support and peer relations

Chapter Five

Discussion, Conclusion and Recommendations

Introduction

This chapter deals with discussion of the results presented in chapter four in accordance with the major variables of the study. It further presents the conclusion and recommendations of the study.

Depression and Peer Relations

The results obtained show no relationship between peer relations and depression. The results obtained differed from previous studies where a relationship between the two was observed. (Oppenheimer & Hankin, 2011, Bean et al., 2019, Adedeji et al., 2022). This may not be seen among medical students due to the limited time they have with their peers and friends (Frontiers, 2022). In medical school the stakes are high and therefore high pressure since they all want to make it to the next level. The medical culture of being responsible for only yourself makes many have less peers. Medical students spend less time with peers and only hang out mainly after rotations which doesn't happen often

However, high quality of peer relations have shown higher life satisfaction, subjective happiness and self-esteem therefore less depressive circumstances. Previous findings suggest that higher peer acceptance, more robust support and deeper intimacy with friends, and easiness to make new friends go in line with lower severity of depressive symptoms.

The results obtained in our study suggest that the medical students interact less with peers and this therefore puts them at a high risk of depression as observed in previous studies.

Social Support and Depression

The results obtained in our study show that there is no relationship between social support and depression. Our results differed from most previous studies were the inadequacy

of social support is directly related to the severity of psychological, physical symptoms or acts as a buffer between stressful life events leading to depressive symptoms (Zimet et al., 1988, Stice et al., 2004, Alsubaie et al., 2019)

The difference with other previous studies can be due to medical students having limited time to attain social support from their friends, family, relatives and other groups and organizations due to the fact that their course is broad and hectic they spend most of their time in the libraries doing research, reading a lot of books, trying to memorize the different types of medicines and attending to patients in the wards. Their Social support is interfered by the tight schedule hence the levels of depression are bound to rise. This limits them from socializing with others hence high levels of depression.

This low social support obtained the medical students, lack of necessary social ability and the tendency of avoiding social situations in most times lowers the support of the depressed personnel hence increasing the levels of depression among medical students. For students to solve problems concerning their peers and family, adapt to their environment, and keep themselves psychologically well, social support is important.

Social Support and Peer Relations

The study results indicate that there is a relationship between peer relations and social. This is similar to previous research as that by De Matos et al., (2003) where he studied peer relations among adolescents indicating a positive relationship . This Students with good family relationships, communication have been seen to be more likely to have better peer relations than those who only have good relations with academic instructors or with their peer (Engels & Ter Bogt, 2001). Students with good social support from lectures have been seen to have good peer relations. However some previous studies have also shown that as family social support decreases, there are high peer relations, this can be accounted to the dependence and

inclination of individuals to their peers for support in terms of need where family isn't able to help (Rupika et al., 2017).

Conclusion

Researchers from our literature concluded that there is a correlation between social support and depression, peer relations and depression, which happens to be different from our current data collected in Makerere University from the school of health and Sciences. This current data no correlation or significant relation between the above variable which could be because of demographic differences, social environmental and personality of medical students in this particular environment. Our discussion further explains the possible reasons as to why our findings happen to differ from the previous ones.

The relationship between peer support and social support from current findings imply that the two examined variable have a correlative relationship. This data can be used in terms of helping medical students deal with depression and the overwhelming pressures of medical school. Healthy peer relations and social support programmes could be carried out and encouraged in the college premises to help these medical students deal with stress. These new findings can also be used to also further more research on depression in medical school not only in Makerere University, but also other universities in Uganda.

Recommendations

- More research to be carried out using a higher sample size to determine the relationship of peer relations and social support with depression
- Encouraging social activities such as school holidays and university activities to enable students interact with one another
- Family, peer and academic support should be encouraged among the students, their parents and thee peers.

- Peer group–support psychotherapy to be implemented at MakCHS a low cost as shown by Nakimuli-Mpungu et al.,(2011) .
- We recommend further studies to find out the effect of peer relations- social support – depression interaction on the different demographics of age, gender, other year cohorts and other various courses at MakCHS.

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Appendices

Appendix 1: Questionnaire

Section A: Social support

Dear Participant,

We are a group of undergraduate Community Psychology students in our final year carrying out research to identify the relationship of social support, peer relations and depression among second and third year Makerere University students. This questionnaire comprises of questions that will collect information on the above-mentioned research area. Participating in this study may not benefit you directly, but it will help us in our academic area of learning. You may find answering some of the questions upsetting, but we expect that this would not be different from the kinds of things you discuss with course mates or friends. We kindly request that you fill in this questionnaire with honesty and answer each of the questions provided. The information that you include in this questionnaire will not be used anywhere else and all information will be used in a confidential manner. We ask that therefore you don't include your name or telephone number or registration number anywhere in this questionnaire.

I voluntarily agree to take part in this study.

Thank you very much for agreeing to participate in this survey.

Program/Degree name.....

Age.....

Gender: M.....F.....

Year of study.....

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the	1	if you	Very Strongly Disagree
Circle the	2	if you	Strongly Disagree
Circle the	3	If you	Mildly Disagree
Circle the	4	if you are	Neutral
Circle the	5	if you	Mildly Agree
Circle the	6	If you	Strongly Agree
Circle the	7	If you	Very Strongly Agree

Very Strongly Disagree	Strongly Disagree	Mildly Agree	Neutral	Mildly	Strongly Agree	Very Strongly Agree
1	2	3	4	5	6	7

		1	2	3	4	5	6	7
1.	Is there a special person who is around when I am in need	1	2	3	4	5	6	7
2.	Is there a special person with Whom I can share joys and sorrows	1	2	3	4	5	6	7
3.	I get the emotional help & support I need from my Friends	1	2	3	4	5	6	7
4.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
5.	My friends really try to help me.	1	2	3	4	5	6	7
6.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
7.	I have friends with whom I can share my joys and sorrows	1	2	3	4	5	6	7
8.	There is a special person in my life who cares about my feelings?	1	2	3	4	5	6	7
9.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

Section B Peer Relations, Cayci Peer Relations

How you relate with your peers	Strongly disagree	disagree	agree	Strongly agree
1. I stick with my friend when my friend wants to do that other people don't want to do.	0	1	2	3
2. I feel free to talk to my friend almost about anything.	0	1	2	3
3. The most exciting things happen when am with my friend and nobody else is around.	0	1	2	3
4. I know whatever I tell my friend will be kept secret between us.	0	1	2	3
5. Whenever you see me, you can tell that my friend is around too	0	1	2	3
6. If my friend does something I don't like, I can always talk to him/her about it	0	1	2	3
7. I talk my friend about my hopes and plans for the future	0	1	2	3
8. When something happens to me, I can share the experience with my friend.	0	1	2	3
9. I speak up to defend my friend when other people say bad things about him/her.	0	1	2	3

Section C: Depression, PHQ9

Over the <u>last 2 weeks</u>, how often have you been bothered by any of the following problems? <i>(Use “✓” to indicate your answer)</i>	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

**Not difficult
at all**

**Somewhat
difficult**

**Very
difficult**

**Extremely
difficult**