

WOLKITE UNIVERSITY

THE PSYCHOLOGICAL IMPACT OF CORONA VIRUES PANDAMIC IN CASE OF OTHER SOCIAL SCIENCE AT WOLKITE UNIVERSITY

A RESESRCH PAPER SUBMITTED TO COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE, DEPARTMENT OF PSYCHOLOGY IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS OF BACHELOR OF (BA) DEGREE IN PSYCHOLOGY

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LETTER OF APPROVAL

This is to certify that the senior essay prepared by ekram nuredin entitled<<The psychological impact of covid-19 pandemic on other social science at wolkite university >>and submitted in partial Fulfillment of the requirement for the bachelor of Arts degree in psychology complies with the regulation of the university meets the accepted standards with respect to originality and quality.

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Abstract

To assess the psychological impacts of COVID-19 pandemic and its associated factors among other social science students at Wolkite University Ethiopia, 2013. The Covid-19 pandemic caused by the novel Sars-CoV-2 corona virus, has resulted in millions of deaths and disruption to daily life across the globe. University students have been additionally affected by a sudden move to online learning, the closure of campuses and dramatic societal changes that have upended their experiences of higher education. The researcher focus on the physical and mental health consequences of the pandemic for this population sector during 2013Ec, and the inter dependencies of these impacts. The researcher survey the challenges for infection control on campuses and for monitoring the disease dynamics in student communities. Finally, the researcher explore the psychological and mental health problems that have been exacerbated by the pandemic and evaluate the underlying factors that are most relevant to students.

KEYWORDS**: - **corona virus, Covid-19, health, pandemic, university students

Abbreviations

AOR - Adjusted Odds Ratio;

COR- Crude Odds Ratio;

COVID-19- 2019 novel corona virus;

ETB- Ethiopian Birr;

SPSS - Statistical Package for Social Sciences.

CI, confidence interval; COVID- 19, corona virus disease 2019;

DASS, Depression, Anxiety, and Stress Scale;

IRB, Institutional Review Board;

MERS, Middle East respiratory syndrome;

OR, odds ratio;

SARS- COVID, severe acute respiratory syndrome corona virus;

UNESCO, United Nations Educational, Scientific, and Cultural Organization;

WHO, World Health Organization.

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CHAPTER ONE

Introduction

1 .1 Background of the Study

Corona virus Disease 2019 (COVID-19) is a disease caused by a novel corona virus (SARS-CoV-2) that emerged in a seafood and poultry market in the Chinese city of Wuhan in 2019. The World Health Organization (WHO) characterized the outbreak as a pandemic on March 11, 2020, as cases have been detected in most countries worldwide [1]. As of October 30, 2020, there have been 45,608,024 laboratory-con- firmed corona virus cases, including 1,189,139 deaths worldwide according to Johns Hopkins University. The pandemic has interrupted the learning of more than one billion students in 129 countries around the world according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO)[2].

The first case of COVID-19 was confirmed in Ethiopia on 13 March 2020, which was the first one to be reported since the beginning of the outbreak in China in December 2019[3]. On 8 April 2020, the Council of Ministers declared a five-month-long state of emergency in response to the growing number of corona virus cases, and schools, sporting events, and public gatherings were closed[4]. According to the ministry of health, Ethiopia there was 95,789 COVID-19 reported cases and 1464 (1.53%) deaths in Ethiopia until October 30, 2020(EHI).

The COVID-19 pandemic affects mental health and well-being in addition to physical health. [5, 6]University graduating class students are more affected psychologically by the pandemic due to cancellation and postponing of anticipated events such as exchange studies and graduation ceremonies [7]. A poorly known contagious disease out- break, like COVID-19, leads to unavoidable stress, fear, and anxiety [8]. The mental well-being of university students can be negatively affected by shifting face-to-face classes to online, suspension of the semester-end final examinations, and unavailability of books, computers, and high- speed internet connection at home.

During the pandemic, University students are at significant risk of adverse mental health outcomes resulted from the continuous spread of the disease, conspiracy theories, myths, and blame games, sensational media reporting of COVID-19, frustration and boredom, implementation of social lockdown with classmates, friends, and teachers, lack of personal space at home, and family financial loss due to lockdown [10].

The careers of these years' university graduates may be seriously impacted due to the pandemic since they experience major interruptions in teaching and assessment in the final part of their studies, and late graduation.

The pandemic has potentially affected students physically, academically, financially, and psychologically. Ina short period, students' lives have dramatically changed as they have been asked to leave campus, adjust to new livingcircumstances, and adapt to online learning platforms [11].

Different studies showed that the prevalence of depression, anxiety, and stress was high among

university students. From studies conducted in Pakistan and Bangladesh, the prevalence was 34% and 82.4% for depression and 45% and 87.7% for anxiety respectively [10, 12].

One study in Nigeria indicated that the prevalence of anxiety and depression was 31.9% and 41.4% respectively [13]. In Ethiopia, two studies reported that the prevalence of depression, anxiety, and stress was 21.2% and 77.2%, 27.7% and 71.8%, and 32.5% and 48.5% respectively[14,15]. Kinds of literature also indicated that age, sex, history of medical illness, living in a State/ Region with a high incidence of COVID-19, family income, having family members infected with the disease, the practice of preventive measures, and residence were determinants of depression, anxiety, and stress[10,12,14,15].

The ongoing spread of COVID- 19, strict isolation measures, delays in starting school, and postponing graduation across the country influences the mental health of university students. As a result, estimating the psychological impact of the COVID-19 pandemic on social science students in Wolkite University is important for health authorities to be developing preventive strategies and effective treatment modalities to would alleviate its negative outcome. Therefore, the study was intend to assess the prevalence and associated factors of depression, anxiety, and stress among social science students at Wolkite University , south west Ethiopia.

1.2. Statement of the problem

The novel corona virus (COVID-19) outbreak, which was first detected in Wuhan, China, in December 2019, has been evolving rapidly. On 30 January 2020, the WHO Director-general declared that the current outbreak constituted a public health emergency of international concern, and on 12 March 2020 the COVID-19 the outbreak was declared a pandemic [2].

Worldwide, until July 24, 2020, over 15.5 million con- firmed cases, about 9.5 million recovered, and more than 650,000 confirmed deaths were reported [3]. In Africa, over 750,000 were confirmed cases, nearly 450,000 recovered, and 6500 deaths were reported.

The most affected countries are: South Africa, Egypt, Nigeria Ghana, Algeria, and Morocco, together, these countries account for 75% of the cases reported in the region [4] .Ethiopia reported a confirmed case of novel corona virus for the first time on April 2, 2020. Until July 24, 2020, 11,939 confirmed cases, 5645 recoveries, and 197 deaths were reported. Currently, Ethiopia is under a state of emergency declared to fight the corona virus(COVID-19) pandemic (WHO) [5].

Moreover COVID-19 has negative mental and social consequences, for example, a broad body of research links social isolation and loneliness to poor mental health; and recent data shows that significantly higher share of people who were sheltering in place (47%) reported negative mental health effects resulting from worry or stress related to corona virus than among those not sheltering in place (37%). Negative mental health effects due to social isolation may be particularly pronounced among older adults and households with adolescents, as these groups are already at risk for depression or

suicidal ideation (WHO) [6]. The widespread outbreaks of infectious diseases, such as COVID-19 are associated with psychological distress and symptoms of mental illness. A study conducted in China during the initial outbreak of COVID-19 found that 53.8% of rated psychological impact of the outbreak, 16.5% reported moderate to severe depression, 28.8% reported moderate to severe anxiety and 8.1% reported moderate to severe stress level. A review of existing literature revealed that that symptoms of anxiety and depression (16 to 28%) and self-reported stress (8%) are common psychological reactions to the COVID-19 pandemic.

The continuous spread of novel corona virus (COVID- 19), strict isolation measures, and delays in starting school, colleges and universities across the country is expected to influence the mental health of university students. Despite its mental health impacts, no detailed study on the psycho- logical impacts of university students facing the epidemic has been conducted. Therefore, the study aims to was show the psychological impact of COVID-19 pandemic and its associated factors among social science students at Wolkite University , south west Ethiopia. The finding of this is help as baseline data for policy makers and programmers to develop mentalhealth programs for individuals during the outbreak.

Research Questions

- What are the major causes of COVID- 19 affect for social science student at Wolkite University?
- What are the psychological and associated factors for other social science student at Wolkite University?
- Show the impact of COVID- 19 pandemic on other social science student at Wolkite University?

1.3 Objective of Study

1.3.1 General objectives

The general objective of the study is to assess the psychological impact of COVID- 19 pandemic on other social science student at Wolkite University.

1.3.2 Specific objectives

In line with this general theme, the following are specific objectives of this study:

1. To identify major causes of COVID- 19 affect for social science student at Wolkite university
2. To assess psychological and associated factor for other social science student at Wolkite university.
3. To examine the impact of COVID- 19 pandemic on other social science student at Wolkite university.

1.4 Significance of the study

The significance of the study was stated in the following. Researcher expects to give current and timely information about the psychological impact of COVID- 19 pandemic on academic participation of other social science student at Wolkite University. The study to give fresh insight about how the university is get

involve in alleviating the problem. It was providing insight about the psychological problem of students in Wolkite university and it is serve as a reference material and clue for other researcher who aspire to engage themselves in research work relate to this topic.

1.5 Scope / Delimitation of the study

The scope of the study is to be only on the psychological impact of COVID- 19 pandemic on other social science student at Wolkite University. The study is too assessed and to identify psychological impact of COVID- 19, which have affect students. It does not assess the social, cultural, economical and other related problems. Geographically, the study was delimitated on other social science student at Wolkite University. Due to resource constraint such as financial, time & capacity of researcher.

1.6 Limitation of the Study

Since the data were collected by phone call the respondents may not provide accurate information for the study, which may have an effect on the findings of this study. Unlike a longitudinal study, the cross-sectional nature of the data makes it impossible to draw inferences about the direction of relations and it does not show cause and effect relationship among study variables

1.7 Organizational of the paper

This study is composed of five chapters. The first chapter consists of introduction and under introduction includes background of the study, statement of the problem, objective of the study, research question, and significance of the study, scope of the study, definition of the term and limitation of the study. The second chapter is review of related literature. The third chapter consists of methodology study design, study approach, sampling technique, sample size, target population, types and sources of data, method of data collection, method of data analysis and ethical consideration. The fourth chapter contains data analysis and discussion. The last chapter contains conclusion and recommendation.

1.8 Operational definition

Depression: is a common and serious medical illness that negatively affects how you feel, the way you think and how you act. Fortunately, it is also treatable.

Pandemic: an outbreak of a disease that occurs over a wide geographic area (such as multiple countries or continents) and typically affects a significant proportion of the population.

Coronavirus (covid-19): is an infectious disease caused by the SARS-CoV-2 virus most people who fall sick with COVID-19 will experience mild to moderate symptoms and recover without special treatment. However, some will become serious ill and require medical attention.

CHAPTER TWO

2. LITERATURE REVIEW

This section has reviewed some literatures regarding the impact of pandemic prevails in the country on the Society and economy and how-to prevent from the adverse effects of the COVID – 19. In [3], the model explained that possession rate in hotels has been reduced by 98 % and that one is imperious for government to comprehend the very challenging circumstances the hotel sector has initiate it.

Therefore, specified the noteworthy input of the sector to GDP growth is 46% and employment of urban is 70 %, it is overbearing to take proper arrangements and in a supportable means in this pandemic condition. In this struggle, period is of the core to save businesses from crumpling and insolvency. In [4], the report described that forecasts of the possible effect of the Covid-19 tremor on financial prudence around the biosphere very extensively in the year 2020. Yet, there is comprehensive contract that the universal economy will act specified the unexpected break to large bands of activity and the resulting revenue loss in the industrial and services segments across maximum advanced countries, mutual with the adversative impacts on financial sectors, consumption (by mutually income and wealth impacts), venture assurance, intercontinental trade and product prices (UNICEF).

In [5], the report of (UNICEF), it is explaining that Elder persons and persons with chronic medicinal conditions viz., heart disease and diabetes are exposing to be extra at peril of developing severe signs. The people have to absorb in what way affects kids because they have very less immunity and possible to expire effortlessly and so far mostly amongst elder persons with pre-existing health conditions.

In [6], the report of UNDP Ethiopia that it is clearly indicated that the Government has even now engaged procedures against business who are collect more prices and around 200 groceries in Addis and near to 800 shops in the provinces have been shut down due to take remedial measure for people of the nation against the pandemic. The higher encounter will be to reply efficiently to a possible straight loss of GDP extending between 2 to 3 % of GDP (around 2 billon US Dollars) and address extensive communal, monetary and level of political impacts too by the severe pandemic.

In [7], the report of UNICEF Ethiopia narrated that the present COVID-19 disaster is challenging the distribution of vital services to the utmost pretentious sections of the populace. The susceptible like Children and families who are socio-economic elimination or those who live in congested areas of the country are predominantly at peril. Children can be excessively affected by measures engaged to control the pandemic such as closures of school and social and physical distancing actions. Superior care requirements to be compensated to avert and minimalist adverse significances for children. Based on the above review of literatures, this study prepared a core objective is to analyze the psychological impact of COIVD-19 in the country.

2.1 Theoretical review

Since the entire world is struggling with the COVID – 19 issues, Ethiopian government decided to close all type of educational institutions on 16 March, 2020 and have been sent one million students to their home whereas 250 Private Higher Education Institutions (PHEIs) were also been subsequently closed and watching parallel measure has been taken by other African Countries too. In the direct repercussion to the end, the government set up a national task force that underway activating the civic near battling the impacts of the COVID. The Ministry of Health of Ethiopia immediately started his work for prevention from the pandemic like propagation against the pandemic and how to prevent from the prevalence of the virus and asked to aid sanitary items, crucial supplies, money donation and even their building to use for quarantine and storing purposes (MHE &EHI).

Ethiopian Private Higher Education and TVET Institutions‟ Association expressed that donations were given by private institutions for the prevention of the pandemic around 30 million birr (around 1 million USD). Private medical colleges similarly solicited closely 4,000 of their medical students to deploy by the government if the situations intensify beyond the capacities of full-time experts in the hospitals. and health centers to battle the virus.

The possible impacts of COVID-19 on education systems are present day life extensively considered. With learning disturbed for more than 1.6 billion children and youth in global level, the inferences are likely to be gigantic. [1]The pandemic not only affects education of the students and the nation's institutions and extend to families, regulatory agencies, unorganized sectors and utmost government establishments that are often involved in boundless trials and administrative activities and monetary and liveliness.

In addition, the critical situation wildly affects the economy of the nation. Maximum business organizations have been closed or operating with high restrictions by half of the staffs of the organizations and unorganized sectors in the capital city viz., Addis Ababa almost shut down. Based on the above-mentioned issues, this paper tries to access impact of COVID – 19 on education and economy of the country.

2.2 Global Impact of COVID-19 on Higher Education Institutional And Students' Perspectives

The COVID-19 pandemic triggered various changes in life, as we know it. One of the sectors which was highly affected was Higher Education, and more specifically student exchange.

The International Association of Universities (IAU) and the Erasmus Student Network (ESN) undertook separate research in order to understand the impact of COVID-19 in the communities they directly support.

IAU developed the first IAU Global Survey on the Impact of COVID-19 for Higher Education Institutions (HEIs) around the globe. This survey was available online from 25 March to 17 April of

2020. It collected 424 answers, of which 194 were from Europe. The most common positions of respondents in Europe were head of international office (19%), Head and deputy head of institution (both at 16%) and Faculty member (15%). These categories of respondents provided different perspectives from the HEIs sector, however not necessarily the institutional perspective.

The survey about the Impact of COVID-19 on Student Exchange in Europe was developed by ESN for students in exchange programmers. This survey was available from 19 March to 30 March of 2020. The survey received 21 930 answers, of which 76% were on Erasmus+ Student Mobility, 10.7% on Erasmus+ Traineeships and 6.8% on Erasmus+ International Credit Mobility. In this paper, IAU and ESN are providing a joint reflection on the impact of COVID-19 in student exchange, by creating a parallel between the answers from HEIs and the answers provided by the students. Through this reflection, the entities compare two different but complementary perspectives.

When going through the paper, it is crucial to acknowledge the different methodologies applied for the two studies, as explained above. One important difference to underline is that the results of the IAU survey are expressed in percentage of HEIs, while the results of the ESN survey are expressed in percentage of students. While it is true that the two percentages are related, they do not have the same weight (e.g., 50% of European HEIs do not necessarily represent 50% of European students doing student exchange).

2.2.1 COMMUNICATION BETWEEN HEIS AND STUDENTS

Communication between HEIs and students was as well under analysis in both studies, however the ESN survey provides for information that is more detailed. In fact, the IAU survey asked only if HEIs have the right infrastructure in place in order to communicate with students and 97% of the HEIs representatives shared that they did. However, the fact of having the right infrastructure does not tell anything on the effectiveness of the communication. The ESN survey provides for more information on this topic, as it analyses the students' views on the availability of information regarding health measures (78% answered positively); the availability of information in English (74% answered positively); and regarding the availability of information about traveling restrictions (only 65% of students answered that there was enough information). These results mean that there is indeed an effort by HEIs to communicate with their students, and that in the majority of cases, the flow of information is good.

However, there is a non-negligible percentage of HEIs where this effort is not efficient. At these HEIs there is a need to review how information is delivered, both in terms of content, language and technical platforms used.

2.2.2 SHIFTS TO ONLINE LEARNING

The COVID-19 pandemic led to the need to adapt teaching methodologies, due to the impossibility of having perennial classes. Therefore, online teaching and learning has played an important role in Higher Education for the last months. When questioned about teaching and learning, 85% of the HEI

representatives and 85% of the international students who answered to the surveys shared that perennial classes had been replaced by online methodologies, totally or partially. Additionally, 12% of the responding HEIs, which suspended their classes completely, were developing solutions for teaching and learning, such as through online methodologies and self-study means. This leads to the conclusion that despite the difficulties in the adaptation to a completely different methodology for teaching, the Higher Education sector demonstrated reactivity in order to find solutions to the challenge raised by the pandemic, and of continuing teaching and learning. It remains to be seen how the quality of learning is affected by the shift from face-to-face to online teaching, especially when the situation will change from a crisis management one to a new normal for the new academic year. It will be important to study this change more in detail, both from HEIs and student perspectives.

2.2.3 STUDENT SUPPORT

Furthermore, the COVID-19 pandemic showed the need to support students with a more holistic approach, not only at the academic level. 42% of HEI representatives stated that both their HEIs and partner institutions abroad had contingency plans put in place, 34% had contingency plans at their own universities and 23% had no contingency plans, neither in their institutions nor in their partner institutions abroad. In the survey developed by ESN, only 58% students identified their host university when asked who supported them during the pandemic and only 44,6% identified their home university.

Despite the majority of HEIs having answered positively to the support provided to students, the lack of contingency plans at almost one quarter of HEIs can lead to a negative impact in the student's experience. It is very important that HEIs do not let students feel abandoned, lacking support by the institutions.

2.2.4 FINAL REMARKS

The major conclusion of the comparison between the results of the ESN and IAU surveys, despite the differences in methodology and period, is that the perception of HEIs and students on the impact of the COVID-19 pandemic on different aspects of higher education coincides.

This is a positive signal, as it shows that both institutions and students have the same understanding of the disruption caused by the pandemic and this could facilitate developing the appropriate solutions.

The second major conclusion is that the higher education community as a whole reacted promptly to the disruption caused by COVID-19 and that the emergency solutions adopted were considered as successful in the majority of cases.

However, because of the outbreak, students faced many challenges in their daily lives, besides the ones stated previously. Students in these times faced mental health issues, such as the feeling of anxiety and isolation. Measures must be taken i in order to prevent situations like these and provide students with the due support. Additionally, students identified that they were victims of racism. Racism is unjustifiable and unacceptable. Knowing that students weren't safe even in an environment that is

supposed to be welcoming and tolerant should be part of a reflection in order to take measures not only to mitigate these situations, but to completely erase them. IAU and ESN will work together in order to foster safety and inclusion in our communities.

The higher education community should now move from a crisis management situation to more long term planning for the new academic year. Many of the solutions implemented during the crisis demonstrated their usefulness and will probably continue, but in order to continue offering quality education in the new academic year, careful planning should be done, as new challenges emerge.

For instance, the reopening of campuses will pose questions relating to finding the right balance between face-to-face and online learning, between physical mobility and "virtual exchange". There will be a need to provide a safe environment on campus for all students (including international students), which will demand more efforts by both HEIs and students. International mobility will be more complicated and international students will need more and probably different support by HEIs.

Therefore, more than ever, it is necessary that HEIs and students collaborate closely in finding solutions to provide the current and next generation of students the same, if not better, learning opportunities than pre COVID-19 generations of students had.

2.3 Impact of COVID – 19 on Education of Ethiopia

2.3.1. Growing Stresses on Private Higher Education

The last 5 months have gradually exposed the variance in the effect of the closures on public and private higher education institutions. Public institutions‟ budget entirely roofed by the government and have had no solemn hindrance in terms of running their work and payment for their employees. Their key encounter has been supportive for their students‟ online and answering to their societies‟ requirements.

In the initial first few weeks, the private sector has been happening to sensation of straining of the pandemic but this was expected to make weal status of this sector.

The massive mainstream of PHEIs in the country be contingent nearly totally on student tuition and fees for their survival. Non-profit private institutions originated by religious units and NGOs may get to pursue sustenance form their parent organizations. Maximum PHEIs function from rental buildings that are possessed by other individual and private trades and they have around 10 thousand of employees and bear considerable expenses of 70 percent to 80 percent on rental and salaries. In addition, PHEIs are paying taxes and duties and they refund credits that got from financial institutions at excessive rates.

They obtain tiny either no-direct or indirect support from the government. A student loan system that aids entire students counting individuals in the private sector is not a policy in Ethiopia as like in neighboring countries like Tanzania and Kenya.

There is a lot of challenges in to offer online education to the students and it is not easier too. The challenges are poor internet connection, excess internet costs, lacks of technology that are serious

encounters to students over and above their likely lack of alertness to follow their studies in a serious pandemic situation.

Such a persistence of lack of developed learning system has compelled institutions to use the social media platforms like Telegram, Face book, e-mail as an instant option to direct lessons to students and also directed to submitting assignments and institutional materials are asked to the students to submit in the concern social media platforms and it has difficulties to protect.

Additional great challenge is the large number of students does not have the chance or capacity to access the social media platforms. These unable to meet out challenges of the students make unhappiness and disagreement with the institutions.

1.1.2. Government Directives

Government of Ethiopia has given one General Directive to swing into all method of teaching online while students could not attend the classes physically due to maintain social distance to avoid the prevalence of the COVID-19. In addition, at first, private schools including higher institutions were advised to not collecting fees due to ethical inferences because of clear limits in their capacity to deliver teaching and learning with the similar impetus and the same way in the past too and also inability of student's‟ parents to pay because of their absence of regular income. It was argued that the advice by the government meant by not the exact time and because of the private institutions should show the compassion towards humanity and also function cost of the concern institutions cloud be declined except payment to the employees. Thus, a direct instruction from the Ministry of Education that private institutions would be allowed to collect only 50 percentage to 75 percentage of monthly fees as reimbursement for the online services for their offerings and its also with the acceptance of the parents‟ only.

This agreed with a national state of emergency that forbidden profitable and private employers with PHEIs from reducing their workforce or prematurely terminating employment agreements additional negotiated the situation of private institutions in all levels of the education levels. Private higher education institutions accepted a 25 percent monthly discount of fees of their personal concurrence. In spite of the absence of official statistics, the straining of disbursing monthly staff wages, rental and other expenditures is now obvious in the private higher education sector and the sector is cautious of increasing burdens in the future and as the academic year coming to end.

CHAPTER THREE

3. METHODOLOGY OF THE STUDY

3.1 Description of the Study Area

Wolkite University is one of the third generation public higher educational institutions that were founded in January 2004E.C. It is located 165km north of Addis Ababa in SNNP, Gurage zone at wolkite town, on the area of >150 hectares in Gubrye sub-city. Furthermore, the university has opened its branch campus at Butagirra town (Gurage Zone). For the first time, the university graduated 64 students were graduated in regular program in 2006E.C.Currently,(2012E.C) the university have 46 regular departments with eight (8) corresponding regular colleges. The total number of students educated in Wolkite University 13711 students (Wolkite University registrar office).

3.2Study design

The design of the study is cross sectional survey design because it is the most common use to gather in social research and status design and to gather information on a population at a single point of time. A cross sectional survey design entails the collection of data on relatively large of cases and single point of time.

3.3 Research Approach

In the study a qualitative study approach is used and support by quantitative study approach because of qualitative approach deviant behavior is qualitative by nature and in order to get deep information from the respondents and fulfill these data which may not may be gather quantitatively and more clear and accounts of small groups and set out to encounter social phenomena as they naturally occur. The reason is supported by quantitative approach to see socio demographic variable of the respondents and explain the phenomena that those data reflects and explore statistical techniques.

3.4Target population

The target population of the study is on students in Wolkite University specifically 2013 other social science students.

3.5 Sampling Technique

Sampling is the method used to select a given number of objects or things from a given population. Sampling technique is mechanism by which the sampling unites of the study is selected from the sampling frame of the population (Babbie2010). The selection of the sampling researchers in turn affects the cost and time. Therefore, researcher was use non-probability sampling technique.From non-probability the researcher, was used purposive and snow ball sampling technique? The reason used purposive sampling technique it reflects a group of sampling techniques that is based on judgment

of the researcher and helps the researcher to get reliable information from reliable and proper body. The other reason use purposive sampling technique because in purposive sampling technique the researcher select only those individuals that yield the most information about the topic under investigation. The reason why the researcher selected snowball-sampling technique is that those individuals to be deviants individual and it is difficult to get them because they may hide themselves.

3.6 Sample Size

For the purpose of the study, the researcher selected 338 available respondents from 2013 other social science students purposively. The reason to selected small number of sample size was lack of sample frame and the researcher will expects the response of respondents may reach saturation point. But this does not mean that all 2013 other social science students are psychologically affected by COVID-19 but the nature of the topic is very sensitive issue because it is difficult to distinguish the students who psychologically affected by COVID-19. According to Marshall and Rossman,(2006), the researchers have to choose methods that are practical, cost effective , time efficient, culturally sensitive and that help to get adequate information as much as possible. By taking this thing in consideration, the researchers used Purposive sampling samplings.

3.7 Type and Source of Data

The researcher was used both primary and secondary data sources

3.7.1 Primary Source of Data: - the primary data sources are the first hand information that directly collected from the respondents. These are achieving the questionnaire that includes both open-ended and close-ended questions. The researcher was used interview to collect the primary data because of the nature of the topic is needs interview and additionally interview facilities for the unclear understanding of the questionnaires and enables to collect unfulfilled response of the questionnaires of the respondents. The researcher was get primary data by open ended and close-ended questionnaires. Interview and FGD from 2013 other social science students at Wolkite University.

3.7.2 Secondary Source of Data

In the study, the researcher was used secondary data sources to support the finding of the study and other related materials or sources that will relate to the topic. The researcher was get gain from published and unpublished materials such as book, thesis journal and internet page to make the study reliable and relevant.

3.8 Methods of data collection

The researcher was used mixed research approach of data collection instrument because to increase and assure the reliability of that is questionnaires and interview, observation and FGD

3.8.1Questionnaires:-is survey instrument in which uniform information extracts from the same respondents (Babbie2010). The questionnaires was used by the researcher consists of questions and items such as prompts for the purpose of gather information from respondents and facilities the study data and to collect data within short period of time. And it represent a formal and written set of both close-ended questionnaires which refers to fixed chance questions through which only from the given alternative and open-ended questions which allow respondents to answered suggestions by their own words concern to their suggestions explanations and comments depend upon the given questions.

3.8.2 Key Informant Interview

Key informants was used to investigated more deeply about the causes and consequences of identify student's deviant behaviors. The student union representative and university discipline committee used as a key informant of the study. In the study re searcher was used four key informants two are student's union representative and two are university students discipline committee or office.

3.8.3 Observation:-observation is another major method of data gathering to get valuable and authentic information because what are students say and to may sometimes contradict with each other. In this case direct observation is the best solution through this the researcher is observed the causes and consequences of student's maladaptive behavior in the study area.

3.8.4. Focus Group Discussion

Focus group discussion is referring to the discussion that the respondents or the study population is discussed on the issue raises by the researcher base on his objectives. In addition, all the relate response are record what the FGD participant are discuss. Under qualitative research approach FGD very important because peoples are collect together they might be (8-12) in numbers discuss on the issue that is being raise by the researcher are when they discuss in group they may get something new and develop something what they known before. In the study, researcher will discuss with small number discussants because unavailability of the students at the time. Moreover, the discussion is moderated by the researcher generate various among the discussants on issue is related to their understanding of psychological impact of COVID-19 behaviors, the major cause behavior, and consequences,

3.9. Method of Data Analysis

Data analysis the process of looking at summarizing the data with aim to extract important or useful information from the developed questions (Babbie2010).the researcher both was used qualitative and quantitative data analysis methods.

3.9.1. Quantitative data analysis:-the researcher use survey a quantitative data analysis is ways because survey is a quantitative by its highly detailed structure and results can be easily collected and presented statistically. The researcher was used descriptive statistic because it involves frequency,

tables and percentage and all steps of statistics such as collect, organize and interpret.

3.9.2. Qualitative data analysis: -the researcher was used interview their data analysis section includes Qualitative expression and analyzed present and interprets to use statement and description of the qualitative.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

In this chapter assess the psychological impact of COVID- 19 pandemic on other social science student at Wolkite university in relation to Socio-Demographic age, Behavioral and Clinical-Related Characteristics, Personal Characteristics, Prevalence of Stress, Anxiety, Depression and Factors Associated with Stress, Anxiety, Depression were described.

4.1 Socio demographic Characteristics

Variables	Category	Frequency (n= 338)	Percentage (100%)
Age	20–24 years	198	58.6
	25–29 years	118	34.9
	≥ 30years	22	6.5
Sex	Male	190	56.2
	Female	148	43.8
Residence	Rural	143	42.3
	Urban	195	57.7
Religion	Orthodox	262	77.5
	Muslim	29	8.6
	Protestant	38	11.2
	Catholic	9	2.7
Field of study	Health	64	18.9
	Non-Health	274	81.1
Living with family	Yes	294	87.0
	No	44	13.0

Table 1: Socio-Demographic Characteristics of 2013 other social science students at Wolkite University South west Ethiopia 2021(N= 338)

A total of 322 university students were interviewed with a response rate of 97.5%. The mean age of the respondents was 22.58±2.8SD years and about 199 (63.4%) of them were females. From the total participants, 210 (66.9%) of the respondents were urban and 137 (43.6%) were Bench in ethnicity. Concerning to their religion, about 133 (42.4%) were protestant (See Table 1).

4.2 Behavioral and Clinical-Related Characteristics of other social science Students

Variables	Category	Frequency (n= 338)	Percentage (100%)
Diagnosed with chronic disease	Yes	39	11.5
	No	299	88.5
Confirmed/suspected case in the family	Yes	34	10.1
	No	304	89.9
History of mental disorders	Yes	27	8.0
	No	311	92.0
Substance use	Yes	64	18.9
	No	274	81.1
Perform physical exercise	Yes	230	68.0
	No	108	32.0

Table 2: Behavioral and Clinical-Related Characteristics of 2013 other social science students at Wolkite University South west Ethiopia 2021(N= 338)

The majority (88.5%) and (89.9%) of the participants were not diagnosed with any chronic disease and had no family members/relatives confirmed or suspected for COVID-19 respectively. Three hundred eleven (92.0%) of the participants had no history of mental disorders. More than three- fourths (81.1%) of the participants did not use a substance like chat, cigarette, and alcohol at least once in the last three months. More than two-thirds (68.0%) of the respondents perform any kind of sports activity including walking for at least 20 min per day (Table 2).

4.3 Personal Characteristics of other social science Students

Variables	Response	Frequency	Percent (%)
Knowledge about COVID- 19 preventive measures	Good Poor	320 18	5.3 94.7
Attitude towards COVID- 19 preventive measures	Positive Negative	300 38	88.8 11.2
Practicing COVID-19 preventive measures	Yes No	179 159	53.0 47.0
Fear of infecting family members	Yes No	211 127	62.4 37.6
Contact history	Yes No	52	15.4

		286	84.6
Living with a family aged > 60 years old	Yes No	118 220	34.9 65.1

Table 3: Personal Characteristics of 2013 other social science students at Wolkite University South west Ethiopia, 2021(N= 338)

Among the total 338 participants in the study, about 94.7% of the students had good knowledge about preventive measures of COVID-19. The majority of the participants (88.8%) in the study have a positive attitude towards the importance of the preventive measures of COVID-19. More than half (53.0%) of the participants in the study have practiced COVID-19 preventive measures. More than three-fifths (62.4%) of the participants worried about infecting family members. Two hundred eighty-six (84.6%) of the participants had no previous contact history with suspected or confirmed COVID-19 cases. Almost one-third (34.9%) of the participants had a family member aged greater than 60 years (Table 3).

4.4 Prevalence of Stress

Statements	Response (Frequency (Percentage))			
	Did Not Apply to Me at All	Applied to Me to Some Degree	Applied to Me to a Considerable Degree	Applied to Me Very Much
I found it hard to wind down	56 (16.6%)	55 (16.3%)	109 (32.2%)	118 (34.9%)
I tended to over-react to situations	68 (20.1%)	95 (28.1%)	132 (39.1%)	43 (12.1%)
I felt that I was using a lot of nervous energy	86 (25.4%)	103 (30.5%)	69 (20.4%)	80 (23.7%)
I found myself getting agitated	93 (27.5%)	61 (18.0%)	84 (24.9%)	100 (29.6%)
I found it difficult to relax	58 (17.2%)	76 (22.5%)	92 (27.2%)	112 (33.1%)
I was intolerant of anything that kept me from	116 (34.3%)	93 (27.5%)	75 (22.2%)	54 (16.0%)
getting on with what I was doing				
I felt that I was rather touchy	167 (49.4%)	92 (27.2%)	30 (8.9%)	49 (14.5%)

Table 4:Responses of other social science Class Students to the Stress Scale at the 2013 students at Wolkite University South west Ethiopia, 2021(N= 338)

The prevalence of stress, anxiety, and depression among graduate class students of the University of Gondar was 22.2% with a 95% CI (17.8%, 26.6%), 39.6% with a 95% CI (34.3%, 45.6%), and 40.2% with a 95% CI (34.8%,46.0%) respectively (Figure 1). Fifty-five (16.3%), 32.2%, and 34.9% of the respondents faced difficulty

relaxing to some degree, a considerable degree, and very much respectively. Nervous arousal was experienced by 28.1%, 39.1%, and 12.1% of them to some degree, a considerable degree, and very much respectively. Nearly three fourth (74.6%), 72.5%, 82.8%, 65.7%, and 50.6% of the study participants reported that they were easily upset, agitated, irritable, over-reactive, and impatient (Table 4).

4.5 Prevalence of Anxiety

Statements	Response (Frequency (Percentage))			
	Did Not Apply to Me at All	Applied to Me to Some Degree	Applied to Me to a Considerable Degree	Applied to Me Very Much
I was aware of the dryness of my mouth	196 (58.0%)	69 (20.4%)	37 (10.9%)	36 (10.7%)
I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness	220 (65.1%)	57 (16.9%)	39 (11.5%)	22 (6.5%)
in the absence of physical exertion)				
I experienced trembling (e.g. in the hands)	210 (62.1%)	71 (21.0%)	32 (9.5%)	25 (7.4%)
I was worried about situations in which I might panic and make a fool of myself	120 (35.5%)	101 (29.9%)	65 (19.2%)	52 (15.4%)
I felt I was close to panic	136 (40.2%)	74 (21.9%)	80 (23.7%)	48 (14.2%)
I was aware of the action of my heart in the absence of physical exertion (e.g.	155 (45.9%)	91 (26.9%)	60 (17.8%)	32 (9.5%)
sense of heart rate increase, heart missing a beat)				
I felt scared without any good reason	117 (34.6%)	73 (21.6%)	89 (26.3%)	59 (17.5%)

Table 5: Responses of 2013 other social science Class Students to the Anxiety Scale at Wolkite University South west Ethiopia,2021(N= 338)

Two hundred eight (61.6%), 62.1%, 40.5%, and 34.6% of the respondents did not develop autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect respectively (Table 5).

4.6 Prevalence of Depression

Statements	Response (Frequency (Percentage))			
	Did Not Apply to Me at All	Applied to Me to Some Degree	Applied to Me to a Considerable Degree	Applied to Me Very Much
I could not seem to experience any positive feeling at all	121 (35.8%)	99 (29.3%)	70 (20.7%)	48 (14.2%)
I found it difficult to work up the initiative to do things	94 (27.8%)	76 (22.5%)	96 (28.4%)	72 (21.3%)
I felt that I had nothing to look forward to	108 (32.0%)	81 (24.0%)	66 (19.5%)	83 (24.6%)
I felt down-hearted and blue	116 (34.5%)	74 (21.9%)	73 (21.6%)	75 (22.2%)
I was unable to become enthusiastic about anything	152 (45.0%)	92 (27.2%)	52 (15.4%)	42 (12.4%)
I felt I was not worth much as a person	144 (42.6%)	86 (25.4%)	60 (17.8%)	48 (14.2%)
I felt that life was meaningless	143 (42.3%)	67 (19.8%)	53 (15.7%)	75 (22.2%)

Table 6:Responses of 2013 other social science Class Students to the Depression Scale at the at Wolkite University South west Ethiopia , 2021(N= 338)

Nearly two thirds (64.2%), 72.2%, 68%, 65.5%, 55%, 57.4%, and57.7% of the respondents develop diysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest involvement, and hedonia, and inertia respectively (Table 6).

4.7 Factors Associated with Stress

Variables		Stress		OR with 95% CI		P-value
		Yes	No	Crude	Adjusted	
Sex	Female	26	122	0.61(0.36, 1.05)	0.60 (0.33, 1.11)	0.106
	Male	49	141	1	1	
Residence	Urban	36	159	0.60(0.36, 1.01)	0.44 (0.24, 0.80)*	0.007
	Rural	39	104	1	1	
Living with a family	Yes	71	223	3.18(1.10, 9.21)	0.25 (0.07, 0.85)*	0.026
	No	4	40	1	1	
Field of study	Non-health	69	205	3.25(1.35, 7.87)	0.39 (0.15, 1.00)	0.050
	Health	6	58	1	1	
Chronic disease	Yes	16	23	2.83(1.41, 5.69)	1.79 (0.79, 4.06)	0.162
	No	59	240	1	1	
Confirmed cases in the family	Yes	17	17	4.24(2.04, 8.81)	0.86 (0.27, 2.73)	0.791
	No	58	246	1	1	
History of mental disorders	Yes	10	17	2.23(0.97, 5.09)	1.01(0.27, 3.83)	0.991
	No	65	246	1	1	
Physical activity	No	35	73	2.28(1.34, 3.86)	2.18 (1.20, 3.96)*	0.010
	Yes	40	190	1	1	
Attitude	Good	63	237	1	1	0.682
	Poor	12	26	0.58(0.28, 1.21)	1.22 (0.47, 3.19)	
Practice	Poor	45	114	1.96 (1.16, 3.31)	1.94 (1.08, 3.50)*	0.027
	Good	30	149	1	1	
Fear of infecting family members	Yes	52	159	1.48(0.85, 2.56)	1.72 (0.93, 3.20)	0.086
	No	23	104	1	1	
Contact history	Yes	27	25	5.36 (2.86, 10.02)	6.55 (3.18, 13.53)*	<0.001
	No	48	238	1	1	
Living with a person aged >60 years	Yes	38	80	2.35(1.39, 3.97)	1.64 (0.91, 2.98)	0.102
	No	37	183	1	1	

Table 7:Bi variable and Multivariable Logistic Regression Analysis of Factors Associated with Stress Among 2013 other social science students at Wolkite University South west Ethiopia, 2021(N= 338)

Note: *Statistically significant at p-value <0.05.

Variables like sex, residence, living with a family, the field of study, diagnosed with chronic disease, confirmed/suspected cases in the family, history of mental disorders, perform physical activity, attitude towards COVID-19 preventive measures, practicing COVID-19 preventive measures, fear of infecting family members, contact history with suspected or confirmed cases, and living with a person aged >60 years were found to be significantly associated with stress using bi variable logistic regression analysis. In multivariable logistic

regression analysis, factors like residence, living with a family, performs physical exercise, practicing COVID-19 preventive measures, and contact history with suspected or confirmed cases were significantly associated with stress. Students who came from the rural residence were 56% times less likely to develop stress compared with students came from urban residence [AOR: 0.44; 95% CI (0.24, 0.80)].

Those study participants who lived alone were 75% times less likely to experience stress compared with students who lived with their family [AOR: 0.25; 95% CI (0.07, 0.85)]. Those students who did not perform physical activity were 2.2 times at a higher risk of developing stress compared with students who perform physical activity [AOR: 2.18; 95% CI (1.20, 3.96)]. Students who did not practice COVID-19 preventive measures appropriately were nearly two timesat a higher risk of developing stress compared with their counterparts [AOR: 1.94; 95% CI (1.08, 3.50)]. Students who had a contact history with suspected or confirmed cases were nearly seven times at a higher risk of developing stress compared with those who had not a contacthistory [AOR: 6.55; 95% CI (3.18, 13.53)] (Table 7).

4.8 Factors Associated with Anxiety

Variables	Response	Anxiety		OR with 95% CI		P-value
		Yes	No	Crude	Adjusted	
Sex	Female Male	58 76	90 144	1.22(0.66–1.60) 1	1.17(0.69–1.97) 1	0.552
Residence	Urban Rural	61 73	134 70	0.44(0.27–0.68) 1	0.36(0.22–0.61)* 1	<0.001
Living with family	Yes No	122 12	172 32	1.89(0.93–3.82) 1	0.66(0.29–1.51) 1	0.334
Field of study	Non health Health	117 17	157 47	2.06(1.26–3.77) 1	0.49(0.23–1.07) 1	0.071
Chronic disease	Yes No	23 111	16 188	2.43(1.23–4.80) 1	0.86(0.35–2.10) 1	0.753
Confirmed cases in the family	Yes No	23 111	11 193	3.63(1.71–7.73) 1	1.59(0.52–4.88) 1	0.921
History of mental disorders	Yes No	17 117	10 194	2.82(1.23–6.36) 1	0.45(0.15–1.36) 1	0.163
Substance use	Yes No	41 93	23 181	3.46 (1.96–6.13) 1	0.27(0.14–0.54)* 1	<0.001
Physical exercise	No Yes	53 81	55 149	1.77(1.11,2.82) 1	2.12(1.24–3.62)* 1	0.006
Fear of infecting family members	Yes No	95 39	116 88	1.85(1.12–2.94) 1	0.51(0.31–0.87)* 1	0.013
Contact history	Yes No	25 109	27 177	1.50(0.83–2.72) 1	1.14(0.54–2.40) 1	0.714

Living with a person aged > 60 years old	Yes No	53 81	65 139	1.40(0.89–2.21) 1	0.79(0.47–1.33) 1	0.382

Table 8: Bi variable and Multivariable Logistic Regression Analysis of Factors Associated with Anxiety Among 2013 other social science students at Wolkite University South west Ethiopia , 2021(N= 338)

Note: *Statistically significant at p-value <0.05.

Bi variable logistic regression analysis was carried out and the variables significantly associated with anxiety were; place of residence, the field of study, having a chronic disease, having a history of mental disorders, substance use, physical exercise, fear of infecting family members, confirmed/suspected cases in the family. Finally, multi- variable logistic regression analysis was carried out to identify factors significantly associated with anxiety. The factors were the place of residence, substance use, physical exercise, and fear of infecting the family members. The odds of anxiety were 64% times less likely to occur among students who live in a rural area than in an urban area [AOR: 0.36; 95% CI (0.22, 0.61)]. Those students who did not use a substance like a cigarette, chat or alcohol were 73% times less likely to develop anxiety as compared to students who use substances in the last three months [AOR: 0.27; 95% CI (0.14–0.54)]. Those students who did not perform physical exercise were two times more likely to develop anxiety as compared to their counterparts [AOR: 2.12; 95% CI (1.24–3.62)]. Students who did not worry about family members who could be infected were 49% times less likely to develop anxiety as compared to those who worried [AOR: 0.51; 95% CI (0.31–0.87)](Table 8).

4.9 Factors Associated with Depression

Variables		Depression		OR with 95% CI		P-value
		Yes	No	Crude	Adjusted	
Residence	Urban Rural	66 70	129 73	0.53(0.34, 0.83) 1	0.55(0.33, 0.89)* 1	0.016
Living with a family	Yes No	129 7	165 37	4.13(1.78, 9.57) 1	4.06(1.54, 10.73)* 1	0.005
Field of study	Non Others social	14 122	50 152	1 0.35(0.18, 0.66)	1 0.42(0.21, 0.84)*	0.015
Chronic disease	Yes No	24 112	15 187	2.67(1.35, 5.31) 1	1.04(0.43, 2.54) 1	0.928
Suspected/infected relatives	Yes No	28 108	6 196	8.47(3.40, 21.09)	3.47(1.10, 10.95)* 1	0.034

				1		
History of mental disorders	Yes No	19 117	8 194	3.94(1.67, 9.28) 1	3.07(0.92, 10.27) 1	0.068
Substance use	Yes No	31 105	33 169	1.51(0.85, 2.61) 1	0.99(0.50, 1.96) 1	0.978
Physical exercise	Yes No	82 54	148 54	1 0.55(0.35, 0.88)	1 1.74(1.04, 2.93)*	0.036
Contact history	Yes No	31 105	21 181	2.55(1.39, 4.66) 1	1.59(0.69, 3.68) 1	0.280

Table 9:Bi variable and Multivariable Logistic Regression Analysis of Factors Associated with Depression Among 2013 other social science students at Wolkite University South west Ethiopia, 2021(N= 338)

Note: *Statistically significant at p-value <0.05.

In bi variable logistic regression analysis, the following variables were found to be significantly associated with depression. Residence, living with family, the field of study, having a chronic disease, having suspected/infected relatives with COVID-19, history of mental disorders, substance use, physical activity, and contact history. Residence, living with a family, the field of study, having suspected/infected relatives with COVID-19, and physical exercise were factors significantly associated with depression using multivariable logistic regression. Students who live in the rural area were 45% times less likely to develop depression compared with those living in urban areas [AOR: 0.55, 95% CI (0.33, 0.89)]. Those students staying with their families were nearly four times at a higher risk of developing depression compared with students staying alone [AOR: 4.06, 95% CI (1.54, 10.73)]. Students who study in non others social science were 58% times less likely to develop depression compared to students who study non-health departments [AOR: 0.42, 95% CI (0.21, 0.84)]. Having suspected or infected cases in the family/relatives increase the risk of developing depression by nearly 3.5 times [AOR: 3.47, 95% CI (1.10, 10.95)]. Those students who did not perform physical exercise were nearly two times at higher risk of developing depression compared with those who perform physical exercise [AOR: 1.74; 95% CI (1.04, 2.93)] (Table 9).

4.10. Discussion

After the first onset of the COVID-19 in china Wuhan city, it has had various effects on the Globe. The closure of universities due to the virus caused students to drop out of school. Especially it has a huge psychological impact

on university students. The current study revealed that 22.2%, 39.6%, and 40.2% of the respondents experienced stress, anxiety, and depression respectively in response to the COVID-19 pandemic. This result suggests that the corona virus has a significant psychological impact on graduate class students who need mental health intervention.

The prevalence of stress among other social science class university students in the current study was 22.2%. This finding was lower than studies conducted in wolkite university Gurage zone, South-west Ethiopia (32.5%), Dessie town, Ethiopia (48.5%), United States (71%), China (67.1%), Spain (28.1%), Canada (30%), and Malaysia (28.9%).14, 15,18,21–23,25 The possible justification for the lower prevalence of stress in this study might be due to the difference in time of the study. Currently, students can get a variety of information regarding the virus than the information they obtained at the beginning of the pandemic. Returning of the students to the university and start learning, the approval and administration of vaccines for COVID- 19, and the increased number of patients who recovered from the disease than individuals who newly diagnosed and died might also contribute to the decrement of stress among students in the current study compared with the previous studies.

The previous studies were conducted when students were at home and at the beginning of the pandemic which may result in a high prevalence of stress among students. On the other hand, the prevalence of anxiety among other social science students in this study was lower than studies conducted in Dessie town, Amhara region, Ethiopia; 71.8%,15 Addis Ababa Ethiopia; 51.6%,32 and Bangladesh 87.7%.12 This discrepancy might be due to the higher population density in Addis Ababa than Gondar, so that keeping a social distance is difficult in Addis Ababa than in Gondar, Ethiopia. Also, the prevalence of corona virus cases was higher in Addis Ababa than in Gondar, due to these reason students in Gondar develops slightly lower than Addis Ababa. Urban living environments are associated with higher rates of prescription for psychotropic medication for anxiety, depression, and psychosis.

The prevalence of depression in this study was 40.2%. This finding was higher than studies conducted in Italy; 27.8%,17 China, 12.2%,20 Spanish; 34.19%,22 and Canada 30%.23 This might be due to the difference in implementing preventive measures, getting access to preventive equipment, information technology, and health system. According to the World Health Organization, developing countries like Africa could be severely affected by the virus, which leads to more frustration and depression in developing countries. However, this finding was lower than studies conducted in Bangladesh; 82.4%,12 China, 46.55%,21 and Dessie Ethiopia; 77.2%.15 The difference might be due to the difference in the study period. Even though the COVID-19 has been found active and lethal still, humans' fear has been declining over time. As soon as the COVID-19 virus detected there was a restriction in routine activities like lockdown and closing schools including universities and colleges and there was no hint about vaccines which leads humans to more frustration. On the other hand, the previous studies were

done at a time when the students were out of school while this study is conducted after the students returned to the school.

Residence, living with a family, perform physical activity, practicing COVID-19 preventive measures, and contact history with suspected or confirmed cases were the factors significantly associated with stress. Students who came from rural residences were 56% times less likely to develop stress compared with students who came from the urban residence. This finding was supported by studies conducted in Dessie town Ethiopia and China.15,16 This might be due to the high prevalence of COVID-19 in urban residences than the rural. Students who live in an urban area may have a higher risk of developing stress than students who live in a rural part of the country as most positive cases were detected in the urban area. Moreover, repeated media exposure and obtaining daily information regarding the pandemic might also expose them to stress. Students who lived alone were 75% times less likely to experience stress compared with students who lived with their families. This finding was supported by a study conducted in the United States.18 This might be due to the pandemic increased the level of fear and worry about infecting their families. Students may be worried more if there are more vulnerable family members like older adults, with existing health problems, and pregnant mothers. They might also worry about their family members whose occupation increased their risk of exposure to the virus-like essential and health care workers which contribute to an increased level of stress.

Those students who did not perform physical exercise were 2.2 times at a higher risk of developing stress compared with students who perform physical exercise. This finding was supported by studies conducted in Turkey, the United Kingdom, and Brazil.34–36 This might be due to engaging in physical activity regularly is a healthy habit and a protective factor against diseases and harmful risk behaviors. Performing physical activity provides several benefits like improving self-esteem and body image, decreasing stress and nervous tension, improving motor balance, and favoring social relatedness.37 Students who did not perform physical activity can not relate and socialize with their peers simply by belonging to a team or sports club which increases the risk of developing stress.

Similarly, students who did not practice COVID-19 preventive measures appropriately were nearly two times at a higher risk of developing stress compared with their counterparts. This finding was supported by a study conducted in Dessie town, Ethiopia.15 This might be due to preventive measures are key to reducing COVID-19 morbidity and mortality. As a result, students who implement COVID-19 preventive measures like wearing a mask, hand washing, and physical distancing appropriately become more confident and less exposed to stress than students who did not implement it. Also, students who had a contact history with suspected or confirmed cases were nearly seven times at a higher risk of developing stress compared with those who had not a contact history. This finding was supported by a study conducted in Mexico.38 This might be due to fear of being

infected with COVID-19 and what could happen can be overwhelming and cause strong emotions. Students who had contact with COVID-19 suspected and positive patients might worry about their health and develop stress.

Among the factors that affect the prevalence of anxiety in this study was the place of residence. Other social science students who came from the urban area had higher anxiety as compared to those students that came from the rural area.

This finding was supported by studies conducted in Bangladesh12 and China16 This might be due to one of the transmissions of corona virus from an infected person to an uninfected person is physical contact. So people living in the urban area are more condensed than the rural area and rural areas are more scattered than the urban area. Another factor significantly associated with the prevalence of anxiety in this study was performing physical exercise for at least 20 min per day. Those students who did not perform the physical exercise for at least 20 min per day were almost two times more likely to develop anxiety as compared to those who did perform physical exercise regularly. This finding was supported by a study conducted in Bangladesh.12 The possible reason might be due to regular exercise may help ease depression and anxiety by releasing feel-good endorphins, natural cannabis-like brain chemicals (endogenous cannabinoids), and other natural brain chemicals that can enhance the sense of well-being.

The students who worried about family members who could be infected were more likely to develop anxiety in comparison with their counterparts. This finding was supported by studies conducted in Wolkite university, South-west Ethiopia,14 and Guangzhou, China.20 This might be due to the greatest fear of students resulted from the possibility of infecting family members during the pandemic. Substance use like cigarettes, alcohol, or chat was one of the factors associated with anxiety in this study.

The risk of developing anxiety was higher among substance users as compared to non-substance users. The possible reason might be due to some substances may help to ease anxiety in the short- term, their effects are temporary, and the use of these substances can create a psychological or physiological dependence, which will cause or worsen other life problems and will ultimately exacerbate anxiety.

Residence, living with families, the field of study, suspected/infected relatives and physical exercise were factors significantly associated with depression. Students who came from rural areas were less likely to develop depression. This finding was supported by the study done in Bangladesh12. This might be due to the difference in information and the implementation of preventive measures. As an example, in an urban area, there was a difficult for implementing physical distancing due to the condensed population and get access to the daily reports of COVID-19 (death and new cases) which leads to the student's depression. Those students staying with family were four times at risk of developing depression compared with those students who stay alone. This finding was supported by a study conducted in Bangladesh12. This might be due to the fear of infecting and losing their families. Students who engaged in health science-related studies had less risk of developing depression compared

with students in other fields of studies. This might be due to the healthcare students could have been well-informed on what to expect as the pandemic progresses compared to the students of other fields of studies.

The odds of depression were nearly four times higher among students who have suspected or infected family members/relatives with COVID-19. This finding was supported by a study conducted in China20. This might be due to the fear of losing the beloved one, family, and relatives by death due to COVID-19 or fear of getting an infection from the relatives and becoming ill. Those students who did not perform physical exercise were nearly two times at risk of developing depression compared with their counterparts. This finding was supported by the study conducted in Bangladesh12. This might be due to the effect of physical exercise on psychological and physical health or spending time with physical exercise instead of only thinking about the severity .

CHAPTER FIVE

5.1, Conclusions and Recommendation

According to this study the psychological (depression, anxiety and stress) among university students related to COVID-19 were high. Being female, staying at home, history of medical illness, poor and moderate social support were factors that increased the risks of depression. Factors increasing the risk of anxiety were not living with their parents; relatives got corona virus and low family income. Moreover substance use, depression, anxiety, and poor social support were among the factors that increase the risk of stress.

More than one-fifth, more than one-third, and nearly two- fifths of other social science students had stress, anxiety, and depression in response to the COVID-19 pandemic respectively. Living in an urban area, living with a family, sedentary lifestyle, unable to practice COVID-19 preventive measures, and having a contact history with suspected/confirmed cases increases the risk of developing stress. Living in an urban area, substance use, sedentary lifestyle, and fear of infecting family members increase the risk of developing anxiety. Students who came from an urban area, live with a family, a study in non-health departments, had confirmed/suspected cases in the family, and did not perform physical exercise had a higher odds of developing depression. It is better to develop effective strategies and interventions, follow and order students, train students about self-protection, and establish a psychological crisis intervention team to minimize the psychological impact of the COVID-19 pandemic on other social science students in wolkite university.

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APPENDICES

WOLKITE UNIVERSITY

COLLEGE OF OTHER SOCIAL SCIENCE,

DEPARTMENT OF PSYCHOLOGY

Questionnaires' for other social science students in Wolkite University:

Directions:

Dear respondents: The main function of this study is to gather relevant data to the study allowed" the psychological impact of COVID- 19 pandemic on other social science student in Wolkite university SNNPRE Regional State". Your answer is very important for the achievement of the study. Thus, you are kindly requested to respond the questions, in order to provide the necessary information on top of the different issues related to the study. The achievement of this study depends on your truthful and real response to the questions. The information will be used for academic reason only and responses will be kept private.

NOTICE:

- Please, read all the questions before attempting to answer the questions.
- No need to consult others to fill the questionnaires.
- You do not need to write your name on the questionnaire.

I. Socio demographic Characteristics questions

Variables	Category
Age	20–24 years 25–29 years ≥ 30years
Sex	Male Female
Residence	Rural Urban
Religion	Orthodox Muslim Protestant Catholic
Field of study	Health Non-Health
Living with family	Yes No

II. Behavioral and Clinical-Related Characteristics questions.

Variables	Category
Diagnosed with chronic disease?	Yes No
Confirmed/suspected case in the family?	Yes No
History of mental disorders?	Yes No
Substance use?	Yes No
Perform physical exercise?	Yes No

III. Questions related with Personal Characteristics.

Variables	Response
Knowledge about COVID- 19 preventive measures	Good Poor
Attitude towards COVID- 19 preventive measures	Positive Negative
Practicing COVID-19 preventive measures	Yes No
Fear of infecting family members	Yes No
Contact history	Yes No
Living with a family aged > 60 years old	Yes No

VI. Questions related with Prevalence of Stress, Anxiety& Depression

Statements	Response (Frequency (Percentage))		
	Did Not Apply to Me at All	Applied to Me to Some Degree	Applied to Me to a Considerable Degree
I found it hard to wind down I tended to over-react to situations I felt that I was using a lot of nervous energy I found myself getting agitated I found it difficult to relax I was intolerant of anything that kept me from			

getting on with what I was doing			
I felt that I was rather touchy			

VII. Questions related Factors Associated with Stress, Anxiety& Depression

Variables			
		Yes	No
Sex	Female Male		
Residence	Urban Rural		
Living with a family	Yes No		
Field of study	Non-health Health		
Chronic disease	Yes No		
Confirmed cases in the family	Yes No		
History of mental disorders	Yes No		
Physical activity	No Yes		
Attitude	Good Poor		
Practice	Poor Good		
Fear of infecting family members	Yes No		
Contact history	Yes No		
Living with a person aged >60 years	Yes No		