Prevalence of PTSD and Depression Among University Students in GOMA, DR Congo

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Abstract

Mental health challenges are a fast-growing disease burden globally. Studies indicate that mental illnesses are more prevalent among students in institutions of higher learning compared to the general population. It is also noted that high prevalence rate of mental illnesses is found among students with a history of childhood trauma. The purpose of this study was to establish the prevalence of PTSD and depression symptoms among Free University of Great Lake Countries and La Sapientia University students in Goma, DR Congo. The study adopted a quasi-experimental research design targeting 4,050 university students out of which 809 students aged between 18 and 25 years who volunteered for screening of PTSD and depression. A combination of purposive, stratified and simple random sampling techniques were used to select the study participants. Data was collected using questionnaires, PTSD Scale for DSM-5(PCL-5) and LEC Self-Report instrument. Subsequently, data was analyzed using bivariate analysis. The findings revealed that students aged 18-20 years registered the highest prevalence of both PTSD (11.4%) and depressive illness (15.2%) compared to older students. The prevalence of PTSD (17.4%; $p = 0.010$) and depressive illness (21.8%) was also found to be higher among female students compared to male students. The prevalence of PTSD and depressive illness was high among first year students at 9.1% while depression was at 11.7% ($p = 0.013$). Further, both PTSD (25.4%) and depressive illness (34%) prevalence rates were higher among single students compared to the other marital categories. Finally, the prevalence of both PTSD (17.9%) and depressive illness (23.9%; $p = 0.005$) was higher among the students whose parents were married compared to other parental marital categories. Based on the results, it is recommended that universities and relevant stakeholders take the initiate to provide professional mental health services in the universities in DR Congo which include regular screening of students for PTSD and depression, and treatment.

Keywords: PTSD, Depression, Trauma, Prevalence, University Student, Mental Health

Introduction and Background

Mental health is important for the proper functioning of the human being throughout all stages of life from childhood to old age. Generally, mental health includes psychological, emotional, and social wellbeing. Mental health affects how humans relate to the environment and to ourselves, that is, the people, objects, stress management and life choices (Westerhof & Keyes, 2010). There are many types of mental health disorders among them anxiety, depression, attention deficit hyperactivity disorder (ADHD), autism, post-traumatic stress disorder (PTSD), schizophrenia, and bi-polar disorder (Cuippers et al., 2021; Raslan, Hamlet & Kumari, 2021).

In recent times, however, mental health disorders have become a growing disease burden all over the world. According to Saxena and Davidson (2019), over the 29-year period from 1990 and 2019, the global number of disability-adjusted life-years (DALYs) due to mental disorders increased from 80·8 million to 125·3 million, and the proportion of global DALYs attributed to mental disorders increased from 3·1% to 4·9%. Mental health challenges are also common among students in higher learning institutions such as colleges and universities where students' survey by the American College Health Association (ACHA) over 2018 and 2019 found that about 60% of respondents felt "overwhelming" anxiety, while 40% experienced severe depression, which impaired their functioning (Fried, Karmali & Irwin, 2020; Liu et al., 2019).

Limone and Toto (2022) explain that the emotional discomfort among undergraduate university and college students makes the prevalence of mental illnesses among them higher than other people in different environments. For students, mental health problems can affect their energy levels, concentration, dependability, mental ability, optimism and result also in declining performance (Osborne, Greene & Immel, 2014). Furthermore, mental health problems can lead to maladaptive behavior such as substance use, self-harm, withdrawal and even suicide. Recent studies suggest that roughly 12% of college students report the occurrence of suicide ideation during their first four years in college, with 2.6% percent reporting persistent suicide ideation (Wilcox et al., 2010). The main predisposing factors to mental health challenges among university students include social, psychological, biological, lifestyle-based factors and academic factors (Limone & Toto, 2022). While it is possible to avoid some of these predisposing factors, there are others which are out of the students' control.

One of the predisposing factors to mental health problems among student is a history of trauma. Childhood trauma, abuse, and neglect are likely to be more disastrous when a person reaches the university or college level (Limone et al., 2021). Trauma greatly impacts a person's thoughts and feelings about oneself and how they relate with other people in the society. Students, especially females, who have gone through a traumatic experience are likely to develop mental illnesses and conditions such as post-traumatic stress disorder (PTSD), depression, or anxiety (Allen, 2008; Limone et al., 2021).

Post-traumatic stress disorder is a stress-related condition followed by "exposure to actual or threatened death, serious injury or sexual violation" (APA, 2013). PTSD may arise as a result of a range of highly stressful situations similar to rape, homicide, physical and emotional abuse, danger of death, a break-in or relationship break-up (Lasiuk & Hegadoren, 2006; McNally, 2005). In addition, individuals could manifest with PTSD symptoms when they are indirectly involved in a critical incident. Examples include, witnessing the traumatic event directly; learning that the traumatic event has occurred to a close family member or a close friend; or experiencing first-hand repeated or extreme exposure to aversive details of the traumatic event but not through media, pictures, television or movies unless work-related (APA, 2013). Such traumatic events may result in a broad range of clinical warning signs and harmful impacts on individuals' well-being (Greenberg et al., 2015).

The American Psychological Association [(APA)] (2013) defined depression as a psychological condition characterized by an individual losing interests all day, and experiencing feelings of unhappiness, emptiness, desperateness, hopelessness, and worthlessness. Similarly, World Health Organization (2013) defined depression as a widespread psychological illness explained by unhappiness, fatigue, guiltiness, worthlessness, diminished sleep and desire for food, and insufficient focus. Depression is one of the leading causes of major distress and a serious mental condition that scourges a lot of people in America. Various statistics indicate that 10.3% of undergraduates had depression. This estimate among undergraduates augmented to nearly 14.9% in 2004 (American College Health Association, 2004), 16.4% in 2012 and 21.5% in 2017 (ACHA, 2017). As discovered by Furr et al., (2001), 54% of undergraduates had signs of depression upon joining campus while 9% attempted suicide when they joined campus.

Students in their early years in university mostly within the ages of 18 and 20 years have been found to be most susceptible to depression and PTSD. For instance, a recent study in the

United States among Jimma University students by Ahmed et al., (2020) found depression to be significantly associated with first year students. A cross-sectional study among Bangladeshi university students by Islam et al., (2018) found that the prevalence of depression and anxiety among first-years was significantly high. Othieno et al., (2014) in their study among university students in Kenya also revealed that depressive illness was significantly more common among the first-year students who were married, economically disadvantaged, and those living off campus.

Marital status of the students' parents has also been investigated in relation to depression and PTSD. For example, a study by Pappa (2013) on relationships between parents' marital status and the psychological well-being of adolescents in Greece confirmed that adolescents from single parents, and divorced or separated parents presented more traumatic symptoms, anxiety and depression than adolescents from stable marriages. In Indonesia, Geshica and Musabiq (2019) conducted a study on parents' marital status and psychological distress among college students with PTSD, which found that participants raised by married parents had a lower psychological distress than participants raised by widowed or divorced parents. The findings from this study showed that participants raised by widowed parents had higher anxiety and PTSD symptoms than participants raised by married parents. By the same token, participants raised by divorced parents had higher depression compared to participants raised by married parents. However, a study by Sekoni et al., (2021) among female participants in Nigeria found that PTSD was not significantly associated with education, employment and marital status of the participants.

Eisenberg et al., (2009) reported that undergraduates with PTSD and depression experienced lack of desire in activities that they previously enjoyed giving rise to school failures. PTSD had an undesirable wave on the school performance (Al-Hemiary et al., 2016; Blanchard et al., 1996). Still, lower intellectual functioning and poor academic performance are positively associated with individuals found to have PTSD, while those with PTSD have been documented to have repeated a class in school (Breslau, 2002a; Totani et al., 2019). Both lecturers and teachers have shown that students who were found with indicative criteria for actual rising rates of PTSD had a poor concentration in school (Blais et al., 2001; Blanchard et al., 1996). Elklit and Frandsen (2014) found that college students' first response to their traumatic experiences was characterized by depressive problems, regressive behavior, physical and behavioral reactions related to reduced school performance, strained peer relations, and lack of sleep. This means that both PTSD and depression need to be attended to

as they can be detrimental to the student's health, social life and even impair their educational prospects.

The Diagnostic and Statistical Manual (DSM 5th edition, 2013) has classified PTSD symptoms depending on symptoms of intrusion, avoidance, negative alterations in cognition and mood, and alterations in arousal and activity. Additional symptoms of depression include lack of sleep, poor concentration, suicide thinking and attempts, significant weight loss or gain, and extreme guilty. The presence of five of these symptoms should be noticed for a period of two-weeks or longer and should cause social and functional impairment to be classified as depression.

The present study focused on PTSD and depression among university students in Goma in the Democratic Republic of Congo (DR. Congo) and sought to establish the prevalence rates. Since it became a Belgian Colony in the late 19th Century, the DR. Congo has undergone episodes of continued long-term of internal armed conflict, especially in the last 25 years, mostly in the Eastern part of the country. This has resulted in internal and external displacement, destruction of property and livelihoods, impairment of families, maiming of persons and has also claimed millions of people's lives leaving some survivors in serious traumas (Kabeya, 2012). The historical background of DR Congo demonstrates that nation could be considered as a research context for the effects of trauma on mental health problems and its negative impact owing to the effects of the prolonged armed conflict in the country. The protracted human conflict and suffering has had a traumatic effect on the mental health state of a majority of Congolese people (Saigh et al., 1997).

Exposure to such traumatic events puts undergraduates at a higher risk of PTSD, depression and anxiety and could result in poor academic performance and social functioning impairment, among others, while in the university (Baker et al., 2016; Boyraz et al., 2015). Research indicates that self-destructive and dangerous behaviors, such as substance abuse, suicidal attempts, risky sexual behaviors, reckless driving, and self-injury manifest among university students in DR Congo are characteristic of PTSD and depression (Kabeya, 2012). However, there is still lack of empirical studies on the prevalence of PTSD and depression among university students in the DR Congo. Hence, the present study sought to establish the prevalence of PTSD and depression among university students from two universities in Goma town in North Kivu Province in the Eastern DR Congo, which in addition to being

significantly affected by the Congo Wars, has also been hit by episodes of eruption of the nearby active volcano, Mt Nyirangongo.

Methodology

In order to ascertain the prevalence of PTSD and depression among student participants, descriptive statistics of continuous (mean and standard deviation) and categorical (proportions) variables were first used. The distribution of numerous variables was calculated and compared between and within groups and bivariate analysis was performed. Bivariate is a descriptive statistic that describes the distribution of categorical variables and helps to understand the proportion of the phenomenon on all the categorical variables. For instance, how many male students had PTSD or how many female students had PTSD.

This study was carried out in Goma town which is the capital of North Kivu Province in the eastern DR Congo. It is located on the northern shore of Lake Kivu, and is contiguous to the Rwandan city of Gisenyi and has three universities. The study was, however, carried out in two universities as at the time of the study, one university was on recess. The two universities have a combined population of 4,050 students. The university students in the area were targeted for the study based on the assumption grounded in the literature on armed conflict showing that about 30% of the men and women who have spent time in war zones experience PTSD and comorbidity such as depression or anxiety (WHO, 2015). As such, the university students from the area were assumed to have the indicative criteria of PTSD and depression symptoms because of the traumatic experiences they were exposed to during the war, such as death of loved ones, rape, robbery, homicide, and physical and domestic violence. Therefore, such experiences could probably lead university students to suffer from PTSD and depression.

The sample was taken from students of the two selected private universities, males and females aged 18 to 25 years. A sample size of 809 respondents which corresponds to 20% of the total student populations in both universities was chosen based on the consideration by Mugenda and Mugenda (2003) that a sample size of 10-30% is good enough if well-chosen and the elements in the sample are more than 30. As this was a baseline study, the students were then sampled using stratified sampling technique. The stratification was done based on the students' university and their gender in order to make it more representative.

Data was collected using several instruments which included a research-formulated questionnaire focusing on socio-demographic information and traumatic events; a PTSD Checklist for DSM-5 (PCL-5) which is a 20-item self-report measure that assesses the presence and severity of PTSD symptoms. This tool was translated into French since DR Congo is a French-speaking country and it was used on university students on both sites to assess PTSD symptoms. Lastly, the participants were then given the Life Events Checklist (LEC) which was to measure the levels of PTSD. This study additionally used Beck's Depression Inventory (BDI) which is a standardized tool that tests prevalence and severity of depression among participants. The inclusion criteria for this study involved appropriate candidates that were male, and female aged between 18 to 25 years and were current students of the two universities. Thus, university students who were below 18 years and above 25 years old were excluded.

Univariate analysis was carried out whereby exploratory data analysis was used to uncover the distribution structure of the study variables, as well as identifying outliers or unusual entered values. Statistical analysis began with descriptive statistics of continuous (mean and standard deviation) and categorical (proportions) variables to establish the prevalence of PTSD and depression among the student participants. Pearson's Chi-square was also used to establish the significance of the socio-demographic variables in predicting PTSD and depression prevalence.

Results

Data was collected from both male and female students from the two selected private universities using the socio-demographic questionnaire, PCL-5 and BDI. A total of 809 students volunteered for screening of PTSD and depression where males were 324 and females were 485.

Prevalence of PTSD and Depression among University Students

The study first sought to establish the general prevalence of PTSD and depression among the university students. Students who scored less than 30 were considered to present no PTSD symptoms, whereas those who scored 30 or greater were interpreted to present with PTSD. Students who scored 16 or less on BDI were taken to have no depression, whereas Students who scored 17 or greater were considered to present with borderline clinical depression. The Table 1 indicated the prevalence of PTSD among the students.

Table 1: Prevalence of PTSD and Depression among the Students

Variable	Measurement	Frequency	Percent
PTSD	≤ 30 = No PTSD	600	74.2
(n = 809)	≥ 31 = PTSD	209	25.8
Depression	≤ 16 = No Depression	530	65.5
(n = 809)	≥ 17 = Depressive disorder	279	34.5

As indicated in Table 1, the prevalence of students who had no PTSD was higher at 74.2% compared to those who had PTSD at 25.8%. Therefore, the general prevalence of PTSD among the students was 25.8%. Also, the prevalence of students who had no depression was slightly higher 65.5% as opposed to those who had depressive disorder 34.5% suggesting that the general prevalence of depressive disorder among the students at baseline was 34.5%.

Prevalence PTSD and Depression along Students' Socio-demographics

Table 2 presents the overall distribution of socio-demographic characteristics of students and the prevalence of PTSD and Depression.

Table 2: Distribution of Student's Socio-demographic Characteristics on PTSD and Depression

Variables	Total (%)	PTSD Scores		Depression Scores	
		No PTSD	PTSD	No Depression	Depressed
Age					
18-20	339(41.9)	247 (30.5)	92 (11.4)	216 (26.7)	123 (15.2)
21-22	317(39.2)	241 (29.8)	76 (9.4)	217 (26.8)	100 (12.4)
23-25	153(18.9)	112 (13.8)	41 (5.1)	97 (12.0)	56 (6.9)
Gender					
Male	324(40.0)	256 (31.6)	68 (8.4)	221 (27.3)	103 (12.7)
Female	485(60.0)	344 (42.5)	141 (17.4)	309 (38.2)	176 (21.8)
Student's year of study					
G0	30 (3.7)	21 (2.6)	9 (1.1)	13 (1.6)	17 (2.1)
G1	258(31.9)	184 (22.7)	74 (9.1)	163 (20.1)	95 (11.7)
G2	251(31.0)	186 (23.0)	65 (8.0)	161 (19.9)	90 (11.1)
G3	99 (12.2)	78 (9.6)	21 (2.6)	76 (9.4)	23 (2.8)
L1	119(14.7)	89 (11.0)	30 (3.7)	84 (10.4)	35 (4.3)
L2	52 (6.4)	42 (5.2)	10 (1.2)	33 (4.1)	19 (2.3)
Student's marital status					
Single	788(97.6)	583 (72.2)	205 (25.4)	514 (63.7)	274 (34.0)
Separated	2 (0.2)	2 (0.2)	0 (0.0)	1 (0.1)	1 (0.1)
Engaged	9 (1.1)	7 (0.9)	2 (0.2)	7 (0.9)	2 (0.2)
Married	8 (1.0)	6 (0.7)	2 (0.2)	6 (0.7)	2 (0.2)
Student's parental marital status					
Married	615(76.0)	470 (58.1)	145 (17.9)	422 (52.2)	193 (23.9)
Single parents	36 (4.4)	26 (3.2)	10 (1.2)	23 (2.8)	13 (1.6)
Separated	49 (6.1)	31 (3.8)	18 (2.2)	22 (2.7)	27 (3.3)
Divorce	15 (1.9)	9 (1.1)	6 (0.7)	8 (1.0)	7 (0.9)
Widow/widower	94 (11.6)	64 (7.9)	30 (3.7)	55 (6.8)	39 (4.8)

Table 2 presents the distribution of socio-demographic characteristics and students' scores on PTSD and depression. The prevalence of both PTSD (11.4%) and depressive illness (15.2%) was high among students aged 18-20 years. Concerning gender distribution, the findings shows that the prevalence of PTSD (17.4%) and that of depressive illness (21.8%) was high among female students. Further, the distribution of PTSD and depressive illness was high among Students in G1 or in their first year at 9.1%, and depression was at 11.7%. As regarding students' marital status, the findings indicated that both PTSD (25.4%) and depressive illness (34%) were higher among students whose marital status was single

compared to the other marital categories. Similarly, concerning the students' parents' marital status, the prevalence of both PTSD (17.9%) and depressive illness (23.9%) was higher among the students whose parents were married as compared to other parental marital categories. It can therefore be deduced from the data that the prevalence of PTSD and depression was high among singles from the Catholic denomination and those whose parents were married and lived together.

Table 3: Chi-square test on prevalence of PTSD and Depression and Key Socio-demographic Characteristics

.	PTSD		Depression	
.	Chi-Square Test		Chi-Square Test	
Variable	Value	Sig.	Value	Sig.
Student's Age	0.947	0.623	2.001	0.368
Student's gender	6.626	0.010	1.74	0.187
Student's year of study	3.676	0.597	14.367	0.013
Student's marital status	0.771	0.856	1.155	0.764
Student's parents' marital status	8.13	0.087	14.908	0.005

The chi-square test in Table 3 shows that gender (p = 0.010) was the only socio-demographic variables that could significantly explain the prevalence of PTSD among the university students in Eastern DR Congo. No significant difference was found with PTSD in the other socio-demographic variables, which is; age (p=0.623), year of study (p = 0.597), students' marital status (p=0.856) and the students' parents' marital status (p = 0.087). The implication of this finding is that the female students mostly in their first year in university were more likely to present with PTSD symptoms as compared to the male participants as also indicated by the previous result in Table 2 which showed the prevalence of PTSD was higher among female participants at 17.4%, as opposed to their male counterparts at 8.4%.

In relation to the distribution of socio-demographic characteristics and depressive disorder among the university students, Table 3 shows that the students' year of study (p = 0.013) and the students' parents' marital status (p = 0.005) were the only socio-demographic variables that could significantly explain the prevalence of depressive disorder among the university students in the area. The other socio-demographic variables, that is, age (p = 0.368), gender (p = 0.187) and students' marital status (p = 0.764) were not found to have any significant association with the distribution of depressive disorder among the university students. This corroborates the previous finding in Table 2 which showed that levels of depression were also

much higher among students whose parents were married (23,9%) compared to students whose parents were unmarried.

Discussion

The objective of the study was to establish the prevalence of PTSD and depression among selected private universities in DR Congo.

PTSD Prevalence among University Students in the DRC

The study found the general prevalence of PTSD among the students was at 25.8% and it was found to be high among students aged 18-20 years at 11.4% compared to the other older groups. This was an indication that the levels of PSTD among the university students in the area was high, a fact that could be explained by the repeated exposure to traumatic events in the Goma, Eastern DR Congo area that has been especially marked with armed conflict and natural disasters as well as other stressful events such as displacement, robbery, sexual violence and gender-based violence among other traumatic events.

These results agree with a similar higher prevalence reported in Pakistan in a study conducted among 355 college students which found a PTSD prevalence of 25% (Kaysen et al., 2003). The prevalence rates from the this study findings were also similar to a systematic and meta-analysis review of 38 articles on prevalence of PTSD among 19,428 university students where the prevalence of PTSD symptoms was estimated to be between 18% to 26%, and also found to be higher among female university students (Salehi, et al., 2021).

As such, it is likely that the university students from Goma, DR Congo had been exposed to higher levels of traumatic experiences than most of their counterparts in other parts of the world, a fact that could be attributed to the history of protracted armed conflict in the area. As majority of the current cohort of university undergraduates in the area were in their early teenage when the main conflict was ending in Congo, it is possible that majority developed PTSD when they were very young, possibly in their early adolescence, and might have developed lifetime PTSD that was neither diagnosed or well treated and could also explain the high prevalence of PTSD.

It was established that the prevalence of PSTD was almost twice as high among female students at 17.4% as compared to their male counterparts (8.4%) and these differences were

significant (P = 0.010). This finding corroborates that of Nooner et al., (2012) who found that female adolescents are twice as likely to develop PTSD following a significant traumatic experience than males. A similar meta-analysis by Ng, et al., (2020) also found the overall pooled prevalence of probable PTSD at 22%, and significantly higher among female students at 54%, as opposed to the male students (Ng, et al., 2020). This could suggest that the female students in the area on average tended to have poor coping mechanisms with potential traumatic experiences [(PTEs)] than males and as such were highly susceptible to PTSD than males.

The differences in coping with PTEs and subsequently PTSD were noted by Cloitre et al., (2009) who asserted that gender contributes significantly to the process of developing PTSD in adolescents. These previous studies concur with the findings of the current study and imply that young females had different coping mechanisms to traumatic situations and experiences than young males. This could suggest that females had a different way of processing a traumatic experience than males and were less likely to adjust to the experience or detach from it more quickly than males.

Depression among university students in the DRC

As regards depression variable, the general prevalence of depressive disorder in this present study was at 34.5%, while depressive disorder was found to be high among students aged 18-20 years at 15.2%, and among female students (21.8%). In addition, the study found that there was a significant association between depressive disorder, students' year of study (p=0.013) and parental marital status (p =0.005). The general prevalence of depression among students found in this current study was slightly higher than those of a cross-sectional study in United States among Jimma University students which found the prevalence of depression among the university students at 28.2% (Ahmed et al., 2020).

The slightly high prevalence of depression in the current study compared to the findings of most studies could be explained by the comorbidity of PTSD as in most cases, depression occurs secondary to PTSD. Previous studies agree with this conclusion, indicating that major depressive disorder coexisted with PTSD in nearly 50% of cases (Park et al., 2015). In the case of the present study, 74.8% of PTSD cases could explain the depression meaning that majority of the depression among the students in the universities were likely as a result of the PTSD.

Further, the current study found that there was a significant association between depressive disorder, Students' year of study (p=0.013) and parental marital status (p =0.005). Findings from this study are not different from other recent studies, which indicated association between the year of study and depression. For instance, a study among university students in Kenya found that depressive illness was significantly more common among the first-year students, those who were married, economically disadvantaged, and those living off campus (Othieno et al., 2014). Therefore, the current study findings affirm the observation that first-year university students are a particularly vulnerable group for mental illnesses especially depression due to the transition phenomenon that requires them to adjust to a different type of life often in a new environment. This could compound the already existing depression caused by PTSD.

New students in the university are at a developmental milestone that bridges a critical transitory period from adolescence to adulthood, which embraces a very important process like identity crises (Hakami, 2018). These developmental crises can lead to crises such as self-doubt, social withdrawal, loneliness, lowered self-esteem, geographical changes, separated from family members and academic stress (Ahmed et al., 2020). It also includes experiencing financial difficulties in a new environment could subject the new university students to develop mental health disorders particularly depression (Reddy et al., 2018).

Similarly, this present study found a significant association between depression and parental marital status of the students (p = 0.005) and, further, the frequency of depressive disorder was higher among students whose parents were married compared to the other groups. Consistently, several studies have found an association between depression and categorical parental marital status. However, in the current case, there was a departure from the norm in several findings that showed students from households with unmarried parents tended to suffer more from depressive disorders that those with married parents. This finding departs from the thinking of previous studies done in relation to the effect of parental marital status on depression of adolescents, such as, Geshica and Musabiq (2019), Mersky et al., (2013) and Obeid, et al., (2021) which argued that children from single parent families tended to be more susceptible to depression than those whose parents had maintained their marriage. This could be explained by Kaysen et al., (2003) observation that parents with PTSD were substantially associated with their children starting to develop PTSD. Therefore, it is possible that unlike

students from other backgrounds, the university students in the DR Congo who took part in the present study hailed from homes where parents though married had PTSD.

Conclusion

From the foregoing discussions of the results, the study concludes that a significant number of university students in Goma, DR Congo suffered from PTSD and depression resulting from exposure to traumatic experiences. However, noticeably younger students in the group transitioning from adolescence to adulthood and female students were the most affected by PTSD and depression. Based on the high PTSD and depression prevalence observed among the students in Goma, DR. Congo mostly resulting from traumatic experiences, it is recommended that universities and relevant stakeholders initiate professional mental health service programs in the universities in DR Congo. This would give access to mental health services to the students suffering from trauma and other related conditions. Higher learning institutions working with adolescents and university students might consider screening for PTSD and depression. This would go a long way in helping in timely identification of students at risk of these conditions and subsequently identify those that might need further interventions. The Ministry of Health or Public Health Department should consider upgrading mental health as a critical disease burden in the country and push for an enactment of budget provisions to help in its alleviation. The limitation of the study was that mental health problems are sensitive due to stigmatization. PTSD and depression are sensitive topics that most individuals avoid discussing because of fear of being labeled or stigmatized, which could lead to biased responses during the study. This could affect the internal validity of the study. To obviate this, the researcher used reliable data collection instruments to answer questions that respondents would be comfortable answering.

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