Psycho-Social Challenges of Health Professionals during the Outbreak of COVID-19 in Dire Dawa City Administration

Wondu Teshome Beharu[1*], Helen Asaminew Dejene[2]

[1]Department of Psychology, College of Social Science and Humanities, Dire Dawa University, Dire-Dawa, Ethiopia;[2]Departments of Clinic, Dire Dawa University, Dire Dawa, Ethiopia

ABSTRACT

Background: Health professionals working in health institutions were face various psychosocial challenges. Psycho-social factors can play a pivotal role in shaping health professionals' personal, family and work life. This study explores the psychosocial challenges of health professionals during the outbreak of COVID-19 in Dire Dawa City Administration.

Methods: A purposive sampling method was used to select ten health professionals from Sabian Primary Hospital and Dire Dawa University which serve as isolation and quarantine center of COVID-19 cases. We conducted 10 in-depth semi-structured interviews with health professionals to examine their experiences of psychosocial challenges during COVID-19. This study was employed thematic qualitative method of data analysis.

Results: The findings of this study revealed that the psychological challenges reported by the study participants were stress, tension, depression, mood and sleep problems. The major social challenges indicated by study participants were missing social bonds, refraining from family visit, missing church programs, wedding, mourning and birth day.

Conclusions: This study was concluded that the psychosocial challenges of health professionals need a scientific strategies and support systems in order to solve the challenges of health professionals successfully.

Keywords: COVID-19; Health professionals; Psycho-social challenges

INTRODUCTION

The Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-2) is a newly discovered ribonucleic acid coronavirus isolated and identified from patients with unexplained pneumonia in Wuhan, Hubei Province, China in December, 2019 [1]. On March 11, 2020, the World Health Organization (WHO) declared COVID-19 as a global pandemic. The disease caused by this virus is known as COVID-19. In January, 2020 the World Health Organization (WHO) declared the outbreak of a new coronavirus disease, COVID-19, to be a public health emergency of international concern [2].

Medical health workers during the COVID-19 epidemic had high prevalence rates of severe insomnia, anxiety, depression, somatization, and obsessive-compulsive symptoms [3]. They also had risk factors for developing insomnia, anxiety, depression, obsessive-compulsive symptoms, and somatization. A higher prevalence of psychological symptoms was found among medical health workers during COVID-19 as well as risk factors for them.

Medical health workers are in need of health protection and adequate working conditions [3]. On the other hand, found out that there is significant amount of negative emotions in the early stage such as fatigue, discomfort, and helplessness caused by high-intensity work and self-protection.

Africa is particularly susceptible because 56 per cent of the urban population is concentrated in overcrowded and poorly serviced slum dwellings (excluding North Africa) and only 34 per cent of the households have access to basic hand washing facilities. In all, 71 per cent of Africa's workforce is informally employed, and most of those cannot work from home. Anywhere between 300,000 and 3.3 million African people could lose their lives as a direct result of COVID-19, depending on the intervention measures taken to stop the spread [4].

Ethiopia, being one of the countries with limited trained human and material resources, is expected to be affected most by the global COVID-19 pandemic. Allocating the limited resources for the prevention of transmission of the disease and implementation

of a uniform and evidence based preventive and treatment protocol at all levels of health care system and throughout the country under central command is believed to be wise decision for optimal utilization of the resources [5]. As such, the problem of poor health systems in our country plus the collective culture of Ethiopian community might create a big challenge for health professionals in order to deal with the issues of psychosocial challenges. It is obvious that trainings and psychosocial supports were playing a pivotal role for the wellbeing's of health professionals working on COVID-19 duty.

According to COVID-19 (Corona Virus Disease 2019) has significantly resulted in a large number of psychological consequences [6]. As to these researchers, COVID-19 not only threaten people's physical health, but also people's mental health, especially in terms of emotions, cognition, anxiety, stress and depression were affected people's life. In the middle of COVID-19 crisis, medical professionals expected to manage their mental health and psychosocial well-being during this time it is important to support these professionals in all aspects of their life to make them more productive, successful and fruitful in solving their job and life affairs.

National Health Commission of China took major steps and issued a notification stipulating guidelines for emergency psychosocial disaster interventions to reduce psychosocial outcomes of COVID-19 outbreak with psychological teams consisting of psychiatrists, mental health professionals and psychological support hot-lines [7]. Our country, Ethiopia also developed such guideline as national comprehensive COVID-19 management handbook *via* it's ministry of health and public health institute [5]. The hand book gives more emphasis on how to treat peoples suspected of COVID-19 and how to mobilize resources. Less attention were given to the psychosocial challenges and support systems which may matters more on the wellbeing, productivity, success and satisfactions of health professionals to prevent COVID-19 spread in our country.

As such, the current study tries to investigate the psychosocial issues related to health professionals more critically and scientifically to investigate the lived experiences during the pandemic outbreak. According to the study conducted by health professionals working in a health institution in the Northern Italy shows those health professionals have a high risk of incurring in burnout or psychological conditions due to the COVID-19 pandemic [8]. Continuous monitoring and timely treatment of these conditions is needed to preserve the professionals' health and to enhance the healthcare systems preparedness to face the medium and long-term consequences of the outbreak.

According to the psychosocial impact of COVID-19 on health care providers were resulted in fear of worthlessness, guilt, overwhelming work-pressure, deprivation of family while being in quarantine, burnouts, depression, fear of infection and outcomes, uncertainty and substance abuse [9]. On average public hospital doctors had longer work hour with that of the other professions. This study also found that 57% of the doctors reported a disturbed work-life balance, dramatically reduced productivity and/or work quality, and prolonged fatigue level, sleepiness and extreme tiredness [10]. Moreover, evidence from the case studies of Nigeria showed that the task of combining multiple roles was very difficult for Nigerian female doctors [11].

As the health professionals were involved directly in the front lines in the prevention of COVID-19, most doctors and nurses were lost their life in countries such as China, Italy, Spain and etc. This may create fears and tensions among the public and health professionals who have double roles for work and their respective family. Although as of yet the effects of COVID-19 on mental health have not been studied systematically, it is expected to have significant effects based on recent public reaction [12]. According to findings show that psychological well-being and psychological safety influence job performance. Their study indicates that when psychological well-being and psychological safety of employees are unsatisfactory, job performance will decrease accordingly. As such, health professionals who were working during this pandemic COVID-19, psychosocial supports were crucial for them to become fruitful and successful in their Job performance [13].

According to study revealed that problems in occupational stress and alertness resulting from being burdened with higher working hours seem to have many harmful ramifications for work-life wellbeing, such as work life imbalance and job dissatisfaction [14]. Further, this study indicate that both work-life balance and job satisfaction are decreased by longer working hours, while also suggesting that occupational stress plays a key role in workers' performance. According to managing healthcare workers mental health and psychosocial well-being during the outbreak of COVID-19 is as important as managing their physical health. As to WHO, keeping all staff protected from chronic stress and poor mental health during this response means that they will have a better capacity to fulfill their roles.

Most studies conducted worldwide on the psychosocial impacts of COVID-19 on health professionals were used quantitative study. For instances, study done in China, Italy, Ireland and Suadi Arabia were come up with quantitative findings [1, 8, 9]. However, this study was different from such studies as it employed the qualitative approach to examine the typical and subjective lived experiences of health professionals in our local contexts. The study conducted in Harar indicated that two-thirds of nurses who were working at government hospitals had work-related stress [15]. Nurses who reared children were two times more likely to experience work-related stress than those who did not rear child.

According to [1] COVID-19 is a new disease and the medical system and culture of different countries varies, further research is needed on the psychological experience of frontline nurses fighting against COVID-19. Currently, published studies have

highlighted the disease prevalence, clinical characteristics, diagnosis, and treatment. However, very few qualitative studies have been published on the psychosocial impacts of COVID-19 on health professionals. As such, this study aims to understand the subjective experience of the health professionals during the outbreak of COVID-19 through semi structured interviews and to analyses the data using phenomenological methods, which providing fundamental data for the psychological and social experience of health professionals.

There are limited and inadequate studies reflecting the psychosocial challenges of health professionals such as doctors, nurses, health officers, lap technicians in Ethiopia in general and Dire Dawa city in particular. Thus, drawing on the fact that, the psychosocial challenges of health professionals are crucial to investigate and it can help not only health professional's life, but also their work performance too. Health professionals who were working in the health institutions are under the condition of work pressure with frequent COVID-19 patient interactions, caring the work responsibilities to the health institutions and at the home. This tradition hits the imbalance keeping time for healthy life situations between work effectiveness, personal conditions and family issues during COVID-19 spread. This study is novel since, the psychosocial challenges of health professionals during the COVID-19 pandemic have not been studied before. Therefore, having the above background in mind, this study was examined the psychosocial challenges of health professionals during the outbreak of COVID-19 in Dire Dawa City Administration.

Research questions

This study was tries to investigate the psychosocial challenges of health professionals during the outbreak of COVID-19 in Dire Dawa City Administration. This study was employed a qualitative research approach with phenomenological design to explore the lived experiences of health professionals during the outbreak of COVID-19. As such, the following leading research questions were guided this study.

1. What are the psychological challenges of health professionals during the outbreak of COVID-19?

2. What are the social challenges of health professionals during the outbreak of COVID-19?

3. What strategies do health professionals rely on in order to solve psychosocial challenges during the outbreak of COVID-19?

4. What types of support systems do they perceive to be helpful to balance their work and family life during the outbreak of COVID-19?

Objectives of the study

The general objective of the study is to investigate the psychosocial challenges of health professionals during the outbreak of COVID-19 in Dire Dawa City Administration.

The specific objectives of the study are:

1. To find out the psychological challenges of health professionals during the outbreak of COVID-19.

2. To examine the social challenges of health professionals during the outbreak of COVID-19.

3. To identify strategies do health professionals rely on in order to solve psychosocial challenges during the outbreak of COVID-19.

4. To find out types of support systems do they perceive to be helpful to solve psychosocial challenges during the outbreak of COVID-19.

METHODOLOGY

This part presents the research design, description of study area, sampling techniques and methods of data collection, procedures, data quality control and method of data analysis.

Study design

The research method that the researchers were employed the phenomenological design with qualitative approach. Because it can describes the psychosocial challenges of health professionals during the outbreak of COVID-19. Hence, a qualitative research paradigm with phenomenological design was used to investigate psychosocial challenges of health professionals. Phenomenology is popular in the social and health sciences, especially in sociology, psychology, nursing and the health sciences.

According to phenomenology discusses the essence of the experience for individuals incorporating "what" they have experienced and "how" they experienced it. The "essence" is the culminating aspect of a phenomenological study [16]. Phenomenology is defined as a science whose purpose is to describe particular phenomena or the appearance of things, as lived experiences [17]. 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. The meaning of the phenomenon is conceptualized in the interior of the individual's awareness. Phenomenology is an approach to explore people's everyday life experience. It is used when the study is about the life experiences of a concept or phenomenon experienced by one or more individuals [18].

Description of study area

The Dire Dawa Provisional Administration is located in the eastern part of Ethiopia. The administration is bordered by the Shinile Zone of the Somali National Regional State on the northwest, and northeast, and by the Eastern Hararghe Region of the Oromia. The Provisional Administration is estimated to have a total land area of 128,802 hectares of land, of which 97.73% covers the rural area, and the remaining 2.27% accounts for the land area used by the region's main urban center: Dire Dawa City, located 515 km from Addis Ababa, 55 km from Harar, and 313 km from Port Djibouti.

The population of the region is at present estimated to be about 369,674, of which 73.6% reside in the urban area and the rest 26.4% live in rural areas [19]. Being one of the largest urban centers in the Eastern parts of the country, Dire Dawa has become home for peoples from a number of nations and nationalities found in the country as well as for people from India, Yemen, Turkey, etc. The Ethio- Djibouti railway line that passes through is as well as the strategic position Dire Dawa holds in Eastern part of the country makes the area among the major trade and commerce center of Ethiopia where the movements of a progressively huge number of people registered.

The 2007 National Census gave a new population total of 233,224 with a balanced gender composition of 116,232 males and 116,992 females, an increase of 30 percent over 1995. The urban population is expected to grow 50 percent more (from 1995 levels) by the year 2015. The total population of the Dire Dawa City Administration (including the surrounding rural countryside) was 341,834, of which two-thirds lived in the city proper [19]. According to Dire Dawa Health Bureau, Dire Dawa City Administration has a total 2 public and 3 private hospitals 8 urban and 7 rural health centers and 34 health posts in all kebeles. The study area was specifically takes place in Sabian Primary Hospital and Dire Dawa University which found in Sabian Kebele-02 and located near Sebategna and Marmarsa respectively.

Samples and sampling technique

A purposive sampling method was used for this research because of number of nurses, doctors, health officers and lab technicians were expected to work in these restricted areas of COVID-19. According to a heterogeneous group is identified that may vary in size from 3 to 4 individuals to 10 to 15. As such, the researchers were employed inclusion and exclusion criteria in order to select ten married men and women health professionals were selected. Based on the inclusion criterion professionals who are married and have kids been included in the sample. And those who are single or unmarried excluded from the sample. Based on the above ground, ten health professionals from Sabian Primary Hospital and Dire Dawa University which serve as center of COVID-19 in the city were purposively selected. My wife who is nurse helped me as gate keeper to approach health professionals and contacted for interview based on their appropriateness for information that is needed for this research.

Methods of data collection

A Semi-structured interview questions was prepared by the researchers based on the research questions and previous literatures in the areas. Semi-structured interviewing is perhaps the most common type of interview used in qualitative social research. In this type of interview, the researchers' wants to know specific information which can be gained while asking health professionals about their typical lived experience during the outbreak of COVID-19. To do this, the same questions was asked each health professionals who work in Sabian Primary Hospital and Dire Dawa University isolation and quarantine centers of

COVID-19 cases. Data collection can be defined as the precise, systematic gathering of information relevant to the research purpose or the specific objectives and questions of a study.

Based on the above ground, the researchers were prepared an interview items in English language and translated into Amharic language to make options for the participants. And informants were selected by purposive sampling for this study from hospital, isolation and quarantine centers of COVID-19 in Dire Dawa City. Interviews was conducted *via* face-to-face and telephone means. All interviews were held in the agreed upon time according to the informant's willingness. The interviewees were asked consent information prior to the interviews. A professional, but relaxed atmosphere was maintained during the interviews. The data collection was conducted from June 02 to July 15, 2020.

Data collection procedures

Data collection procedures that typically involves interviewing individuals who have experienced the phenomenon. After obtaining informed consent, each participant was asked to verbally respond to the following questions: "How would you describe the psychological challenges during the outbreak of COVID-19? What are the social challenges during the outbreak of COVID-19? What are the strategies you employed to solve the psychosocial challenges of COVID-19? How would you describe the types of support systems to balance your work and family life during the outbreak of COVID-19?" Taking notes, jot down their saying, recording their audios *via* smart phone was employed during data gathering process.

Data quality control methods

According to posit that trustworthiness of a research study is important to evaluating its worth and trustworthiness involves establishing: Credibility-confidence in the 'truth' of the findings [20]. Transferability-showing that the findings have applicability in other contexts. Dependability-showing that the findings are consistent and could be repeated. Conformability-a degree of neutrality or the extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation, or interest.

Furthermore, qualitative data quality was assured *via* the key elements that determine credibility, systematic, in-depth fieldwork that yields high-quality data [21]. On the other hand, qualitative researches claim the qualitative data was attained on its quality through the application of (3V) methods such as verification, validation and validity [22]. Verification is the first step in achieving validity of a research project and fulfilled through literature searches, bracketing past experiences, using an adequate sample, identification of negative cases and interviewing until saturation of data was achieved. In this study, the attempt was made while developing interview questions based on previous study conducted qualitative study on similar issues. The sample also adequate because during the outbreak of COVID-19 it was so difficult to get more professionals on face to face as a result of restriction rule and regulation issued by government.

As such, the sample for this study was ten health professionals (6 male and 4 female). Validation was accomplished by multiple methods of data collection (observations, interviews, and drawings), data analysis and coding by the more experienced researcher, member checks by participants and key informants, and audit trails. Validity is the outcome goal of research and is based on trustworthiness and external reviews [16]. The validation of data was done in this study by cross checking and inviting two PhD students of Social psychology from Addis Ababa University to review the first draft of data coding and analyzing part and gain constructive comments and suggestions to modify it again. Two key informants also involved in checking whether their feed backs of the interview represents their idea or not and gain their respective suggestions. The quality of data was assured by at different level from the process of data collection to analysis of the collected data. The collected data was reviewed and checked for completeness, and clarity after collected all data.

Method of data analysis

In this study, we were employed thematic qualitative method of data analysis which was specifically phenomenological method (describing responses of participants in words through categorizing into different themes according to their relatedness, quoting their saying and etc.). According to phenomenological method was employed in analyzing participants' transcripts. In this method, all written transcripts are read several times to obtain an overall feeling for them. From each transcript, significant phrases or sentences that pertain directly to the lived experience of COVID-19 are identified. Meanings are then formulated from the significant statements and phrases.

The formulated meanings are clustered into themes allowing for the emergence of themes common to all of the participants' transcripts. The results are then integrated into an in-depth, exhaustive description of the phenomenon. Once descriptions and themes have been obtained, the researcher in the final step may approach some participants a second time to validate the findings. If new relevant data emerge, they are included in the final description. On the other hand, phenomenological psychologist revealed that the process of data analysis in phenomenological study involves the following steps: Extracting significant statement, meaning units, textural description, and structural description and describing the essence of the experience.

According to data analysis can follow systematic procedures that move from the narrow units of analysis (e.g., significant statements), and on to broader units (e.g., meaning units), and on to detailed descriptions that summarize two elements: "what" the individuals have experienced and "how" they have experienced it [22]. Accordingly, phenomenological study discusses the essence of the experience for individuals incorporating "what" they have experienced and "how" they experienced it. The "essence" is the culminating aspect of a phenomenological study. As such, in this study, the analysis was starting with what psychosocial challenges that health professionals experienced during the outbreak of COVID-19 and how do they manage and solve it were thoroughly identified and orderly analyzed.

RESULTS

Presentation of the study findings

This study tries to investigate the psychosocial challenges of health professionals during the outbreak of COVID-19 in Dire Dawa City Administration. A qualitative methodology was used in this study. Domains and themes were discovered in the narratives of the lives of the health professionals which formed the basis for the data analysis conducted in this study. Included in this chapter is a presentation of the results from the transcribed and coded data derived from the in-depth interview used in this study that allowed various aspects of the psychosocial challenges of health professionals was explored and examined qualitatively.

The domains and categories in which these statements are assigned are defined and outlined. Direct quotes from participants are used to bring the meaning of each theme to light and to lend support and further describe the points in which participants sought to make clear. There were ten participants in the study. To illustrate how health professionals face the psychological challenges during the outbreak of COVID-19, this chapter carefully addresses the four research questions presented below (1) what are the psychological challenges of health professionals during the outbreak of COVID-19? (2) What are the social challenges of health professionals during the outbreak of COVID-19? (3) What strategies do health professionals rely on in order to solve psychosocial challenges during the outbreak of COVID-19? (4) What types of support systems do they perceive to be helpful to balance their work and family life during the outbreak of COVID-19?

Demographic data of the respondents

The participants of this study were 6 males from Sabian Primary Hospital and 4 females from Dire Dawa University isolation and quarantine center for COVID-19 were selected. Table 1 below outlines the general characteristics of the participants as follow:

As the above table indicated the participants were found between 26 and 40 age ranges. The number of children ranged from 1 to 3 kids. Their job titles indicate as doctor, lap technician, health officer and nurses. Regarding the working hours per week, the health professionals' reports from 30 to 40 hours duration of work were mentioned approximately.

Themes and categories of data

In this study, the data was organized into four major themes emerge under the three domains or categories. As such, based on the research questions, the Psychological challenges, Social challenges, major strategies and types of support systems were organized based on the interview collected from ten health professionals working in Sabian Primary hospital and Dire Dawa University isolation and quarantine center for COVID-19 cases. From 10 verbatim transcripts of health professionals, 40 significant statements with their formulated meanings were extracted. Arranging the formulated meanings into clusters resulted in 4 themes and 3 categorical domains that emerged from their associated meanings. The detail of the theme and category was summarized in Table 2 below.

Table 1: General demographic characteristics of participants.

Participants	Age	Sex	Job title	Number of children	Working hours (Week)
P1	35	Male	Doctor	2	40
P2	33	Male	Lap Technician	1	40
P3	37	Female	Nurse	3	35
P4	28	Female	Nurse	2	35
P5	26	Female	Nurse	1	35
P6	40	Male	Doctor	2	42
P7	30	Male	Health Officer	1	33
P8	28	Female	Nurse	1	30
P9	29	Male	Lap Technician	1	35
P10	33	Male	Nurse	2	40

Table 2: Themes and categories of qualitative data.

	Themes							
Categories	Psychological challenges	Verbatim transcripts	Social challenges	Verbatim transcripts	Major strategies	Verbatim transcripts	Types of support systems	Verbatim transcripts
Domain-1	Stress/Panic Tension/Fear Anxiety/Worry	4	Missing Social Bond in wedding, birthday, mourning, church attendance, baptizing kids	4	Planning Set Priority Scheduled	4	Economical Material Extra Payment	3
Domain-2	Depression, Frustrations, Emotional	3	Social withdrawal and isolation physically from others	2	Discussing Praying to God	2	Family/Parents Husband/Wife Other Relatives	4
Domain-3	Mood alteration and Sleep Problem	3	Missing family affairs, homesickness	4	Consulting Ignoring Sharing	4	Staffs Colleagues/ Friends	3
Total Statement	40	10		10		10		10

In line with the research questions in this study, the findings were analyzed and interpreted as follow: Let me presented the findings step by step which was organized into the following four majors areas as psychological, social, strategies and support systems.

Theme 1: Psychological challenges of health professionals

Psychological impacts are a major challenges reported by the study participants. Both Participant one and three explained how their work related stress and tension, depression, mood and sleep problem can influence their day-to-day routine tasks. This was illustrated well by Participant-1 who stated

"My first experience was very organized and simple. As the number of patients' increases, our work schedules also start to be challenging, sometimes my work schedule is the hardest thing because checking patient's status and caring for self together make me busy. This is a time when for the first time to spend more time without my children I feel that they need me. Currently, I spend more time without sleep and sometimes I feel depressed." (Personal Interview, July 2020).

On the other hand, the study participants also mention the psychological challenges associated with their work, personal and family life aspects. These are long hour working schedules and staying for month in COVID-19 hospital lead to interrupt their family life, which causes problems of homesickness and mood alteration to balance their work responsibility and family life.

This was illustrated well by Participant-3 who stated:

"Our task was saving life. Sometimes I was feel loneness as I am in a jungle. I didn't feel in hospital because in the first two month, we were only visiting few patients. As the cases of COVID-19 increases in peoples who returned from Djibouti, we started to become disorganized and start to worry. But, thanks to God! We are now working in monthly rotation with other staff and help each other's. Even though, I communicate my daughter *via* phone every day, I still worry about her and I missed her a lot. I left her to stay in my sisters' home. Her father was passed away due to car accident. I am the only one who cares for her. This moment is so hard for me. I am a single mum; it is hard for me to shoulder both responsibilities as a mother and as health professionals. Sometimes, I pray to God to give me the strength and bright ways to save life." (Personal Interview, July 2020).

In our patriarchal society and collective culture, COVID-19 was created a number of psychosocial challenges among the general

people and health professionals too. After one year when the first case reported in China in December, 2019, still COVID-19 is number one killer virus in the world. Health professionals have been playing a pivotal role in COVID-19 prevention process. Regarding the psychological challenges that health professionals were facing during the outbreak of COVID-19, one of health professional working in Sabian primary hospital revealed his worry as follow:

"I felt shocking and very tensioned while my heart goes bubbling with emotionally disturbed feeling even I do laydown on my bed but I didn't felt sleep and wakeup without any rest. Sometimes, I do frustrate and feel helpless in doing my tasks. In other time, I do plan some other means of treating my patients to make them strong psychologically." (Personal Interview, July 2020).

Theme 2: Social challenges of health professionals

A major social challenges indicated by study participants were mostly related to family and relatives issues such as missing social bonds, refraining from family visit, missing church program in baptizing kids ('Kiristina' in Ethiopian Christian Orthodox Religion, it is the act of baptizing kids at the age of 40 days for boy and 80 days for girl), wedding, mourning, birth day issues were reported by study participants during the interview.

This was illustrated well by Participant-2 who stated:

"I feel worried when I do remember our Sunday church attendance with my kids. He call me and said to me when do we go to church and "Papa" (Children recreational center in the city). As he reminds me our past actions that we missed, I feel frustrated and enter in a sad mood and fear about the future. More importantly, I also worried about my dad and mum who are in the age range between 60-70 years. Every day, I told them to stay home and never go out to visit others. Sometimes, I feel I have to work hard and cover all their leaving cost i.e., economical support in this crisis moment. I always inform my family, don't hug any one! Wash their hands with soap! But, my big challenge was some of my family members ignoring my phone command. I am so eager to get them on face-to-face after my duty." (Personal Interview, July 2020).

On the other hand, they key informants also mention social challenges that arise from social desirability or wrong perception in the community. In such, social bond they mention difficulties to keep their kids and other family member from local community ties and interaction.

This was illustrated well by Participant-5 who stated:

"I am worried about whether my children and family will infected in my absence. My partner is very worried that I will be infected. But, in opposite, I fear about them as they are in the community. I am the only child and my mother cries every day and fears that I will be infected, and I worry more about them. My local community holds wrong perception by saying this disease is not ours; it is the virus of rich people and the western. My family did not want to avoid their neighbor. They still calling each other's

for coffee as usual without social distancing. Even though, I inform them to isolate themselves, they did not accept that idea. All neighbor kids meet each other in playground still playing with each other's. My family did not ok to break such social bond and social interaction. During this COVID-19 outbreak, my bigger challenge was emanate from the issues of social withdrawal, isolation and social exchange affairs." (Personal Interview, July 2020).

Theme 3: major strategies to solve psycho-social challenges

The study participants mention several issues regarding how to solve and manage issues related to psycho-social challenges occurred during the outbreak of COVID-19. Strategies such as planning a head, discussing with important others in their life, consulting and set priority on issues. Ignoring things above their limit and searching alternative from multiple perspectives and praying to God were coded as a major strategies collected from an interview with key informant.

This was illustrated well by Participant-1 who stated:

"I do have long working experience as a medical doctor. So that I know how to react and manage well. I always calm when dealing with my patient and I always planned to run my tasks per schedule. My typical strategy is not to think about the virus, I focus on my usual ways of treating people. I do forget everything when I am busy. Gradually, I develop my self-confidence and I can treat people effectively. It makes me feel good to think that I'm treating people every day. Ignoring the impacts come from psychosocial problems. I do feel relief while sharing with others my experience and support even other junior staff. Discussing with other and having fun with other staff also my strategies to smooth things." (Personal Interview, July 2020).

Theme 4: Types of support systems to balance work and family life

The study participants revealed that the types of support mostly come from various aspects. This was mentioned as economic benefit (extra payment), material support from health institutions, family support, staff and friend support were mentioned by key informants.

This was mentioned by participant-3 as follow:

"I really appreciate the people who care for and support me during this crisis moment. This time made me to feel that everyone try to help each other in that way we can win the spread of this pandemic. Each day I got encouragement from staff, family and friends. I communicate with my family and kid's each day and exchange information as well about. I now gain supports from my husband. He is responsible for running activities at home like caring for our kids, managing our trade activities at our shop, and participating in social responsibilities in the community". (Personal Interview, July 2020).

Regarding institutional support, participants mention their training, glove, safety cloth and economic benefits which

government provides them extra pay as a daily bases for those working on duty.

Participant-5 went on and said:

'I got training and material support such as face masks, gloves and safety cloth before I start to working in this quarantine and isolation center (DDU). We have very supportive staff, because in this center our relationship is so amazing. I work in a rotation duty cycle, if I am late they all cover my place, I do the same in my turn. So, I have a really enjoy this work environment.' (Personal Interview, July 2020).

DISCUSSION

This study explored the psychosocial challenges of health professionals using phenomenological methods and we were summarized my findings into 4 themes: as psychological challenge, social challenge, major strategies and types of support system discussed as follow:

The health professionals who were working during the outbreak of COVID-19 revealed that they encounter psychological challenges such as stress, tension, anxiety, fear, depression and mood disorder which lead to sleep problems. This study was consistent with the study of which report the threat of epidemic disease led to a large number of negative emotions such as fear, anxiety, and helplessness. Such feelings were also reported by current study participants were explained how their work related stress and tension, depression, mood and sleep problem can influence their day-to-day routine tasks in this study.

In similar vein, the study conducted by [8] indicate that health professionals (71.2%) had scores of state anxiety above the clinical cutoff, 88 (26.8%) had clinical levels of depression, 103 (31.3%) of anxiety, 113 (34.3%) of stress, 121 (36.7%) of post-traumatic stress, work burnout, 107 (35.7%) had moderate and 105 (31.9%) severe levels of emotional exhaustion; 46 (14.0%) had moderate and 40 (12.1%) severe levels of depersonalization; 132 (40.1%) had moderate and 113 (34.3%) severe levels of reduced personal accomplishment. The current study also indicated that there was no pressure at early stage of COVID-19. But, as the cases increased, they start to develop stress and feeling of emotional disturbance. This finding was similar with the study conducted in china by [3] which reports a higher prevalence of insomnia, anxiety, depression, somatization and obsessive-compulsive symptoms among medical health workers.

This study indicate that the major social challenges reported by study participants were mostly related to family and relatives' issues such as missing social bonds, refraining from family visit, missing church program in baptizing kids, wedding, mourning, birth day, etc. The psychological need for relatedness relates to the individual's inherent tendency to feel connected to other individuals or be a team member or group member to be loved and to be cared for [23]. Work place interactions satisfy the basic human need for relatedness.

Nursing is one of the occupations that have high values of altruism and is accompanied by interactional demands that are highly important. As nurses have to work for extended hours and they must replenish their resources at work rather than looking for breaks [24]. As the study by [25] indicated that the process of balancing the challenging demands of work and family life can be physical, psychologically, and personally debilitating for women. The study also found that not having enough time for family time is one of the main source of stress for these women. On the other hand, hospital doctors struggled to achieve a work–life balance. They felt that long and unpredictable working hours, combined with a high level of work intensity, left them with no time for anything else [26].

The COVID-19 pandemic has affected the way people live interpersonal relationships. The lockdown was characterized of a different organization of daily life, with an advancement of time at home and a reduction of distance through digital devices [27]. On other hand, the social impacts of the COVID-19 pandemic on people such as separation from loved ones, loss of freedom, uncertainty about the advancement of the disease, and the feeling of helplessness were reported [28,29]. Furthermore, [30] found out that social challenges are also found to be major challenges for students such as social distancing, 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. Hospital doctors were struggling to achieve balance between work and life in Ireland [31]. On the other hand, found out that health professionals face the challenges of balancing their medical career with duties of home life and child rearing in America [32].

The major strategies mentioned by health professional to deal with psycho-social issues were included as planning, consulting, ignoring and discussing with others were listed by study participant. The study by [25] also indicate strategies such as planning, faith and accepting limitation were employed among women to balance their work and family affairs. On the other hand, the [2] forwarded the coping strategies for health professionals such as ensuring sufficient rest and respite during work or between shifts, eats sufficient and healthy food, engage in physical activity, and stay in contact with family and friends. The study participants also reveal such strategies such as discussing and consulting with others, taking priority and scheduling for the activities to carry out.

The study participants revealed that the types of support mostly come from various aspects. This was mentioned as economical, material, family support, staff or coworker supports were mentioned by key informants. This finding is consistent with [25] findings which revealed that the main sources of support for professional women were stated as their husbands, grandparents, co-workers and bosses as their most significant ones. In relation to family support, the majority responded that the there is good support from both their husband and other extended family too.

According to [13] findings show that psychological well-being and psychological safety influence job performance. Their study indicates that when psychological well-being and psychological safety of employees are unsatisfactory, job performance will decrease accordingly. As such, health professionals who were working in public hospitals, psychosocial supports were crucial for them to become successful in their job performance. According to [14] study revealed that problems in occupational stress and alertness resulting from being burdened with higher working hours seem to have many harmful ramifications for work-life wellbeing, such as work life imbalance and job dissatisfaction.

In addition to the above mentioned psycho-social factors, the study by shows that the reasons for which female employees are facing trouble to maintain a work-life balance are mostly because of: long working hours, job rigidity, work overload, responsibilities related to child care, discrimination and biasness at work place, lack of supervisory support, dominant managerial style and scarce family support. Ethiopia is considered to have one of the lowest ratios of doctors to population in the world [33]. In particular, with the expansion of health facilities across the country, severe shortages of health workers for staffing have been witnessed [34].

In Ethiopian context, health professionals are those who trained in the biological/medical science and who treat their patient in line with biological models. Psychology professionals were misunderstood and less needed in public hospitals and other health care industries in Ethiopia. But, in fact, social psychologists, clinical psychologists and counseling psychologists believed to play a loin share for the psychosocial wellbeing's of both professionals and patients in public hospitals. Acentral role to play in promoting workers' mental health [35]. Individual strategies to cope with the mental health effects of poor psychosocial environments in the workplace were helpful for participants, but strengthening workplace policies to promote good mental health may have other benefits such as improved productivity [35].

The mental health arena continues to face multiple barriers in Ethiopian context. According to described mental health in Ethiopia as one of the most disadvantaged health programs in Ethiopia, both in terms of facilities and trained manpower with estimates of the average prevalence of mental disorders in Ethiopia at 15% for adults and 11% for children [36]. There are so many psychological disorders that might affect the lives of people and health professionals too. But, only limited hospitals provide well-organized psychiatric services, and Amanuel Hospital continues to be the only psychiatric hospital in the country. It is obvious that trainings and psychosocial supports were playing a pivotal role for the wellbeing's of health professionals working in public hospitals. Even though, most hospitals start to offer the psychiatric/mental health service for patients, there are few professionals assigned to such department and most of them were medical doctors. Health professionals need to understand why individuals make certain decisions about health risk behaviors

[37]. Furthermore, found out that there is a strong association between work-life conflict and poor self-reported health among working adults in Europe [38].

According to high values of work interfering with family life (WIF) were significantly correlated to higher rates of personal burnout, behavioral and cognitive stress symptoms, and the intention to leave the job. In contrast, low levels of WIF predicted higher job satisfaction, better self-judged general health status, better work ability, and higher satisfaction with life in general [39]. In similar vein, found out that the factor which impacts the subjective well-being among rural women most is work-interfering-with-family conflict, followed by work-family balance and confidence in conflict coordination [40]. Public hospitals totally ignored the critical problems in our community especially psychosocial disorders and challenges. As such, the psychosocial service center should be organized *via* both psychology and psychiatry fields of study in order to solve psychosocial challenges among hospital workers in public hospitals in Ethiopia.

LIMITATIONS

Investigating the health professionals' image of COVID-19 and its psychosocial consequences was very essential to know the lived experiences of the health workers. Health professionals who respond to the deadly virus of COVID-19 pandemic might need more psychological and social support. Many respondents used their image of COVID-19 and to share their psychosocial challenges and experiences during the outbreak of COVID-19. Asking health professionals about what strategies and support systems employed during the outbreak of COVID-19 might touch feelings not previously shared and studied scientifically. As such, this study is important to give the image for offering psychosocial support and training on how to balance the issues of work and life among health professionals. More importantly, this study is critical as it shows the wide range of the applications of social psychology in health ground. Hence, social psychologists play a pivotal role in order to tackle psychosocial challenges among employees who work in health care industrial.

CONCLUSION

This study was examined the psycho-social challenges of health professionals during the outbreak of COVID-19 in Dire Dawa city administration. The major findings of this study indicate that stress, tension, anxiety, depression, mood alteration and sleep problems were the major psychological challenges of among health professionals working in COVID-19 center. This study also indicate that the major social challenges reported by study participants were mostly related to family and relatives' issues such as missing social bonds, refraining from family visit, missing church program in baptizing kids, wedding, mourning and birth day.

The major strategies used by health professionals to solve psychosocial challenges were stated as planning, consulting, ignoring and discussing with others. Regarding the types of

support systems to manage the challenges of work life balance among health professionals listed as economical, material, family support and staff support were revealed in this study. The support systems employed by government as economical support program by the hospital extra payments in addition to salary help them to achieve work-life balance. Though these are not adequately helping them, the immediate supervisor, coworker support and family and friend supports are some of the reported supports which can contribute to balance their work and the other aspect of life. Therefore, there is a major psychosocial challenge of health professionals during the outbreak of COVID-19 in Dire Dawa City Administration.

DECLARATIONS

Ethics approval and consent to participate

Ethics approval was obtained from Dire Dawa University. The study was approved by the local ethics guideline prepared by Dire Dawa University Research and Community Service Directorate office. All participants were asked for informed consent before conducting the interview.

Consent for publication

Not applicable.

Availability of data and materials

All qualitative data of this study was available with the researcher and kept confidentially.

Competing interests

The authors declared that this is original research and have no conflicts of interests with any other person or institutions.

Funding

Authors' contributions

BTW is the author of this study and prepare the manuscript, analyze and interpret the data and preparing the final reports. HAD was assisted the researcher by participating in data collection process *via* semi-structured interview from nurses. The authors read and approved the final manuscript.

ACKNOWLEDGEMENTS

Authors' details

Wondu Teshome Beharu is currently assistant Professor of Social Psychology in Department of Psychology, College of Social Science and Humanities, Dire Dawa University, Eastern Ethiopia, Box: 1362; Website: www.edu.et; E-mail: wondu.teshome@ddu.edu.et/wondyamsuty@gmail.com; phone:+251935660442/+251967051474

Helen Asaminew Dejene is a Senior Nurse in Student Clinic, Dire Dawa University, Eastern Ethiopia E-mail: helenasamenew09@gmail.com; phone: +251915081375

REFERENCES

1. Sun N, Wei L, Shi S, Jiao D, Song R, Ma L, et al. Qualitative study on the psychological experience of caregivers of COVID-19 patients. Am J Infect Control. 2020; 48(6):592-8.

2. World Health Organization. Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020. World Health Organization; 2020.

3. Zhang WR, Wang K, Yin L, Zhao WF, 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):242-50.

4. United Nations Economic Commission for Africa. COVID-19 in Africa: protecting lives and economies.

5. FMOH. National Comprehensive COVID-19 Management Handbook. Addis Ababa, Ethiopia, First edition. 2020.

6. Li S, Wang Y, Xue J, Zhao N, Zhu T. The impact of COVID-19 epidemic declaration on psychological consequences: a study on active Weibo users. Int J Environ Res Public Health. 2020; 17(6):2032.

7. National Health Commission of China. The guideline of psychological crisis intervention for COVID-19. 2020.

8. Giusti EM, Pedroli E, D'Aniello GE, Stramba BC, Pietrabissa G, Manna C, et al. The psychological impact of the COVID-19 outbreak on health professionals: a cross-sectional study. Front. Psychol. 2020; 11(1684): 1-9.

9. Suwalska J, Napierala M, Bogdalski P, łojko D, Wszołek K, Suchowiak S, et al. Perinatal mental health during COVID-19 pandemic: an integrative review and implications for clinical practice. J Clin Med. 2021; 10(11):2406.

10. Young FY. Working Hour, Work-Life Balance and Mental Health on Construction Workers. J Hum Resour Manag Res. 2016; 4(5):49.

11. Adisa TA, Mordi C, Mordi T. The challenges and realities of work-family balance among nigerian female doctors and nurses. Economic insights-trends & challenges. 2014; 66(3).

12. Xiang YT, Yang Y, Li W, Zhang L, Zhang Q, Cheung T, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. Lancet Psychiatry. 2020; 7(3):228-9.

13. Obrenovic B, Jianguo D, Khudaykulov A, Khan MA. Work-family conflict impact on psychological safety and psychological well-being: A job performance model. Front Psychol. 2020; 11:475.

14. Hsu YY, Bai CH, Yang CM, Huang YC, Lin TT, Lin CH. Long hours' effects on work-life balance and satisfaction. BioMed Res Int. 2019:1-9.

15. Baye Y, Demeke T, Birhan N, Semahegn A, Birhanu S. Nurses' work-related stress and associated factors in governmental hospitals in harar, eastern ethiopia: a cross-sectional study. PLOS One. 2020; 15(8):1-13.

16. Creswell JW, Poth CN. Qualitative inquiry and research design: Choosing among five approaches. Sage publications; 2016.

17. Speziale HS, Streubert HJ, Carpenter DR. Qualitative research in nursing: Advancing the humanistic imperative. Lippincott Williams & Wilkins. 2011.

18. Mohajan HK. Qualitative research methodology in social sciences and related subjects. J Econ Develop Environ People. 2018; 7(1):23-48.

19. Central Statistical Authority (CSA). The National Statistics of Ethiopia. 2007.

20. Lincoln YS, Guba EG. Naturalistic inquiry. Sage. 1985.

21. Patton MQ. Qualitative research & evaluation methods: Integrating theory and practice. Sage publications. 2014.

22. Moustakas C. Phenomenological research methods. Sage publications.1994.

23. Baumeister RF, Leary MR. The need to belong: desire for interpersonal attachments as a fundamental human motivation. Psychol Bull. 1995; 117(3):497.

24. Solat S, Abrar M, Shabbir R, Bashir M, Saleem S, Saqib S. Workplace interactional demands and work-family enrichment: an investigation from the service sector. Front Psychol. 2020; 11:1476.

25. Rendon RA. Work-life balance among working married women: What social workers need to know.

26. Humphries N, McDermott AM, Creese J, Matthews A, Conway E, Byrne JP. Hospital doctors in Ireland and the struggle for work–life balance. Eur J Public Health. 2020; 4:32-5.

27. Saladino V, Algeri D, Auriemma V. The psychological and social impact of COVID-19: new perspectives of well-being. Front Psychol. 2020; 11:2550.

28. Li LZ, Wang S. Prevalence and predictors of general psychiatric disorders and loneliness during COVID-19 in the United Kingdom. Psychiatry Res. 2020; 291:113267.

29. Cao W, Fang Z, Hou G, Han M, Xu X, Dong J, et al. The psychological impact of the COVID-19 epidemic on college students in China. Psychiatry Res. 2020; 287:112934.

30. Fura DL, Negash SD. A study on the living experiences of people during the COVID-19 pandemic: the case of wolisso town home-Stayed University students. J Psychol Psychother. 2020; 10(5):1-1.

31. Adams JG, Walls RM. Supporting the health care workforce during the COVID-19 global epidemic. Jama. 2020; 323(15):1439-40.

32. Raffi J, Trivedi MK, White L, Murase JE. Work–life balance among female dermatologists. Int J Womens Dermatol. 2020; 6(1):13-9.

33. Tasnim M, Hossain MZ, Enam F. Work-Life Balance: Reality check for the working women of Bangladesh. J Human Resour Sustainability Studies. 2017; 5(1):75-86.

34. Mariam DH. Brief overview of the literature relevant to Human Resources for Health (HRH) in Ethiopia. Ethiop J Health Develop. 2013; 27(1):1-5.

35. Mackenzie CR, Keuskamp D, Ziersch AM, Baum FE, Popay J. A qualitative study of the interactions among the psychosocial work environment and family, community and services for workers with low mental health. BMC Public Health. 2013; 13(1):1-4.

36. Kibour Y. Mind the gap: Personal reflections on the mental health infrastructure of Ethiopia. Psychol Int. 2010; 21(1):1.

37. Hidalgo KD, Mielke GI, Parra DC, Lobelo F, Simões EJ, Gomes GO, et al. Health promoting practices and personal lifestyle behaviors of Brazilian health professionals. BMC Public Health. 2016; 16(1):1-0.

38. Mensah A, Adjei NK. Work-life balance and self-reported health among working adults in Europe: a gender and welfare state regime comparative analysis. BMC Public Health. 2020; 20(1):1-4.

39. Fuß I, Nübling M, Hasselhorn HM, Schwappach D, Rieger MA. Working conditions and work-family conflict in German hospital physicians: psychosocial and organizational predictors and consequences. BMC Public Health. 2008; 8(1):1-7.

40. Liu S. The relationship between Education and Well-being in China.