

# A Study on the Living Experiences of People during the COVID-19 Pandemic: The Case of Wolisso Town Home-Stayed University Students

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## ABSTRACT

Since its outbreak in Wuhan, China in December 2019, the COVID-19 has been enormously spreading all over the world affecting several facets of humans. The purpose of this study therefore was to explore living experiences of home stayed university students in Wolisso town using the qualitative, phenomenological approach, secondary and primary dataset. In-depth telephone interview and Facebook conversation using semi-structured items were used to gather data from a purposeful sample of eight (five male and three female) participants. After coding and transcription, interview data were organized and thematically structured manually. The findings from this study indicated that university students have been facing challenges and the COVID-19 has been affecting the psychological, social and academic functioning of the students. In addition, the findings revealed that students have been utilizing some coping strategies including cognitive-behavioral activities, seeking and giving social supports and building positive relationships and enhancing social connections with friends, family, professionals or physically with people in need during COVID-19 crisis through email, social media (Facebook, telegram) or SMS text. Finally, based on the key challenges discussed, implications of the findings/recommendations were suggested.

**Keywords:** University students; Challenges; Coronavirus; Coping strategies and social connections; Wolisso town

## INTRODUCTION

The COVID-2019 has been identified as the cause of an outbreak of respiratory illness in Wuhan, Hubei Province, China beginning in December 2019. This epidemic had spread to 19 countries with 11,791 confirmed cases, including 213 deaths, as of January 31, 2020. Following this, the World Health Organization declared it as a Public Health Emergency of International Concern [1]. Since then, WHO and public health authorities around the world have been also acting to contain the COVID-19 outbreak. However, it has been spreading and threatening the health, and millions are infected, and thousands are died while still some are recovered over the world. As the report of WHO and Hopkins University, in number since 31 December 2019 and as of 24 July 2020, 15,537,513 cases of COVID-19 have been reported, including 634,069 deaths and 9,535,641 recoveries over the world. Among these worldwide cases, 789,226 infections; 16,715 deaths; 447,026 recoveries of COVID-19 have been reported in Africa. When it comes to Ethiopia, as of 24 July 2020, 11,933 people are infected and 197 are died while 5,645 people are recovered. This devastating pandemic has been therefore, creating many challenges to the lives of community in general and university students in particular across the world. For instance, as WHO (2020) noted, the crisis of

(COVID-19) is generating stress throughout the population across the world.

Given its devastating impact thus, a public health emergency at national and international level has declared and the extraordinary measures have taken by the governments to prevent the contamination and limit the outbreak. Among the measures, one is, universities have forced to send students to their home over the world in different times. This action at the same time disrupted the education activities and lifestyle of the students in which they are no longer able to physically go to school and attend education during the COVID-19 [2]. As this author also noted, the pandemic has also shuttered economies and social ties around the world regardless of some battered education systems in both developing and developed countries in which they have tried to change and bring their courses online and adapt short-term solutions for remote teaching and learning. Nevertheless, schools particularly the higher education faced additional challenges related to financing and unavailability of infrastructure to transform from traditional, campus-based learning to online learning through the right technologies and approaches for educating and engaging their students.

Not only the system of delivering education affected as a result of the COVID-19 pandemic, but also the universities and their

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communities, particularly the students have impacted. Some studies in different part of the world revealed the impacts of COVID-19 on learning process and the students. In USA a study showed that COVID-19 has made the college-age students' mental health significantly worse and created unbearable psychological pressures like depression, anxiety, PTSD and eating disorders [3]. According to Cao et al. [4], a study in china on COVID-19-related stressors also found economic stressors, effects on daily-life, and academic delays were positively associated with the level of anxiety symptoms of college students while social support was negatively correlated with students' anxiety. In Kenya, COVID-19 has put problems on face to face methods of teaching and learning [5]. In Ethiopia, one study conducted among 422 college students in Dessie town, revealed that the level of anxiety, stress, and depression disorders are high among students due to COVID-19 [6]. From these findings, it is possible to think that educational institutions have affected in several ways over the world due to the COVID-19, particularly it has affected the students and the ways to run learning or attempts to transit learning from traditional way to online learning.

With regards to the prevention and intervention of the COVID-19 and related issues, after it achieved its pandemic status, World Health Organization has issued guidelines for managing the problem including both biomedical and psychological approaches. The preventive and medical actions and emergency psychological crisis interventions for people affected by COVID-19 including direct interventions for patients, and indirect for relatives, caregivers, health care professionals and communities in general are important (<https://www.frontiersin.org>). Strengthening community bonds and supporting each other in response to the COVID-19 crisis also appears to be vital. In relation to this, Kovari [7] the communication manager of the Italian branch of EIT Climate-KIC, explains that, it is central to strengthen ties in communities and support each other by sharing important information, resources and tools to try to cope with such a crisis situation. As IPI [8] also noted, if professional learning community affords consistent information on COVID-19 situation within which we can think, behave and draw upon our healthy links, it benefits a whole community.

Of course, response to COVID-19 can take various forms like music strategy, especially to get out of the stress. When we confined to homes, our normal social support from friends and family; our freedom to control our day-to-day lives and general way of life are restricted. As a result, feeling loss of control not experienced before is occurred, but making music provides a means to regain control [9]. In addition, the community connection as a means to fight the spread of COVID-19 seems important though there has been sometimes confusion and controversies in people's mind about social distancing which government officials across the globe and WHO have asked to stay away at least two meters from each other or social distancing. This approach often creates social side effects in bringing reducing usual social interactions. As a result, community in general may be feeling as if they are a lone. Thus, such kind of complexity creates mental and emotional tensions. According to Kanter and Kuczynski [10], in times of societal stress, a demand (stay away from each other) runs counter to what evolution has hard-wired people to do; seek out and support each other as families, friends and communities, and we desire to huddle together. From this point of view, it seems, there

are negative effects of social distancing which appears to suppress social interactions. As psychological scientists at the University of Washington's Center for the Science of Social Connection stated, social distancing has side effects. Since, human beings are social beings, being deprived of social connection can create more stress and illness. People who are lonely have higher levels of the hormone cortisol, an indicator of stress; show weaker immune responses to pathogens; and are at increased risk for premature death. Isolation can also lead to depression, suicidal thoughts and other clinical conditions. For example, for those who must be quarantined because they are infected with the virus, depriving them of social connection and physical closeness unfortunately may make it harder for them to defeat infection [10].

From the above explanation, it is possible to think that university students are not different and can also be confused with the term social and physical distancing and affected in practicing social distancing. The awareness of the students on how to stay connected to the community within the concept of social and physical distancing to combat the COVID-19 is therefore to be a central. The students must be conscious in time of crisis like COVID-19. Community responses including volunteer groups, neighborhood associations, teachers or others are also important in helping and building trust between government and citizens to inform the public on the risks of COVID-19 and needed steps. It is with this concept that the writer of this paper argues that, although the priority number one to combat COVID-19 is to follow the recommended rules devised by World Health Organization [11] including frequent hand washing, covering when sneezing or using face mask, stay home and social distancing, the importance of social connection in time of stress has missed, and the application and the way people in general and university students in specific adhered to these rules seems not similar across society over the world. On the other hand, the spread of COVID-19 is increasing from time to time which in turn resulted in worry among the general population and students. So, over the world, university students are no exception in experiencing even the additional stress that they left with some struggling to manage their mental health during home quarantines, social distancing and missed milestones like graduation.

Universities in Africa and Ethiopia have not been any different in this aspect. Particularly, when comes to Ethiopia, although health care professionals, university instructors, volunteers etc in collaboration with health care organizations, universities and government officials have been attempting to work on prevention and intervention of COVID-19, the spread of COVID-19 is devastating and creating worry yet. Fear and anxiety have formed along with the increasing number of diagnosed cases; stigma and discrimination arise towards those who infected as well as people who have contact with those infected patients. The college and/or university students seem even more vulnerable to the condition, fears and emotional disturbances related to the COVID-19 pandemic given everything including their academic activities have lost. In particular, the concept of social distancing appeared to be strange to the community in general and students in Ethiopia which might be cause for fast spread of COVID-19 and tension. Social distancing conceived as if it means to ceasing social connections which in fact does not mean. Some people even perceived that social distancing is avoiding social relations and/or communications. Such kind of misunderstanding, on the other

hand led people to be confused with the awareness of social distancing and physical distancing. Of course, when we talk about distance, our mind immediately interpret it as quantifiable apart like 2 meters discrete required from individuals to walk or move together. In this sense, it seems keeping physical distance 2 meters apart from each other is appropriate to reflect what required as a means to reduce the transmission of COVID-19 than social distancing which reduces our emotional ties and communications in general.

In order to tackle the impacts of COVID-19, strengthening the community connections is a central mechanism. Be it awareness rising, teaching, informing, linking, sharing etc, we need a tied community to us and each other; because the more we cooperatively share our understanding on this problem, the more we reduce its negative effect on communities. The problem in the concept of social distancing is therefore, government officials and others have asked to keep social at a distance to fight the spread of coronavirus, but not small number of individuals have been misunderstood the concept as if it does mean not cultivating social and emotional connections to a larger human community to relief from the suffering of COVID-19. To the knowledge of the writer of this paper thus, no sufficient studies have been conducted in the area of such misunderstanding and living situations of the students during COVID-19 in Ethiopia. In addition, the personal observation that the researcher himself made in different times when walked on the street was signify how far the COVID-19 is becoming infectious and affecting peoples' everything for which contrarily, significant numbers of the people walking on the street do not seem they have given priority for distancing and stay at home preferences. Therefore, having the primary purpose of exploring the living experiences of university students related to COVID-19 and the ways to cope and strengthening the community connections, latterly the findings would contribute to fill the gaps in the literatures and suggesting practical solutions in the area of the living situations of university students in relation to COVID-19 pandemic. To achieve this purpose, the study's basic research questions therefore were designed as below.

## RESEARCH QUESTIONS

- What are the major challenges described by the University Students?
- What are the coping strategies used among University Students to respond to COVID-19?
- How does social connection can be strengthened among University Students to respond to COVID-19?

## OBJECTIVES OF THE STUDY

The general objective of this study was to understand the living experiences, strategies of university students to handle and empower the community connection to fight the impacts of COVID-19.

More specifically, the study intends to:

- Explore the living challenges faced by University students due to COVID-19.
- Identify the coping strategies used by University students in response to COVID-19.

- Understand ways to strengthen the social connections of university students in response to COVID-19

## RESEARCH METHODOLOGY

In this study, a qualitative research, phenomenological design was employed. This design was mainly selected because; it allows the exploration and understanding of informants' responses through directly dealing with their issues in depth. Such design also informs to study research problems addressing the meaning individuals or groups ascribe to a social or human problem [12]. According to Merriam and Tisdell [13] this design assists qualitative researchers in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences by focusing how people adjust to situations, how they think about this phase of their lives, the process they engaged in when moving from one phase to the other, and so on. Based on this concept, a researcher used the phenomenological approach of the qualitative methods. Phenomenology is defined as a science whose purpose is to describe particular phenomena or the appearance of things, as lived experiences [14]. Burns and Grove [15] also state that the purpose of phenomenological research is to describe and capture the experiences as they are lived. It is this lived experience that gives meaning to each individual's perception of a particular phenomenon and is influenced by everything internal and external to the individual.

### Sample and sampling techniques

A purposive sampling method was used for this study, because it helps the researcher to get pertinent information from these individuals who have already experienced and rich in information to answer the research questions. In this sampling process, inclusion and exclusion criteria were considered. As inclusion criteria, persons who are not infected by COVID-19 yet and in Wolisso town were included in the sample. And those who are confirmed with COVID-19 infection are excluded from the sample. Based on this ground 8 individuals were purposively selected, communicated and used for interview.

### Data collection instrument (Measures)

In this study, based on the research questions, semi-structured interview was used. It is a form of qualitative research tool where questions are asked about people's perceptions, attitudes, beliefs, opinion or ideas. As Merriam and Tisdell [13] stated the semi structured interview appears at the middle, between structured and unstructured interview. In this type of interview either all of the questions are more flexibly worded or the interview is a mix of more and less structured questions. Usually, specific information is desired from all the respondents, in which case there is a more structured section to the interview. But most of the interview is guided by a list of questions or issues to be explored, and neither the exact wording nor the order of the questions is determined ahead of time. This format allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic. Therefore, an interview Guide which contains flexible interview items were developed by the researcher and tested through pilot study. The items were supposed to assessing the situations and ways to strength community connection during this distressing pandemic. In addition, the researcher has used documents, journals, and research papers,

published and unpublished materials for the accomplishment of this study.

### Procedures of data collection

Data collection is defined as the precise, systematic gathering of information relevant to the research purpose or the specific objectives and questions of a study as cited by Susan [16]. Based on this, the researcher prepared semi-structured interview items in English language and translated into Afan Oromo language to make suitable for the participants. And participants were selected using purposive sampling for the Interview. Interviews were conducted through telephone audio calling and Facebook conversation in Wolisso town. All interviews were held in the agreed upon time according to the informant's willingness. Before, conducting an interview, the participants were contacted communicated to get their consent to participate or not to participate in the study and to explain the purpose of the study in detail. After their consents secured, the necessary orientation was provided to the participants on the type of information required of them, how to make efficient use of time throughout the communication period. As this, interview with eight (8) individuals was conducted in this study. The interview sessions were conducted by the researcher himself and each session was lasted for about 30 to 45 minutes. To secure the confidentiality of the participants' responses, both in the transcription and analysis of interview data, the participants' actual names were not used, instead coded. Besides, transcription of the interview was organized in accordance with the three major categories or themes psychological, social, academic challenges and strengthening community connection as handling mechanism to the impact of COVID-19.

### Methods of data analysis

In this study, the researcher used thematic qualitative method of data analysis which contains quoting and describing responses of participants in words through categorizing into different themes according to their relatedness, quoting their saying and etc. It helps to organize data into categories and identifying, analyzing and reporting patterns (themes) within the data [15,17]. The data generated through interview was analyzed by transcribing and coding the responses of the informants, and identifying central themes based on the research questions.

## RESULTS

The primary purpose of this study was to understand the living experiences and ways to enhance social connections in the absence of social interactions in response to COVID-19 among university students stayed home in Wolisso Town. The total of eight participants with, 5 (62.5 %) male participants and 3 (37.5%) female participants were participated in this study. Accordingly, interviews were conducted to comprehend the ways in which participants view issues related to COVID-19. The collected data to answer the research questions was qualitatively analyzed. The results of this study were organized and presented in accordance with the major themes of these research questions. The approach used in presenting the interview data for each of the thematic areas based on the research questions were first, summary of the findings that the majority of the participants showed their agreements or diversified views were presented under each theme; second, some quotations of the participants from the transcripts were presented.

Quotations are presented by P1, P2, P3 ..., and P8, representing Participant 1, Participant 2..., and Participant 8 instead of using name of the participants. Psychological, social and academic challenges are among raised issues.

### The major psychological challenges described by the participants

The interview participants were asked a general question about the kinds of psychological challenges did they live and do they experiencing in the current life. Almost they were generally quite responsive when answering "what do you feel and describe about your daily lives and activities in relation to COVID-19?" Majority of them described their personal and emotional challenges and feelings by saying, "COVID-19 is sent to humans by the God; It is an angry of God to humans but . . ." and then gave their feeling. It was often a very detailed feeling. The most common feeling responses were related to hopelessness, fears, anxiety, worthlessness, emotional detachment, powerlessness, loss and obsession. The subsequent are representative responses described from their words of mouth and transcribed and presented. The interview participants were asked about their personal feelings, thoughts, ideas, and perceptions of COVID-19 in relation to their lives and daily activities. The reports from interview participants' generally shown that the majority of the participants were reacting to the virus in a fearing state manner. Particularly, they have panic to what they have been observed from different Medias over the world. The fast spread of COVID-19 and the huge number of deaths that have been seen in the developed and developing countries is sparking anxiety to current life of the majority of the participants. Almost all participants experienced and have been experiencing a dangerous situation right after the outbreak and spread of COVID-19, especially in Ethiopia. Participants explained a variety of psychological challenges including pressure, worryness, anxiety or fear, hopelessness and loss after the occurrence of the pandemic. The following are quotes taken from the interview transcripts as supportive evidences to the general summary of the findings indicated overhead. For example, when they describe about personal feelings, mental experiences and perception of the dangerously changing lifestyle environments as a result of COVID-19, interview participants of the study reported as follows:

*P1: "Obviously, the situation is dangerous to all of us, but on my side, I feared lots. The pandemic is creating disruption of my lifestyle, no hope for future living and I occupied with worries. I lost my confidence to regain everything that is affected over the last months."*

Moreover, when explaining personal challenges, one of the participants also reported:

*P4: "I am experiencing more stress as I have listening to the report of infection and death of others by COVID-19. Adjusting to losses of structure I already adapted in my lives is becoming fear and worry sparking. To be honest, this time, I worried much, lost interest of any and felt worthless of life."*

The participants were also mentioned different types of emotional and personal challenges. They mentioned being in COVID-19 situations in which they were frightened of getting infected by the virus is very difficult. The following are quotes taken from one participant.

*P3: "This pandemic has disrupted our routines. It has also forced everyone to think and worry about the impact of COVID-19 on our daily functioning."*



So, I felt afraid that the virus is going to contaminate mass public in which I have no guarantee for myself. The tension of being contaminating is distressing me.”

In addition, participants of study reported that, most of the time their life is full of anxiety, they were impulsively complaining about the community for the reluctance and avoidance of respecting WHO’s rules. One participant reported:

P6: “I am feeling discomfort and sense of hopeless. I am getting not sufficient sleep due to the crisis of life COVID-19 caused up on me and public in general”. Sometimes I feel as if it is God’s punishment to be in this situation. I also feel that the community has reluctance in considering the virus as if it sent by the God due to people’s sin and the solution is therefore on the hand of God. People also largely keep ignoring the advice from officials including regarding social distancing. I think such kind of believe and ignorance creates more dangers of COVID-19 on the people’s lives. So, COVID-19 is really a headache to most of us.”

For majority of the participants’ the rapidly evolving pandemic is stressful and affected negatively their living structure. For instance, one participant of the study reported that:

P5: “My personal life has changed as a result of the coronavirus. I get confused, especially when I think everything has changed as a result of COVID-19. I lost hope and feel anxious. Even I worry about my entire family. COVID-19 is a biggest health crisis causing mental state disturbances. So, all the hopes I had for things have died, because this virus has completely changed my day to day living style and activities.”

Participants have also explained their current way of life and the way COVID-19 has changed their feelings and influence negatively. One participant described that

P2: “I am experiencing insecure, mistrust to my friends and fear of virus transmission to confirm with them. I also feel like if things are against my capacity to control. I worry about my future plans and feel discomfort.”

### The major social challenges described

When responding to “What have you experienced and experiencing as social and economic challenges from COVID-19?” many participants described these challenges that they believed to be a COVID-19 related problems. Generally, the participants expressed worryness about families and friends’ health, discomfort to condition of staying to home, detachment from social gatherings, fear of getting their friends back, feeling of isolation and loneness. As majority of the participants described, life is not honest, not predictable and not reliable, because, I planned several things, but COVID-19 has cancelled everything. They described that they have lost their social linkages. The major losses reported were isolation from their beloved ones, friends or peers, social status, social accomplishments, significant relationship, enjoyment and visiting their relatives. Moreover, they also mentioned that they experienced a feeling of distress at home following separation from their usual social interactions. From varieties of loses they explained, the following are quotes taken from interview transcripts as supportive evidences to the summary of the findings indicated above.

### Two participants have described their feeling as follows:

P6: “Social distancing is undeniably seems not works for Ethiopians and it is awkward. To many, it appears, the request to socially distance

themselves from others creates negative feelings. I am not different from such difficulty. Particularly, at initial time, it was unthinkable for me not to shake hands when greeting my friends - even if it is not allowed to do so. Thus, social distancing appeared new to our culture that challenged me especially during the outbreak of COVID-19.”

“I feel COVID-19 put danger on my social interaction and activities. I lost group enjoyment, recreation, participation, and other social capitals. I worry if will establish and secure such status again. I stayed home, but think about my friends and enjoyment I lost in the presence of other.”

### As one participant also described, the finding reported here under:

P8: “I lost my social interaction. I have many friends in this town. But, I can’t get them in person due to the fear of contamination by COVID-19. I also lost social interaction with my families. Thus, such difficulty has created feeling of discomfort on me. Even going to grocery, restaurant and cafe is impossible to avoid social gathering.”

Participants of this study also expressed their concern regarding loss of their usual visit to their most relevant relatives and friends. Most of the participants are worrying about what to do about social disconnection even in the future, although they are using some mechanisms including calling, chatting etc.

### One participant reported:

P7: “Oh my God, COVID-19 switched off my every social interaction. Visiting with a close friends and family member face to face is difficult. Visiting online from my home is not enough. I missed my families’ children. Generally, I feel my lifestyle in every aspect has disturbed.”

Participants also expressed their reactions regarding issues related religious aspect of COVID-19. They expressed that disconnection from worship place is challenging. They described that such condition is not adapted before.

### One participant expressed as follows:

P4: “The virus has impacted my religious behaviors. Attending religious services at Churches is impossible because of the coronavirus. Churches and other houses of worship have already canceled the services for unknown time. I have disengaged from collective worship entirely. As a result I felt discomfort.”

### Most of the participants reported that they have feeling grieve reactions to the disengagement from social environment resulted from COVID-19.

### One participant reported that:

P8: “I feel sad, I lost my social enjoyments. Participating on wedding and birth days ceremonies which are important in life has cancelled. Even I did not attend the funeral accomplishment when my relative has passed away during This COVID-19. So, COVID-19 has changed my live and major events important in social life, and this generated feeling of psychological distress on me.”

### Major academic challenges

As already known on 16 March 2020 the government of Ethiopia closed schools across the country immediately after the announcement of the first five COVID-19 cases. At that time, universities were not closed and the government planned to provide

all essential care to students at their respective universities. But, after a week, on 24 March, the government decided to close all higher education institutions because of the increasing number of new cases and with the purpose of preventing the spread of the coronavirus pandemic. With this decision students left all universities and back to their home.

In this study however, after leaving the campuses, most participants have expressed the challenges of COVID-19 on their academic activities. Many challenges were described by the study participants.

### Three participants expressed the challenges as follows:

P1: *“This time is a very difficult time. All family members came to stay home. All are at home all the time at the same time. This situation is unusual. It is also a burden to parents, especially for mother. Before COVID-19, partially children including me are in school on their academic activities. But during COVID-19, all are at home. I therefore, worry about some families to have conflict with their parents at home due to taking long time at home. Therefore, COVID-19 is overwhelming situation for my parents and on my academic activity.”*

P2: *“COVID-19 has completely disrupted the academic situation of many students. I personally, worried about how to regain my motivation to continue my education that I lost. The pandemic seems to increase the number of cases and deaths. This on one hand creates fear, and I have worry on the other hand, about disrupted academic, social and generally all lifestyles. Therefore, the impact is COVID-19 is multifaceted.”*

P3: *“There was a rumor to continue education online, especially after few weeks of students’ university leave. This created worry in my mind about how to continue education online using email, websites and other platforms in Ethiopia where there is very poor access to internet connection. For me and many of my friends, the applicability has been questioned believing that we have no experience to such design and perhaps, the issue created feeling of hopeless.”*

Other participants also have explained their challenges with regards to academic challenges occurred due to COVID-19.

P4: *“COVID-19 is presenting stress on human being. But as a usual I can relief from the stress by reading stories, academic books; using khat and sometimes Draaftii Singilii fa’ii fayyadamuudhan. When translated to English, it means using a single-draft.”*

P5: *“I am a final year student. Will I still be able to graduate is my question. As a result, I am feeling anxious and stressed that imposed by Coronavirus (COVID-19) about my academic. I don’t know what I can do.”*

P6: *“The pandemic COVID-19 has made us (university students) to be out of our academic activities. I was a graduate class this year. It disrupted my three years effort of my academic. It caused feeling of lost interest. By now, I have very poor motivation and attitude to my academic, because the pandemic is significantly changing the style of everything including education and created crisis of life.”*

P7: *“The attempt of the shift from tradition way to online courses has also stressed many of us at least in first phase. Especially when universities tried to distribute materials like module, handout, notes, references etc through email, telegram, Facebook and other websites. I worried because there is no sufficient internet connection to access these materials effectively, and how this plan can be implemented and used for assessment of performance that leads to grading for decision of pass/fail. Even I am uncertain of*

*the future solution to the academic challenges occurred. Thus, COVID-19 has put significant challenge and creates potential complications on my academic activities, motivation and expectation.”*

### Major coping strategies used to handle the challenges

The interview participants were asked the general question *“How do you cope with the challenges of COVID-19 you have been experiencing?”* to explain what they have been working to make the situation better. Majority of the participants were not actively engaged to make the distressing environment better than what is occurring, particularly during its first outbreak in Ethiopia. However, with passage of time when things become serious, they tried to use strategies to handle the problem.

The participants explained that most of them have been gone through difficult situations and they used different mechanisms to challenge COVID-19’s problem. Majority of them were attempts to follow spiritual activities like praying by considering the virus is caused by God/Allah. In addition, the participants sought social support from their friends, extended families and relatives. Using different enjoying activities were also part of coping strategies to the challenges of COVID-19. For most of the participants listening to songs both spiritual and nonspiritual, reading books, magazines, writing own diary, communicating with family and friends through phone calls and internet sites when accessible. For some of participants, participating on voluntary activities against COVID-19 has also helped them to reduce the stress of COVID-19.

### Five participants expressed how coped with the COVID-19 burdens as follows:

P6: *“I used crying to Allah always when I overwhelmed with the challenges of COVID-19. In addition, my father has a great role to help me when I stressed. He always says what Allah brings go/removed only by him. This mostly gave me strength to avoid my fear to COVID-19. I read spiritual books when I get stressed to get relief. So, words of encouragement from Quran and my father helped me to reduce feeling of stress or insecurity.”*

P8: *“In order to protect myself from COVID-19 infection, I am taking some preventive actions. Among these actions, I am practicing good hygiene, self-isolation or avoiding social gatherings, and social (physical) distancing.”*

P1: *“During COVID-19, I am telling to myself that whatever I am feeling right now, it’s okay to feel that way, because I am not the only one to feel in this way. Most of the time, I allow myself to take actions such as notice and express what I am feeling on the paper like directing my emotions into something creative (e.g., drawing picture, painting, poetry, music) and talking with others, or directing my emotions into something creative (e.g., drawing, painting, poetry, music).”*

P3: *“During this devastating time, for me it’s natural to feel stress and tell this for my mind to think of all the usual activities I may not be able to do at the moment if I am on the usual way. So, I make myself a conscious shift to focus on the activities I am still able to do or those that I may have more opportunity to do if I am at home more often. So, I keep on activities like book reading, listening to a podcast, music and gardening during COVID-19 stress.”*

P5: *“COVID-19 has cancelled every activity I may accomplish with my friends. This put serious challenge on my activities and thought. But to get out of such distressing feeling, somewhat am following the rules devised by WHO and other organizations. I am obeying to frequent hand washing, using of face mask, but I have problem on physical distancing or avoiding*

*social gathering that I think challenged me as unusual activity.”*

Some of the participants have described their feeling on how they used and benefited from the stress coping strategies. They expressed how to relieve stress through deep breathing and feel calm down, avoid a negative thought and physical activity like short walks.

Two participants expressed their used coping strategies as follow:

P1: *“COVID-19 is a stressful virus. But, worrying will not change or help the situation. So, trying to practice positive thinking like I will stay healthy by taking good self-care and practicing good infection control practices is important instead of having negative thinking like I might get the COVID-19 virus and get sick. Therefore, am using such positive thinking to avoid stress.”*

P3: *“I have been using websites information to relief from COVID-19’s stress, however, at the same time when I constantly read, watch or listening to deaths and infection of COVID-19, it has been intensifying my worry and agitation that leads to another stress and restlessness.”*

P4: *“COVID-19 is presenting stress on human being. But as a usual I can relief from the stress by reading stories, academic books; using khat and sometimes Draaftii Singilii fa’ii fayyadamuudhan. When translated to English, it means using a single-draft.”*

P5: *“I wash my hands thoroughly for 20 seconds, cover my mouth when I sneeze with my elbow or with a tissue that I immediately throw away, eliminate hand-shaking and practice social distancing. If I practice all these things, why I worry then, fear is not important, but following and implementing the procedures of avoiding contamination by COVID-19 is very important. Talk to one self every time by saying don’t fear, but take care is essential for me.”*

For few of the participants, COVID-19 is perceived as a virus that has no way to protect themselves, except by the work of God. They explained that they trust to God than implementing procedures, and they have been behaving as a usual time before COVID-19, yet they have not infected by the virus. Some participants said that the stress of COVID-19 is relieved by using psychoactive substances.

### **Participants expressed their feeling as follows:**

P7: *“Though I am not alone to experience stress and there are also other many people right now during the COVID-19, I personally use frequently watching and reading news and social media to keep myself well informed and prepared. But I truly trust my God that the virus will not infect me. I am behaving as a usual time, it is not you that protect yourself, but the God.”*

### **Social connections**

The COVID-19 has been stressful for many people and any communities in general. It has caused trauma, suffering, fear and anxiety. Social distancing principle has implemented to reduce the physical proximity of people during COVID-19. However, social connections seem important to reduce the burden of COVID-19. With regards to this, the study participants have conveyed their idea and practices.

Majority of the study participants have expressed that practicing social distancing by itself is challenging. It is unusual to the participants’ culture. They described that even sometimes it confused them with social connection which is important to suppress the negative effects of COVID-19.

### **The majority of participants reported their ideas and actions as follows:**

P4: *“I challenged with uncommon concept of social distancing. It would better even if it stated as physical distancing. Any ways, staying connected to social environment through different mechanism is very important. I am using for example, receiving support and care from others including my online friends, family, and professionals. So, it has been helping me lots.”*

P6: *“Social connections are important to relief from distressing situation like COVID-19. Spending time with supportive family and friends can bring a sense of comfort and stability during COVID-19 that I am actually using. I talk my concerns, thoughts, and feelings with others to suppress stress. For me social connections can help people to find helpful ways of thinking to dealing with a stressful situation.”*

P8: *“To my understanding the so called social distancing refers physical distancing which does not need to mean social disconnection. So, I can receive support remotely through call, text, or video-chat with friends and family. Thus, I recommend that talk to someone or telling a family member or friend how you are feeling has to be advised by professionals.”*

P1: *“As all of us know due to COVID-19, social distancing and isolation are in use. These are I think, not familiar with us. To mitigate their shortcomings therefore, there are things everyone can do. Reaching out to friends and family and connect with them through a phone call, with a real voice, text and a video chat to share people know how much we care about them and empower human social connection during crisis.”*

P2: *“Social connections appear to be essential. As my think COVID-19 even seems to give an opportunity to large community to think and work how social connections are important to support and care for each other like for children, youth, elder, vulnerable, family, neighborhood and community in general.”*

P5: *“There are many ways to help yourself and others during COVID-19 crisis. Although social gathering is not possible during this crisis, we can make possible how to get out of the stress generated by COVID-19. These can be through making social networks online or offline keeping physical distance. For example, I have been using social Media such as Facebook, email, telegram and you tube to share information to my friends, family and receive information from them. Working on the protection of COVID-19 through community oriented activities like volunteering, sharing, helping and cooperating activities which benefits the society. Thus in my view, strengthening social and community connections through various mechanisms is very significant during COVID-19.”*

## **DISCUSSION**

The coronavirus COVID-19 pandemic is global health crisis of this time and put greatest challenge on people lives since its emergence. The virus has been spreading to every continent. Previous empirical evidences have shown that COVID-19 pandemic affected every aspect human beings. For Kanter and Kuczynski [10], COVID-19 has various impacts such as feeling of loneliness and anxiousness in the absence of social interactions. A study in china on college students also revealed that about 24.9% of college students have experienced anxiety because of COVID-19 outbreak [4]. Similarly, the current study revealed psychological challenges faced by the participants as a result of COVID-19. The most commonly reported psychological challenges in this study include fear, worries, lost confidence, anxiety, stress, lost interest, worthless, afraid and tension. In addition, the present study also



found psychological problems associated to COVID-19 including feeling of discomfort, hopelessness, sleep instability, reluctance, mental ignorance, mental state disturbances, confusion, feeling of insecurity, mistrust and inability to control problems. In line with the present study, prior research confirmed that any stressful events such as disasters, pandemics like COVID-19 and other traumatic events have generated remarkable stress and emotional turmoil for example to healthcare providers who work during the outbreak [18].

A study in china conducted on comparing psychosocial problems between medical health workers and nonmedical health workers revealed that Chinese medical health workers had more psychosocial problems than nonmedical health workers during the COVID-19 outbreak [19]. The current study also found major psychological and social problems related to COVID-19. Though the previous finding has confirmed that medical workers were vulnerable to COVID-19 being frontier to fight it, the current study also revealed that university students are experiencing various psychosocial problems given they lost important life events like graduation and any academic activities due to COVID-19. Other Authors also argued that during COVID-19, college students are uniquely vulnerable to both everyday stressors and psychiatric symptoms that appear to be on the rise. These authors also stated that stress, anxiety, depression, suicidal ideation and self-harm all seem to be increasing among this population [20].

The same to the finding of current study, a preceding report released by the Guild of European Research-intensive universities [21], shown that universities are crucially affected and the students felt stress and faced several psychological disturbances. In earlier study, following campus closings and the overall response to the coronavirus which have shifted how college students may think about their sense of belonging, research in USA indicated that in addition to depression and loneliness they faced, college students will also likely face increased rates of anxiety, fueled by the uncertainties surrounding the virus Lipson (April 8, 2020) cited in Gramigna [12]. Consistent findings are also revealed in the current study. For instance, majority of the participants expressed their psychological challenges resulted due to COVID-19 including hopelessness, fears, anxiety, worthlessness, emotional detachment, powerlessness, loss and obsession. As a report released by World Health Organization on 18 March 2020 [11], issues related to mental health and psychosocial problems by addressing instructions and some social considerations during the COVID-19 outbreak indicated that the coronavirus pandemic has been followed by a concern for a potential spike in suicides, exacerbated by social isolation due to quarantine and social-distancing guidelines, fear, and unemployment and financial factors [22].

Social challenges are also found to be major challenges in the current study. The participants of the current study reported that social distancing is becoming a *strange and awkward*. Negative feelings to the lost interactions, inability to shake hand, lost group enjoyment, fear to recover interaction and being remained at home major challenges faced. Here the researcher can conceptualize the words of the participant strange and awkward. As stated by the participant, social distancing is strange is to mean, it is new to practice and challenging for collective society like Ethiopia. It does mean, social distancing is uncooperative to participants to be in a

group to function in a usual manner that puts feeling of loneliness and isolation among the participants. This finding is consistent with a previous report by American Psychological Association (2020) cited by Bevard [23] that shown lack of social connection among students due to COVID-19 that increases health risks and creating an effect similar to smoking 15 cigarettes a day or having an alcohol use disorder. Prior report further indicated that, for most students' school isn't just about academics, it is also about social interactions characterized by friendships, walking and eating lunch together. Through their interactions with teachers and other school personnel, they can learn to interact with non-family authority figures, exposed to a variety of different cultures, perspectives and ways of living that may be different than their own. Thus, due to COVID-19, following being out of the schools, students have lost such benefits [24]. Similarly, in the current study, impaired and avoided social interactions (from family, friends, grocery, and restaurant), feeling of loneliness, disturbed lifestyle, and affected religious activities (cancelled group worship) are also commonly experienced challenges among the participants. In general concept, the researcher deduces that COVID-19 pandemic has been distorting the social gatherings and the positive outcomes of this social togetherness functioned in a collective way.

On the other hand, academic issue is another challenge revealed in the current study. Participants expressed fear and worry to continue education online, especially during the first phase of the outbreak, being out of academic environment, affected graduation as one core academic event, worry to restore academic motivation, disrupted academic life, increased tension, lack of sufficient internet access to receive education materials and complicated academic activities are found challenges. In line with this finding, previous report indicated COVID-19 has affected academics of the students. The report released by the UN Department of Economic and Social Affairs (UN DESA), [25] shown that the COVID-19 outbreak affects more than one billion (1.6 billion) ormade youth to be no longer physically in school after the closure of schools and universities across many jurisdictions. The report further indicated that the disruption in education and learning could have medium and long-term social consequences on the quality of education, though the efforts made by teachers, school administrations, local and national governments to cope with the unprecedented circumstances to the best of their ability should be recognized. Academic impact of COVID-19 has also reflected in previous studies. According to Sahu et al., [26], due to the rapid increase of COVID-19 cases worldwide, universities have canceled or postponed all events, sports, workshops, conferences, and other activities for an indefinite period of time. They forced to avoid or reschedule meetings involving large numbers of staff or students unless it is urgent, and instead of physical meetings, they preferred to try to conduct Zoom meetings. This quick rise of infected cases has also created in addition on students a sense of uncertainty and anxiety about what is going to happen. COVID-19 has also caused a tremendous level of stress among the university fraternity, inclusive of students. This stress may lead to unfavorable effects on the learning and psychological health of students [27]. The current study revealed similar findings. The participants expressed that their motivation and expectation are disturbed, felt inability to graduate, their careers and uncertainty about what to do on academic concern. Anxiety is increased due to the change in academic style and activities. Further other author also revealed



that students experienced major interruptions in teaching and assessment in the final part of their studies. The graduates are going to face the severe challenges of the global recession caused by the COVID-19 crisis. In addition, the students faced mental health problem and fear of the impact on assessment and evaluation due to the transition from face-to face teaching to online delivery [26]. Therefore, the current researcher infers that COVID-19 has been putting tremendous challenges on the academic aspect of university students.

As one concern of the current study, coping strategies and the ways to enhance social connections during COVID-19 are expressed by the study participants. The outbreak of coronavirus disease 2019 (COVID-19) is a stressful for people in general. Fear and anxiety about this disease can be overwhelming and cause strong emotions in different age groups including adolescents and adults. But, there are ways to use and reduce COVID-19's stress. According to the report by CDC, taking care of our self, our friends, and our family, taking breaks in watching, reading, or listening to news, stories, including social media or hearing about COVID-19 the pandemic repeatedly that can be upsetting, taking care of our body, making time to relax-try to do some other activities you enjoy and connecting with others can help us cope with stress, and further helping others cope with their stress can also make the community stronger. Similarly, Self-protection activities including good hygiene practice, hand washing/cleaning, self-isolation or avoiding social gatherings and social (physical) distancing are stated as major behavioral strategies to prevent COVID-19. Furthermore, the participants expressed that implementing rules devised by WHO is central to combating the effects of COVID-19. A previous report also shown social relationship using various mechanisms is important to cope up with the negative effect of COVID-19. As Chayko (2020) cited in Schumann [28] argued, while social isolation and physical distancing during the global COVID-19 pandemic is keeping us physically separated from friends and loved ones, technology is keeping us more connected than ever before. She stated that social media and other digital technologies like email, texting, Facebook, etc., have been indispensable in helping us stay informed and remain connected. Other report also mentioned that digital platforms or apps are important to keep citizens informed and enable public participation to bring social connections [29].

On the other hand, this study revealed several thought, emotion and behavioral approaches to cope with the challenges of COVID-19. Participants expressed cognitive-behavioral activities as ways of coping strategies to COVID-19. For instance, controlling negative thoughts, changing the thoughts to actions such as noticing and expressing on the paper or directing emotions into something creative (e.g., drawing picture, painting, poetry, music) and talking with others. Cognitively, telling to one self that worrying will not change or help the situation is found as cognitive aspect to cope with this problem. Moreover, practicing positive thinking is found to be central as coping strategy in this study. For example, from quotes of the participants, I presented interesting quote of one participant that expressed as *"I will stay healthy by positively thinking, taking good self-care and practicing good infection control mechanisms"*. Therefore, in this study, being conscious, telling to one's mind to think of all the usual activities and making a conscious shift to focus on these activities, keeping on activities like book reading, listening to music, talking to one self every time by saying don't

fear, but taking care, praying to Allah/God and gardening etc during COVID-19 stress are found to be essential coping strategies.

On the other hand, this finding also revealed that some participants have been using maladaptive mechanisms as relieving way of COVID-19. Following everything cancelled as a result of COVID-19, serious challenge has created. This challenge leads some participants to use drugs such as chewing khat, drinking alcohol to get relief from stress during COVID-19. In relation to this, one quote is presented as follows: *"I get relief from the stress by using Diraaftii Singilii fa'ii fayyadamuudhan- when translated to English, it means using a single-draft."*

Social bonds are also the concern of this study. It appears to be important to strength social connections during crisis. Researchers refer to the concept of social connections as the feeling that you belong to a group and generally feel close to other people. Scientific evidence strongly suggests that this is a core psychological need, essential to feeling satisfied with one's life. As Romito et al., [30] described social connections are the relationships you have with the people around you. They may be close, like family, friends, and co-workers, or more distant, like people you know casually. They can be as close as next door or so far away that you only connect with them by telephone or through the Internet. Thus, the resilience, the ability to bounce back after stressful situations, is strengthened when people give and receive support. Building positive relationships with people can make a difference in how resilient we are, and try to connect with people who have a positive outlook and can make people better. The support we get from our social connections can add to our feelings of meaning and purpose in life. These, in turn, add to our resilience. Happy, resilient people tend to be more connected to the people around them, and they depend on the strength of their family and friends when the going gets threatening.

Scholars have also emphasized the importance of positive human social connection for health, well-being, and survival [31]. Several studies confirmed that social connection-the development of positive relationships with others in the social world is a primary psychological need and motivator essential for human development and survival [32-34]. Like shown in previous studies that assert the importance of social connection during tough situations, the current study also found that establishing social support/connections, caring for others and participating on community activities (volunteering, sharing, helping & cooperating) are essential ways to strengthening social connections in the time of COVID-19 pandemic. In fact as majority of the participants expressed social distancing appeared to be unusual concept which creates confusion even among general population. As described by the participants however, converting the concept to physical distancing helped them to sustain stay connected to social environment through different mechanisms. Social connections are strengthened among participants in the form of receiving support and care for others through online and engaging on social and voluntary activities. As Romito et al., [20] stated, there are many ways in which people build positive relationships and enhance social connections during crisis. People can stay connected with friends, family or people in need online in time of stress, and send an encouraging email or text message to someone who is going through a hard time, look for a faith community that shares your views, and call a food bank or hospital and ask about their volunteer programs. They can

connect with such people through social media on the internet and online forums about specific interests can be a good choice for people who cannot leave their homes due to tough situations. Previous research confirmed that social connection is important for people's health and well-being contrary to social isolation that arising from a lack of meaningful connection with others which can result in deterioration of well-being with negative consequences for health [35].

Therefore, the researcher in the current study can realize that social connections are important to people particularly in time of distress, and thoughts, ideas, emotions and actions can be enhanced through experiencing of feeling of closeness to others, engagement in voluntary activities, establishing feeling of love, caring for others, valuing others and forming interpersonal relationships for healthy life. People can do this through online and/or direct interactions keeping their physical distance.

## CONCLUSION

The findings from this study suggest that COVID-19 has been affecting the living of university students. They have been facing challenges and COVID-19 has been affecting the psychological, social and academic functioning of the students. The findings from this study also however, indicated that students have been utilizing some coping strategies including cognitive-behavioral activities, seeking and giving social supports and strengthening social connections. Particularly, building positive relationships and enhancing social connections with friends, family, professionals or physically with people in need during COVID-19 crisis through email, social media (Facebook, telegram) or SMS text message are valued to enhance social connections that facilitates meaningful life, health and wellbeing. Since the COVID-19 has been affecting several aspect of university students' normal functioning though they are using some coping strategies to handle its negative effects, healthcare professionals, teachers, psychologists, voluntary organizations, student themselves and government in general should work to suppress the negative impacts of COVID-19 on university students.

## LIMITATIONS

With regards to limitations of this study, the researcher would like to recommend issues that can be made to improve on studies in the future. In addition to qualitative data, a more diverse and quantitative data should be included. Although technology based interview method was involved in this study, it would be better if face to face interview data collection will used. The quality of data in this study will also be improved if software data analysis method used. In addition to assessing living situations of students during COVID-19, future research can make this study better if post COVID-19 situations will be included.

## REFERENCES

- Adhikari S, Meng S, Wu Y, Mao Y, Ye R, Wang Q. Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: a scoping review. *Infect Dis Poverty*. 2020;9:29.
- Rodi KS. How COVID-19 is driving a long-overdue revolution in education, 2020.
- Kerr E. How College Students Manage Coronavirus Stress, 2020.
- Cao W, Fanga Z, Houc G, Hana M, Xua X, Donga J, et al. The psychological impact of the COVID-19 epidemic on college students in China. *Psych Res*. 2020;287:112934.
- Nyerere J. Kenya's university students and lecturers face huge challenges moving online. *Academic rigor, journalistic flair*, 2020.
- Tadesse WA, Mihret S, Biset G, Muluneh A. Psychological Impacts of COVID-19 among College Students in Dessie Town, Amhara Region, Ethiopia; Cross-sectional Study. *Research Square*, 2020.
- Kovari M. Strengthening community ties and supporting each other through the COVID-19 crisis, 2020.
- International Psychotherapy Institute. COVID-19 Reflections and Resources, Professional Learning Community, 2020.
- Langley M, Coutts L. Why do we turn to music in times of crisis? 2020.
- Kanter J, Kuczynski A. Social distancing comes with social side effects – here's how to stay connected, 2020.
- World Health Organization. Mental health and psychosocial considerations during the COVID-19 outbreak, License: CC BY-NC-SA 3.0 IGO, 2020.
- Creswell, John W. *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage. Gramigna J. COVID-19's mental health effects by age group: Children, college students, working-age adults and older adults, 2020.
- Merriam SB, Tisdell EJ. *Qualitative research: A guide to design and implementation*. San Francisco, CA: Wiley, 2016.
- Streubert Speziale HJ, Carpenter DR. *Qualitative research in nursing. Advancing the humanistic imperative (4th Edn)*. Lippincott: Philadelphia, 2006.
- Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006;3:77-101.
- Susan MR. *Basics: Quantitative and Qualitative Methodologies*, 2012.
- Bazeley, P. 2009. Analysing Qualitative Data: More Than 'Identifying Themes'. *Malaysian Journal of Qualitative Research*, 2, pp. 6-22.
- Barello, S and Graffigna, G. Caring for Health Professionals in the COVID-19 Pandemic Emergency: Toward an "Epidemic of Empathy" in Healthcare. *Front. Psychol*. 2020;11:1431.
- Zhang W, Wang K, Yin L, Zhao W, Xue Q, Peng M, et al. Mental Health and Psychosocial Problems of Medical Health Workers during the COVID-19 Epidemic in China. *Psychother Psychosom*. 2020;89(4):242-250.
- Conrad R, Rayala H, Menon M, Vora K. Universities' Response to Supporting Mental Health of College Students During the COVID-19 Pandemic. *Psychiatric Times*, 2020.
- Guild of European Research-intensive universities. Impact of the COVID-19 pandemic on Erasmus, 2020.
- Gunnell D, Appleby L, Arensman E, Hawton K, John A, Kapur N, et al. "Suicide risk and prevention during the COVID-19 pandemic". 2020;7(6):468-471.
- Bevard, E. 'Uncertainty and loss': The impact of COVID-19 on student mental health" on social media. *The State News*, 2020.
- Child and adolescent Behavioral Health. The Impact of COVID-19 on High School Students, 2020.
- UN DESA. The Social Impact of COVID-19.
- Sahu P. Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff. *Cureus*. 2020;12(4):e7541.

27. Al-Rabiaah A, Temsah MH, Al-Eyadhy A, M Hasan G, Al-Zamil F, Al-Subaie S, et al. Middle East Respiratory Syndrome-Corona Virus (MERS-CoV) associated stress among medical students at a university teaching hospital in Saudi Arabia. *J Infect Public Health*, 2020.
28. Schumann, M. Strengthening Face-to-Face Connections Online During the COVID-19 Pandemic, 2020.
29. OGP. Collecting Open Government Approaches to COVID-19, 2020.
30. Romito K, Poinier CA, Husney A, Serio DC, Bailey MT, Maldonado RCh. Social Connections-My Health Alberta- Government of Alberta, 2019.
31. Seppala E, Rossomando T, Doty JR. Social connection and compassion: Important predictors of health and well-being. *Sol Research*. 2013;80(2):411-430.
32. Baumeister RF, Leary MR. The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychol bulletin*, 1995;117(3):497-529.
33. Hart J, Shaver PR, Goldenberg JL. Attachment, self-esteem, worldviews, and terror management: Evidence for a tripartite security system. *J Person Soc Psychol*. 2005;88:999-1013.
34. Maslow AH. A theory of human motivation. *Psychol Rev*. 1943;50(4):370-396.
35. Wilkinson A, Bowen L, Gustavsson E, Håkansson S, Littleton N, McCormick J, et al. Maintenance and Development of Social Connection by People with Long-term Conditions: A Qualitative Study. *Int J Environ Res Public Health*. 2019;16:1875.