ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCE DEPARTMENT OF EMERGENCY MEDICINE AND CRITICAL CARE

MAGNITUDE AND FACTORS ASSOCIATED WITH DEPRESSION AND ANXIETY AMONG HOSPITALISED PATIENTS WITH COVID-19 IN ADDIS ABABA, ETHIOPIA, 2021

BY: HIDJA MUSTOFA (BSc)

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COLLEGE OF HEALTH SCIENCE

DEPARTMENT OF EMERGENCY MEDICINE

MASTER OF SCIENCE RESEARCH SUBMISSION FORM

Name of investigator	Hidja Mustofa Mekonen BSc
Name of advisors	1st – **AKLILU AZAZH (Professor in EMCC, MD, Internist)** 2nd _ **SOFIA KEBEDE (Assistant professor, MD, EMCC Physician)** 3rd – **KHEYRIA HUSSEIN (MSc in EMCCN, lecturer, PHD fellow)**
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Address of the investigator	Tel.: 0918135837 Mail:hidjamustofa@gmail.com

Approval by the board of examiners

This thesis by **HIDJA MUSTOFA** is accepted in its present form by the board of examiners as a satisfying thesis requirement for the degree of master in emergency medicine and critical care.

External examiner:

_____ _____ _____

Name signature date

Internal examiner:

_____ _____ _____

Name signature date

Research advisors:

AKLILU AZAZH (Professor in EMCC, MD, Internist)

_____ _____

Signature date

KHEYRIA HUSSEIN (MSc in EMCCN, lecturer, PHD fellow)

_____ _____

Signature date

SOFIA KEBEDE (Assistant professor, MD, EMCC Physician)

_____ _____

Signature date

Department head:

_____ _____ _____

Name signature date

APPROVAL SHEET

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

DEPARTMENT OF EMERGENCY AND CRITICAL CARE MEDICINE ADVISORS APPROVAL SHEET

This is to certify that the thesis entitled “magnitude and factors associated with depression and anxiety among hospitalized patients with COVID-19 in Addis Ababa, Ethiopia, 2020.'' is submitted in partial fulfilment of the MSc. with a specialization in "Emergency and Critical care nursing” to the Graduate Program of the College of Health Sciences of Addis Ababa University and has done by Hidja Mustofa ID No: GSR0403/11 under my supervision. Therefore, I recommend that the student has fulfilled the requirements and hence hereby can submit the thesis to the Department.

_____ _____ _____

Name of Major Advisor Signature Date

_____ _____ _____

Name of Co advisor Signature Date

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I hereby declare that this MSc thesis is my original work and has not been presented for a degree in any other university and all sources of material used for this thesis have been duly acknowledged.

Name: _____

Signature: _____

Date: _____

This MSc thesis had been submitted for examination with my approval as a thesis advisor.

Name: _____

Signature: _____

Date: _____

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List of abrevation and acronym

AOR: Adjusted Odd Ratio

CI: Confidence interval

COVID-19: Coronavirus disease 2019

DSM-5: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

FMOH: Federal ministry of health

GAD: Generalized anxiety disorder

HCW: Health care workers

ICU: Intensive care unit

MERS: Middle East respiratory syndrome

MHA: Mental Health America

PHQ: Patient health questionnaire

PTSD: Posttraumatic stress disorder

PPS: Probability Proportional to Size

SARS: Severe acute respiratory syndrome

SARS-CoV-2: Severe acute respiratory syndrome coronavirus 2

SPSS: Statistical package for social science

TASH: Tikur anbesa specialised hospital

WHO: World health organization

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ABSTRACT

Background: Covid-19 was identified as the cause of a cluster of pneumonia cases in Wuhan, a city in the Hubei Province of China. It affected 178,021,491 of individuals and killed 3,853,190 of peoples globally since 17/06/2021. It has the seeds of a major mental health crisis beyond the physical effect. The mental health and wellbeing of whole societies and infected individuals have been severely impacted by this crisis and are a priority to be addressed urgently.

Objective: The aim of this study is to assess the magnitude and factors associated with depression and anxiety among hospitalized patients with COVID-19 in Addis Ababa, Ethiopia, 2020.

Methods and materials: A cross sectional descriptive study focussed on measuring depression and anxiety using self-report scales PHQ-9 for depression and GAD-7 for assessing anxiety among COVID-19 patients was conducted. The data has been cleaned using Epi Data version 4.6.6 and analysed using SPSS version 25 software. Descriptive statistics done to identify summary values of the variables. Associations between variable was estimated by computing odds ratios (ORs) and their 95% confidence intervals (CIs) using regression analysis. The statistical significance has been checked using p value <0.05. The result is presented by tables.

Result: Among 114 patients participated in this study, male patients accounted 60(52.6%) and 54(47.4%) are females, the mean age of the patients were 45.81±15.26 ranged from 16 to 85 years. Depression was diagnosed in 30 (26.3%) of patients: 27(24%) had moderate depression and 3(2.6%) had severe depression. (See table 4) Fourteen (12.3%) of patients were diagnosed as having anxiety: among them 12(11%) had moderate anxiety and 2(1.8%) had severe anxiety. Patients with an educational level of college or university (p=0.008, AOR=6.786, CI=1.642-28.054) and patients with heart disease (p=0.049, AOR=9.582, CI=1.009-91.020) was associated with presence of depression.

Conclusion:

This study looks into the burdens of anxiety and depression symptoms among covid-19 patients and the result found to be high. Patients with high educational level and patients with heart disease were likely to develop depression.

Key words; COVID-19, Anxiety, Depression,

CHAPTER 1: INTRODUCTION

1.1 Back ground

Coronaviruses are one of human and animal pathogens. The new coronavirus was identified at the end of 2019 as the cause of a series of pneumonia cases in Wuhan, a city in China's Hubei Province. It spread rapidly, leading to a global pandemic. (1) The disease has been officially named covid-19 which means coronavirus disease 2019. (1)

Most individuals infected with the COVID-19 virus encounter mild to moderate respiratory symptoms and that they recover without need of special treatment. As many evidences revealed serious illness are likely to develop in older people, and in those with underlying medical problems like cardiovascular disorder, diabetes disease, chronic respiratory illness and cancer. (2)

In nations all over the world, this pandemics bring changes in national behavioural patterns and shutdowns of usual day-to-day activities. While these steps may be critical to stop the spread of this infection, undoubtedly, they will have both short and long-term consequences for mental health and well-being.(3) Isolation, quarantine, social distancing, and community containment actions were implemented promptly and those actions are still being implemented.(4)

Characteristics of anxiety and depression can develop in a person after certain serious traumatic situations, such as combat experiences, physical or sexual assault, exposure to a natural disaster such as a major earthquake or a life-threatening pandemic, or being held as a detainee of war or in a concentration camp. (5) In COVID-19 pandemics, patients with confirmed or suspected COVID-19 may experience fear of the consequences of infection with a potentially deadly new virus. In addition, symptoms of infection, such as fever, hypoxia, and cough, as well as adverse effects of treatment, such as insomnia caused by corticosteroids, can lead to a worsening of anxiety and mental distress. (6)

WHO has released considerations regarding mental health and psychological wellbeing at the time of the Covid-19 outbreak. It provides key interventions and recommended Mental Health and Psychological Support activities to integrate in the response. These include messages targeting a wide range of people, including the general public, health care workers, team leaders or health facility managers, child care providers, the elderly, caregivers, people with disabilities and people in isolation.(7)

1.2 Statement of the problem

Almost all people affected by emergencies will experience psychological distress such as feelings of anxiety, sadness, hopelessness, difficulty sleeping, fatigue, irritability or anger and pains which for most people will improve over time.(8)

Patients with (SARS) and Korean Middle East Respiratory Syndrome (MERS) develop psychosis and other psychiatric disorder like depressive disorder, posttraumatic stress disorder and anxiety disorder in the acute phase and also in the long term. (9–15)

In the context of the COVID-19 pandemic which affected 178,021,491 of individuals and killed 3,853,190 of peoples globally since 17/06/2021, it appears likely that there will be substantial increases in anxiety and depression, substance use, loneliness, and domestic violence.(16)

Stress and an environment of chronic uncertainty, fear and despair, emotions that erode mental health, well-being and immune defences and social isolation experienced in quarantine created by covid-19 pandemic have greatly increased the likelihood that patients will experience adverse mental health effects.(17–22)

Globally the mental health of the population is affected, increase in cases of depression, suicide, and self-harm, apart from other symptoms has been reported following the occurrence of COVID 2019.(23–29) According to National Medical centre report in North Korea 30% of patients hospitalised with covid-19 diagnosed with mental illness including depression, stress disorder, and panic attack. (30)

According to the Yale University study, people who had been diagnosed with conditions ranging from anxiety to dementia and self-injury were at 2.4-times greater risk of dying of COVID-19 and the mortality depend on how long they'd been in the hospital.(31)

During the covid-19 outbreak, various psychological problems and mental health effects, including anxiety, worry, depression, frustration, and uncertainty gradually emerged.(32) In this study prevalence of anxiety and depression and contributing factors are assessed. Those institutions who deal with treating covid-19 patients as a whole and healthcare workers will use the information to provide psychological interventions for patients with covid-19.

1.3 Significance of and rational for the study

Although the COVID-19 crisis is, in the first instance, a physical health crisis, it has the seeds of a major mental health crisis as well. If action is not taken early, the functioning of society will be compromised. It must be front and centre of every country's response to and recovery from the COVID-19 pandemic. The emotional well-being and prosperity of entire social orders and infected people have been seriously affected by this emergency and are a priority to be addressed earnestly.(33)

Till to date, there is little to no epidemiological data on mental health problems due to outbreak of the COVID-19 and mass isolation available in Ethiopia. To meet these need the present study will be undertaken to assess the mental health status of patients with confirmed covid-19 in selected treatment centres found in Addis Ababa, Ethiopia.

Those institutions who deal with treating covid-19 patients as a whole and healthcare workers will use the information to provide psychological interventions for patients with covid-19.

Furthermore other researchers will use the information from this study as baseline and as a reference in different studies.

CHAPTER 2: LITERATURE REVIEW

This study will identify the prevalence and associated factors of anxiety and depression among covid-19 patients. Similar studies has been done internationally on the psychological impact of the covid-19 and other previous outbreaks on different group of societies affected by those pandemics. In this chapter different studies will be discussed and most of them are studies done in China, this might be because China is the country in which the pandemic originated. The literature review will be classified into three categories as follows;

2.1Prevalence of psychological symptoms among previous viral pandemics victims

A retrospective survey was done in 36 Middle East Respiratory Syndrome (MERS) cases and 1656 isolated people whose results are not confirmed by laboratory, they found Anxiety symptoms were prevalent in 47.2% of confirmed cases and 7.6% of isolated people. with the risk factors being symptoms related to MERS during isolation, inadequate supplies (food, clothes, accommodation), social networking activities (email, text, Internet), history of psychiatric illnesses, and financial loss.(34)

A case study among 10 patients diagnosed with severe acute respiratory syndrome (SARS) in Hong Kong, China, 7 patients experienced mild psychiatric complications like anxiety, suicidal ideation, depression and anger and the rest 3 manifested severe psychiatric complications such as hallucination and mania.(11)

A longitudinal study on mental morbidities among 181 SARS survivors, they found a total of 77 (42.5%) had experienced at least 1 active psychiatric illness among the most common diagnosis depression contributed 39.0 percent (30 of 77).(14)

2.2Prevalence of psychological symptoms among the general populations affected by COVID-19

Online screening survey released by Mental Health America (MHA) results from per day screening, there were 88,405 additional positive depression and anxiety screening results over what was expected, from which 54,093 were results of moderate-to-severe depression and more than 34,312 results of moderate-to-severe anxiety. The most common contributing factor (60%) was loneliness and isolation.(25)

Study done in Cyprus, Europe, on prevalence of psychiatric problem during covid-19 pandemic among adult population shows about 41% reported symptoms associated with mild anxiety; 23.1% reported moderate-severe anxiety symptoms. Concerning depression, 48% reported mild and 9.2% moderate-severe depression symptoms.(23)

Cross-sectional survey done in China among 1652 of adult Chinese populations, showed that, the overall prevalence of generalised anxiety disorder (GAD) was 35.1%, depressive symptoms was 20.1%, and poor sleep quality were18.2%.(29)

A Cross-Sectional Study conducted in Liaoning Province, China, among 263 adult Chinese residents showed, 7.6% of participants had features of moderate to severe anxiety and panic disorder.(28)

A study done in China among 2441 adults depression was prevalent in 72.6% of the participants and insomnia was 20.6% prevalent.(24)

2.3 Prevalence of psychological symptom in covid-19 patients

A cross sectional study in Shenzhen, China, on prevalence of depression among quarantined individuals whose results are not known, 6.21% (139/2237) of participants found to have depressive symptoms. Age, marriage, education were found to be associated with the prevalence of depression. (35)

A mixed-method study done in Shanghai, China showed that patients suffered from moderate to severe levels of depression 17%(18 out of 103 patients) and anxiety 6.8%(7 out of 103 patients). And the result does not differ between males and females.(36)

A cross sectional study conducted in Shanghai, China among 144 participants, 34.72% and 28.47% patients with COVID-19 had symptoms of anxiety or depression, respectively. Gender, age oxygen saturation, and social support were associated with anxiety for COVID-19 patients. Moreover, age, family infection with covid-19 and social support were the factors associated with depression.(37)

A cross-sectional study in Wuhan, China, revealed from a total of 78 patients 35.9% patients were diagnosed with depression and 38.5% patients were diagnosed with anxiety. Anxiety and depression was most prevalent in females and in those whose parents are diagnosed or died with covid-19.(20)

Online survey in confirmed and suspected 759 patients in Ecuador, found that 22.9% confirmed and 18.5% suspected patients had depression as well as 24.2% confirmed and 21.4% suspected patients had anxiety symptoms. And also 16.0% confirmed and 13.0% suspected patients had anxiety and depression comorbidity.(38)

Online survey in Shenzhen, China, among 126 covid-19 survivors who are still in quarantine, 31.0%, had stress response, 22.2% had anxiety features and 38.1% had depression. Infected family members and post infection discomfort were strongly associated.(17)

A study done in Wuhan, China on mental health status of covid-19 survivors, they found that 50 (13.5%) individuals had anxiety and 40 (10.8%) of them had experienced depression. And 23 (6.2%) had Comorbid anxiety and depression. post-discharge residual symptoms, worry about recurrence, and worry about infection to others were significantly associated.(39)

A cross-sectional study on psychological morbidities and fatigue in COVID-19 patients in China, out of 41 patients 18 (43.9%) presented with general mental health problems, 5 (12.2%) had posttraumatic stress disorder (PTSD) symptoms, 11 (26.8%) had anxiety and/or depression symptoms (5 had both anxiety and depressive symptoms, 5 had only depressive symptoms, and 1 had only anxiety symptoms). perceived social support scores was associated with anxiety and depressive symptoms.(21)

A cross-sectional study conducted in Wuhan, China among 307 COVID-19 patients the prevalence of anxiety were 18.6% and 13.4% for depression symptoms. Poor Sleep quality, number of current physical symptoms ≥ 2 were independent risk factors for anxiety symptoms female, family member confirmed COVID-19, number of current physical symptoms ≥ 2 were independent risk factors for depression symptoms.(40)

A cross sectional study conducted in Zhongshan, China, prevalence of depression was (29.2%), prevalence of Anxiety was 20.8%, and Depression comorbid with Anxiety was found to be 21.1% from 57 covid-19 infected patients.(19)

CHAPTER 3: OBJECTIVE OF THE STUDY

3.1 General objective

To assess the magnitude and factors associated with depression and anxiety among hospitalized patients with COVID-19 in Addis Ababa, Ethiopia, 2020

3.2 Specific objectives

1. To assess the magnitude of generalised anxiety disorder in patients with covid-19
2. To assess the burden of major depression disorder among patients with covid-19
3. To identify factors associated with generalised anxiety disorder and major depression disorder of covid-19 patients.

CHAPTER 4: METHODOLOGY

4.1Study area

The study was conducted at two selected hospitals with covid-19 isolation and treatment unit in Addis Ababa Ethiopia which is administered by both federal ministry of health and Addis Ababa city administrative health bureau. Those are

Yekatit-12 Hospital Medical College, it is a public hospital found in Addis Ababa city established in 1915. It is among the six regional hospitals in the capital, Addis Ababa. It provides a health care service at an out-patient and in-patient level as a referral hospital center for health centers and hospitals in Addis Ababa as well as different regions of the country. The hospital provides service for more than 500,000 people living in its catchment area. (41)(42)

Tikur Anbesa Specialised Hospital, it is found in Addis Ababa Ethiopia. This is Ethiopia's largest general public hospital and one of two university hospitals in the country. Since 2021 this hospital has 800 beds and offers diagnosis and treatment for approximately 370,000-400,000 patients a year.

4.2Study design

A cross sectional discriptive study focussed on measuring magnitude and factors associated with depression and anxiety among hospitalized patients with COVID-19 in Addis Ababa, Ethiopia, 2020 using self-report scales.

4.3Study period

The study was conducted on December 1-30 2020

4.4 Study population

4.4.1 Source population

All patients with confirmed covid-19 hospitalised for treatment in hospitals and treatment centres in Addis Ababa, Ethiopia.

4.4.2 Study population

All patients admitted to Yekatit-12 Hospital Medical College, and Tikur Anbesa Specialised Hospital covid-19 isolation and treatment units during data collection period which is on December 2020.

4.5 Sample size, and sampling procedure

4.5.1 Sampling technique and procedure

Purposive sampling technique has been employed. So we select the participants who met the inclusion criteria. This is because of the limited number of patient flow during one month data collection period.

4.5.2 Sample size determination

All patients who were admitted to the two hospital covid-19 treatment units during data collection period were studied, so sample size determination is not required

4.6Eligibility criteria

4.6.1 Inclusion criteria

- Patients with confirmed covid-19 disease who are willing to participate in this study was participated.

4.6.2 Exclusion criteria

- Patients with altered level of consciousness and those on mechanical ventilation
- Critical COVID-19 patients

4.7 Study variables

3.7.1 Dependent variables

- Magnitude of major depressive disorder in patients with confirmed covid-19
- Magnitude of generalised anxiety disorder in patients with confirmed covid-19

4.7.2 Independent variables

- Demographic factor
  - Gender
  - Age
  - Marital Status
  - Educational status
- Health related
  - Previous psychiatric illness
  - Chronic illness like Hypertension, heart disease, diabetes mellitus, Cancer.
- Clinical status
  - total isolation period during treatment
  - Oxygen saturation at rest
  - Symptom severity; severe, moderate, mild
- Family related
  - infection status of family members
  - death of family member from covid-19
  - contact with family members and friends
- institution related factors
  - provision of basic needs

- silence of the wards
- approach of HCWs

4.8Data collection procedure and data quality control

4.8.1 Data collection instrument

The standardised scales two item PHQ-9 and the two item GAD-7 designed to detect a depressed mood and anxiety level respectively, was used. A total score of ≥10 for both the PHQ-9 and GAD-7 has been defined as depression and anxiety respectively. The severity of psychological distress were classified with the standard thresholds: Minimal or none (0–4), Mild (5–9), Moderate (10–14), Severe (>15) for both the PHQ-9 and GAD-7.(43)(44)

Patient Health Questionnaire (PHQ-9)

The PHQ-9 is the nine item depression scale of the Patient Health Questionnaire. It is based directly on the diagnostic criteria for major depressive disorders in Diagnostic and Statistical Manual Fourth Edition (DSM-IV). The questionnaire is designed to measure a patient's mood during the previous two weeks prior to consultation. It is used as a screening and monitoring of patients with major depressive disorder.(45)

Generalised Anxiety Disorder (GAD-7)

Anxiety symptoms were assessed by using GAD-7. This is a self-administered 7 item instrument that uses some of the DSM-V criteria for GAD (General Anxiety Disorder) to identify probable cases of GAD along with measuring anxiety symptom severity. It can also be used as a screening measure of panic, social anxiety, and PTSD.(44)

4.8.2 Personnel

Data was collected by nurses who work in covid-19 treatment area. Training and recruitment was done through online for three days before the data collection. The training addresses the objective of the study, briefing of the eligibility criteria and the tools used to collect the data.

4.8.3 Data collection procedure and quality control

Data was collected in all day of the week. Supervision takes place to check the data for completeness, accuracy, and consistencies by the principal investigator and by supervisors. Participants was interviewed and clinical information was collected from patient medical records. We used a standardised questionnaire so pre-test was not done.

4.8.4 Reliability and validity of data collection tools

Reliability

The reliability coefficient, Cronbach's α was 0.78, and 0.84 indicating acceptable internal consistency for the reliability of the PHQ-9 test scores in different studies done using this measurement scale in Ethiopia.(46) (47)

The anxiety measurement scale (GAD-7 items) also had a good internal consistence Cronbach's alpha = 0.82 and test re-test reliability, interclass correlation coefficient = 0.37.(48)

Validity

The two measurement scale PHQ-9 and GAD-7 was translated into Amharic by official translators during data collection and was translated back in to the original English language during data entry and analysis.

4.9Operational definitions

1. ***Generalised anxiety disorder;*** is a general, long-lasting worry and anxiety about everyday life, about anything and everything. People with GAD imagine the worst happening (and worry about all the possible worst case scenarios). They believe future events are almost always negative, and they won't be able to cope 'when' these things 'do' happen. However, as in all anxiety, we tend to over-estimate the danger, and under-estimate our ability to cope. It is diagnosed by using DSM-5 Diagnostic Criteria.(49)

DSM-5 Diagnostic Criteria for Generalized Anxiety Disorder:(50)

   1. excessive anxiety and worry most days about many things for at least six months
   2. difficulty controlling your worry
   3. appearance of three of the following six symptoms: restlessness, fatigue, irritability, muscle tension, sleep disturbance, and difficulty concentrating
   4. symptoms significantly interfering with your life
   5. symptoms not being caused by direct psychological effects of medications or medical conditions
   6. Symptoms aren't due to another mental disorder (e.g. anxiety about oncoming panic attacks with panic disorder, anxiety due to a social disorder, etc.)

2. ***Major depressive disorder***; also referred as depression is a serious medical condition that affects a person's mood, behaviour thought process, and physical health. It is characterized by a pervasive sad mood and the loss of pleasure in most activities (anhedonia) lasting for at least 2 weeks. If depression is not treated early, or is treated inappropriately, it can be fatal. One in six people with severe, untreated depression commits suicide. (51)(52)

Anyone who experiences five or more of the following symptoms for at least 2 weeks may have a depressive illness. (53)

- A loss of interest in activities that normally are pleasurable, including sex
- Appetite and weight changes (either loss or gain)
- Sleep disturbances (insomnia, early morning wakening, or oversleeping)
- Feelings of guilt, worthlessness, or helplessness
- Feelings of hopelessness or pessimism
- Difficulty in concentrating, remembering, or making decisions
- Thoughts of death or suicide; suicide attempts
- Persistent body aches and pains or digestive disorders not caused by physical disease.

3. ***Isolation:*** means keeping people who have tested positive for COVID-19 away from people who do not or may not have COVID-19.(54)
4. ***A confirmed case:*** Any person with laboratory confirmation of SARS-CoV-2 infection with or without signs and symptoms.(55)
5. ***COVID-19 death:*** is defined as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID disease (e.g., trauma). There should be no period of complete recovery between the illness and death.(56)
6. ***Critical COVID-19 patients:*** patients with acute respiratory distress syndrome (ARDS) or sepsis with acute organ dysfunction.(57)

4.10 Data analysis procedure

The collected data was checked for completeness and consistency before and during data processing and arranged, entered, cleaned using Epi Data version 4.6.6 and analysed using SPSS version 25 software. Descriptive statistics was done to identify summary values of the variables. Associations between variable was estimated by computing odds ratios (ORs) and their 95% confidence intervals (CIs) using regression analysis. The statistical significance has been checked using p value <0.05. The results are presented by tables and in written form.

4.11 Ethical clearance

Permission to carry out the research were sought from the Addis Ababa University Collage of health science research standards and ethics committee. Informed verbal consent was obtained from all study participants. Participants who were on oxygen was interviewed without interrupting the oxygen administration. All the collected data kept confidential and the names or other personal information is not notified in any report.

4.12 Dissemination of results

After the data is processed and analysed hard copies and soft copies of the result will be submitted to college of health science of Addis Ababa University, published and disseminated to Yekatit-12 Hospital Medical

College, and Tikur Anbesa Specialised Hospital, and department of Emergency medicine Nursing Director and Federal Ministry of Health (FMOH). It will also be submitted to local and international peer reviewed journal for publication.

CHAPTER 5: RESULT

In a one month of cross sectional study on December 2020, a total of 121 individuals participated and seven participant's data were incomplete due to different reasons, so a total of 114 participants are studied.

5.1 Socio demographic characteristics

Among COVID-19 patients included in this study male patients accounted 60(52.6%) and 54(47.7%) were females, the mean age of the patients were 45.81±15.26 ranged from 16 to 85 years. the educational level of majority of the patients were elementary school 41(36%) and 14(12.3%) of them are illiterate. Majority of them 79(69.3%) are married. See table (1)

Table 2: socio-demographic distribution of covid-19 patients admitted to Tikur Anbessa Specialised Hospital and Yekatit 12 Hospital Medical College isolation units

characteristics		frequency(n)	Percentage (%)
gender	male	60	52.6
	female	54	47.4
	Total	114	100.0
age	15-35	34	29.8
	36-56	48	42.1
	57-77	30	26.3
	78-98	2	1.8
	Total	114	100.0
educational level	elementary school	41	36.0
	high school	9	7.9
	preparatory school	15	13.2
	college or university	35	30.7
	illiterate	14	12.3
	Total	114	100.0
marital status	married	79	69.3
	single	15	13.2
	widow	11	9.6
	divorced	9	7.9
	Total	114	100.0

5.2 Clinical characteristics

89(78.1%) of participants has chronic or acute medical illness, among them 70(61.7%) has one medical problem and 14(12.3%) has two medical problems, and the others has three or more medical problems.

Table 2: comorbidity status of patients infected with COVID-19 admitted to Tikur Anbessa Specialised Hospital and Yekatit-12 Hospital Medical College isolation units

Comorbidities		Frequencies(n)	Percentages (%)	
		n	Percent	Percent of Cases
	Hypertension	20	17.7%	22.5%
	Diabetes mellitus	13	11.5%	14.6%
	Cancer	21	18.6%	23.6%
	Cardio vascular disease	8	7.1%	9.0%
	Other	51	45.1%	57.3%
Total		113	100.0%	127.0%

Majority of the patients 63(55.3%) oxygen saturation were >93% and 38(33.3%) patients were on oxygen and the other 13(11.4%) patients saturation were <=93%.

Based on covid-19 sign and symptom severity 32(28.1%) of patients has mild symptom, 72(63.2%) of them has moderate symptom and the other 10(8.8%) has severe symptoms and some patients who has severe clinical symptoms were admitted to intensive care unit.

The total isolation period of all patients were 1-24 days with a mean of 5.11±3.666, majority of them 99(86.8%) were isolated for 1-8 days. 7(6.1%) of patients has psychiatric illness history and 24(21.1%) has smoking history. 6(5.3%) patients have a family member infected with covid-19 and 1(0.9%) among them has a family member died of covid-19. Most of the patients 99(86.8%) has contact with families through phone of face to face while on isolation.

82(71.9%) of patients said there is adequate provision of food and clothing. 6(5.3%) said the room was not comfortable to sleep and all of the patients said health care workers have good approach towards them.

Table 3: clinical characteristics and anxiety and depression magnitude of COVID-19 patients admitted to Tikur Anbessa Specialised Hospital and Yekatit-12 Hospital Medical College isolation units

Variables		Frequency(n)	Percentage (%)
Spo2 at rest	<=93%	13	11.4
	>93%	63	55.3
	>=93% with oxygen	38	33.3
	Total	114	100.0
COVID-19 severity	mild	32	28.1
	moderate	72	63.2
	severe	10	8.8
	Total	114	100.0
Total isolation period	1-8	99	86.8
	9-16	13	11.4
	17-24	2	1.8
	Total	114	100.0
Depression		30	26.3
No depression		84	73.7
Anxiety		14	12.3
No anxiety		100	87.7

5.3 Magnitude of anxiety and depression symptoms among covid-19 patients

According to PHQ-9 and GAD-7 depression and anxiety measurement scales only patients with moderate and severe depression or anxiety symptoms (that is participants who scored >=10 for both) are diagnosed as having depression or anxiety respectively.

Among 114 patients participated in this study, depression was diagnosed in 30 (26.3%) patients: 27(24%) had moderate depression and 3(2.6%) had severe depression. (See table 3) Fourteen (12.3%) patients were diagnosed with anxiety: among them 12(11%) had moderate anxiety and 2(1.8%) had severe anxiety. Regarding results of anxiety comorbid with depression, 6(5.2%) of patients had anxiety comorbid with depression.

5.4 Association of socio demographic and clinical factors with anxiety and depression outcome

To identify for the presence of a statistical significant association between independent variables and anxiety and depression outcome, first each independent variables were assessed individually in bivariate logistics regression analysis.

Then five variables had shown some form of association ($p<0.25$) with positive anxiety outcome. Then they were further taken to multivariate analysis and had shown no significance association.

Eleven variables shown some form of association ($p<0.25$) with positive depression outcome and they were taken to multivariate analysis. It results in only two variables has showed association with positive depression outcome (patients with an educational level of college or university has 7 times risk for having depression than patients with other level of educations and who are illiterate ($p=0.008$and AOR=6.786, CI=1.642-28.054). patients with Cardio vascular disease was 10 times risky for developing depression than other patients with no CVD ($p=0.049$, AOR=9.582, CI=1.009-91.020)).

Table 4: Bivariate and multivariate analysis showing association of anxiety with socio demographic and clinical characteristics

Anxiety

		no anxiety	Anxiety	p value	COR(95% CI)	AOR(95% CI)	p value
gender	male	51	9	0.355	1.729(0.541-5.524)		
	female	49	5	1	1		
age	15-35	30	4	1	1		
	36-56	43	5	0.848	0.872(0.216-3.519)		
	57-77	25	5	0.575	1.500(0.363-6.192)		
	78-98	2	0	0.999	0		
marital status	married	69	10	0.894	1.159(0.131-10.278)		
	single	14	1	0.706	0.571(0.031-10.435)		
	widow	9	2	0.662	1.778(0.134-23.520)		
	divorced	8	1	1	1		
educational status	elementary	38	3		1		
	High school	8	1	0.706	1.583(0.145-17.248)		
	preparatory	13	2	0.491	1.949(0.292-12.987)		
	college or university	29	6	0.198	2.621(0.604-11.372)	3.729(0.555-25.034)	0.176
	illiterate	12	2	0.442	2.111(0.315-14.161)		
comorbidity	yes	77	12		1		
	no	23	2	0.466	1.792(0.374-8.595)		
HTN	yes	19	1	0.297	0.328(0.040-2.663)		
	no	81	13		1		
DM	yes	11	2	0.718	1.348(0.266-6.833)		
	no	89	12		1		
Cancer	yes	19	2		1		
	no	81	12	0.671	0.711(0.147-3.443)		
Cardio vascular disease	yes	7	1	0.984	1.022(0.116-8.988)		
	no	93	13		1		
other	yes	42	9	0.125	2.486(0.777-7.954)	4.384(0.976-19.688)	0.054
	no	58	5		1		
smoking history	yes	21	3	0.971	1.026(0.262-4.015)		
	no	79	11		1		
family infected with covid-19	yes	5	1	0.738	1.462(0.158-13.509)		
	no	95	13		1		
family died from covid-19	yes	1	0	1	0		
	no	99	14		1		
contact with family	yes	88	11	0.336	0.5(0.122-2.052)		
	no	12	3		1		
spo2 at rest	<=93%	13	0	0.999	0		
	>93%	57	6	0.112	0.395(0.125-1.243)	0.591(0.163-2.141)	0.423
	>=93% with	30	8		1		

	oxygen						
History of psychiatric illness	yes	6	1	0.868	1.205(0.134-10.822)		
	no	94	13		1		
covid-19 symptom severity	mild	28	4	0.832	1.286(0.127-13.036)		
	moderate	63	9	0.821	1.286(0.145-11.383)		
	severe	9	1		1		
total isolation period	1_8	86	13	0.191	0.151(0.009-2.568)	0.098(0.003-2.856)	0.177
	9_16	13	0	0.998	0		
	17_24	1	1		1		
adequate provision of food and cloth	yes	72	10		1		
	no	28	4	0.964	1.029(0.298-3.551)		
room comfortable to sleep	yes	95	13		1		
	no	5	1	0.738	1.462(0.158-13.509)		
depression outcome	yes	24	6	0.142	2.375(0.749-7.529)	1.768(0.383-8.168)	0.465
	no	76	8		1		

Table 5: Bivariate and multivariate analysis showing association of deperession with socio demographic and clinical characteristics

		No depression	depression	p value	COR(95% CI)	AOR(95% CI)	p value
gender	male	43	17	0.606	1.247(0.539-2.886)		
	female	41	13		1		
age	15-35	22	12		1		
	36-56	39	9	0.095	0.423(0.154-1.162)	0.334(0.082-1.360)	0.126
	57-77	21	9	0.653	0.786(0.275-2.247)		
	78-98	2	0	0.999	0		
marital status	married	59	20	0.839	1.186(0.228-6.186)		
	single	9	6	0.377	2.333(0.356-15.3)		
	widow	9	2	0.822	0.778(0.087-6.983)		
	divorced	7	2		1		
educational status	elementary	36	5		1		
	High school	8	1	0.928	0.9(0.092-8.796)		
	preparatory	12	3	0.464	1.800(0.373-8.681)		
	college or university	13	20	0.000	9.600(3.039-30.327)	6.786(1.642-28.054)	**#0.008**
	illiterate	13	1	0.605	0.554(0.059-5.196)		
comorbidity	yes	68	21		1		
	no	16	9	0.217	1.821(0.703-4.719)	1.024(0.196-5.354)	0.977
HTN	yes	13	7	0.335	1.662(0.592-4.666)		
	no	71	23		1		
DM	yes	10	3	0.778	0.822(0.210-3.214)		
	no	74	27		1		
Cancer	yes	20	1		1		
	no	64	29	0.036	9.062(1.160-70.801)	5.870(0.508-67.814)	0.156
CVD	yes	3	5	0.028	5.400(1.205-24.200)	9.582(1.009-91.020)	**#0.049**
	no	81	25		1		
other	yes	41	10	0.147	0.524(0.219-1.253)	0.510(0.109-2.384)	0.392
	no	43	20		1		
smoking hx	yes	17	7	0.721	1.199(0.441-3.259)		
	no	67	23		1		
Covid-19 infected Family	yes	2	4	0.040	6.308(1.092-36.435)	6.103(0.514-72.479)	0.152
	no	82	26		1		
family died from covid-19	yes	1	0	1	0		
	no	83	30		1		
contact with family	yes	74	25	0.510	0.676(0.211-2.167)		
	no	10	5		1		
spo2 at rest	<=93%	8	5	0.782	1.202(0.327-4.423)		
	>93%	51	12	0.091	0.452(0.181-1.134)	0.477(0.121-1.874)	0.289

	>=93% with oxygen	25	13		1		
Psychiatric history	yes	5	2	0.889	1.129(0.207-6.150)		
	no	79	28		1		
covid-19 symptom severity	mild	24	8	0.754	0.778(0.162-3.744)		
	moderate	53	19	0.809	0.836(0.196-3.568)		
	severe	7	3		1		
total isolation period	1_8	70	29	0.538	0.414(0.025-6.850)		
	9_16	13	0	0.998	0		
	17_24	1	1		1		
adequate provision of food and cloth	yes	64	18		1		
	no	20	12	0.094	2.133(0.879-5.176)	0.906(0.254-3.232)	0.878
room comfortable to sleep	yes	81	27		1		
	no	3	3	0.194	3.000(0.571-17.755)	1.902(0.173-20.893)	0.599
anxiety outcome	yes	8	6	0.142	2.375(0.749-7.529)	2.496(0.488-12.779)	0.272
	no	76	24		1		

CHAPTER 6: DISCUSSION

From the total of 114 patients included in this study number of male patients (52.6%) is slightly higher than females which is nearly similar with a study conducted in Zhongshan, China (50.9%) (19), and opposite with a cross sectional study conducted in Kantosspital, Aarau in which female accounts 54.4%. (58)

The mean age of the patients was 45.81±15.262 which is in agreement with a prospective cross sectional study done at Kantosspital, Aarau 44.6, and in Zhongshan, China which is 46.9. (58), (19)

The mean isolation time was found to be 5.11±3.666 where most of them 99(86.8%) were isolated for 1-8 days, this is lower compared to a cross sectional study conducted in shanghai, China , 8.16 ± 4.06. (36) Comorbidity status of patients 78.1% patients has chronic and acute comorbidity this high number is because most of them were admitted to the hospitals for another reason before they caught covid-19 and experienced the symptom then get checked for covid-19

Magnitude of Depression and its associated factor discussion

In this study 26.3% patients had depression, which is nearly similar with studies in conducted in Pakistan 27.9%.(18), huoshenshan hospital Wuhan, China 28.47%. (37) This might be due to the similarities in the study design and also the sample size of this two studies are so close to our sample size.

This study is high when compared with studies conducted in Ecuador 22.9%.(38) Jianghan Fangcang shelter hospital,wuhan China 13.36%. (40), Jinyintan hospital Wuhan, China 10.8% (39), Shenzen China 6.21%. (35) and also our study result is low compared with studies in Zhongshan, China 29.2%.(19), Wuhan China, 35.9%.(18)

The reason for this discrepancies might be due to different reasons like differences in social norms, access to psychological support, access to resources for coping mechanism, involvements of family members in caring of patients,

Patients with an educational level of college or university had seven times likely to develop depression than patients with lower level of education (p=0.008and AOR=6.786, CI=1.642-28.054), this finding is the same with a study in Wuhan,China (20) and opposite with study in Shenzhen, China.(35) Although many studies show the opposite some studies show that individuals with a higher level of education have high degree of depression compared with less educated people. (59)

Patients with cardiovascular disease are found to be ten times more likely to develop depression symptoms than patients with other chronic and acute illnesses and with patients who has no comorbidity (p=0.049, AOR=9.582, CI=1.009-91.020). this is different with other studies where females, age, family infection with COVID-19, low social support and other factors are found to be predicting factors of depression in three studies in Wuhan China (40), (39), (37) and study in Pakistan (18).

As many studies have shown, patients with chronic illnesses appears to suffer from some level of anxiety and depression. (60–64)

Magnitude of anxiety and its associated factor discussion

Magnitude of anxiety was found in 12.3% patients. This result is consistent with a study in Jinyintan hospital, Wuhan China 13.5%.(39)

Which is less compared with a survey conducted in Ecuador 24.2%. (38) Zhongshan, China 20.8%.(19) Jianghan Fangcang shelter hospital in Wuhan China 18.57%.(40), Pakistan 24.6% (18) single centred cross sectional study conducted at Wuhan, China 38.5%. (18), huoshenshan hospital Wuhan, China (34.72%).(37) This discrepancy might be because they studied large sample size, and populations are more prone to be overwhelmed by information's through different social media than our society.

Regarding factors associated with anxiety this study show no association with socio demographic or clinical factors, but other studies show many factors such as gender, age, oxygen saturation, low level of social support, poor sleep quality family member infection status are associated with anxiety, huoshenshan hospital Wuhan, China (37), Jianghan Fangcang shelter hospital in Wuhan China (40), Pakistan (18). Wuhan China (20).

The contagiousness of covid-19, the recurrence of the infection, lack of antiviral drugs to cure the disease, and people being overwhelmed by information's about the pandemic through different social media are presumed to be main reasons for this high burden of depression and anxiety

Conclusions

This study looks into the burdens of anxiety and depression symptoms among covid-19 patients and the result show magnitude of depression and anxiety were high. Patients with educational level of college or university and patients with heart disease show significant association with depression. The finding will insight the need to incorporate psychological service in every patient care as vital service to many hospitals and institutions involved in managing outbreaks.

RECOMMENDATIONS

- This study uses small sample size, so it will be better to conduct this kind of research with a sample size that is enough to be used for generalization to the population, and also it will be better to try it with other study designs and longer duration of study period that is better in identifying the cause of psychological morbidities.
- It is important for many hospitals and institutions involved in managing outbreaks to incorporate psychological service in every patient care as one service.

STREANGTH AND LIMITATIONS

Strength of the study; this study uses primarily a primary data and the data collection method was interview and only few information was taken secondarily. This makes the finding more accurate. And as my knowledge there is no similar study conducted in Ethiopia, so the information will help in planning and implementation of psychological health services.

Limitation of the study; this research has several limitations, first we used small sample size, this is because many institutions were not cooperative to allow for data collection and the research was conducted in only two institutions where those are not only for isolation hospitals. Secondly, this is a cross sectional study design so it doesn't identify whether the cause for this burden of anxiety and depression is COVID-19 itself or not. Finally this study has shown no association of depression or anxiety with particular variables such as age, sex, contact with family member, having a family member infected with covid-19 and so on even if this variables shown different degree of association in many other studies; so doing such research that will illustrate further will be important.

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ANNEX: QUESTIONNAIRE

Information sheet

Research title

Prevalence and factors associated with anxiety and depression among COVID-19 patients in selected two covid-19 treatment centre in Addis Ababa, Ethiopia, 2020

Principal investigator:

HIDJA MUSTOFA (a student at Addis Ababa university faculty of college of medicine and health science department of Emergency Medicine).

Invitation

You are being invited to take part in this research project. Before you decide to do so, it is important you understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the research purpose?

This research project aims to investigate Prevalence and factors associated with anxiety and depression among COVID-19 patients. This project builds on research previously carried out by other researchers and has been designed to allow comparisons with previous findings.

Who can take part?

If you are a covid-19 patient and 18 years of age or over, then you can complete this questionnaire.

Why take part?

The aim of the research is to collect information on prevalence and factors associated with anxiety and depression among COVID-19 patients. This will hopefully improve

What will happen to me if I take part?

After reading this information sheet you can accept the question "do you consent to this questionnaire?" at the beginning of the questionnaire and continue to complete the questionnaire which we estimate will take you 10 minutes.

What are the possible benefits and risks of taking part?

There are no immediate benefits for those people participating in the project, it is hoped that this work will have a beneficial impact on informing how provision of psychological support will improve the outcome of patients affected with the pandemics. Participating in the research is not anticipated to cause you any disadvantages or discomfort.

What about my privacy and confidentiality?

All questionnaires will be completed anonymously; the researcher will not know who has completed each questionnaire. The research will only be seen by the researcher and her project tutors. Results of the research will be published. You will not be identified in any report or publication.

Consent form

I have read the information and recognise that my participation in this study is entirely voluntary and that I am free to withdraw from the study at any time without any consequences. I understand that the information from this study will be strictly confidential. I realize that I may ask further information about this study if I wish to do so at any time.

Do you consent to this questionnaire?

……Yes, I want to participate in the study

…….No, I don't want to participate in the study

Witness: Signature…….Date……..

I. Baseline demographic and clinical characteristics of the patient

Table 3: Baseline demographic and clinical characteristics of covid-19 patients

1. Age	……
2. Sex	A. male B. female
3. Marital status	A. Married B. Single C. Widowed D. Divorced
4. Educational status	A. Elementary school B. Middle school C. High school D. >High school
5. Comorbidity	A. Yes B. No
6. If the answer is yes for question no 4 specify	A. Hypertension B. Diabetes mellitus C. Cancer D. Cardiovascular disease E. Other…….
7. Smoking history	A. Yes B. No
8. Family member confirmed covid-19	A. Yes B. No
9. Family member died from covid-19	A. Yes B. No
10. Contact with family members	A. Yes B. No
11. Oxygen saturation at rest	A. ≤93% B. >93%
12. History of psychiatric illness	A. Yes B. No
13. Covid-19 symptom severity	A. Mild B. Moderate C. Severe
14. total isolation period during treatment	A. 1-2 week B. 3-4 week C. 2-3 month D. More than 3 month
15. Adequate Provision of	A. Yes

food and cloth	B. No
16. The ward is comfortable to sleep	A. Yes B. No
17. Health care workers have good approach towards the patient	A. Yes B. No

II. Depression level Assessment questions by using *PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)*

Table 4: Depression level Assessment by using PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (Use " ✓ " to indicate your answer)	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things				
2. Feeling down, depressed, or hopeless				
3. Trouble falling or staying asleep, or sleeping too much				
4. Feeling tired or having little energy				
5. Poor appetite or overeating				
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down				
7. Trouble concentrating on things, such as reading the newspaper or watching television				
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual				
9. Thoughts that you would be better off dead or of hurting yourself in some way				
10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people? **Not difficult at all …** ⬭ **Somewhat difficult …** ⬭ **Very difficult …** ⬭ **Extremely difficult …** ⬭				

III. Anxiety level assessment questions

Table 5: Anxiety level assessment by using Generalized Anxiety Disorder 7-item (GAD-7) scale

Over the last 2 weeks, how often have you been bothered by the following problems? Not	**Not at all sure**	**Several days**	**Over half the days**	**Nearly every day**
1. Feeling nervous, anxious, or on edge				
2. Not being able to stop or control worrying				
3. Worrying too much about different things				
4. Trouble relaxing				
5. Being so restless that it's hard to sit still				
6. Becoming easily annoyed or irritable				
7. Feeling afraid as if something awful might happen				
8. If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people? **Not difficult at all _____** **Somewhat difficult _____** **Very difficult _____** **Extremely difficult _____**				

አባሪ 1: መጠይቅ

የመረጃወረቀት

የምርምርርዕስ

በአዲስአበባ፣ኢትዮጵያ፣ 2020 ውስጥበተመረጡሁለትየCovid-19 የህክምናማዕከልውስጥበ COVID-19 ታካሚዎችመካከልየጭንቀትእናየድብርትስርጭትእናተዛማጅነገሮች.

ዋናተመራማሪ:

ሂድጃሙስታፋ

(በአዲስአበባዩኒቨርሲቲየሕክምናኮሌጅእናየጤናሳይንስየድንገተኛሕክምናእናወሳኝእንክብካቤክፍልተማሪ)

ግብጥ

በዚህየምርምርፕሮጀክትውስጥእንዲሳተፉተጋብዘዋል።ይህንንለማድረግከመወሰንዎበፊትጥናቱለምንእየተካሄደእንደሆነእናምንእንደሚያካትትመገንዘቡአስፈላጊነው።እባክዎንየሚከተሉትንመረጃዎችበጥንቃቄለማንበብጊዜይውሰዱእናከፈለጉከሌሎችጋርይወያዩ።ግልፅያልሆነነገርካለይጠይቁወይምተጨማሪመረጃከፈለጉለመሳተፍወይምላለመሳተፍለመወሰንጊዜይውሰዱ።ይህንንስላነበቡእናመሰግናለን።

የምርምርዓላማውምንድነው?

ይህየምርምርፕሮጀክትበአዲስአበባ፣ኢትዮጵያ፣ 2020 ውስጥበተመረጡሁለትየCovid-19 የህክምናማዕከልውስጥበ COVID-19 ታካሚዎችመካከልየጭንቀትእናየድብርትስርጭትእናተዛማጅነገሮችንለመመርመርያለመነው።ይህፕሮጀክትየሚገነባውቀደምሲልበሌሎችተመራማሪዎችበተከናወነውምርምርላይሲሆንእናከቀዳሚውግኝቶችጋርንፅፅሮችንለመፍቀድየተቀየሰነው።.

ማንሊሳተፍይችላል?

እርስዎCovid-19 ታካሚእናዕድሜዎ 18 ወይምከዚያበላይከሆኑይህንመጠይቅማጠናቀቅይችላሉ።

ከተሳተፍኩምንይገጥመኛል?

ይህንንየመረጃወረቀትካነበቡበኋላበመጠይቁመጀመሪያላይ “ለዚህመጠይቅተስማምተዋል?”
የሚለውንጥያቄመቀበልይችላሉ።ከዚያም 10
ደቂቃዎችንይፈጅብዎታልብለንየምንገምተውንመጠይቅማጠናቀቁንይቀጥሉ።

መሳተፍምንጥቅሞችእናአደጋዎችአሉት?

በፕሮጀክቱውስጥለሚሳተፉሰዎችምንምዓይነትፈጣንጥቅምየላቸውም፣ይህሥራየስነልቦናድጋፍመ
ስጠቱበወረርሽኙየተጎዱትንታካሚዎችውጤትእንዴትእንደሚያሻሽልበማሳወቅረገድጠቃሚተጽዕኖ
ይኖረዋልተብሎተስፋይደረጋል።በምርምርውውስጥመሳተፍለእርስዎምንምጉዳትወይምአለመመቸት
ሊያመጣብዎትየሚችልአይደለም።

የእኔግላዊነትእናምስጢራዊነትስ?

ሁሉምመጠይቆች
የእርስዎንስምሳያካትትይጠናቀቃሉ;ተመራማሪውእያንዳንዱመጠይቅማንእንደሞላአያውቅም።ጥናቱ
የሚታየውበተመራማሪውእናበፕሮጀክትአስተማሪዎብቻነው።የምርምርውጤቶችይታተማሉ።እርስ
ዎበማንኛውምዘገባወይምህትመትውስጥአይታወቁም።

የፈቃድቅጽ

መረጃውንአንብቤበዚህጥናትውስጥያለኝተሳትፎሙሉበሙሉበፈቃደኝነትመሆኑንእናያለምንምመዘ
ችከየትኛውምጥናትለማግለልነፃነኝ፡፡ከዚህጥናትየተገኘውመረጃበጥብቅሚስጥራዊእንደሚሆንተገንዝ
ቤያለሁ፡፡በማንኛውምጊዜማድረግከፈለግኩስለዚህጥናትተጨማሪመረጃመጠየቅእንደምችልተገንዝቤ
ያለሁ፡፡

ለዚህመጠይቅተስማምተዋል?

……አዎእኔበጥናቱመሳተፍእፈልጋለሁ

……አይ፣በጥናቱመሳተፍአልፈልግም

ምስክር-ፊርማ …… ቀን ……

I. የታካሚውመሰረታዊየስነ-ህዝብእናክሊኒካዊባህሪዎች

ሠንጠረዥ 3: የታካሚውመሰረታዊየስነ-ህዝብእናክሊኒካዊባህሪዎች

18.ዕድሜ	ሀ/ 20-25 ዓመት ለ/ 26-30 ዓመት ሐ/ 30-35ዓመት መ/ከ 35ዓመትበላይ
19.ፆታ	ሀ/ ወንድ ለ/ ሴት
20.የጋብቻሁኔታ	ሀ / ያገባ ለ/ ነጠላ ሐ/ መበለት መ/ የተፋቱ
21.የትምህርትደረጃ	ሀ/አንደኛደረጃትምህርትቤት ለ/መካከለኛደረጃትምህርትቤት ሐ/ሁለተኛደረጃትምህርትቤት መ/ሁለተኛደረጃትምህርትቤት
4. ሌላበሽታ	ሀ/አዎ ለ/ የለብኝም
5. አጭሰዉ ያዉቃሉ	ሀ/አዎ ለ/አላዉቅም
6. የቤተሰብአባልበcovid-19 የተረጋገጠአለ?	ሀ/አዎ ለ/ የለም
7. የቤተሰብአባልከCovid-19 የሞተአለ?	ሀ/አዎ ለ/ የለም
8. ከቤተሰብአባላት ጋርትገናኛለህ/ሽ?	ሀ/አዎ ለ/ አልገናኝም
9. በእረፍትጊዜየኦክስጂንመሌት	ሀ/≤93% ለ/ >93% ሐ/>93%ኦክስጅንላይ
10.የአእምሮህመምታሪክአለዎት?	ሀ/አዎ ለ/ የለብኝም
11.Covid-19 የምልክትክብደት	ሀ/መለስተኛ ለ/መካከለኛ ሐ/ከባድ
12.በሕክምናወቅትአጠቃላይየመገለል ጊዜ?	ሀ/1-2 ሳምንት ለ/3-4ሳምንት ሐ/2-3ወር መ/ከ 3 ወርበላይ
13.በቂየምግብእናየአልጋአቅርቦትአለ?	ሀ/አዎ ለ/ የለም
14.ክፍሉለመተኛትምቹነው?	ሀ/አዎ ለ/ የለም
15.የጤናእንክብካቤሰራተኞችወደታካሚውጥሩአቀራረብአላቸው?	ሀ/አዎ ለ/ የለም

II. የታካሚ የጤና ጥያቄን -9 (PHQ-9) በመጠቀም የድብርት ደረጃ የምዘና ጥያቄዎች

ሠንጠረዥ 4: የታካሚ የጤና ጥያቄን -9 (PHQ-9) በመጠቀም የድብርት ደረጃ የምዘና ጥያቄዎች

ባለፉት 2 ሳምንታት ውስጥ በሚከተሉት ማናቸውም ችግሮች ስንት ጊዜ ተቸግረዋል? (መልስዎን ለማመልከት "✓" ን ይጠቀሙ)	**በጭራሽ**	**ብዙ ቀናት**	**ከግማሽ ቀናት በላይ**	**በየቀኑ ማለት ይቻላል**
1. ነገሮችን ለማድረግ ትንሽ የሆነ ፍላጎት ወይም ደስታ				
2. ድብርት፣ የመንፈስ ጭንቀት ወይም ተስፋ የመቁረጥ ስሜት				
3. የለመተኛት ወይም ተኝቶ ለመቆየት መቸገር ፣ ወይም ብዙ መተኛት				
4. የድካም ስሜት ወይም አነስተኛ ጉልበት				
5. የምግብ ፍላጎት መቀነስ ወይም ከመጠን በላይ መብላት				
6. ስለራስዎ መጥፎ ስሜት - ወይም እርስዎ ውድቀት እንደሆኑ ወይም እራስዎን ወይም ቤተሰብዎን ዝቅ እንዳደረጉ መሰማት				
7. እንደ ጋዜጣ በማንበብ ወይም ቴሌቪዥን በመመልከት ባሉ ነገሮች ላይ ለማተኮር መቸገር				
8. ሌሎች ሰዎች አዩኝ አላዩኝ በሚል በጣም በዝግታ መንቀሳቀስ ወይም መናገር፣ ወይም ተቃራኒው - በጣም መቁነጥነጥ ወይም እረፍት አልባ መሆን ከወትሮው በበለጠ ብዙ መንቀሳቀስ				
9. ብሞት ይሻላል ወይም በሆነ መንገድ ራሴን መጉዳት ይሻላል ብሎ ማሰብ				
10. ከላይ ከተዘረዘሩት ማንኛውንም ችግር ካረጋገጡ ሥራዎትን ለመሥራት ፣ በቤት ውስጥ ነገሮችን				

ለመንከባከብ ወይም ከሌሎች ሰዎች ጋር ለመግባባት እነዚህ ችግሮች ምን ያህል ከባድ አድርገውብዎታል?

በጭራሽ አስቸጋሪ አይደለም ... ⬭

በተወሰነ ደረጃ ከባድ ነው ... ⬭

በጣም ከባድ ነው ... ⬭

እጅግ በጣም ከባድ ነው ... ⬭

IV. ጭንቀትደረጃምዘናጥያቄዎች

ሠንጠረዥ 5: GAD-7 ልኬትበመጠቀምየጭንቀትደረጃግምገማ

ባለፉት 2 ሳምንታትውስጥበሚከተሉትችግሮችምንያህልጊዜተረብሸዋል?	በጭራሽ	በርካታቀናት	ከግማሽቀናትበላይ	በየቀኑማለትይቻላል
9. የመረበሽስሜት፣የመስጋትወይምጠርዝላይየመሆንስሜት				
10. ጭንቀትንማቆምወይምመቆጣጠርአለመቻል				
11. ስለየተለያዩነገሮችከመጠንበላይመጨነቅ				
12. ዘናለማለትችግር				
13. በጣምእረፍትየሌለውመሆንዝምብሎመቀመጥከባድመሆን				
14. በቀላሉየሚናደድወይምብስጩመሆን				
15. አንድአስከፊነገርእንደሚከሰትየመፍራትስሜት				
16. ማንኛውንምችግርካረጋገጡ; ሥራዎንለመሥራት፣በቤትውስጥነገሮችንለመንከባከብወይምከሌሎችሰዎችጋርለመግባባትእነዚህችግሮችምንያህልከባድአድርገውብዎታል? በጭራሽአስቸጋሪአይደለም_____ በመጠኑከባድ_____ በጣምከባድ_____ እጅግበጣምከባድ_____				