

PREDISPOSING FACTORS TO MENTAL AND SUICIDAL BEHAVIORS AMONG STUDENTS OF KENYA MEDICAL TRAINING COLLEGE ZONE

ABSTRACT

AIMS; The objectives of the study were: to determine suicide and substance abuse rate among college students within KMTC colleges in zone six; to establish psychosocial factors that influence mental and suicide distress among KMTC students in the mentioned zone; and to analyze the relationship between the psychosocial factors and suicide & substance rates among KMTC students in zone six.

METHODS; The study employed descriptive and inferential research design and collected both quantitative and qualitative data. The data collection instruments were interviews among students, focus group discussion and questionnaires.

STUDY SAMPLE; The study target population was at zone six colleges with population sample size of 289. **DATA ANALYSIS;** The collected data was analyzed by use of the Statistical Package for Social Science (SPSS) version 26.0. Data was presented in form of tables and figures.

Institutional based cross-sectional study was conducted among students of Kenya Medical Training college, a structured self-administered questionnaire (SRQ 20) and suicidal ideation was assessed using semi structured yes/no question face to face interview. Stratified multistage sampling technique was used to select the study participants from respective campuses from a randomly selected zone. Ethical clearance was considered due to the sensitivity of the matter; clearance from respective authorities were obtained before actual data collection were done.

RESULTS; All of the respondents agreed to more than 50% on the factors that lead to suicide ideation. From the findings, 51.8% respondents agreed that the use Tobacco and its products (cigarette, chewing tobacco, cigars etc) affects their health, legal, social and cost financial problems weekly, 20.5 % once or twice 9.1% monthly 9.5% daily. Also 90.9% of the students agreed that Alcohol beverages (beer, wines, spirits etc) has caused health, legal, social and financial problems on a daily basis, 2.7% once or twice, 1.4% weekly and 15% never affected by alcohol.

CONCLUSIONS.RECOMMENDATIONS; The study recommends that the government should develop an authority to handle suicide and mental health related issues. The authority should be seriously funded like case of HIV-AIDS. The authority should be able to establish adequate policy for the involvement of the society. Its policies should result in re-establishment of positive social norms, as currently norms seem to be dwindling slowly by slowly. This change in norms is likely to change society to prevent causes and effects of suicide, making the society view the phenomena differently and positively. The proposal was approved by the college research committee.

Confidentiality of the participants was highly observed. In addition, the researcher-maintained anonymity of the respondents upon obtaining a written consent based on an

elaborate explanation of the study.

Keywords; Suicidal ideation; Mental Disorders and Distress

1. INTRODUCTION

“Worldwide about 450 million people suffer from mental or behavioral disorders, of that only small minority of them receive the basic treatment”. [1] “Mental illness can affect anyone, in any age, gender, culture, ethnicity, or social class. Regardless of who they are, people who have been diagnosed with a mental illness are all likely to experience stigma, and despite this fact, mental health has been hidden behind a curtain of stigma and discrimination for a very long period” [2]. “Studies showed that university and college students are vulnerable to mental health problems and many students experience their first psychiatric episode while at college, and 12 to 18% of students have a diagnosable mental illness” [3-5].

“Mental distress is a mental health problem that includes anxiety, depression, suicidal ideation and somatic symptoms such as headache, backache and sleeping problems” [6-7]. “Nowadays, mental distress is an important public health problem and it is a leading cause of mental disability worldwide, accounting for one-third of disability-adjusted life years” [8-9].

“Many studies reported that high prevalence of mental distress among college students compared to the general population in particular, is more common among medical students due to the environmental setting of their living condition which exposes them to other dynamics such as added stress with academic challenges, social interaction within the mixed cultural pool and separation from preexisting social support” [10, 11]. “Mental health problems affect society as a whole and no group is immune to mental disorders” [12]. “The university students face multiple stressors which may be as a result of being separated from their historical support systems and networks of care, and are as a result of the collegiate environment as academic load, constant pressure to succeed, competition with peers, financial burden, peer, teacher or parental pressure as well as concerns about the future” [13]. This can have negative effects on the student’s ability to study and academic outcomes [14-15]. A study among undergraduate students in Canada showed that 30% of students had a psychological distress, significantly higher than that of adults in the general population of Canada [16]. More than half of the students in the USA have mental distress [17]. 10.8% of students in Kenya experience mental distress [18].

“Suicide is a serious and growing public health problem, and it remains a serious cause of death among the youth in the world. , it is therefore, essential to increase our knowledge concerning the etiology of suicide among undergraduate students. Suicidal ideation among university students has unique circumstances due to the stress that occurs in university life, including changes in family and peer relationships” [20]. “The prevalence of suicide rate among young is the second leading cause of death in college students, making it significant” [21]. “Over 1,100 students die by suicide each year. It is estimated that each year, for individuals ages 18-29 years old, 2.9 million people have suicidal thoughts and an estimated 477, 000 attempt suicide” [22]. In college students, found out that 21.6% of their sample reported thoughts of suicide [23] and in another study, approximately 49% of college students reported a lifetime history of suicidal ideation or attempts [24]. The main aim of this study therefore was to establish predisposing factors that trigger mental and suicidal distress among Kenya Medical Training College Students in Kenya.

1.1.2. STATEMENT OF THE PROBLEM

According to World Health Organization estimates for the year 2020, approximately 1.53 million people particularly youth, die from suicide; and 10 to 20 times more people are to attempt suicide in the world. Those estimates represent on average one death every 20 seconds and one attempt every one to two seconds in the world. Although of low predictive value, the presence of psychopathology is probably the single most important predictor of suicide especially among youth. In addition, more transient factors that reflect an imminent risk of suicide crisis and need immediate intervention include unbearable mental pain and related experiences of depression and hopelessness among youth. Problems with help-seeking, social communication and self-disclosure also pose a suicide risk, as do personality traits of aggression and impulsivity in the lives of youth (26). This research sought to determine the predisposing factors that trigger mental and suicidal distress among students attending Kenya medical training college in order to institute interventional measures to counter.

There is a lot of literature about prevalence of mental and suicidal distress among youth and students in general but it appears that there is either little or no study conducted to establish the extent to which KMTc students have become vulnerably exposed to psychosocial challenges within the system of higher education. Besides, in Kenya there are no published studies on suicidal tendencies among college students especially among Kenya Medical Training students, though, there is some publication on the same subject done in the university settings. This study focused on predisposing factors that contribute negatively on decision making by students and thus may save lives of many students being trained within KMTc colleges.

1.1.3. PURPOSE OF THE STUDY

The purpose of the study was to determine the predisposing factors that trigger mental and behavioral distress among Kenya Medical Training College students in zone six of KMTc Colleges.

1.1.5 RESEARCH QUESTIONS

The research questions of the study were as follows;

1. What is the prevalence rate of substance abuse among college students in zone six of Kenya Medical Training Colleges?
2. What are the predisposing factors associated with mental and suicidal distress among students of zone six Kenya Medical Training Colleges?
3. What is the relationship between the predisposing factors & suicide rates and substance abuse among students of zone six Kenya Medical Training Colleges?

1.1.6. SIGNIFICANCE OF THE STUDY

It is expected that the findings of this study will be of significance to the Ministry of Health, KMTc colleges, KMTc lecturers, parents/guardians, college management and policy makers on psychosocial factors triggering mental and behavioral distress among students.

In the following manner, effective measures will be put in place on how to mitigate these problems facing college students

1. Stakeholders in Health including Ministry of Health would gain an insight on probable predisposing factors that trigger mental and suicidal distress among KMTc students in Kenya.
2. Parents and the entire community would gain an understanding of psychosocial factors that trigger mental and behavioral behaviors among KMTc students in Kenya.
3. College campuses of Management would give more attention to initiate psychological counseling programs in schools in order to respond to the needs of students facing psychosocial issues both within KMTc colleges and outside.

4. College lecturers would be equipped with information on the nature of psychological issues students are likely to be facing and thus advocate, through the college management, for programs suitable to the needs of students.
5. Policy makers may use this study to develop strategies and policies that would address the psychological factors that trigger mental and suicidal distress among students.
6. Knowledge and information based on psychosocial triggers of mental and suicidal distress among students would be enhanced, thus additional knowledge to educational psychology.
7. KMTCC being an Health institution is held accountable by Ministry of health that is in charge of Health overall could make use of the findings to address wastage of human resources in schools.

2.0 LITERATURE REVIEW

2.1 Substance abuses and Suicidal Behaviors among Youth According to Pison (26), in the United States, alcohol consumption remains a formidable contributing factor to suicidal behaviors among youth. It is observed that some youth begin taking alcohol even when they are in high school. Some of them start taking alcohol as a result of poor relationships with their parents or guardians. As a result of alcoholism among 15 youth, some of them become vulnerable to suicidal behaviors because of hopelessness. In addition, Pison (2006) points out that alcoholism has a decisive influence on the marital relationship being presented especially hopelessness and depression which leads to suicidal behaviors. (27) indicates youth who are at higher risk of suicidal behavior tend to be individuals with alcoholism. Some of these youth may have been brought up in families who brew alcohol and perhaps started taking in early age. Therefore, alcoholism tends to direct the youth to hopeless lives which may eventually lead them to suicidal behavior in the community. According to Jaycox et al (29) indicates that there is an elevated risk of death by suicide among persons with substance-use disorders as well as among heavy users of alcohol and other drugs. (29) on his case-control study also indicates that 23–46 % of suicides among youths can be attributed to alcohol in-take which is one of the factors that influences youth toward suicidal behavior. (30) argues that alcoholism is considered to be a risk factor for suicidal behaviors among youth. This is because the alcoholic youth cannot perform his or her duties properly, especially within the family and in the work place. As result, conflict can arise which may end up in the youth demonstrating suicidal behavior (30). argues that the spread of alcohol abuse is believed to have increased suicidal behaviors among youth since 1970. When we observe most African villages where alcoholism is the order of the day especially among youth, suicidal cases are often found among them. (31), argue that in some very small towns in Australia, there has been a wave of suicides caused by the influence of alcoholism among the youth. The key element of suicide prevention strategies is restriction [32]. In Sri Lanka, studies have shown that easy accessibility of pesticides in farming households is the main reason why it is the most common premise that people use for self-harm [33]. In agricultural nations such as Asia mostly use organophosphates for pesticides control resulting in easy availability of these chemicals to the community. These poisons have been a challenge in emergency department in Nepal. Nepal is one of the developing countries, therefore, agriculture is commonly practice and availability of pesticide poisons across the country posing a challenge issue as in developed countries like United States. Globally, it is estimated that about three million incidences of attempted self-poisoning reported yearly resulting a mortality rate of 6% - 30% in developing countries [34]. Agricultural practices are

commonly witnessed in San Quintin Valleys and Mexicali Valleys which are marketable in return demand for pesticides as a requirement for pest controlled goes hand in hand with agricultural activities therefore, availability of toxic chemicals which increase risk to farmers [35]. Attempted suicide following ingestion of organophosphate poisons among women in agrarian population unlike in United States, where the same self-attempted suicide are either as a result of intentional or accidental dermal exposure or ingestion by farm workers. OP pesticides are easily available following community members doing their farming their vicinities [36]. High gender bias (female) suicide attempt) reported incidences in Nepal are as result of cultural and social roles bestowed on them by the community showing inequity in the gender roles. Leading to domestic abuse early marriages ending in suicide attempted by women in the country [34].

2.1.3 Terminal Illness and Suicidal Behaviors among Youth

The influence of terminal illness among youth showing suicidal behavior is clearly demonstrated worldwide irrespective of religion, political affiliation or region. (37) argue that Hinduism forbids both suicide and active euthanasia especially when it comes to spiritual matters. The Hindu religion considers life as sacred and it should be respected no matter what kind of suffering the person is passing through. (38) assert that terminal illness such as HIV has also been associated with increased suicidal behavior especially among youth. The youth with AIDS have been shown to have a 20-36 times greater risk of suicidal behavior than men in the general population. Orden et al (37) assert that one illness with mainly high risk for suicide is HIV/AIDS, which has been shown to confer 18 approximately a seven-fold risk for suicide as compared to the common population especially among youth. Orden et al (37) also indicate that the vast majority of people who die by suicide (i.e., just about 95%) suffer from mental disorders and it is quite possible that the outstanding 5% suffer from subclinical variants of mental disorders or presentations of disorders not detected by methodologies such as psychological autopsies. In addition, he continues arguing that certain mental disorders confer higher threat for suicidal behavior than others. The studies indicate that the following disorders are connected with particularly elevated rates of suicide: Major depressive disorder, with suicide rates flanked by 2–6%; bipolar disorder, with estimates suggesting a 15-fold increased risk for suicide; borderline personality disorder, with suicide rates between 4–5%; anorexia nervosa, with a suicide rate 58 times that which is expected; schizophrenia, with suicide rates sandwiched between 1.8%-5.6%; substance abuse, with a suicide rate 5.7 times that of the general population; and conduct disorder in youth, with a six fold increase in risk for suicide compared to community controls. Finally, amyotrophic lateral sclerosis has an anticipated six-fold increased risk and multiple sclerosis a two-fold increased risk.

2. MATERIAL AND METHODS

2.1 LOCATION OF THE STUDY

3.2 Research Design

The study used mixed research design. This presented facts about the situation of the circumstances as it existed at the time of study (Creswell, 2013). Mixed method research was found to be appropriate for this study according to Creswell & Clark, (40,41, it involved the use of both qualitative and quantitative approaches in tandem so that the overall strength of the study is greater than either of the approaches. The design also portrayed the relationships and practices that existed, cultural beliefs and processes which were the continuing effects felt and even trends developed (42,43). The design enabled the researcher to probe and obtain an in-depth understanding of the subject under study; it described perceptions of different respondents within KMTC colleges.

3.3 Population

Kenya Medical training College students formed the target population. The college is made up of Sixty-nine (69) campuses across the country but concentration was on zone six colleges with an estimated population of 1043 on selected classes. A random sample of 15 students from each college of zone six participated in the study. The assumptions made were that each of the student was coming from a family with at least a parent or guardian in his or her life.

3.4 Target Population

The target population can be defined as the total number of items about which information is desired (Kothari, 2004). In this population the target population constituted 90 students (2nd-3rd year students) from zone six colleges of KMTC. The zone six constituted of Kapkatet KMTC, Molo KMTC, Bomet KMTC, Nakuru KMTC, Nyamira KMTC and Sigowet KMTC. The choice of zone six colleges was based on their locality and the fact that they could be easily reached from one center to another.

The study also targeted 2 teachers and 1 member of the management board from each college, preferably the principal of each college.

3.5 Sample Size

Chart 1 : Sample Size

Population Group	Population Size	Sample Size	Notes
2 nd and 3 rd students	1043	90	Only 90 of 289 students were to be included in the study based on practical limits in reaching the calculated number of respondents
Teachers	60	12	Only 12 teachers of 52 of different gender were included due to limitation of conducting the study in 6 colleges
Campus Management	60	12	Only 12 of 52 reached due to practical limits on reaching the calculated number of all board members
	1163	108	

The sample size for this study was 108 composed of 90 2nd and 3rd year students, 12 lectures and 12 campus management members.

3.6 Sampling Technique

Due to various differences in the characteristics of the study population, different sampling methods were used to select the study participants. The sampling techniques that were deployed included; 2nd and 3rd year students who were selected using simple random sampling. Teachers who were included in the study were also selected using the simple sampling while members of the campus management were sampled by use of purposive and snowballing sampling.

3.7. Sample size Determination

The KMTC student population was estimated at 12000. Each college had an average of 173 students and therefore for six colleges, it was estimated that the student population was 1043. It was also estimated that each college had an average of 10 lecturers and 10 Campus managers.

From the above estimated population, the sample size for each of the groups in study was determined using Yamane's formula (Yamane, 1967) presented below as;

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

n is the sample size; N is the population, e is the accepted sampling error represented by value 0.05.

$$\text{For students, } n = \frac{1043}{1 + 1043(0.05)^2} = 289$$

Each administrator and Dean of student were interviewed in every college in zone 6 meaning 6 administrators and 6 Dean of students.

3.8 Data collection instruments

The data collection instruments for this study included interviews and questionnaires. The researcher collected primary data from 2nd and 3rd year students, KMTC lecturers and campus management team.

3.9. Data collection procedures

The study was undertaken over a period of two months and was conducted using structured questionnaires, Focus Group Discussion (FGD) and guided interviews. Copies of structured questionnaire with both closed and Open- ended questions were administered by the researchers to students and teachers who filled structured questionnaires to gather relevant data, addressing the objectives of the study.

3.10. Data Analysis Plan

The statistical Package for Social Sciences (SPSS) version 26.0 was used to process and analyze the collected data. Questionnaire items were coded according to each variable of the study to ensure that margin of error was minimized and to ensure accuracy during analysis. Data was subsequently cleaned, edited, synthesized according to emerging issues, variables and objectives

All data was analyzed using descriptive and inferential statistics that involved calculating frequencies, means, standard deviation and percentages. As stated by (Neuman, 2000), analysis include working out certain measures and finding the various interactions that exist from the obtained information. Any pattern of interaction was used during interpretation of data. This enabled the researchers to describe the distribution of scores of measurements using a few indices and statistics. Means, frequencies, standard deviation and percentages will be use of to analyze various variables to meet the objectives of the study. Analyzed data was then presented using tables, pie charts and graphs. Qualitative data will be used in drawing conclusions and recommendations.

4. RESULTS AND DISCUSSION

4.2 Response Rate

According to the study simple size 289 questionnaires were given out to the respondents and 220 were fully filled and successfully returned. This represents a response rate of 76% that is considered adequate to be used for data analysis. Babbie (2014) asserted that return rates of 50% are acceptable, 60% is good and 70% is very good to analyze and publish research findings. The study response rate was thus considered very good to analyze and publish research findings.

Substance Abuse Prevalence Rate Among College Students Within Kenya Medical Training College Zone Six Colleges

The research sought to know whether the respondents ever known any student whose mental and psychological condition has affected him/her to the level of dropping out of college. The findings are represented in Table 1

Table 1: Knowledge of any student whose mental and psychological condition has affected him/her to the level of dropping out of college.

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	177	80.5	80.5	80.5
No	43	19.5	19.5	100.0
Total	220	100.0	100.0	

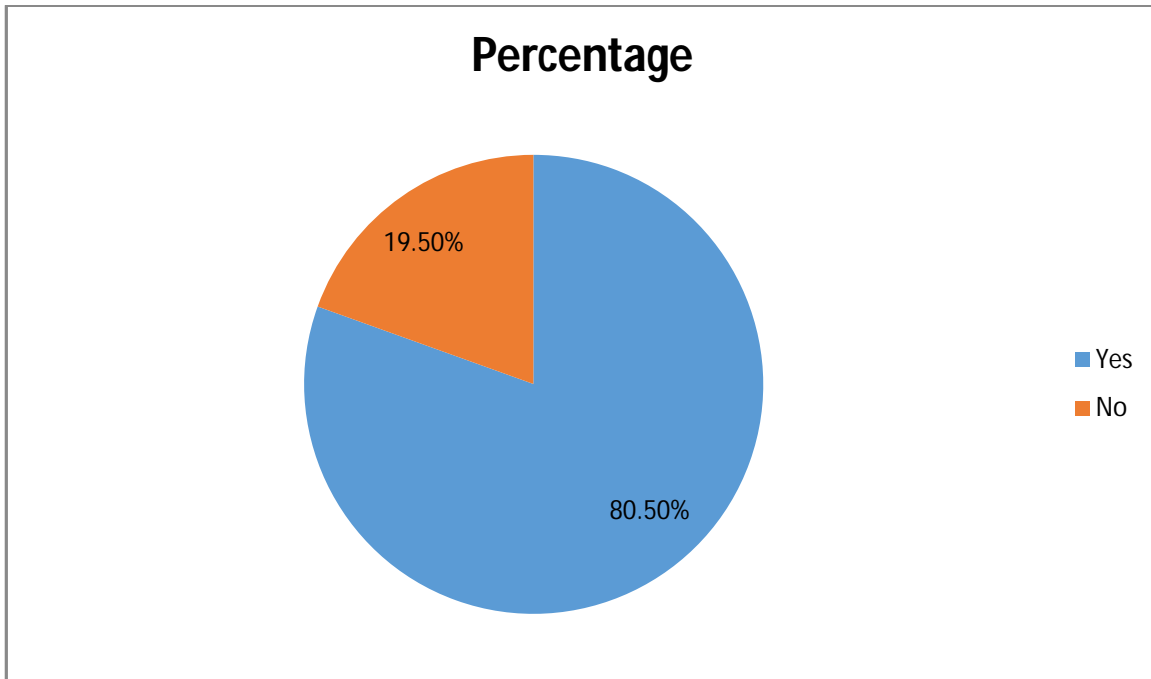


Figure 1: Knowledge of any student whose mental and psychological condition has affected him/her to the level of dropping out of college.

From the study findings majority of the students 177(80.5%) agreed that they know students whose mental and psychological condition had affected him/her to the level of dropping out of college. Those who had never seen any student whose mental and psychological condition had affected him/her to the level of dropping out of college were 43(19.5%). The findings imply that majority of the students had mental and psychological condition

The study went further to ask the respondents who knew any student whose mental and psychological condition has affected him/her to the level of dropping out of college to indicate the extent to which they disagree or agree on statement concerning mental and psychological. NB: 5= strongly agree, 4=agree, 3=neutral, 2=disagree, and 1= strongly disagree. The findings were presented in Table 2.

Table 2: Effects of Psychological Condition

Statement		1	2	3	4	5	Total
A student with psychological condition has no one to talk of him/her	N	39	24	34	112	11	220
	%	17.7	10.9	15.5	50.9	5	100
He/she has no one to reach out to for help	N	40	20	18	89	53	220
	%	18.2	9.1	8.2	40.5	24.1	100
He/ She experience stigmatization from in and out of college	N	0	17	26	177	0	220
	%	0	7.7	11.8	80.5	0	100

Yes	89	59.5
No	131	40.5
Total	220	100.0

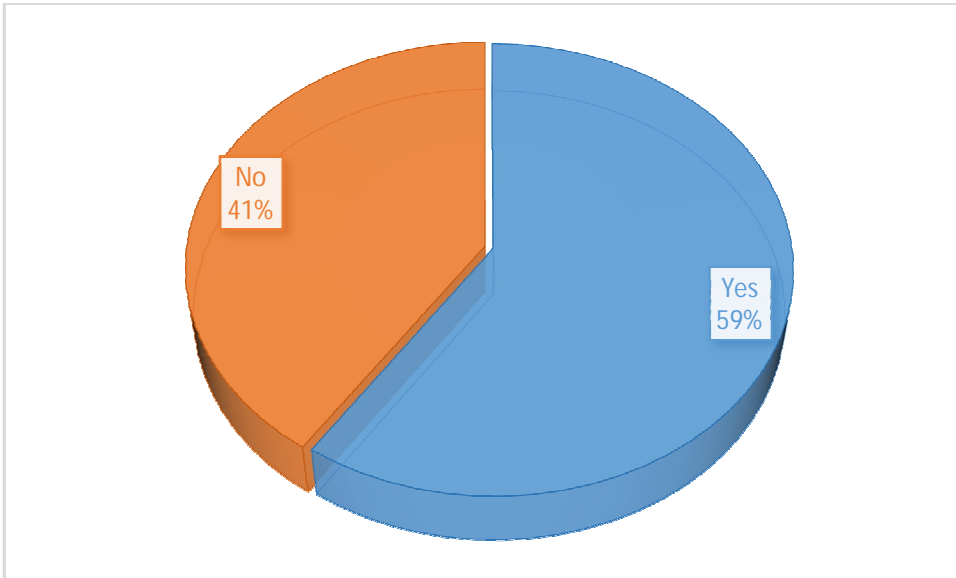


Figure 3 Student awareness on students affected by psychological conditions

The study sought to know whether respondents knew of any of their colleague who dropped out of college or attempted suicide as a result of not getting support from Parents, college, relatives, government, church. Local administration, counselor. The result showed that majority of the respondents 61.4% knew their colleagues who dropped out of school because of not getting support against 38.6% who weren't aware.

Table 4: Whether respondents knew of any of their colleague who dropped out of college or attempted suicide as a result of not getting support

	Frequency	Percent
Yes	135	61.4
No	85	38.6
Total	220	100.0

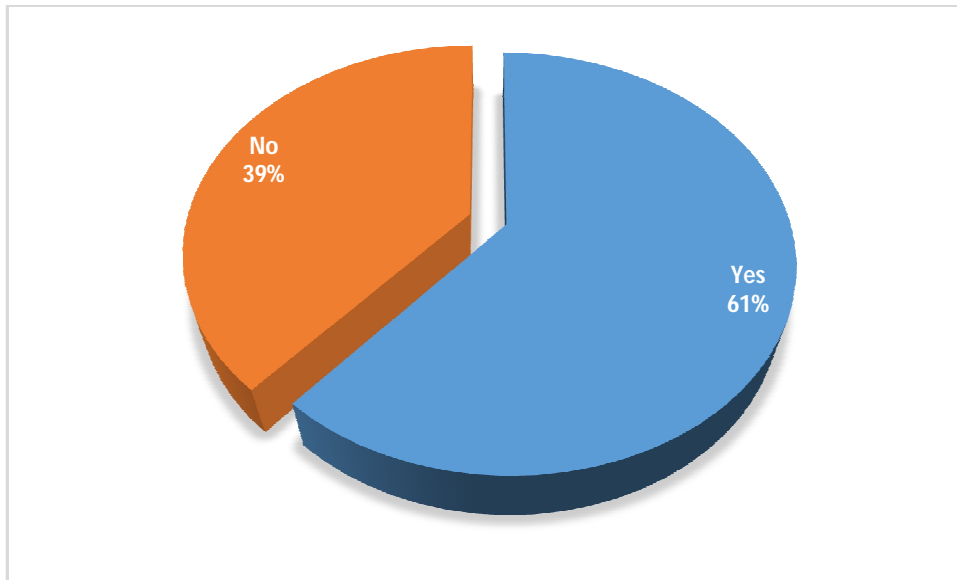


Figure 4: Whether respondents knew of any of their colleague who dropped out of college or attempted suicide as a result of not getting support

Non-Medical Substances Used

The study sought to establish the non-medical substances the student used. The respondents were asked to indicate the non-Medical substance they have been using in their life. The findings are presented in the Table 5.

Table 5 Indicate the non-Medical substance they have been using in their life

Statement		YES	NO	Total
Tobacco and its products (cigarette, chewing tobacco, cigars etc)	N	126	94	220
	%	57.3	42.7	100
Alcohol beverages(beer, wines, spirits etc)	N	160	60	220
	%	73	27	100
Cannabis (Marijuana, po., grass, hash, ashish etc)	N	153	67	220
	%	69.5	30.5	100
Cocaine (coke, crack etc)	N	100	120	220
	%	45	55	100
Amphetamine type stimulants (speed, diet pills, ecstasy)	N	80	140	220
	%	37	63	100
Inhalants (glue, nitrous, paint thinner,	N	59	161	220

petrol etc)	%	26.8	73.2	100
Sedatives or sleeping Pills (valium. Ser,epax, Rohpnol)	N	57	163	220
	%	25.9	74.1	100
Hallucigens (mushrooms LSD, acid, Special K etc)	N	37	183	220
	%	16.8	83.2	100
Opiods (heroin, morphine, methadone, codeine)	N	45	175	220
	%	20.5	79.5	100

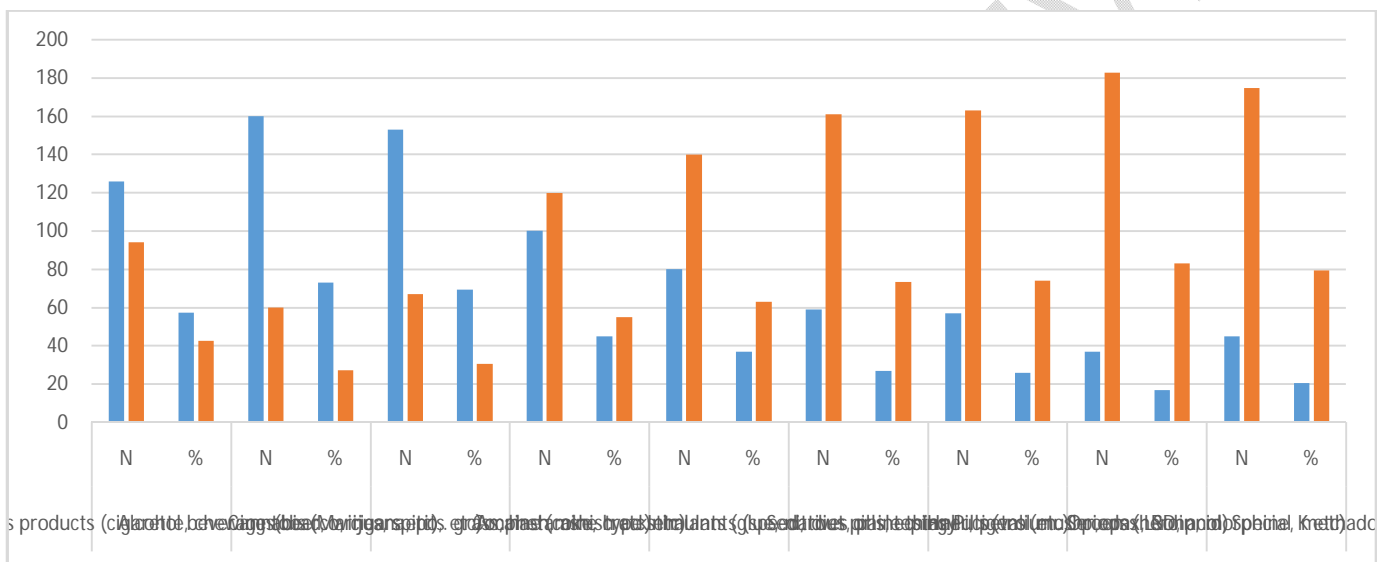


Figure 5: Indicate the non-medical substance they have been using in their life

The findings established that 57.3% of the respondents indicated that they have using tobacco and its products (cigarette, chewing tobacco, cigars etc) while 42.7% they never used tobacco and its products (cigarette, chewing tobacco, cigars etc). 73% of the respondents indicated that they have been using alcohol beverages (beer, wines, spirits etc) while 27% have never used alcohol beverages. Those who have used cannabis (Marijuana, po., grass, hash, ashish etc) were 69.5% against 30.5%. the cocaine users were 45% against 55% while those were using amphetamine type stimulants (speed, diet pills, ecstasy) were 37% against 63%. 26.8% indicated they use inhalants (glue, nitrous, paint thinner, petrol etc) against 73.2%. those were using sedatives or sleeping pills (valium. Serepax, Rohpnol) were 16.8% against 83.2% while those using opioids (heroin, morphine, methadone, codeine) wetre 20.5% against 79.5%. From the findings the most common substance used by student is alcohol, cannabis, cocaine and tobacco.

4.6 How often student use Drugs and substance

The respondents were asked to indicate how they used the substance they mentioned above in the last 3 months. The findings were presented in the table below.

Table 6: How often students used the substances for non-medical use

Statement	N/%	Never	Once or twice	Weekly	Monthly	Daily or Almost Daily	Total
Tobacco and its products (cigarette, chewing tobacco, cigars etc)	N	153	26	23	15	3	220
	%	69.5	11.8	10.5	6.8	1.4	100
Alcohol beverages(beer, wines, spirits etc)	N	160	13	36	8	3	220
	%	72.7	5.9	16.4	3.6	1.4	100
Cannabis (Marijuana, pot. grass, Hash, ashish etc)	N	159	47	5	9	0	220
	%	72.3	21.4	2.3	4.1	0	100
Cocaine (coke, crack etc)	N	169	12	36	1	2	220
	%	76.8	5.5	16.4	0.5	0.5	100
Amphetamine type stimulants(speed, diet pills, ecstasy)	N	161	0	48	4	7	220
	%	73.2	0	21.8	1.8	3.2	100
Inhalants (glue, nitrous, paint thinner, petrol etc)	N	138	42	2	29	9	220
	%	62.7	19.1	0.9	13.2	4.1	100
Sedatives or sleeping Pills (valium. Serepax, Rohpnol)	N	132	18	34	13	23	220
	%	60	8.2	15.5	5.9	10.5	100
Hallucigens (mushrooms, LSD, acid, Special K etc)	N	104	54	26	16	20	220
	%	47.3	24.5	11.8	7.3	9.1	100
Opioids (heroin, morphine, methadone, codeine)	N	145	38	14	12	11	220
	%	65.9	17.3	6.4	5.5	5	100

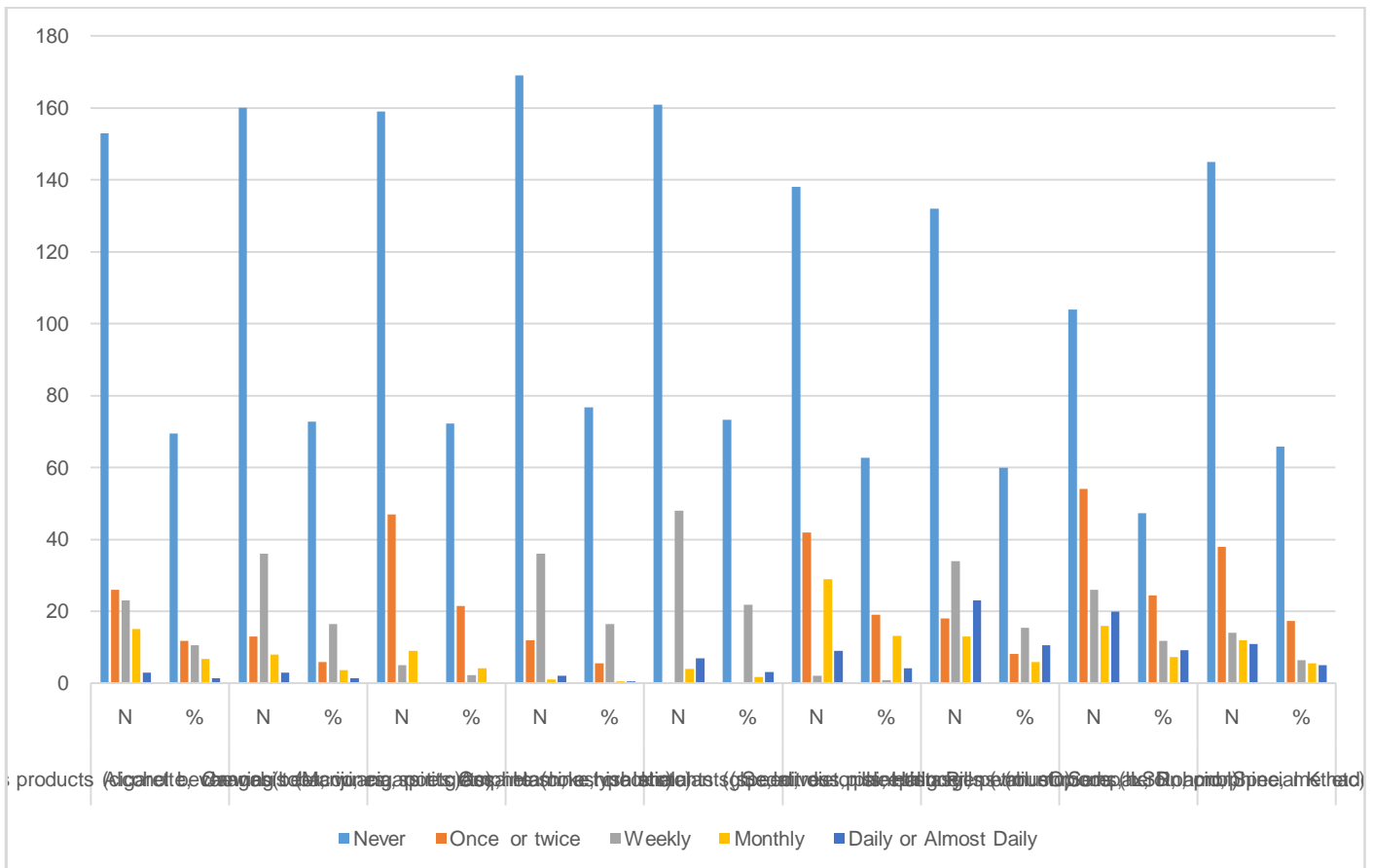


Figure 6: How often students used the substances for non-medical use

From the findings, 55% respondents agreed that they use tobacco and its products (cigarette, chewing tobacco, cigars etc) weekly, 11.8% once or twice 10% monthly 6% daily while 18.2% they have never used tobacco and its products (cigarette, chewing tobacco, cigars etc). 45.5% of the students use alcohol beverages (beer, wines, spirits etc) weekly 18.2% once or twice, 14% daily, 9.1% monthly and 14% have never used alcohol. Further the study showed that 36.4% of the students use Cocaine weekly, 14% once or twice, 9.1% each they use cocaine daily and monthly. 41% of the students use Cannabis (Marijuana, pot. grass, Hash, ashish etc) weekly, 21% they use it once or twice, 14% monthly, 6% daily while 18% they don't use it they have never use Cannabis (Marijuana, pot. grass, Hash, ashish etc).

From the findings, 73.2% respondents they have never used amphetamine type stimulants (speed, diet pills, ecstasy), 21.8% they use it weekly, 3.2% daily and 1.8% use it monthly. 62.7% they have never used inhalants (glue, nitrous, paint thinner, petrol etc), 19.1% they use it once or twice, 13.2% use it monthly, 4.1% daily and 0.9% use it weekly. 60% have never used Sedatives or sleeping pills (valium, Serepax, Rohpnol), 15.5% they use it weekly, 10.5% daily, 8.2% they have used it once or twice and 5.9% use it monthly.

Further, the results indicated that 47.3% respondents had never used hallucigens (mushrooms, LSD, acid, Special K etc), 24.5% they have used it once or twice, 11.8% use it weekly, 9.1% use it daily and 7.3% used it monthly. And last but not least 65.9% of the respondents have never used Opioids (heroin, morphine, methadone, codeine), 17.3% have used it once or twice, 6.4% used it weekly, 5.5% used it monthly and 5% used it daily.

4.7 How often the substances led to health, legal, social and financial problems

The study sought to know how often the substances led to health, legal, social and financial problems in the past 3 months. The findings were presented in Table 7 below.

UNDER PEER REVIEW

Table 7: How often the substances led to health, legal, social and financial problems

Statement	N/%	Never	Once or twice	Weekly	Monthly	Daily or Almost Daily	Total
Tobacco and its products (cigarette, chewing tobacco, cigars etc)	N	19	45	114	20	22	220
	%	8.6	20.5	51.8	9.1	9.5	100
Alcohol beverages (beer, wines, spirits etc)	N	33	6	3	0	178	220
	%	15	2.7	1.4	0	80.9	100
Cannabis (Marijuana, pot. grass, Hash, ashish etc)	N	29	34	41	15	101	220
	%	13.2	15.5	18.6	6.8	45.9	100
Cocaine(coke, crack etc)	N	60	35	54	34	37	220
	%	27	16	25	15	17	100
Amphetamine type stimulants (speed, diet pills, ecstasy)	N	154	20	18	14	14	220
	%	70	9.1	8.2	6.4	6.4	100
Inhalants (glue, nitrous, paint thinner, petrol etc)	N	136	31	40	9	4	220
	%	61.8	14.1	18.2	4.1	1.8	100
Sedatives or sleeping Pills (valium, Serepax, Rohpnl)	N	132	2	64	10	10	220
	%	60	0.9	29.1	4.5	4.5	100
Hallucigens (mushrooms LSD, acid, Special K etc)	N	162	16	16	16	10	220
	%	73.6	7.3	7.3	7.3	4.5	100
Opioids (heroin, morphine, methadone, codeine)	N	139	23	46	2	10	220
	%	63.2	10.5	20.9	0.9	4.5	10

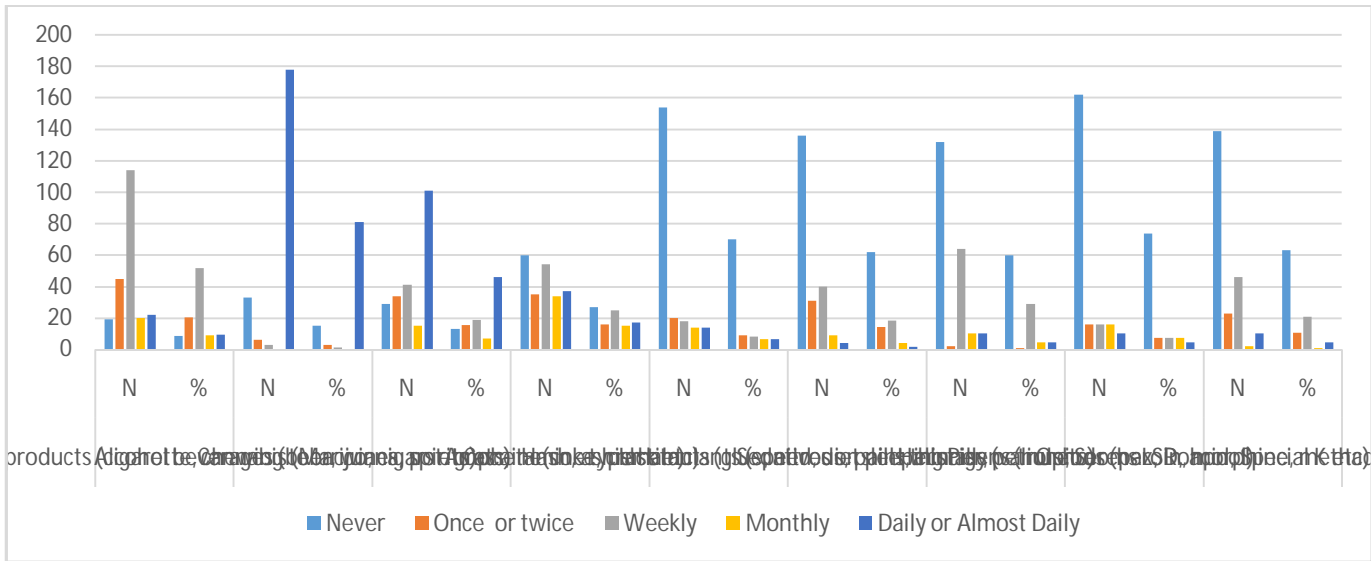


Figure 7: How often the substances led to health, legal, social and financial problems

From the findings, 51.8% respondents agreed they used Tobacco and its products (cigarette, chewing tobacco, cigars etc) which affected their health, legal, social and cost financial problems weekly, 20.5 % once or twice 9.1% monthly 9.5% daily while 18.6% it has never led to health, legal, social and financial problems. 80.9% of the students agreed that Alcohol beverages (beer, wines, spirits etc) has caused health, legal, social and financial problems on a daily basis, 2.7% once or twice, 1.4 weekly and 15% never affected by alcohol. Further the study showed that cocaine affected the students' health, legal, social and cause financial problems by 17% daily, 25% weekly, 15% monthly and 16% once or twice. While 27% of the student weren't affected. 45.9% of the students used cannabis (Marijuana, pot. grass, Hash, ashish etc) it affected their health, legal, social and can cause financial problems daily, 18.6% weekly, 6.8% monthly, 15.5% once or twice while 13.2% they don't use it they have never affected by Cannabis (Marijuana, pot. grass, Hash, ashish etc).

From the findings, 70% respondents they have never affected by Amphetamine type stimulants (speed, diet pills, ecstasy), 8.2 % indicated that the substances led to health, legal, social and financial problems for users weekly, 6.4% daily and 6.4% used it monthly.61.8% they were never affected by Inhalants (glue, nitrous, paint thinner, petrol etc), 18.2% they used it and it led to health, legal, social and financial problems weekly, 14.1% affected them once or twice, 4.1% affected monthly and 1.8% affected daily. 60% of the students they didn't use Sedatives or sleeping Pills (valium. Serepax, Rohpnol) and its never led to health, legal, social and financial problems 29.1% they use it weekly and it led to health, legal, social and financial problems, 4.5% daily, and monthly. Additionally, the results indicated that 73.6% respondents had never used Hallucigens (mushrooms, LSD, acid, Special K etc) and had never affected them health wise, legal, social and cause financial problems. 7.3% they had used it and it had led to health, legal, social and financial problems once or twice, weekly and even daily. last but not least 63.2% of the respondents indicated that Opioids (heroin, morphine, methadone, codeine) had never led to health, legal, social and financial problems, 20.9% indicated it had led to health, legal, social and financial problems it weekly, 10.5% once or twice and 4.5% daily.

Further, the study was interested in knowing during the past 3 months, how often had students failed to do what was normally expected of them because of the use of substances. The findings were presented in Table 8

Table . 8: During the past 3 months, how often had students failed to do what was normally expected of them because of the use of substances

Statement	N/%	Never	Once or twice	Weekly	Monthly	Daily or Almost Daily	Total
Inhalants (glue, nitrous, paint thinner, petrol etc)	N	122	9	53	25	11	220
	%	55.5	4.1	24.1	11.4	5.0	100
Tobacco and its products (cigarette, chewing tobacco, cigars etc)	N	0	177	29	2	12	220
	%	0	80.5	13.2	0.9	5.5	100
Alcohol beverages (beer, wines, spirits etc)	N	30	40	50	20	80	220
	%	14	18	23	9	36	100
Cannabis (Marijuana, pot, grass, Hash, ashish etc)	N	51	42	120	0	7	220
	%	23.2	19.1	55	0	3.2	100
Cocaine (coke, crack etc)	N	90	28	47	31	24	220
	%	40.9	12.7	21.4	14.1	10.9	100
Amphetamine type stimulants(speed, diet pills, ecstasy)	N	138	60	14	8	0	220
	%	62.7	27.3	6.4	3.6	0	100
Sedatives or sleeping Pills (valium Serepax, Rohpnl)	N	130	6	33	51	0	220
	%	59.1	2.7	15	23.2	0	100
Hallucigens (mushrooms, LSD, acid, Special K etc)	N	120	10	30	50	10	220
	%	54.5	4.5	15	22.2	4.5	100
Opioids (heroin, morphine, methadone, codeine)	N	140	20	25	31	4	220
	%	63.6	9.1	11.4	14.1	1.8	100

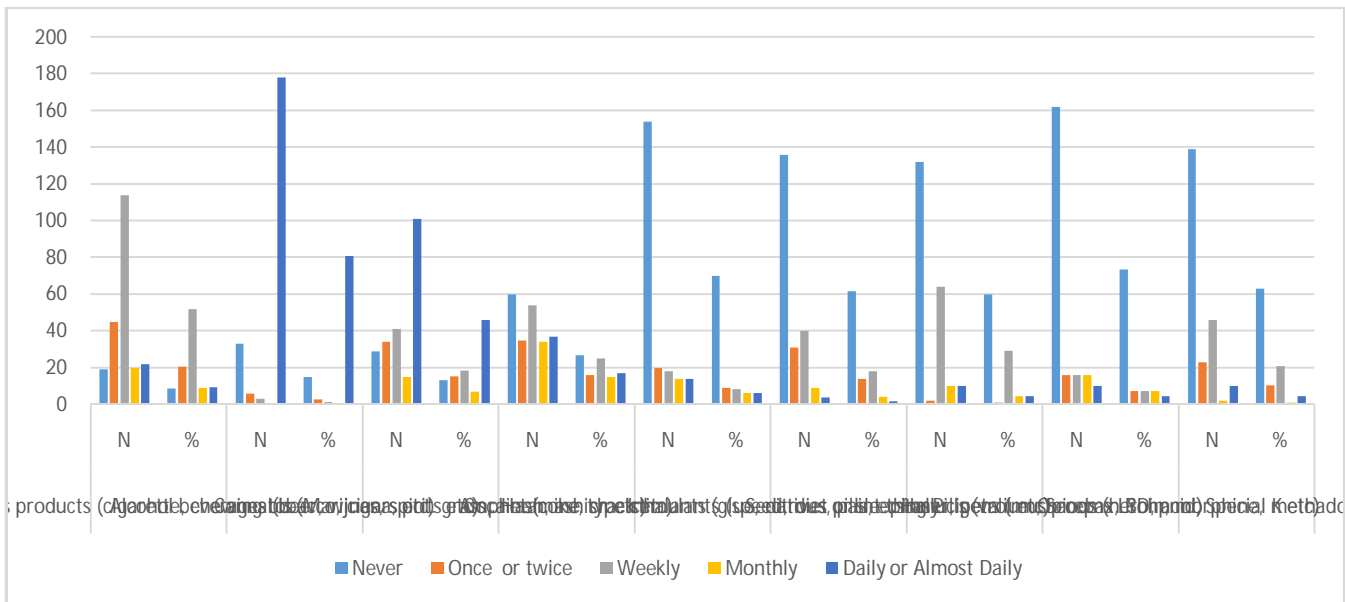


Figure 8: During the past 3 months, how often had students failed to do what was normally expected of them because of the use of substances

According to the findings, 80.5% respondents agreed that once or twice they had failed to do what was normally expected of them because of the use of tobacco and its products (cigarette, chewing tobacco, cigars etc), 13.2% they failed weekly, 0.9% monthly and 6% daily. Alcohol had been the sources of student failing to do what was normally expected of them this was rated as follows (Daily 36%, weekly 23%, once or twice 18%, monthly 9% and 14% indicated alcohol had never made them failed to do what was normally expected of them. Further the study showed that 55% of the students failed to do what was normally expected of them because of the use of Cannabis weekly, 19.1% once or twice, and 3.2 % daily. 40.9% of the students had never failed to do what was normally expected of them because of the use of Cocaine (coke, crack etc), while some failed to do what was normally expected of them (12.7% once or twice, 21.4 Weekly, 14.1% monthly and 10.9% daily). From the findings, 62.7 % respondents they had never failed to do what was normally expected of them because of the use Amphetamine type stimulants (speed, diet pills, ecstasy), 27.3% they had failed once or twice, 6.4% weekly, and 3.6% monthly. 55.5 % they had never failed to do what was normally expected of them because of Inhalants (glue, nitrous, paint thinner, petrol etc), 24% they failed weekly, 11.4% they had failed monthly, and 5% daily. 59.1% had never failed to do what was normally expected of them because of the Sedatives or sleeping Pills (valium. Serepax, Rohpnol), 15% they have failed weekly, 23.2 % failed monthly and 2.7 failed once or twice. Further, the results indicated that 54.5% respondents had never failed to do what was normally expected of them because of the Hallucinogens (mushrooms, LSD, acid, Special K etc), 22.5% they had failed Monthly, 15% failed weekly and 4.5 daily. And last but not least 63.6% of the respondents had never failed to do what was normally expected of them because of the Opioids (heroin, morphine, methadone, codeine), 9.1% had failed once or twice, 11.4% failed weekly, 14.1% failed monthly and 1.8% failed daily.

The study sought to determine whether the friend, relative or colleague ever expressed concern over the use of any specific substance among students. The findings are presented in the Table 9

Table 9: To determine whether the friend, relative or colleague ever expressed concern over the use of any specific substance among students

Statement

	N/%	No Never	Yes, in the past 3 months	Yes but Not in the past 3 months	Total
Tobacco and its products (cigarette, chewing tobacco, cigars etc)	N	162	27	31	220
	%	73.6	12.3	14.1	100
Alcohol beverages (beer, wines, spirits etc)	N	144	71	5	220
	%	65.5	32.3	9.3	100
Cannabis (Marijuana, pot grass, Hash, ashish etc)	N	153	57	10	220
	%	69.5	25.9	4.5	100
Cocaine (coke, crack etc)	N	194	14	12	220
	%	88.2	6.4	5.5	100
Amphetamine type stimulants (speed, diet pills, ecstasy)	N	190	14	16	220
	%	86.4	6.4	7.3	100
Inhalants (glue, nitrous, paint thinner, petrol etc)	N	180	18	21	220
	%	81.8	8.2	9.5	220
Sedatives or sleeping Pills (valium Serepax, Rohpnol)	N	150	25	45	220
	%	68.2	11	20	100
Hallucigens (mushrooms LSD, acid, Special K etc)	N	204	4	12	220
	%	92.7	1,8	5.5	100
Opiods (heroin, morphine, methadone, codeine)	N	203	6	11	220
	%	92.3	2.7	5.0	100

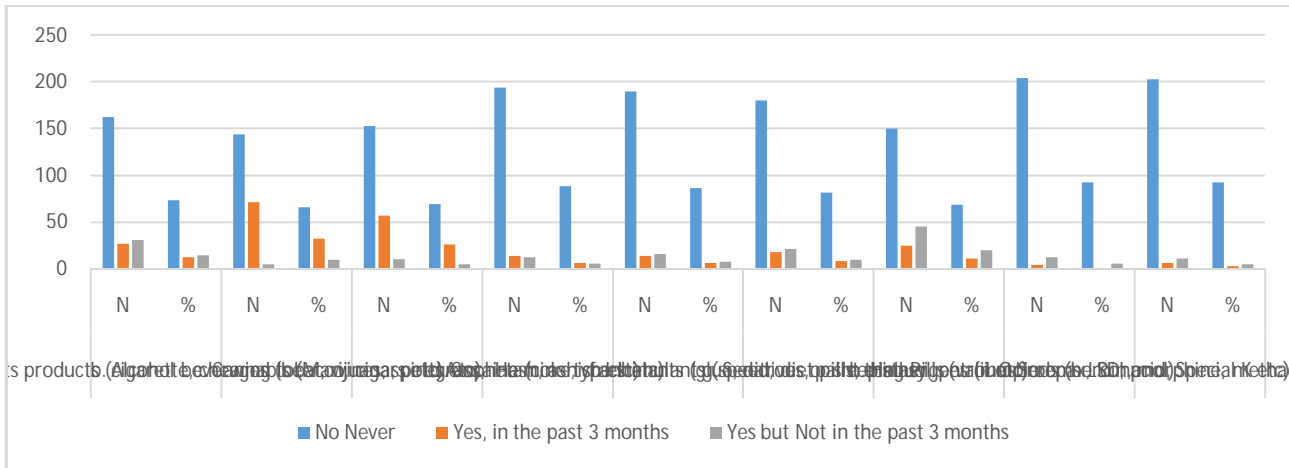


Figure 9: To determine whether the friend, relative or colleague ever expressed concern over the use of any specific substance among students

From the findings, 73.6% respondents agreed that their friends, relatives or colleagues had never expressed concern over the use of Tobacco and its products (cigarette, chewing tobacco, cigars etc), only 12.3% of the friends, relatives or colleague had expressed concern in last 3 months and 14.1% expressed concern there before. 65.5% of the students indicated their friends, relatives or colleagues had never expressed concern over the use of Alcohol beverages (beer, wines, spirits etc), few had shown concern (32.3%) in the last 3 months and 9.3% had shown concern there before. 69.5% of the students indicated that their friends, relatives, or colleagues had never expressed concern over the use of Cannabis (Marijuana, pot. grass, Hash, ashish etc), only few 25.9% they had shown concern. From the findings, 86.4% respondents indicated that their friends, relatives or colleagues had never expressed concern over the use of Amphetamine type stimulants (speed, diet pills, ecstasy), only 6.4% and 7.3% had shown concern. Those who are using Inhalants (glue, nitrous, paint thinner, petrol etc), 81% indicated that their friends, relatives or colleagues had never expressed concern over the use of Sedatives or sleeping Pills (valium. Serepax, Rohpnl), only 8.2% and 9.5% were concern. Further, the results indicated that 92.7% respondents had never seen their friends, relatives or colleagues expressing concern over the usage of Hallucigens (mushrooms, LSD, acid, Special K etc), only 7.3 % had expressed concern. Lastly 92.3% % of the respondents had never seen their friends, relatives or colleagues expressing concern over the use Opioids (heroin, morphine, methadone, codeine), only 7.7% had expressed concern.

The study sought to determine whether the students had ever tried and failed to control, reduce or stop using any specific substances. The findings are as shown in Table 10

Table 10: Have you ever tried and failed to control, reduce or stop using any specific substances

Statement	N/%	No Never	Yes, in the past 3 months	Yes but Not in the past 3 months	Total
Tobacco and its products (cigarette, chewing tobacco,cigarsetc)	N	69	120	31	220
	%	31	55	14	100
Alcohol beverages (beer, wines, spirits etc)	N	50	100	50	220
	%	27.5	45	27.5	100
Cannabis (Marijuana, pot. grass, Hash, ashish etc)	N	100	57	63	220
	%	45	25.9	31.1	100
Cocaine (coke, crack etc)	N	194	14	12	220
	%	88.2	6.4	5.5	100
Amphetamine type stimulants (speed, diet pills, ecstasy)	N	162	27	31	220
	%	73.6	12.3	14.1	100
(glue, nitrous, paint thinner, petrol etc)	N	144	71	5	220
	%	65.5	32.3	9.3	100
g. Sedatives or sleeping Pills (valium Serepax, Rohpnol)	N	153	57	10	220
	%	69.5	25.9	4.5	100
Hallucigen (mushrooms, LSD, acid, Special etc)	N	194	14	12	220
	%	88.2	6.4	5.5	100
Opioids (heroin, morphine, methadone, codeine)	N	180	20	20	220
	%	82	9	9	100

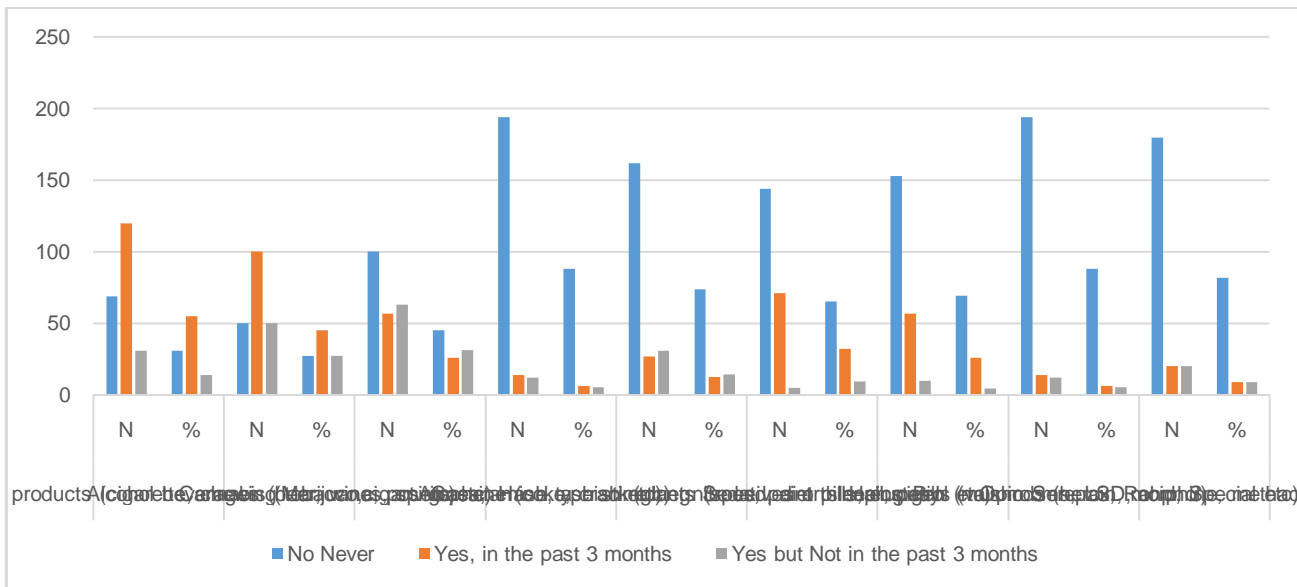


Figure 10: Have you ever tried and failed to control, reduce or stop using any specific substances

From the findings, 55%, 14% respondents agreed that they had tried to control reduce and stop using Tobacco and its products (cigarette, chewing tobacco, cigars etc) but the not succeeded. 31% they had never tried to control or stop using it. 45%, of the students had tried to control and stop alcohol in the last 3 months but had not to managed, other 27.5% of the students had tried to control and stop alcohol but not succeeded while other 27.5%of the respondent they had never tried to control to use alcohol. Further the study showed that 45% of the students never tried to control to use Cannabis (Marijuana, pot. grass, Hash, ashish etc), while 31.1% had tried to reduce it there before and other 27.5% have tried to control in recent period of last 3 months. For those using cocaine 88.2% of them they had never tried to control or stop using the substance.

From the findings, 73.6% respondents had never tried to control the use of Amphetamine type stimulants (speed, diet pills, ecstasy), 12.3% had tried in the last 3 months to control and stopped using the substance and 14.1% tried to reduce and stopped using it. The majority of respondents at 60% had never tried to control the use of Sedatives or sleeping Pills (valium, Serepax, Rohpnl), 25.9% of the respondents had tried in the last 3 months and 4.5% had also tried before. Further, the results indicated that 88.2% respondents had never tried to control or reduce the use of Hallucigens (mushrooms, LSD, acid, Special K etc), only 6.4% and 5.5 had tried to control and stopped to use. And finally 82% of the respondents had never tried to control or stopped using Opioids (heroin, morphine, methadone, codeine), only 18% had tried to control and stop using it in the last 3 months and there before.

The study sought to know who students resorted to for support in case of psychological challenges that might affect their education or studies? The result was presented in the Table 11.

Table 11: Who students resorted to for support in case of psychological challenges that might affect their education or studies

Statement	N/%	1	2	3	4	5	Total
Parents/Guardian	N	14	20	49	100	37	220
	%	6.4	9.1	23.3	45.5	16.8	100
Pastor/Church	N	7	141	38	28	6	220
	%	2.7	64.1	17.3	12.7	2.7	100
Local administration	N	192	0	0	28	0	220
	%	87.3	0	0	12.7	0	100
Counselor	N	0	25	0	172	23	220
	%	0	11.4	0	78.2	10.5	100
College administration	N	156	16	4	44	0	220
	%	70.9	7.3	1.8	20	0	100

5= strongly agree, 4=agree, 3=neutral, 2=disagree, and 1= strongly disagree

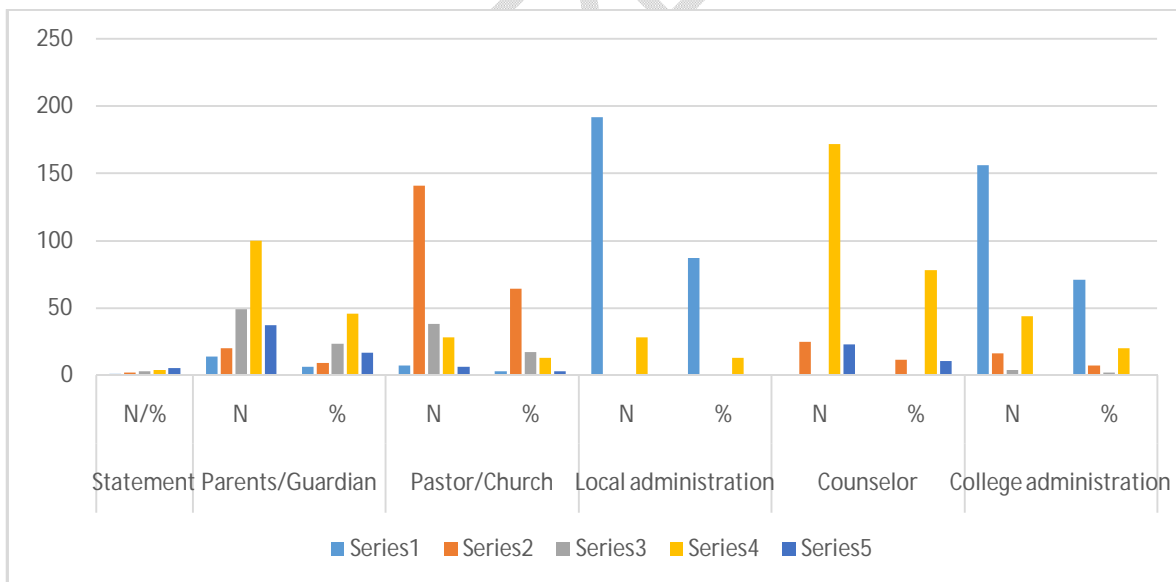


Figure. 11: Who students resorted to for support in case of psychological challenges that might affect their education or studies

The study findings showed that 45.5%, and 16.8% strongly agreed and agreed, sought support from parents in case of psychological challenge that affected their education or studies, 78.2%,10.5%

resort support from the Counselor. However, they strongly disagree and disagreed resorting support from church (64.1%, 2.7), Local administration (87.3%) and college administration (70.9%, 7.3%). This implies that students resort the support from parents and counselor.

Who is responsible for your psychological challenges when in college?

The study sought to determine who was responsible for the psychological challenges for students when in college. The findings are as shown in Table 12.

Table 12: To determine who was responsible for the psychological challenges for students when in college

	Frequency	Percent	Valid Percent	Cumulative Percent
Parents	18	8.2	2.7	2.7
College Counselor	148	67.3	67.3	70.0
Local administration	6	2.7	8.2	78.2
College administration	48	21.8	21.8	100.0
Total	220	100.0	100.0	

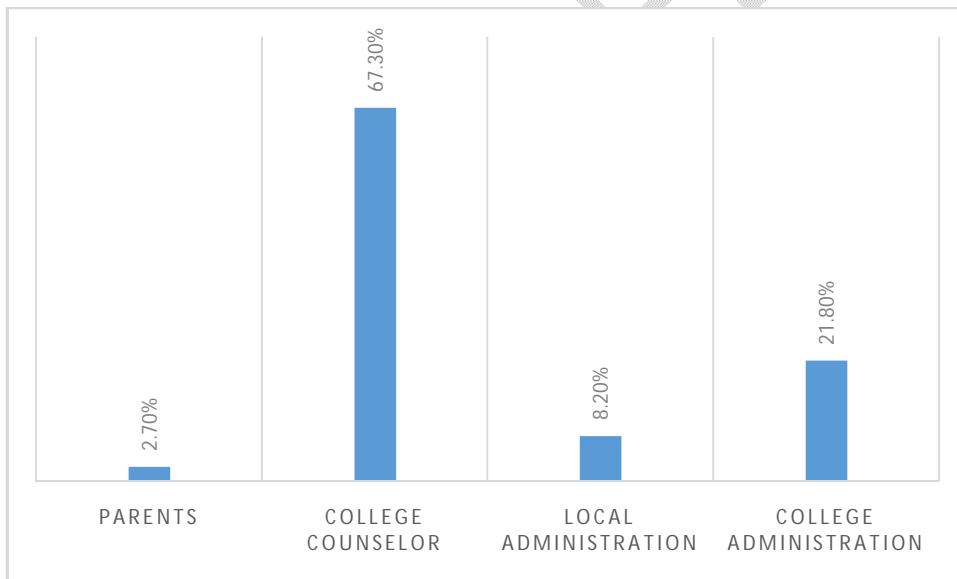


Figure 12: To determine who was responsible for the psychological challenges for students when in college

From the study findings the most responsible person for students' psychological challenges when in college, was the college counselor at 67.3%, college administration 21.8%, 8.2 parents and local admiration at 2.7%

The study sought to know what people thought about mental conditions and behavioral distress among college students. The findings are presented in the Table 13.

UNDER PEER REVIEW

Table 13: To know what people thought about mental conditions and behavioral distress among college students

Statement	N/%	1	2	3	4	5	Total
Seen as a curse originating from somewhere	N	0	147	24	49	0	220
	%	0	66.8	10.0	22.3	0	100
Considered as generational condition	N	0	19	0	55	146	220
	%	0	8.6	0	25.0	66.4	100
Considered as originating from failed families /relationship	N	0	0	0	169	51	220
	%	0	0	0	76	23.2	100
Taken as a condition not treatable	N	128	6	21	64	1	220
	%	58.2	2.7	10.5	29.1	0.5	100

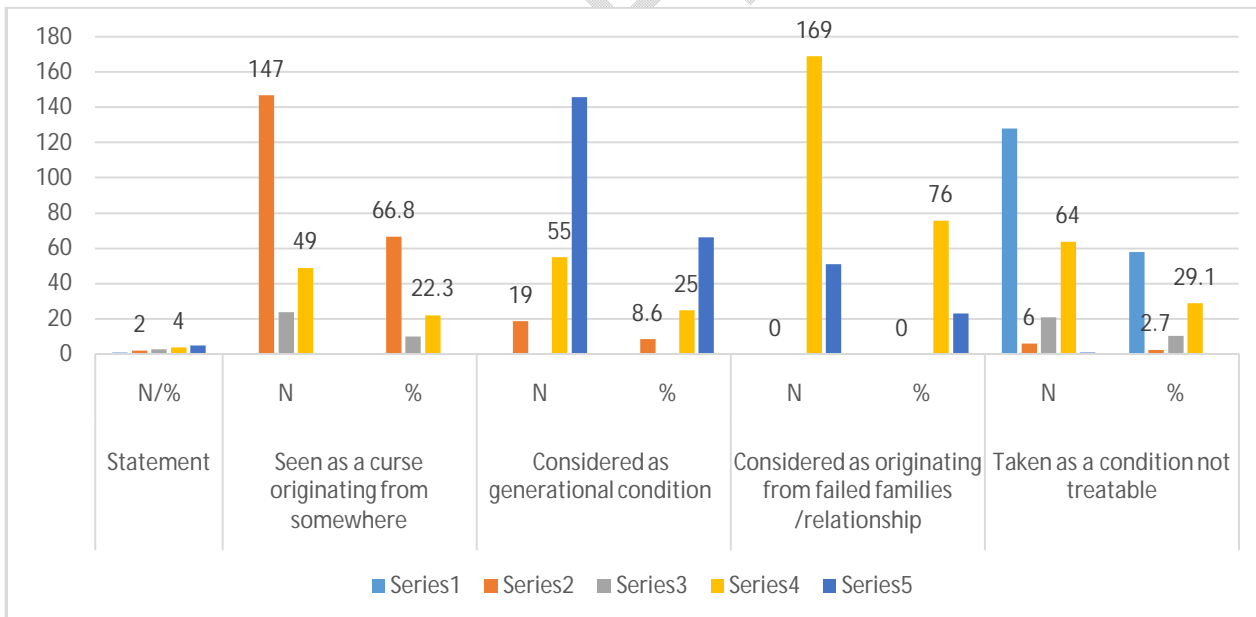


Figure 13: To know what people thought about mental conditions and behavioral distress among college students

As per the findings in Table 13, the mixed response on the listed statements concerning what people thought about mental conditions and behavioral distress among college students. Majority of the respondents at 66.8% disagreed that mental conditions and behavioral distress among college

students was seen as a curse originating from somewhere, 23% agreed that mental conditions and behavioral distress among college students was seen as a curse originating from somewhere some responded were undecided. 25%, 66.4% agreed and strongly agreed mental conditions and behavioral distress among college students was considered as generational condition while 8.6% disagreed on the statement.

Further study findings indicted that 70% of the respondents agreed and 23.2% strongly agreed' that the mental conditions and behavioral distress among college students was considered as originating from failed families /relationship. Also 58.2% of the respondents disagreed that mental conditions and behavioral distress is taken as a condition not However, few 29.1% disagreed while other 2.7% undecided.

Interviews with college administrators

The researcher did some interview with the KMTC management that included the administrators, dean of the students, board management and the other stakeholders

From the interviews it was established that in the last 3 years that is 2017-2019 more than 20 students in various KMTC college have attempted or completed suicide. The majority of the respondents indicated that more than 20 students have attempted or completed suicide. From the respondents view the following were reasons behind increase in student attempted suicide:

“Examination malpractices; Failure to attend classes and clinical practices; Harassment from other students; Class absenteeism; Drug abuse; Indiscipline; Gender based violence and Threatening lectures”

On how to rate the students who were suspended or expelled from college socially, Majority were moderately social able while some were Very social able.

On what interventions did the board of management put in place to avoid other psychosocial challenges among students or how college management deal with psychological and social challenges that students experience, the management indicated their view as follows:

“Recruitment of counsellors; Sports activities were organized to avoid idleness ; Frequent motivational talks to students; Teaching of psychology in every course; Providing financial support to needy students; Discouraging use of drug abuse; Enforcing strict school rules; Strict supervision; Create awareness and give life lessons; Encouraging student discussion groups and lecturers”

The Researcher interviewed the management on the psychological and social issues affecting students that they had interacted with in college. Based on the feedback, some of the issues included

“Relationship issues, Financial challenges, Academic problems, Peer influence, Drug and substance abuse, Depression, Family issues, Glomerular disease, Transcutaneous renal biopsy, Nephrotic syndrome”

The researcher sought to know whether there were signs and symptoms that showed that one was suffering from mental distress. The study findings showed that the majority of the interviewees indicated Yes. Respondent one **had this to say;**

“there quite some signs and symptoms this includes students feeling sad or down, Confused thinking or reduced ability to concentrate, Excessive fears or worries, or extreme feelings of guilt, Extreme mood changes of highs and lows and Withdrawal from friends and activities”.

Respondent two indicated

“Other symptoms and signs includes; Significant tiredness, low energy or problems sleeping; Detachment from reality (delusions), paranoia or hallucinations: Inability to cope with daily problems or stress; Trouble understanding and relating to situations and to people; Problems with alcohol or drug use; Major changes in eating habits; sometimes Sex drive changes; Excessive anger, hostility or violence and some students start Suicidal thinking”.

The study also looked the role that psychologists or counselors could play as far as mental and psychological distress was concerned. The interview with the administrators, showed majority of the respondents indicating that there was a big role the psychologists or counselors could play. This included the counselor offering advice, support, and a safe space to talk about the problems a person was struggling with. One administrator indicated....

“Mental health counselors can teach a person healthy coping strategies or self-help techniques, or they can simply give people a space to work out solutions for themselves. They can help students to understand their feelings; identify issues that affect their mental health; discover ways to overcome them; learn new skills and coping strategies; set goals for personal growth and learn more about mental health conditions”

One of the deans who was interviewed had this to say:

“were specific conditions or life events that counselors can help someone cope with include: grief or loss, phobias, addiction, anger management, bereavement, eating disorders, relationship and family difficulties, obsessive-compulsive disorder. Some counselors can help students who have recently experienced trauma, sexual assault, or domestic abuse”.

Another dean said:

“Counseling typically focuses on addressing the main symptoms or problems a person or group finds distressing. By doing this, counselors can help people overcome challenges, obstacles, or events that have affected their mental well-being”.

In his study the researcher sought to know the Psychological Services offered Within and outside the institution of learning

The administrators and deans of schools had suggested the following:

Consultation around whole-school issues, such as managing students behavior, identifying and assessing students with special educational needs or disability, working with parents.

School-based staff development, attending annual reviews, providing consultation and advice for students with mental health issues and problems.

Providing individual support to students around social skills, stress reduction, peer tutoring and solution-focused counselling.

Promoting mental wellness for all students in our institution

Identify and address problems before they escalate or become chronic, and provide increasingly intensive, data-driven services for individual students as needed.

Access to adequate staffing of school-employed mental health professionals, like school psychologists, is essential to the quality and effectiveness of these services.

4.3. Summary of key findings

The study was guided by the following objectives; to determine substance abuse prevalence rate among college students within Kenya Medical Training College zone six colleges, to establish predisposing factors associated with mental and suicidal distress among zone six students of Kenya Medical Training Colleges and to analyze the relationship between the predisposing factors and suicide behaviors among students of zone six of Kenya Medical Training Colleges.

Majority of the students 177(80.5%) agreed that they know students whose mental and psychological condition had affected them to the level of dropping out of college. Those whose had never seen any student whose mental and psychological condition had affected them to the level of dropping out of college were 43(19.5%). The findings imply that majority of the students has mental and psychological condition.

Majority of the respondents 'agreed' and 'strongly agreed' that the student with psychological condition has no one to talk of him/her at 55.9%, 64.6% said that the student with mental and psychological condition has no one to reach out to for help; and 80.5% indicated that students with psychological condition experience stigmatization from in and out of college. Further study findings indicted that 88.3% of the respondents agreed and strongly agreed' that the students with mental and psychological condition has no concentration in class. Finally 44.1% 'agreed' and strongly agreed' that they feel neglected from all quarters.

All of the respondents agreed to more than 50% on the factors that lead to suicide ideation. From the findings, 51.8% respondents agreed that the use Tobacco and its products (cigarette, chewing tobacco, cigars etc) affects their health, legal, social and cost financial problems weekly, 20.5 % once or twice 9.1% monthly 9.5% daily. Also 90.9% of the students agreed that Alcohol beverages (beer, wines, spirits etc) has caused health, legal, social and financial problems on a daily basis, 2.7% once or twice, 1.4% weekly and 15% never affected by alcohol. Further the study showed that cocaine affects the students' health, legal, social and cause financial problems by 17% daily, 25% weekly, 15% monthly and 16% once or twice

On the signs and symptoms that show that one is suffering from mental distress, Majority of the interviewees accepted their presence as quoted by one respondent.

“there quite some signs and symptoms this includes students feeling sad or down, Confused thinking or reduced ability to concentrate, Excessive fears or worries, or extreme feelings of guilt, Extreme mood changes of highs and lows and Withdrawal from friends and activities”.

4. CONCLUSIONS AND RECOMMENDATIONS.

The purpose of the study was to determine the predisposing factors that trigger mental and behavioral distress among Kenya Medical Training College students in zone six of KMTTC Colleges. Alcoholism was a major factor influencing and triggering mental and behavioral distress among Kenya Medical Training College students therefore, policies restricting students from taking alcohol should be introduced in order to curb these cases or reduce the incidences. That was because of alcohol addictions, irresponsible when drunk and violence as a result of alcohol. Terminal illness such as HIV/AIDS and some low cases of cancer and very low issues of physical challenges cause suicidal behaviors among KMTTC students. Hard drugs are easily available. Again counselling sessions and trainings. Introduction of short courses on drug abuse /alcohol in order to create awareness among students.

CONSENT AND ETHICAL APPROVAL

The proposal was approved by the college research committee. Confidentiality of the participants was highly observed. In addition, the researcher-maintained anonymity of the respondents upon obtaining a written consent based on an elaborate explanation of the study.

REFERENCES

1. Adlaf, E. M., Gliksman, L., Demers, A., & Newton-Taylor, B. (2001). The prevalence of elevated psychological distress among Canadian undergraduates: Centre for addiction and Mental Health: Department of Public Health Services, Canada: University of Toronto, *J Am Coll Health*; 50: 67-72. Retrieved from <https://goo.gl/261g9V>.
2. Benitez, C., Quintero, J., Torres, R. (2001). Prevalence of risk for mental disorders among undergraduate medical students at the medical school of the Catholic University of Chile, am, A. R.(2008). Maslow's theory of motivation and hierarchy of human needs: *A crMarcoleta, Santiago*: 129: 173-178. <https://goo.gl/otV2C4>
3. Carey Usher Mitchell, Mark La Gory, (2002). Social Capital and Mental Distress in an Impoverished Community: *City and Community*; 1: 199-222.
4. Dahlin, M. Joneborg N, Runeson B. Stress and depression among medical students: a cross-sectional study, Stockholm, Sweden: Department of clinical Neuroscience section Psychiatry, St Goran Med Educ. 2008; 39: 594-604. Retrieved from <https://goo.gl/7Mo4Ew>
5. Dan, C., Tarun, D., Taghi, Y.(2003). Investing In Mental Health: Department of Mental Health, Substance Dependence, and Non-Communicable Diseases, Geneva, Switzerland: WHO: 7-46 WHO.
6. Erikson, E. H.(1963). *Child and Society*. New York. Norton.
7. Goldberg, D.P. Huxley P. (1992). *Common Mental Disorders: A bio-social model*, Insitute of Psychiatry, London, England.
8. Kalisiewicz, D. A. (2000). *Small Encyclopedia of PWN*, PWN 778, Ethipia: Scientific Publishers.
9. Kothari, C.(2004). *A Research methodology: Methods and Techniques*. New Delhi, India: Pitman
10. Leahy, C., Peterson, R.F., Wilson, I.G., Newbury, J.W., Tonkin, A.L., Turnbull, D. (2010). Distress levels and self-reported treatment rates for medicine, law, psychology and mechanical engineering students: A cross-sectional study, South Australia: University of Adelaide *Aust N Z J Psychiatry*; 44: 608-615. <https://goo.gl/p2qEv9>.
11. Lima, M.C., Dominquese, M.S., Cerqueira, A.T. (2006). Prevalence and Risk Factors of Common Mental Disorders among Medical students, Brasil, Botucatu: *Rev Saude Publication*; 40: 035-1041.
12. Mow Brays CT, Megivern, Mandiberg, J., Strauss, S. Stein C.H. Collins K., et al. (2006). Campus mental health services: A school of social work: Recommendations for change, University of Michigan, USA: *Am J Orthopsychiatry*.76:226-237.<https://goo.gl/QMEZrX>.
13. Neuman, W. (2000). *Social research methods: Qualitative and Quantitative approaches* (4thed.). Boston, MA: Allyn and Bacon.
14. World Health Organization (WHO). (2001). *Mental health: New understanding New Hope*. The World Health Report, Geneva, Switzerland: WHO.
15. Sreeramareddy, C. T., Shankar, O. R., Binu, V. S., Mukhopadhyay, C., Ray, B., Menezes, R. G. (2007). Psychological morbidity. Sources of Stress and Coping Strategies among Undergraduate Medical Students in Nepal, Nepal, India: *BMC Med Educ*. 7: 26. <https://goo.gl/Q9YjmS>
16. Stallman, H. M.(2010). Psychological Distress in University students: a comparison with general population data, Brisbane, Australia: University of Queensland, Schools of Medicine and Pharmacy *Australian Psychologist*; 45: 249-257. <https://goo.gl/2TFyPt>
17. Vaez, M., Ponce de Leon, A. Laflamme, M. (2006). Health-related determinants of perceived quality of life: A comparison between first-year university students and their working peers, Stockholm, Sweden: Department of Clinical Neuroscience of personal injury prevention: Karoliska Institute; 26: 167-17. Retrieved from <https://goo.gl/JfyCgB>.
18. Verger, P. Guagliardo, V., Gilbert, F., Rouillon, F., Kovess-Masfety, V. (2010). Psychiatric Disorders in students in six French Universities: 12-month prevalence, Comorbidity, impairment, and help-seekin, Marseille, France: French Institute of Health and Medical Research (INSERM). *Soc Psychiatry and PsychiatrEpidemiol*: 45: 189-199. <https://goo.gl/nCVZRj>

19. Yamen, T. (1967). *Statistics: A introductory analysis*. New York, NY: Harper & Row
20. Bowen R, Balbuena L, Peters E. M, Leuschen-Mewis C, Baetz M. (2015). The relationship between mood instability and suicidal thoughts. *Arch Suicide Res*. 2015;19(2):161–71
21. Kalisiewicz, D. A. (2000). *Small Encyclopedia of PWN*, PWN 778, Ethiopia: Scientific Publishers.
22. Kothari, C. (2004). *A Research methodology: Methods and Techniques*. New Delhi, India: Pitman
23. Leahy, C., Peterson, R.F., Wilson, I.G., Newbury, J.W., Tonkin, A.L., Turnbull, D. (2010). Distress levels and self-reported treatment rates for medicine, law, psychology and mechanical engineering students: A cross-sectional study, South Australia: University of Adelaide *Aust N Z J Psychiatry*; 44: 608-615. <https://goo.gl/p2qEv9>.
24. Lima, M.C., Dominquese, M.S., Cerqueira, A.T. (2006). Prevalence and Risk Factors of Common Mental Disorders among Medical students, Brasil, Botucatu: *Rev Saude Publication*; 40: 035-1041.
25. Mow Brays CT, Megivern, Mandiberg, J., Strauss, S. Stein C.H. Collins K., et al. (2006). Campus mental health services: A school of social work: Recommendations for change, University of Michigan, USA: *Am J Orthopsychiatry*. 76:226-237. <https://goo.gl/QMEZrX>.
26. Neuman, W. (2000). *Social research methods: Qualitative and Quantitative approaches* (4th ed.). Boston, MA: Allyn and Bacon.
27. World Health Organization (WHO). (2001). *Mental health: New understanding New Hope*. The World Health Report, Geneva, Switzerland: WHO.
28. Sreeramareddy, C. T., Shankar, O. R., Binu, V. S., Mukhopadhyay, C., Ray, B., Menezes, R.G. (2007). Psychological morbidity. Sources of Stress and Coping Strategies among Undergraduate Medical Students in Nepal, Nepal, India: *BMC Med Educ*. 7: 26. <https://goo.gl/Q9YjmS>
29. Stallman, H. M. (2010). Psychological Distress in University students: a comparison with general population data, Brisbane, Australia: University of Queensland, Schools of Medicine and Pharmacy *Australian Psychologist*; 45: 249-257. <https://goo.gl/2TFyPt>
30. Vaez, M., Ponce de Leon, A. Laflamme, M. (2006). Health-related determinants of perceived quality of life: A comparison between first-year university students and their working peers, Stockholm, Sweden: Department of Clinical Neuroscience of personal injury prevention: Karoliska Institute; 26: 167-17. Retrieved from <https://goo.gl/JfyCgB>.
31. Verger, P. Guagliardo, V., Gilbert, F., Rouillon, F., Kovess-Masfety, V. (2010). *Psychiatric*
32. Fleischmann A, Arensman E, Berman A, intention to use integrated pest Carli V, De Leo D, Hadlaczky G et al. management: integrating theory of planned Overview evidence on interventions for behavior and norm activation model. *J population suicide with an eye to Environ Manag*. 2019;236:328-39. identifying best-supported strategies for 25. Dara SK. The new integrated pest LMICs. *Glob Ment Health*. 2016;3. management paradigm for the modern
33. Weerasinghe M, Pearson M, Peiris R, age. *J Integr Pest Manag*. 2019;10(1):12. Dawson AH, Eddleston M, Jayamanne S 26. World Health Organization. Preventing et al. The role of private pesticide vendors suicide: a Resource for Pesticide in preventing access to pesticides for self-Registrars and Regulators; 2019. poisoning in rural Sri Lanka. *Inj Prev*. 27. Donley N. The United States lags behind 2014;20(2):134-7.
34. Licata C, Liu L, Mole D, Thorp J, Chand R, Integrated pest management (IPM) in Chaulagain S. Social and cultural factors greenhouse and other protected leading to suicide attempt via environments. In: *Integrated management organophosphate poisoning in Nepal. of insect pests: Current and future Case Rep Psychiatry*. 2019;2019:1-3. developments. Burleigh Dodds Science
35. Serrano-Medina A, Ugalde-Lizárraga A, Publishing. 2019;-48.

36.Bojorquez-Cuevas MS, Garnica-Ruiz J, 8. Kumar S, Kaushik G, Dar MA, Nimesh S, González-Corral MA, García-Ledezma A et López-chuken UJ, Villarreal-Chiu JF. al. Neuropsychiatric disorders in farmers Microbial degradation of organophosphate associated with organophosphorus pesticides: A review. Pedosphere. 2018; pesticide exposure in a rural village of 28(2):190-208. northwest México. Int J Environ Res Public 9.

37. Bird S. Organophosphate and Carbamate health coverage achievable: report of the Poisoning; 2019. third global survey on E-health. World Available:<https://www.uptodate.com/conten> Health Organization; 2017. ts/organophosphate-and-carbamate

38.Licata C, Liu L, Mole D, Thorp J, Chand R, Integrated pest management (IPM) in Chaulagain S. Social and cultural factors greenhouse and other protected leading to suicide attempt via environments. In: Integrated management organophosphate poisoning in Nepal. of insect pests: Current and future Case Rep Psychiatry. 2019;2019:1-3. developments. Burleigh Dodds Science

DEFINITIONS, ACRONYMS, ABBREVIATIONS

Here is the Definitions section. This is an optional section.

Term: Definition for the term

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