

## Mental Health during COVID-19 Pandemic: Does Social Support Count? A Cross-Sectional Survey among Lira University Students, Northern Uganda

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### Abstract

COVID-19 pandemic that began in Wuhan, China towards the end of 2019 is the world's catastrophe of the 21<sup>st</sup>-century. As a result, the pandemic has disrupted all sectors of the world's economies including the education sector depending on their stages of implementation. For the case of tertiary and University institutions, most of them were about to begin examinations but which had to be put on halt as students had to go home. These disruptions could have serious mental health impacts on the individuals. We conducted a cross-sectional study to assess the mental health status and its association with social support during the COVID-19 lockdown among undergraduate students of Lira University. We used a non-probability convenience sampling technique to identify the students. We developed an online survey questionnaire using google form and sent to the students' email and social media contacts. Responses were submitted directly to a google central server in an

excel form and later exported to SPSS V.25 for analysis. We used descriptive statistical analysis to show frequency distributions, mean, and graphs and Chi-square test to establish possible relationships. More than half of the respondents, 57% were females, 34.63% were in the age group 21-22 years old, the majority were in the third year (33.97%). The majority of students were in good mental health and had positive social support. The findings also revealed a significant statistical association between social support and mental health status. Based on the results, there is a need to provide social support to students when they are at home during the pandemics such as the COVID-19 to ensure their mental health stability.

## Background

The COVID-19 epidemic that started in Wuhan, China in 2019 has spread to almost all nations now [1]. Statistics of infection have been growing rapidly across nations coupled with its ever-increasing death toll. It has ravaged all nations of the world, threatening to bring to a halt all human activity ranging from economic, social, political, and religious [2]. Each country's governments enforced lockdown measures on every human activity except for those who provide essential services such as medical and security workers [3]. The lockdown aimed at reducing the possibility of new infections and flattening *the curve*. The procedures and measures put in place have been effective in preventing the transmission of COVID-19. Nevertheless, there is the looming fear of the possible mental health consequences of the measures [4].

Studies before COVID-19 indicated that people in quarantine report more mental health problems like depression, insomnia, anxiety, and others in comparison to the general population [5]. Evolving research examining the mental health consequences of the COVID-19 pandemic has highlighted severe depressive and anxiety disorders among the general public [6]. These studies show that COVID-19 has caused a sense of hopelessness and helplessness among people [7]. With the worldwide trajectory of COVID-19, the mental health issues resulting from this pandemic have compounded its public burden [8]. However, these studies have concentrated on the mental health of patients [9].

Under ideal situations, University students experience some forms of mental health problems [10,11]. For instance, in the United Kingdom, high requirements for better performance affect students' mental health statuses, hardships due to problems of finance, and being lonely [12,13]. However, available data reveals that the number of University students that experience mental complications relative to the overall population is greater [14,15].

Globally, during difficult times like the one caused by the COVID-19 pandemic; University students' mental health becomes a subject of importance because their performance is highly dependent on how well their mental status is. The students are at a high risk of developing mental health problems, possibly due to the lockdown measures such as the closing of institutions of learning, social distancing, and restrictions of movements among others [16]. The fact that, during this time, students cannot access mental health services such as peer-to-peer support, counselling, and guidance may further exacerbate this situation. A study examining the impact of COVID-19 on students' wellbeing in China showed that close to 25% of the

respondents reported having anxiety symptoms [7]. Thus, the mental health consequence of the COVID-19 pandemic on students is a public health concern that requires immediate mental health support to avert the dire academic consequences.

Due to interference with normal academic programs by the pandemic, educational institutions have shifted to online teaching/learning. Despite its benefits, the online learning system also has its challenges, which might worsen the already dire situations the learners are facing [17]. Previous literature on learning disruptions may discourage students from a desire to learn, thereby causing mental health problems and ultimately leading to an increased likelihood of dropout [18]. There is a possibility that the COVID-19 pandemic lockdown could have exerted a significant mental health burden on the undergraduate students when they were at home. The above phenomenon requires urgent and appropriate psycho-social interventions to address any consequences. Social support is one such important intervention that can be provided to individuals who find themselves in situations such as the one caused by the COVID-19 pandemic to improve their health and well-being.

Social support is the experience of being valued, respected, cared about, and loved by others who are present in one's life [19]. It can be in form of tangible assistance provided by others when needed, which includes an appraisal of different situations, effective coping strategies, and emotional support such as counselling and guidance [17]. Individuals rely on social support from different actors such as family, friends, teachers, community, partners, relatives, peers, friends, religious groups and workmates/colleagues, or any social groups in which one belongs [17]. Continued stay in non-school environments due to COVID-19 poses a risk of developing serious mental health problems [17,20]. To mitigate such risks, learners normally rely on social support from their networks, including the family, relatives, and friends. The absence or lack of social support negatively affects learners' mental health and well-being [21].

Studies that have looked at the association between social support and mental health and wellbeing produce mixed findings, with most of them revealing significant positive associations [22]. Since the outbreak of the COVID-19 pandemic, not much is reported on the kind of social support provided to students while at home [23,24]. In Uganda, a few studies have been conducted on the mental health status of University students following government lockdown measures to prevent COVID-19 [25] but these studies have not established the relationship between social support and the mental health of students. Therefore, we conducted a study to assess the mental health impact of the COVID-19 pandemic on Lira University undergraduate students and the associated social support factors.

## Methods

This was a cross-sectional survey conducted among undergraduate students of Lira University, Northern Uganda. Data relating to different variables were collected from across the student population within a specific period (Shaughnessy, 2003). Further, the design is appropriate to determine the occurrence of social phenomena among groups of people [26] and also to examine possible patterns of association between the variables [27].

## Participants

We selected participants who were undergraduate students from Lira University, which is found in northern Uganda. We used the volunteer and convenience sampling technique to select the participants. Due to the enforcement of the lockdown curfew, we preferred the non-probability approach of sampling to other approaches. Through emails and social media platforms, we sampled a total of 165 students.

## Instruments

We adapted the Mental Health Continuum Short Form (MHC.FC) and the Oslo 3-items Social Support Scale (OSSS-3) instruments and used them to collect data on the students' mental and social support, respectively. The MH. FC is a 14-item instrument with six options that prompt study participants to give their feelings regarding the mental health-related statements. The options include: never, once or twice, once a week, 2 to 3 times a week, almost every day and every day. The instrument has a minimum score of 0 and a maximum score of 70 with a score below 25 showing poor mental health, followed by a score between 25-45 implying average mental health while a score between 46 and above being termed positive mental health [28]. The instrument showed an internal consistency of  $<0.80$ , which means that it is reliable and its external validity for University students both within and outside Africa is appropriate [29].

Meanwhile, the OSSS-3 is a three-point scale ranging from 3 to 14 which measures three key aspects-how close people are to an individual, how much interest and concern people show to an individual, and how easy it is to get practical help from neighbours [30]. The first item has 4 response options, while the second and third items each have five response options, all giving a total of 14 scores. The lowest score is 3 and the highest score is 14 with a score between 3-8 being considered poor social support, while a score from 9 to 11 is moderate social support and finally a score between 12 and 14 indicates strong social support [31].

## Study Procedure

The study took place between August and October 2020, which is approximately four months after the closure of the University. We approached the students either by calling them on their telephones or their emails, WhatsApp and Facebook. We also approached their student leaders and fellow faculty staff and requested them to share the instrument widely with their respective students. Finally, we used the available media, such as the university staff WhatsApp group and the students' different WhatsApp group, to circulate the questionnaire. We monitored responses through the central server system that was automatically created by Google. To ensure a timely response, we made regular and constant reminders through the different communication channels.

## Ethical Consideration

The research received ethical approval from The AIDS Support Organization-Research Review Board (TASOREC/010/2020-UG-REC-009). Also, the students were asked to state if they were willing to answer the questions. Only those who consented were the ones that proceeded to participate in the study. Moreover, those who felt they could not continue were free to discontinue their participation without any condition.

To ensure confidentiality, participants' identities were concealed by providing anonymous responses.

## Results

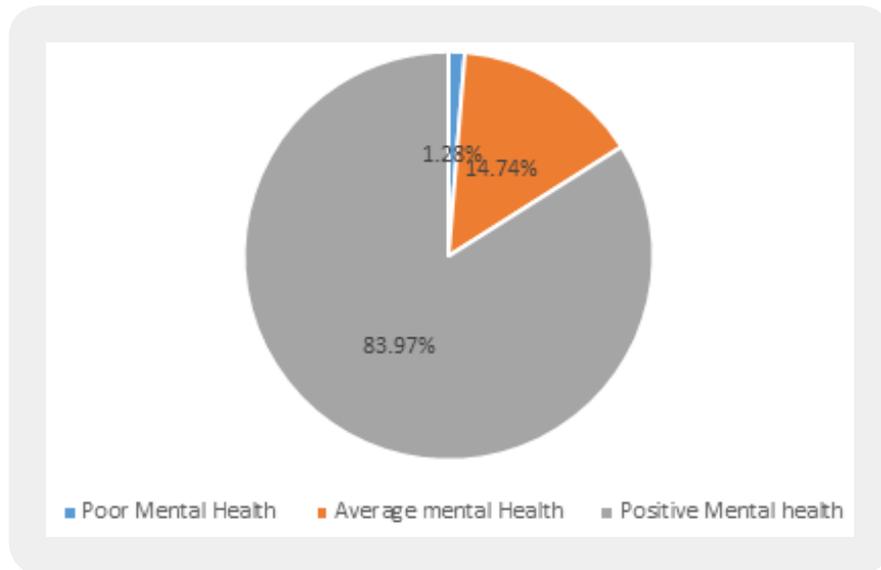
Out of a total of 165 students that responded to the questionnaires, 9 participants either did not complete the questionnaires or filled in the wrong information and thus they were excluded from the analysis leaving only 156 respondents which is a 94.5% response rate. Most of the respondents in this study were female (55.77%); aged 21-22years (34.62%) and a majority (30.13%) were in their first year of study at the University (Table 1).

**Table 1:** Socio-demographic characteristics of respondents

Description	Characteristics	Frequency.	Percent (%)
Sex	Female	87	55.77
	Male	67	42.95
	Prefer not to say	2	1.28
Age (in years)	17-18	01	0.64
	19-20	26	16.67
	21-22	54	34.62
	23-24	42	26.92
	25 and above	33	21.15
Year of study	First-year	47	30.13
	Fourth-year	19	12.18
	Second-year	37	23.72
	Third-year	53	33.97

## Mental Health Status Respondents

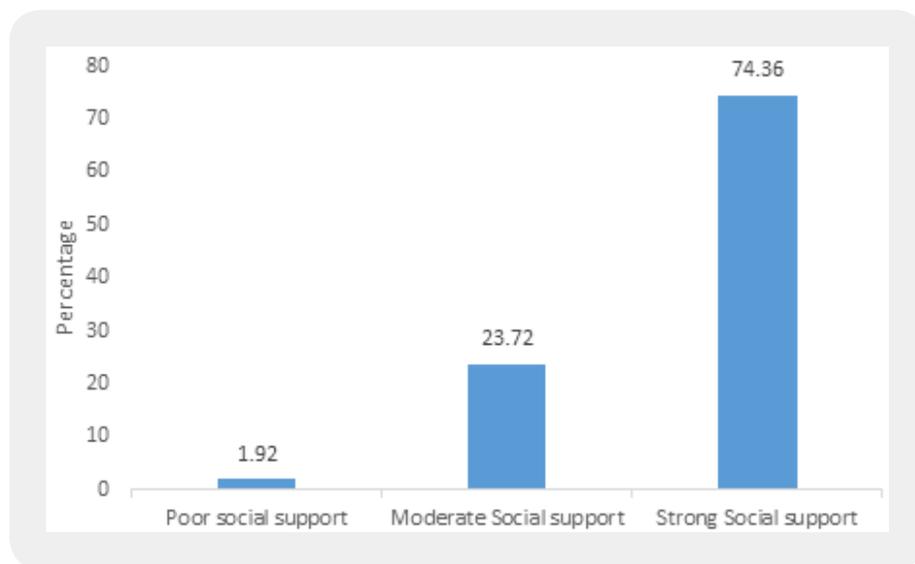
The study set out to determine the mental health status of undergraduate students at Lira University. We asked respondents to give their opinions on a set of statements that measure their mental health. From the data, the greatest proportion of the students 131 (83.97%) had positive mental health status compared to a few others 23 (14.74%) who had average mental health, although some two students (1.28%) stated that they had poor mental health during the lockdown (Figure 1).



**Figure 1:** Mental health status of the respondents

### Social Support Provided to Respondents

The study also set out to find out the existence and level of social support provided to students while at home. We employed the 3-item instrument to measure social support. From figure 2, the majority of the students 116 (74.36%) had strong social support while a significant proportion, 37 (23.72%) had moderate social support and, very few having poor social support 03(1.92%).



**Figure 2:** Respondents' social support (N=156)

## Association Between Social Support and Mental Health

Results in Table 2 show that there is a strong relationship between social support and the mental health status of the respondents. This is illustrated by the Chi-square value of 126.7, statistically significant at  $P=0.000$ .

**Table 2:** Social support and mental health status ( $N=156$ )

Social Support (SS)	Poor Mental Health	Average Mental Health	Positive Mental Health	Total	P. Value
Poor SS	02 (66.67%)	01 (33.33%)	0 (0.00%)	03 (100.00%)	
Moderate SS	0.0 (0.00%)	14 (37.84%)	23 (62.16%)	37 (100.00%)	0.00
Strong SS	0.0 (0.00%)	08 (6.90%)	108 (93.10%)	116 (100.00%)	
Total	2 (1.28%)	23 (14.74%)	131 (83.97%)	156 (100.00%)	

Pearson  $\chi^2(4) = 126.6994$   $P = 0.00$

## Discussions

In this current study, we sought to establish the mental health status of undergraduate students of Lira University when they were sent home because of the COVID-19 pandemic and to determine its relationship with social support. From our findings, almost all the students (83.9%) were in a positive mental health state. The finding contradicts a study conducted in China which showed that at least 25% of the University students reported symptoms related to anxiety [7]. Under normal circumstances, mental health challenges are prevalent among University students [10,11]. This could be as a result of pressure to perform well academically or having no or few friends to interact with, or even financial hardships [12,13]. This discrepancy could be because COVID-19 started in china and they were the first to experience its effects whereas the Ugandan students had already been psychologically prepared for the COVID-19 lockdown.

The study also found out that the students had strong social support (74.3%). That is, not only did the students have people who were close to them and provided for their needs, but they were also able to interact and share their problems with them, and care for them as well. The findings are in agreement with a similar study done in different regions of the world which revealed that the adolescents had good social support from their families, peers, and neighbours [32]. In the face of a pandemic, such as the COVID-19 pandemic, the family plays a crucial role in not only providing basic needs but also ensuring good social support to the young people.

Finally, our results revealed a positive correlation between social support and the mental health of University students ( $\chi^2 = 126.70$ ;  $P=0.00$ ). This may not be a surprising result, because studies have also indicated that social support is a protective factor for mental health [23]. Social support makes a person relaxed and comfortable, thereby relieving the stress that could result in mental health challenges. Studies show that a person's mental health is determined by social factors (Berkman, 2014) [33]. The findings of this study are similar to a study by Alegria and others who reviewed the literature on social determinants of mental

health in which they concluded that individuals who had social support from a community or trusted group of people tended to have positive mental health, while those who lacked social support had negative mental health [34].

Also, in agreement with our results, a meta-analysis in Iran to investigate the relationship between effect size of social support and mental health among different groups of individuals revealed that there was a moderate correlation between social support and mental health especially to women, the elderly, patients, workers and students [35]. On the contrary, a study by Elizabeth in the U.S did not find any link between positive social support and several anxiety and mood disorder episodes in patients [36]. Probably the causative factors for the anxiety were not addressed in the process of social care and also the fact that her study conducted was among patients as opposed to the current study which was among students, may justify the differences in the findings [37].

## Conclusions and Recommendations

Lira University students had a positive mental health state since they had adequate social support from their close ones. The reported social support may account for the positive mental health observed. Therefore, social support to University students during difficult times such as the COVID-19 pandemic is vital as it ensures their positive mental health state. Understanding University students' perspectives of the lockdown experience could help dig deeper into the dynamics and complexities experienced during pandemic situations. A more rigorous study among students of different Ugandan Universities should be conducted to generalize the findings.

## Study Limitations

The study was only conducted among a few students of Lira University and adopted a cross-sectional design employing quantitative approaches only. The use of an online questionnaire meant that some students could not be accessed.

## Conflict of Interest

The authors declare that there is no competing interest whatsoever regarding the study.

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