

# **Psychological challenges faced by nurses during covid19**

## Abstract

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Title of publication <b>Psychological challenges on nurses during covid-19</b>		
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Abstract <p>The world is in a destructive phase, and governments, hospitals, doctors and it is testing nurses like never. The coronavirus 2019 has spread at a rapid pace, making it difficult to adapt to the changes. Hospitals are overcrowded, and the pandemic has had the most significant impact on frontline workers. The thesis aims to discover the psychological challenges nurses have faced during the pandemic and determine their coping strategies. The purpose of the thesis is to promote psychological well-being in health care, especially of nurses.</p> <p>The authors used qualitative method in this thesis. Data was collected via interviews based on three main themes with four chosen participants. The interviews were transcribed and coded according to the themes using inductive content analysis</p> <p>Findings show that nurses felt stress and anxiety due to factors such as lack of human resources, insufficient workers, drastic changes in workplaces, and a lack of knowledge about the virus. The psychological pressure has resulted in nurses wanting to change careers.</p> <p>Nurse managers could focus more on the psychological well-being of nurses. Professionals of psychological well-being could reach out to nurses rather than waiting for nurses to reach out to them amid this chaos. Nurses can also be provided further education on coping with increased workload and psychological challenges that come with it.</p>		
Keywords  Nurses, Psychological challenges, Coping, Stress, Anxiety		

## Abstract

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Julkaisun otsikko Psykologiset haasteet sairaanhoitajille Covid-19: n aikana		
Tutkinto Sairaanhoitaja AMK		
Tiivistelmä <p>Maaailma on tuhoisassa vaiheessa, ja hallituksia, sairaaloita, lääkäreitä ja sairaanhoitajia testataan kuin koskaan ennen. Virus on levinnyt nopeasti. Sairaalat ovat täynnä, ja pandemialla on ollut suurin vaikutus etulinjan työntekijöihin. Opinnäytetyön tarkoituksena on selvittää psykologiset haasteet, joita sairaanhoitajat ovat kohdanneet pandemian aikana, ja selvittää heidän selviytymisstrategiansa. Opinnäytetyön tarkoituksena on edistää erityisesti sairaanhoitajien psykologista hyvinvointia terveydenhuollossa.</p> <p>Työssä käytettiin laadullista lähestymistapaa. Tiedot kerättiin haastatteluilla, jotka perustuivat kolmeen pääteemaan valittujen osallistujien kanssa. Haastattelut kirjoitettiin ja koodattiin teemojen mukaan induktiivisen sisältöanalyysin avulla.</p> <p>Tulokset osoittavat, että sairaanhoitajat kokivat resurssien puute, riittämättömät työntekijät, radikaalit muutokset työpaikoilla ja tiedon puute viruksesta olivat stressin ja ahdistuksen seurauksena tekijöinä.</p> <p>Sairaanhoitajien johtajat voisivat keskittyä enemmän hoitajan psykologiseen hyvinvointiin. Psykologisen hyvinvoinnin ammattilaiset voisivat tavoittaa sairaanhoitajia pikemminkin kuin odottaa sairaanhoitajien tavoittavan heitä. Sairaanhoitajille voitaisiin myös tarjota jatkokoulutusta selviytymisestä lisääntyneestä työmäärästä ja siihen liittyvistä psykologisista haasteista.</p>		
Asiasanat Sairaanhoitajat, Psykologiset haasteet, Selviytyminen, Stressi, Ahdistus		

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## 1 Introduction

The outbreak of the novel coronavirus has spread to many countries since December 2019. The WHO emergency committee had declared it as a global health emergency on 30 January 2020. (Velavan & Meyer 2020, 278-280.) Pandemics are the combined worldwide spread of new and re-emerging infectious disease epidemics involving a vast population, sometimes resulting in severe casualties and socioeconomic damage. (Madhav et al. 2017.)

The covid-19 pandemic has culminated in significant global burdens. Devastating consequences include high rates of illness and mortality, financial issues experienced by individuals, distress linked to known and specifically unknown knowledge, and fear of ambiguity as to the continued impact. Health care workers, crucial to the ongoing healthcare crisis triggered by covid-19, are expected to tackle the public health crisis associated with the virus: minimizing the spread of infection, seeking out short-term solutions, and inventing long-term solutions. These huge responsibilities are causing health care workers to feel mental exhaustion, which could lead to clinical mistakes, lack of sympathy in the care of patients, lower efficiency, and higher turnover. (Shreffeler et al. 2020,1.)

The health care professionals who provide care to the patients infected with covid-19 and non-infected patients are still obliged to fulfil their duties to their families and themselves. (Shreffeler et al. 2020,1). As nurses are the most prominent group of healthcare professionals globally, nurses have been on the frontline during both epidemics and pandemics (World Health Organization 2020). Nurses must ensure that all patients receive individual, high-quality care regardless of the contagious disease. Nurses are Even participating in preparing the projected covid-19-related outbreaks that raise the need for nursing and health facilities that could overwhelm the healthcare system. (Fawaz et al. 2020, 1341-1342.)

The aim of the thesis is to discover the psychological challenges nurses have faced during the pandemic and to find out their coping strategies.

The purpose of the thesis is to promote psychological well-being in health care, especially of nurses. For nurses and healthcare organizations, this thesis will be beneficial to improve the psychological well-being of nurses in their workplaces. This thesis would help increase consciousness of problems relating to the well-being of nurses at work. The study's findings would provide an understanding of the present condition in providing psychological assistance to nurses at work, thereby further helping experts in health care to strengthen the support structure and establish coping mechanisms by enhancing the psychological well-being of nurses.

Although healthcare providers face many challenges worldwide, such as physical, financial, emotional, etc., the fundamental purpose of this thesis is to outline and understand psychological challenges. The relations and effect of other challenges leading to the psychological challenge will be discussed, but this thesis will deepen into only psychological challenges. During covid19, each healthcare professional, such as doctors, paramedics, social workers, and many nurses working in different setups than the hospital, has also faced challenges, but the targeted groups for this thesis are nurses. The healthcare field is enormous. There are many ways divided into many different sectors to provide healthcare support to the public, such as retirement homes, general healthcare clinics, homecare, etc. Concluding all these fields in one thesis is impossible. Thus, the focus of this thesis will be mainly on nurses working in hospitals.

## 2 Covid-19 and roles of nurses

Coronavirus is an infectious disease that has recently spread across the globe. The virus originated from Wuhan, China, and was first identified in December 2019. The WHO committee in China was first informed about the cases of pneumonia with no known cause on 31 December 2019. Until the beginning of the new year 2020, there were 44 patients with pneumonia with unknown cause reported by WHO China. (WHO 2020.)

By the end of January 2020, the virus had travelled to other countries. Based on the cases emerging in China and international locations, the WHO emergency committee had declared a global health emergency on 30. January 2020 (Velavan & Meyer 2020, 278-280).

### 2.1 Virus and symptoms

Coronaviruses are enveloped, positive single-stranded giant RNA viruses that infect humans and a wide variety of animals. Coronaviruses were first described in 1966 by Tyrrell and Bynoe, who cultivated the viruses from patients with common colds. (Tyrrell & Bynoe 1966.)

The respiratory disease was shown to have been caused by the coronavirus, which was structurally related to a virus that causes acute respiratory syndrome (SARS). The virus managed to transition from animals to humans on the Huanan Seafood Market in Wuhan, China. (Velavan & Meyer 2020, 278-280.) The initial clinical sign that allowed the virus classification was pneumonia, while in recent reports, gastrointestinal symptoms and asymptomatic infections have also been described. (Chan et al. 515-523.)

In symptomatic cases, clinical symptoms of the disease typically begin less than a week later, consisting of fever, cough, nasal inflammation, fatigue, and other signs of upper respiratory tract infections. In approximately 75% of patients, the infection has led to severe dyspnoea and severe chest symptoms corresponding to pneumonia. (Wang et al. 2020.)

Most individuals infected with the COVID-19 virus develop mild to moderate respiratory infection and heal without special care. People above the age of 65 and people with existing medical issues such as coronary disorder, asthma, chronic respiratory disease, and cancer are more prone to experience severe illness. (WHO 2020.)

Covid-19 was spread quickly from a single city to the whole world in just 30 days. The sheer pace of both geographical expansion and the rapid increase in case numbers shocked and quickly overwhelmed health and public health systems in China, especially in Wuhan City

and Hubei Province and later to the healthcare systems worldwide. (Wu & McGoogan 2020.)

## 2.2 Prevention and treatment

The COVID-19 virus transmits primarily from person to person, mainly by respiratory droplets created whenever an infected person coughs or sneezes. These droplets can land in the mouths or noses of nearby people or are inhaled into the lungs. (Wei et al. 2020, 411-415.)

According to the WHO interim guidance, “Responding to Group Spread of COVID-19,” published on 7 March 2020, preventing COVID-19 spread requires the establishment of cooperation structures not only in health but also in areas such as transportation, travel, trade, economy, security, as well as other areas that cover most of the society. (WHO 2020.)

The early approach for reducing the spread of cases was preventive steps, and to avoid further dissemination, early screening, diagnosis, isolation, and care are needed. Preventive methods emphasize hospital isolation and infection control and necessary steps to be taken during diagnosis and emergency treatment with an infectious patient. The most effective preventive strategy for the public to use is to regularly wash their hands, use handheld hand sanitizer, and prevent interaction with their face and mouth when engaging with a potentially contaminated site. Citizens are recommended to wash their hands frequently, exercise respiratory hygiene (i.e., cover their cough), use masks, and avoid the crowds and near interaction with sick individuals, whenever necessary, to minimize the possibility of transmission throughout the group. (Güner et al. 2020, 571-577.)

Until the vaccinations were developed, health professionals had no specific treatment procedure for treating contaminated patients. There was no other treatment protocol available for the infection, nor was there a vaccine or antiviral drug regimen. The only choice and strategy were to treat the symptoms. Treatments of patients were primarily centred on delivering supportive care, such as oxygenation, breathing, and fluid retention. As part of essential COVID-19 control, a combination of low-dose systematic corticosteroids and antivirals, as well as atomization inhalation of interferon, has been recommended. (Cunningham et al. 2020.)

Vaccines usually take years of trial and evaluation before they can be used in the clinic, but in 2020, scientists set out on a race to develop safe and reliable coronavirus vaccines in record time. Currently, 78 vaccines are being tested in human clinical trials, with 22 having passed the final stages of testing, and seven vaccines have already been approved for full use, with some vaccines reportedly having more than 90% efficacy against COVID-19 in



clinical trials, and 91,6M from the population of the world have been fully vaccinated. The research on the acceptance of the vaccine in the population is minimal and needs further investigation. (Zimmer et al. 2021.)

### 2.3 Roles and responsibilities of nurses during covid19

Today, nursing is the glue that holds the health care journey of the patient together. Roles of nurses have evolved to address the needs of society, from ensuring the most accurate diagnoses to the ongoing education of the public about critical health issues. Nurses are focused and determined in safeguarding public health. There are roles such as home care where nurses go to homes of patients to provide care. Roles of nurses are critical as they work tirelessly to ensure that the entire patient experience goes smoothly. Nurses are emotionally and psychically challenged throughout the process; working late hours and being part of lives of their patients creates a bond between the nurse and patient. (American Nurses Association 2020.)

Nurses are a community of health care workers that are often the first point of contact in their communities, especially during infectious disease outbreaks. Nurses play a significant role in controlling infections, including infection control, suppression of infection, and epidemic infection surveillance. (Lotfinejad et al. 2020, 776-777.)

The role of nurses includes professional nursing practice, counselling, follow-up care, patient education, and disease prevention., which has increased the provision of healthcare facilities, decreased chronic illness complications, enhanced cost-effectiveness, and improved patient experiences with healthcare services. (Kemppainen et al. 2021, 490.)

Furthermore, nurses are also given the responsibility of spreading awareness of the transmission of infectious diseases to ensure the safety of the public. While taking an active part in spreading awareness about the risks of COVID-19 disease transmission, nurses were also expected to educate people about successful prevention efforts. They also work on mobile strike teams that investigate case connections, provide self-isolation and quarantine education by helplines and home visits, and interpret the guidelines by the government to the public. (Fawaz et al. 2020, 1341-1342.)

Nurses shall also ensure the appropriate availability and use of sanitation materials and personal protective equipment and provide screening records, confinement instructions, and triage procedures based on the most recent guidelines. A global pandemic necessitates active nursing personnel participation in health management, patient education and knowledge exchange, and public safety. (Fawaz et al. 2020, 1341-1342.)

Nurses are providing consultations to patients via telecommunications and constructing and performing triage plans. These new methods of providing patients with support and care have forced nurses to become more innovative and become more self-innovative amid the crisis. Due to this excessive need for nurses in all hospital nurses, nurses are being redeployed to learn new skills, take new roles, and work closely with critically ill patients. The pandemic has made many releases that roles of nurses are often undervalued and misunderstood; however, the roles are now more critical than ever. (John Hopkins University 2020.)

The year 2020 was designated as the international year of the nurse and midwives by World Health Organization, emphasizing the importance of nurses and midwives towards the health and well-being of the global community. The crisis the covid-19 pandemic has caused highlighted the daily commitment and sacrifice of the nurses who took care of the patients while being at significant risk to themselves. (Aquila et al. 2020, 136.)

### 3 Psychological challenges

According to American Psychological Association, psychology is the scientific study of the mind and behaviour; to understand the psychological impact of covid-19 on nurses, the key factors that affect nurses during this period must be understood. Many factors influenced the psychological health of a nurse. Personal characteristics such as gender, age, educational level, marital status having children or not, personality might be correlated with the mental health among nurses. (McLeod 2019.)

A significant and necessary part of wellness is mental and psychological well-being. The WHO Constitution states: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Mental health is more than just the absence of mental illnesses or disability, an essential consequence of this concept. (WHO 2020.)

#### 3.1 Increased workload and exhaustion

The Covid-19 pandemic has put an unparalleled burden on the healthcare systems. Significant changes in healthcare quality became unavoidable. They also saw the discontinuation of regular care, the repurposing of therapeutic areas, the redeployment of workers to unfamiliar healthcare settings. The redeployment of staff to unfamiliar healthcare environments has contributed to the psychological distress of nurses. Being asked to work in areas of the hospital that do not coincide with their roles and takes responsibilities for tasks they have never seen before causes increase workload and mental exhaustion. (Williams et al. 2020, 65-66.)

The nursing profession has very complex roles in general; nurses also felt responsible for saving the healthcare system from failing during the pandemic. Shortage of nurses is a well-known problem to the world; thanks to the pandemic, there was a significant increase. It requires nurses to work longer shifts and more hours and work extra shifts as a substitute for nurses in quarantine due to the exposure to the virus to keep the healthcare system from failing. (John Hopkins University, 2020.)

For nurses working in the front line during the pandemic, multiple factors caused stress, which led them to be anxious and tired. The environment was chaos; lack of equipment, a panic amongst everyone, lack of knowledge of the virus, and uncertainty. Long working hours, new roles, and responsibilities added workload. To stop the virus from spreading, nurses also had additional commitment to focus and work on the cleanliness of the working area and educating patients continuously on hand hygiene and other precautions to control

the virus. With the shortage of medical staff and additional tasks on top of that, nurses face increased physical and mental exhaustion. (Huang et al. 2020, 1-4.)

According to the survey conducted by the Finnish Nurses Association (FNA) of more than 2,300 nursing professionals, more than half of respondents said they had thought of changing jobs during the height of the pandemic. Nurses were moved to different areas, and 29% of nurses who transferred to various departments characterized their orientation for their new roles as weak or extremely poor. (Yle 2020)

Frontline health care staff in all major hospitals are mandated to wear personal protective equipment (PPE) throughout the escalation of the COVID-19 outbreak when caring for suspected or verified COVID-19 patients. It requires the wearing of close-fitting N95 face masks, protective eyewear (goggles), gowns, surgical gloves, and the use of powered air-purifying respiratory devices (PAPR). For the healthcare staff, wearing the PPE and changing out of it is an exhausting and time-consuming job; it adds additional stress, particularly if a long duration of exposure to such equipment is needed. Due to the long hours of exposure to such equipment, reports of headaches and skin rashes in nurses are rising. (Hu et al. 2020, 1-3.)

### 3.2 Psychological challenges faced by nurses in time of covid19

The acceleration of the COVID-19 has been overwhelming for the world healthcare services, resulting in a tremendous psychological burden on nurses who care for sick COVID-19 patients. In addition, serious events have taken place worldwide, such as the suicide of nurses taking care of infected patients. Front line caregivers face enormous workloads, long-term exhaustion, threats of illness, and dissatisfaction with the death of patients. They also experience worries or even misunderstandings between patients and members of their families. (Shen et al. 2020, 1.)

In late April, the International Council of Nurses (ICN) reported that “there is strong evidence that nurses are experiencing unprecedented levels of stress. Impossible workloads, the fear of exposure Covid-19, and risking their health and that of their families. Lack of childcare has also been a problem for nurses, along with financial pressure, long shifts with little to eat or drink. “Additionally, there are reports about nurses being attacked for working with COVID-19 patients, including being hackled, spat on, verbally abused, and called “disease spreader” Facing these kinds of outside, piling on to the stress faced at the workplace can trigger mental breakdowns on nurses. Even before the pandemic, nurses have faced many mental health problems because factors like work-life balance, Long-shifts, and limiting

opportunities for rest and recovery can also be detrimental to mental health. (International Council of Nurses 2021.)

Nurses are at considerable risk of work-related stress, burnout, and mental health problems such as depression and anxiety. The danger, including the rate of suicide among female nurses, is greater than that of the general working population or those in other professions. A recent report on suicide by female nurses showed the suicide rate was 23% higher amongst nurses than the UK national average. More than half of the nurses who died were not in contact with mental health services, suggesting a need to improve access to mental health care in nurses, as in many groups. (Carr 2020.)

### 3.3 Stress and anxiety

Stress can be defined as any type of change that causes physical, emotional, or psychological strain. Stress is a way of the body to respond to anything that requires attention or action. Stress can be both long and short term which usually determines the gravity of the effects. It is typically a feeling of emotional or physical tension and can be caused by the environment or thought that makes you feel frustrated, angry, or nervous. (Scott 2020.)

Psychological stress is a popular term denoting processes believed to contribute to various mental and physical conditions. Stress can be divided into two sections good known as eustress, which can help motivate and focus, and bad stress or distress, which usually leads to anxiety, concern, and a decrease in performance. The negative impacts of stress can damage health since its symptoms are headaches, sleep disturbance, physical performance, and digestive issues. Long-term stress can also contribute to psychological and emotional strains, obesity, and heart diseases. (Scott 2020.)

According to a survey of 34 hospitals in China was performed and their findings revealed that 3/4ths of the 1257 health staff were under stress, half of the respondents recorded depressive symptoms, and a third of them recorded insomnia, 2/5th of the participants reported insomnia. (Lai et al. 2020.)

As per a report by Xiao, Han et al. (2020), the relevant stress-triggering variables in the medical personnel were concerns for personal safety, considerations for their relatives, and references for patient mortality. This research also explored the motives for continued work after the epidemic, such as societal and moral obligation, appreciation of hospital authorities, and increased financial reimbursement expected.

Anxiety is stress that continues after the stressor is gone. It is the natural response of human body to stress, a feeling that can occur before, during, or even after some event. Long-term anxiety feelings can lead to anxiety disorder. Short-term anxiety can be beneficial in some cases; it may help to perform better and work harder. If the anxiety continues for a long, it can start to affect daily life, leading to abnormal activity such as not performing daily activities or making decisions. The anxiety can get worse if it is left untreated. There is no specific answer as to what causes anxiety, but researchers believe that it is a combination of factors that play a role. Genetics, brain chemistry, and environmental factors play a massive role in everyone. Anxiety can be dangerous as it can worsen symptoms of depression. (Holland 2020.)

As the virus was first discovered in Wuhan, the healthcare system was the first to face the deadly covid19. According to the research conducted by Shen et al. (2020,1), the nurses in Wuhan did not communicate well with other nurses during the early stages, which resulted in anxiety and loneliness. In addition to all the work pressure, they were also concerned about their family, which led to higher psychological stress amongst nurses working in ICU in Wuhan. According to the survey conducted with 85 nurses by Shen et al. (2020,1), it was found that the main manifestations were decreased appetite or indigestion (59%), fatigue (55%), difficulty sleeping (45%), nervousness (28%), frequent crying (26%), and even suicidal thoughts (2%).

According to the research conducted by the 61 health care workers that frequently used N95 masks, 58 (95.1%) reported adverse effects, including nasal bridge scarring (68.9%), facial scratching (27.9%), skin harm (26.2%), dry skin (24.6%), and rash (16.4 percent). Seven staff had ear and indentation discomfort, and one had acne. On the bridge of the nose, chin, and cheeks, 6 of them formed wheels. These physical challenges faced by nurses play a crucial role linked to an increase in anxiety. (Hu et al. 2020, 1-3.)

### 3.4 Coping strategies

Along with emotions, covid19 has also affected the coping strategies of nurses. In Folkman et al. (1987), coping is defined as the thoughts and actions individuals use to deal with stressful events. Research has identified two main coping initiatives: problem-focused coping and emotion-focused coping. The aim of problem-focused coping is to solve the problem or act to change the situation. However, emotional coping focuses on alleviating stress-related emotional pain.

Studies have shown that feelings and coping mechanisms have a reciprocal relationship. Emotions are held to have behavioural consequences. For example, when there is anger,

we fight; when afraid, we want to run away; and when happy, we want to enjoy. Emotions tend to motivate such behavioural changes. (Fredrickson 2001, 218-226) Individuals who describe themselves as angry and fearful cope with the challenge using aggressive tactics, such as posing questions. In contrast, individuals who are more prone to report a negative response, such as sadness, tend to use passive coping methods. (Charles et al. 2001, 136-151)

Occupational stress has significantly contributed to reducing the ability to meet job demands and the welfare of the staff. It also affects the quality of the care and health services provided to the patient. (Lee 2003, 86-91.)

Coping with a stressful situation is multifaced and aims to reduce the impact of such events on an individual's physical, social, and emotional functioning. There are three different ways for effective coping. In the first place, Nurses must be prepared to expect the possible stressors before running into them and prepare a suitable plan to ambush for various outcomes. Secondly, Nurses must reduce the physical stress caused by stressors. Lastly, Increasing the positive energy among them has been known to be helpful in stressful events. (Loo-see 2012, 163-166.)

Studies suggest that a healthier lifestyle also plays a vital part in the improvement of mental well-being. Identifying safe lifestyle decisions that foster social well-being and mitigate psychiatric problems is also beneficial in preventing mental illnesses. According to the WHO, a healthy lifestyle entails engaging in daily physical exercise, refraining from smoking, limiting alcohol intake, and eating healthy foods to avoid obesity. (Velten et al. 2020, 10-15.)

Nurses have identified numerous ways to deal with job stress, according to the study. These strategies have proven to be helpful in helping nurses cope with stress. They prevent situation control, such as checking on a patient in a moderate condition every couple of hours and regularly checking on a patient in a critical need and seeking assistance, such as asking a supervisor when having a question or speaking with a family member about the tension. Self-control, job tension influences personal life, so people do activities they like at home to avoid worrying about work. Avoidance and escape the situation such as keeping themselves occupied at home after work. They have also found that spiritual escapism, such as reading holy books, has helped them deal with stress. (Huang et al. 2020, 8-10.)

#### **4 The purpose and aim of the thesis.**

The aim of the thesis is to discover the psychological challenges nurses have faced during the pandemic and to find out their coping strategies.

The purpose of the thesis is to promote psychological well-being in health care, especially of nurses. For nurses and healthcare organizations, this thesis will be beneficial to improve the psychological well-being of nurses in their workplaces.

The key challenges to nursing professionals during the COVID-19 pandemic are discussed, and solutions to help nurses are provided in this thesis. The study states the following research questions:

1. How do the nurses describe the psychological challenges they have faced during the covid-19?
2. How have nurses been coping with the psychological challenges?



## 5 Methodology and data search

### 5.1 Qualitative research approach

The systematic study of social phenomena in natural settings is known as qualitative research. This research is one of the studies that use words rather than numbers to understand the experiences better. The author is the data collector in this research. This research process seeks to answer why an event occurs, what happens, and what those events mean to the participant. (Teherani 2015, 669-670.)

Qualitative research is helpful in answering “why” and “how” questions, and a close relationship distinguishes it between authors and participants, which is based on equality as human beings. The author should be able to communicate with participants and treat them as equals. This research also considers the prescriptive of those involved in research and their perceptions, meaning, and interpretations of the phenomenon. (Hammarberg et al. 2016, 498-499.)

The authors of this study chose qualitative research because they believed it is suitable for their topic. The research is based on personal feelings and experiences they have been through at the time of covid-19. This research method can provide a complete picture of answers and reasons by interviewing. This research studied nurses who have been working in hospitals at the time of covid-19 to get a better view of what they have been going through mentally.

### 5.2 Interview as data collecting method

Interviews and group discussion are the most used method of data collection in qualitative research. There are three different fundamental research methods in qualitative research: structured, semi-structured, and unstructured. Structured interviews are verbally administered questionnaires with no follow-up questions. Semi-structured interviews include a series of follow-up questions that help define the areas that need to be explored. Unstructured interviews are conducted with no organization and do not reflect any preconceived theories, it is used when significant depth is required. (Gill et al. 2008, 292-295.)

In this study, a semi-structured method is used, which consists of several key questions that help to determine the areas that need to be explored but also allows the interviewer and interviewee to diverge from pursuing an idea or response in more detail. This interview

format is commonly used in healthcare because it directs participants on what should be discussed. This method also allows elaborating information that is important to participants but was previously unknown by the interviewer. (Jamshed 2014, 87-88.)

When conducting qualitative research, Interviews are the most effective method. Authors can use interviews to understand better and investigate research topics, perspectives, and phenomena. During the interview, questions or depth in the subject may arise that the authors did not anticipate. The interview will be conducted with one central question and additional key question allowing participants to express themselves openly about the research. (Virginia Tech 2018.)

Semi-structured interviews were used to gather information. Both authors arranged the interview using their contacts. All the participants were given an interview schedule and a briefing on the topic of the interview. The time and location are determined by the schedule of each participant and the best time for them. All the interviews were taped, and notes were taken with the permission of the participant. The authors briefed the interview guide questions and introduced themselves and their thesis topic during the interview. The participants led the interview, and additional questions were asked in response to their answers.

### 5.3 Participants

One of the most significant aspects of this study is the participants. Qualitative research is intended to be purposeful, so selecting the best participants is essential, specifically nurses who can provide beneficial and valuable data for the study. The efficient selection of the participants would significantly contribute to the process of data collection and data analysis. (Sargeant 2012, 1-3.)

Based on the research questions of this study, the first criterion for participation is that all participants are currently working in a hospital or were working during covid-19. Participants are drawn from social networks or workplaces of the authors.

The authors contacted the participants and asked if they would be interested in participating in the study. Authors have explained the purpose of the research and what it entails to participate in this study.

For the research, four nurses were interviewed. Participants have been involved in this field for 5-10 years. The age of the participants ranges in age from 25 to 35 years old. Because the study will be presented in English, the language used in this study is English. The interview was held after work. Each interview took about 25-30 minutes.

## 5.4 Data analysis

Data analysis can be done with the inductive and deductive content analysis methods. The inductive content analysis method is used when the authors need to develop the theories and themes. By analysing the data received from the participants, inductive content analysis is used to establish theory and define main themes. The themes emerge from a constant examination of the data. This method aims to condense large amounts of data into a concise summary format and establish links between the summary results obtained from the data and research objectives. The inductive content analysis method is a time-consuming methodology that necessitates several reviews and in-depth reading of raw data. (Hall, 2019.)

Deductive content analysis is a method that refers to starting with a predetermined collection of codes and then assigning specific new codes to new qualitative data. These codes could come from previous research or already have an idea of what themes to look. The deductive method will help save time and ensure that all areas of interest are coded. (Medelyan, 2020.)

In this research, the authors will be using the inductive content analysis method. Since the study is qualitative and focused on open-ended interviews, the theoretical framework has guided the authors to form the interview questions and analyse the results throughout this thesis. This method is suitable for this thesis. As a result, it enables authors to condense a large amount of raw data into a concise overview format, making it easier to create consistent links between the summarized results and the study objectives.

The review in this study began with reading the transcribed texts several times to understand the text better. After that, the text was driven by codes that defined various aspects of the material. Based on how different the codes were connected, the codes were further categorized into subthemes and then themes. The created themes are increased workload and burnouts, Psychological challenges, stress & anxiety, and Coping strategies. (Appendix 3)

## 6 Findings

### 6.1 Increase workload and exhaustion.

Increased workload and exhaustion can be described with three subthemes (Figure 1.) According to all the interviewees, working during the time of covid has been physically and mentally exhausting. They mentioned that beginning of the pandemic was stressful; having to work without proper instructions and equipment was traumatic for both nurses and the patients. They stated the problem of a shortage of nurses, which leads to increased workload and exhaustion because a nurse would be forced to care for patients than is necessary due to lack of nurses.

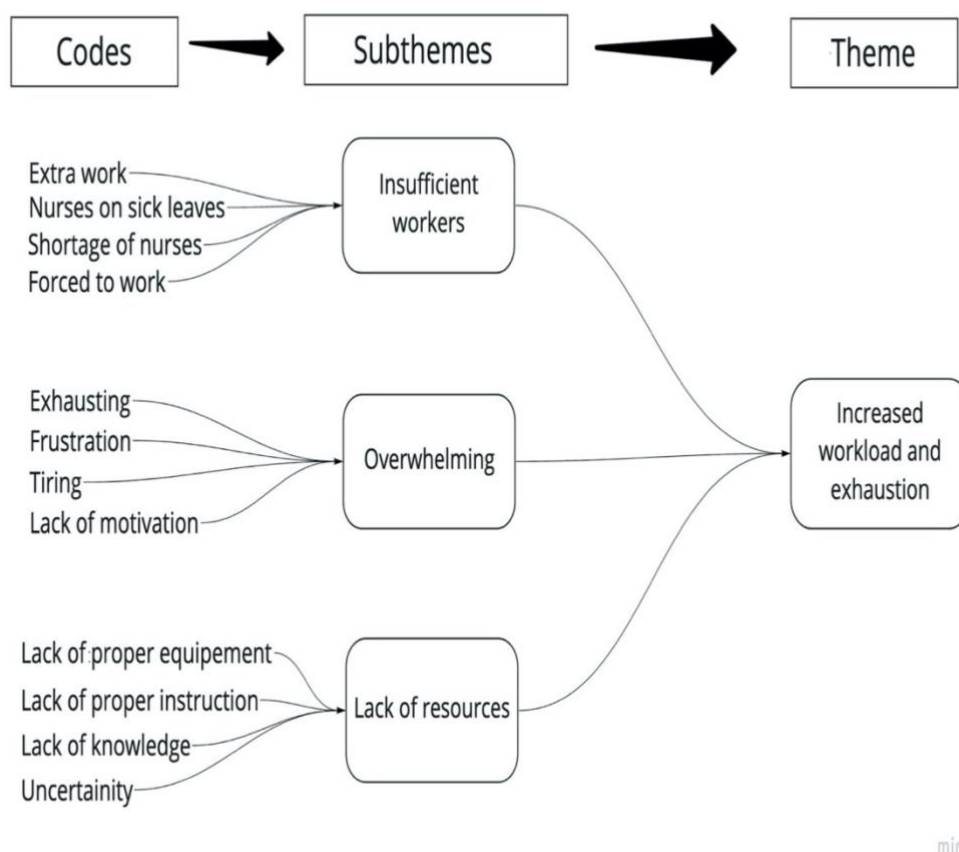


Figure 1. Increased workload and exhaustion

**Insufficiency of workers** was one of the main reasons that caused an increase in workload. Nurses had to do extra work as a substitute for nurses who were infected and in quarantine. More nurses were on sick leave, which added extra pressure on available

nurses to do more shifts. One of the nurses also felt like nurses were being forced to work and being neglected as the holidays of nurses were cancelled.

*“When the government decided to introduce standby law and the holidays were canceled, it felt like we nurses were being forced to work, whatever we were feeling or doing. No one asked nurses point of view.”*

*“Working extra shifts and long hours was physically and mentally very exhausting.”*

Nurses stated overall experience as very **overwhelming and frustrating** due to fear of getting infected first, infecting critically ill patients, and infecting family members.

*“Ethical burden felt overwhelming and frustrating at times due to fear of getting infected, infecting ill patients and our family members.”*

*“Due to the exhaustion, I even considered changing profession at times.”*

Nurses also felt that **lack of resources** made it difficult for nurses to go through these challenging times. As per nurses, in the beginning, there was a shortage of surgical mask inwards, and there was also confusion if mask helps in decreasing the spread of the virus. At times nurses had to take care of the patients without masks, and due to this, they felt neglected by the healthcare system.

One of the nurses described the situation as:

*“We had patients on that time who came back from North Italy, and we had to take care of them without masks (because we didn't have them) while these patients had symptoms of Covid as high fever and diarrhoea. As a nurse, I felt that no one protected us; doctors and hospital management didn't take our concerns seriously. The healthcare system neglected us.”*

The healthcare directives of the healthcare system were often changing due to a lack of understanding and knowledge of the virus. The nurses found the constant changes in orders to be overwhelming and frustrating. Nurses have also mentioned that some requests or instructions sounded ridiculous and caused disputes.

*“There were disagreements between keeping 1,5-2 meters distance even during work, while in the office, the computers were pretty close to each other and were impossible to keep distance, which felt stupid.”*

Due to the requirement to wear surgical masks, the nurse said that she often forgot to drink, resulting in dehydration and difficulty concentrating, and physical weakness.

*“Because of the mask, I keep forgetting to drink and get dehydrated, which made me grumpy and dizzy at times. I couldn’t concentrate properly at work sometimes. I also get a headache every day, and I think it is because of the mask.”*

## 6.2 Psychological challenges; stress and anxiety

Psychological challenges: stress and anxiety can be described with three subthemes (Figure 2.) All interviewed nurses faced some sort of psychological challenges during the covid19 period. Each of them admitted to feeling overwhelmed and nervous at times. Most of them stated that work-related pressures affected their personal lives as well. According to nurses, it was challenging not to worry about jobs and caregiving in general during their spare time.

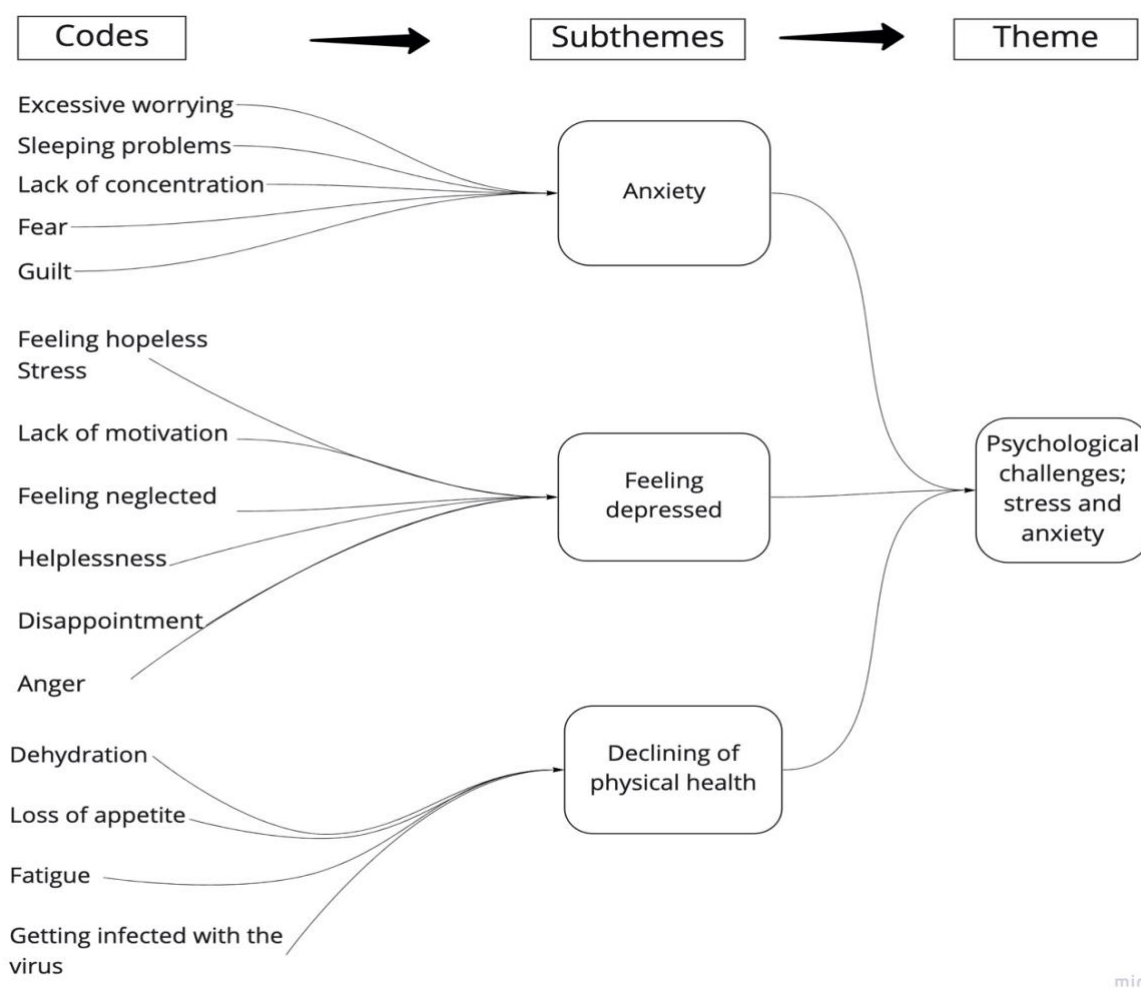


Figure 2. Psychological challenges; stress and anxiety

**Anxiety** was felt by all 4 of the interviewees. Nurses expressed that they were apprehensive about their families as they had to go back to them after work, and the fear of infecting their loved ones would keep haunting them. All the nurses interviewed work in a hospital setting with critically ill patients, which caused them to be fearful about infecting patients already in

a risky group. When patients did get infected, nurses would feel the guilt of being responsible for it.

*“Fear of infecting my family and having to go to work daily with that thought gave me anxiety.”*

*“The thought of infecting critically ill patients and that they might die because of me was mentally very depressing.”*

One of the nurses also mentioned that watching the news and using social media did harm as everybody everywhere was only talking only about the virus and getting home after work and reading and thinking about the same thing, again and again, made her more anxious than ever. Not being able to go out with friends or anywhere for that matter was very depressing.

*“I stopped following the news as it only increased my anxiety.”*

*“I felt like I was stuck at home as I couldn’t follow my hobbies and can’t go out as much.”*

The **depressed feeling** due to the situation has also caused long-term challenges for nurses, such as sleeping problems. Due to the lack of nurses, nurses had to work in new areas or get patients from different wards as some wards were converted into wards treating infected patients. This caused an increase in the feeling of depression as the patients would be from the various wards, and nurses had to learn new things to take care of them, which also caused a lack of motivation. One of the nurses stated that even thought of changing the profession crossed her mind.

*“Our ward had to take care of patients from different wards because some ward was changed to COVID ward. Also was a lack of nursing staff. It caused at some point that I had a lack of motivation too.”*



*“Right now, I am having sleeping problems; sleep is not deep enough. It probably is because of work stress and long shifts. It only appeared after covid19.”*

The **physical challenges** as dehydration, loss of appetite, rashes, and headaches due to masks did nothing but increased the level of stress in nurses.

The ignorance of the public also on such a crisis caused a lot of anger. Nurses also expressed disappointment by lack of respect for their work and poor pay for such demanding work.

*“People were very ignorant. While going to work on public transport, I would see people not wearing masks or wearing them wrong while it was mandatory. That makes me angry.”*

*“I have been very proud of our nurses but very disappointed with lack of respect and poor pay for such demanding work.”*

### 6.3 Coping strategies

Coping strategies can be described with three subthemes (Figure 3.) Nurses had very little but similar or even identical things to say about their coping strategies. The strategies mainly were communicating, being upbeat or changing thinking style, and making lifestyle changes.

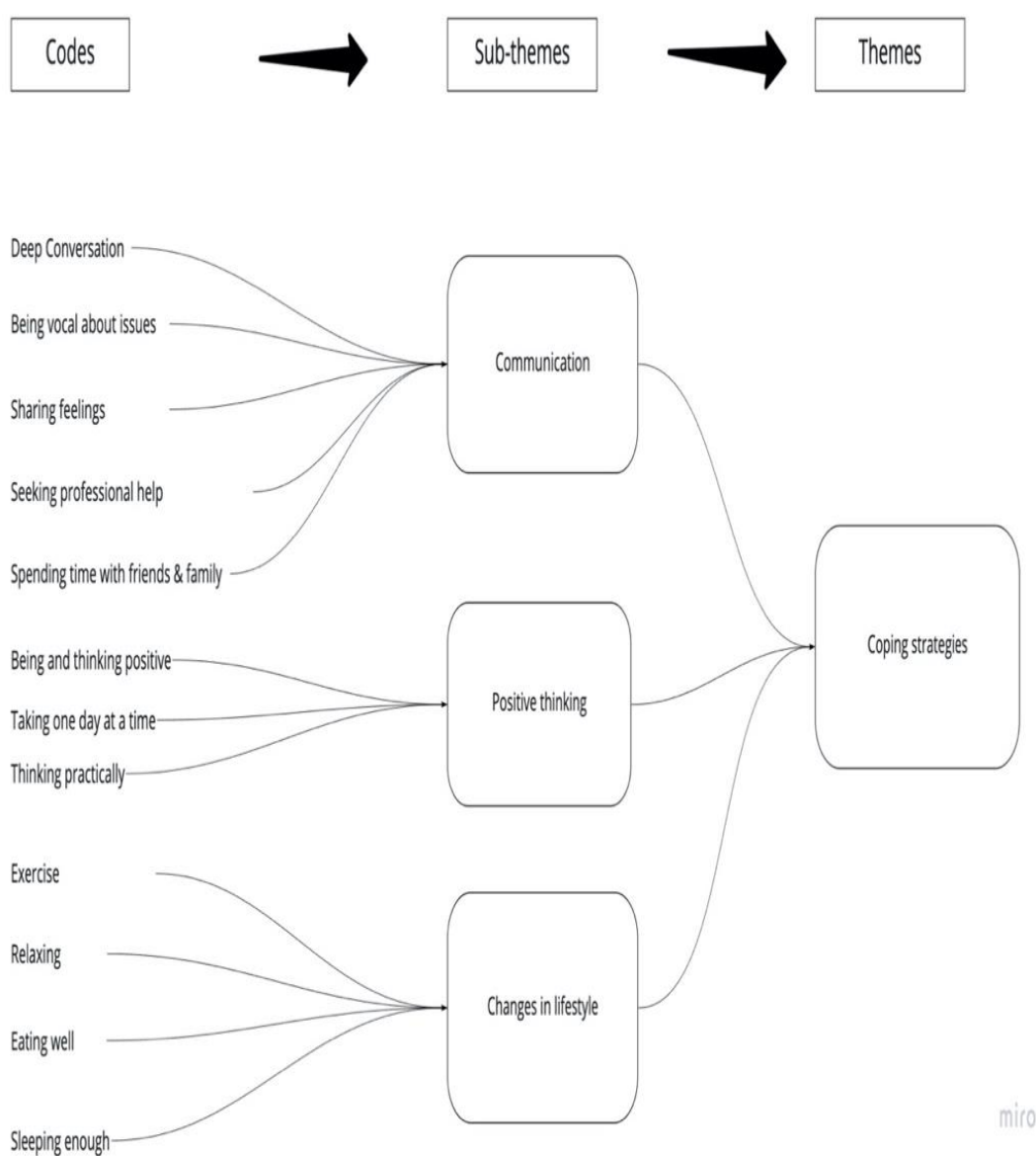


Figure 3. Coping strategies

**Communication** was the key answer when asked about coping with the nurses. They mentioned that talking to colleagues about issues and being in touch with extended family helped decrease stress. Only one of the nurses mentioned seeking professional help. According to the nurses, having conversations with colleagues about their feelings made them feel that they are not alone in this. They also mentioned that they got full support from co-workers, and at such a difficult time, it became more meaningful and valuable.

*“When something bothers me, it helps when I talk to somebody about it, it doesn’t solve the problem, but I feel less stressed. I am also seeking professional help currently due to sleeping problems and anxiety issues.”*

*“I think the best coping strategy was communication with colleagues. We talked openly and had profound conversations.”*

*“Support from co-workers has become even more valuable.”*

**Positive thinking** or making changes in thinking style is one of the strategies that most nurses mentioned. They brought out the issue that people tend to become easily vulnerable and emotional at such times. It is not easy to be positive while losing a significant population and seeing patients fight for their lives. Nurses mentioned that they tried to stay positive for the patients and their families. They tried to become more practical and focus on giving the best care.

*“We often said that at least we can go to work and see colleagues, patients, people while others are at home every day. Maybe this was kind of like a positive coping strategy” we were happy that our everyday working life is still going on, and we can discuss face-to-face, not online.”*

*“I tried to take a day at a time and give myself some time. I told myself that I could have bad days, I am not, and I don’t have to be perfect. I realized that excessive worrying would just make it worse, and I need to focus on work. I also realized that I am not alone in this.”*

**Changes in lifestyle** were another common strategy mentioned by each of the nurses. Nurses expressed that exercising more, eating healthy, going out help them take their minds off from the crisis. They also mentioned that having good sleep was very important but challenging to get enough sleep at times. They stated that eating healthy and taking walks, spending time with friends, although it was not possible all the time, helped them reduce anxiety.

*“I try to have a life outside work; I go for long walks with dogs. I tried to enjoy my free days. Connect with others was crucial as well, connecting by phone, online. I plan to eat healthy, exercise, and sleep enough, and I am not successful every time I am at least trying.”*

## 7 Discussion

### 7.1 Discussion of findings

The aim of the thesis is to discover the psychological challenges nurses have faced during the pandemic and to find out their coping strategies. The purpose of the thesis is to promote psychological well-being in health care, especially for nurses. For nurses and healthcare organizations, this thesis will be beneficial to improve the psychological well-being of nurses in their workplaces. Findings suggest that nurses have experienced **increased physical as well as mental workload and exhaustion** during the pandemic. More and more nurses were on sick leave or in quarantine due to the exposure to the virus. Some temporary nurses and nurses who fell in the risk group even resigned, putting the pressure on other available nurses to fill in for them, which was physically and mentally exhausting. A study conducted by Huang et al. 2020 had similar findings on the issue.

Findings also indicate that nurses felt the addition of responsibilities during this period. They had to take extra time to educate patients about the virus and the precautions they must take; on top of that, lack of protective equipment, knowledge, and proper instructions initiated a lot of anger and confusion amongst nurses. Nurses must also put extra efforts in disinfecting, putting protective gear on, and following protocols regarding infection control was putting a lot of physical and mental workload, especially with a lack of resources. Due to the exhaustion, nurses have even considered changing professions that agree with the survey conducted by FNA, whereas half of the nurses felt a need for a career change. (YLE,2020)

Findings regarding **psychological challenges and stress and anxiety** agree with the research (Xiao et al., 2020). Results show that nurses have felt an immense amount of stress and anxiety due to fear of getting infected and worrying about their family. Further findings show that nurses also faced sleeping problems due to stress and anxiety, which confirms the research conducted by Xiao et al. (2020), which states that the combination of anxiety, stress, and self-efficacy of medical staff act on their sleep quality. Nurses admitted that most of their co-workers shared similar feelings about the situation, which confirms the ICN report, which suggests a global phenomenon of mass trauma experienced by nurses.

Findings also prove that physical challenges such as headaches due to wearing masks for a long duration and rashes and dehydration further led to more stress and anxiety; this is in confirmation with the study conducted by Hu et al. (2020).

Findings also suggest that nurses have felt a lack of respect towards them, supporting the report by the international council of nurses, which stated that nurses had been verbally and physically abused for working in hospitals and were called “disease spreaders.”

Communication was a big essential part of the **findings of coping strategies**. Findings indicate that nurses were relieved to speak to their colleagues about problems while knowing that the biggest concern was not resolved. In these situations, nurses used emotional coping with communicating their emotions. The communication also exposed the feelings of their colleagues, leading them to believe that they are not alone. Findings indicate that assistance from peers and subordinates was vital when dealing with the issue. It helped to reduce psychiatric symptoms such as anxiety and stress. In addition to communicating, positive thinking was also one of the coping strategies in the findings. Findings show that seeing positive aspects of problems leads to rational thoughts to prevent intense feelings from adversely affecting them. Self-criticism in such a crisis did not benefit at all, but rather having a sense of reality, changing own thinking style, and thinking “I cannot be perfect, and I cannot be at my best all the time and I will give myself some time” was seen to be beneficial.

The findings further support the value of making healthier lifestyle decisions for better psychological well-being. The results indicate that changing everyday lifestyle habits, such as exercising and engaging in other daily tasks, assisted nurses in coping with stress and anxiety. Lifestyle changes have helped nurses sleep well and are evidence of anxiety reduction. Sleeping sufficiently eased their physical fatigue, which is directly related to their emotional exhaustion. Similar findings were found by Velten et al. (2020).

## 7.2 Ethical consideration and trustworthiness

As Internet researching becomes more common, it is critical to pay attention to the ethics of researching web content to ensure ethical diligence and appropriateness (Burler & Bally 2018, 1). According to Fouka & Mantzourou (2011.), the major issues while conducting research are informed consent, beneficence- Do not harm, respect for anonymity and confidentiality, and privacy.

As mentions above, Informed consent is the major ethical issue in conducting research. According to Armiger: “it means that a person knowingly, voluntarily and intelligently, and clearly and manifestly, gives his consent.”

The most important aspect of the study is the ethical considerations. The authors will collect and process data so that the privacy of the subject is not jeopardized. Data manipulation and data that is misleading should be avoided. (Cooper 2016, 3-6)

An essential concept of research ethics is informed consent. The participants needed to be aware of the advantages of the research as well as the potential risks. The authors gave informed consent to the participants, allowing them to understand the research framework. All information that could influence the decision of the participant to participate was made available to them. Participation was optional and not mandatory. Participants have the right to withdraw from the study at any time if they had agreed to do so or if they believe their privacy or rights have been violated. (Dudovskiy 2011) The authors upheld the beneficent theory and concern for the well-being of the participant. They also considered the possible repercussion of disclosing the identities of the participants.

The trustworthiness of thesis work implies that the principles of validity and reliability carry it out. It is possible to ensure that the thesis work is valid, dependable, and of high quality. However, when writing a thesis, the author should carefully read the material to identify any inaccuracies. (Elo et al. 2014.) During the completion of the thesis work, the concept of validity and reliability are taken into consideration. During the thesis writing process, the author relied solely on reliable medical sources. It means that the information collected is suitable for medical professionals, students, and those seeking accurate information.

To prevent plagiarism and provide a clear picture of where the original data came from, accurate citations were used according to school guidelines, with all references mentioned in the reference list. The administration of open-minded interviews was often used to obtain primary data. To retain the originality of the research, the original texts of the participants was extracted and quoted with the results and interpretation.

In terms of confirmability, the authors intend to consider all perspectives on the data equally and present the answers in an original form. Knowledge from previous research work and related feedback has helped the authors analyse this data. The participants were asked open-minded interview questions, and their answers were transcribed. As an appendix to this research, the original version of the responses that serve as documentation of the interviews has been attached. (Appendix 3) As a result, if other authors want to repeat the study, the results should be consistent.

### 7.3 Limitations and recommendations

The limitation of this study was the difficulty in determining which research articles were more reliable because the topic was so new at the time. Many articles were being published at the time, but locating a reliable source was difficult. Some of the research was available in a different language and translating it to English and getting the data out of that article was impossible.

The other limitation was finding participants who had been in this field for a long time and knew the difference between working before and during the covid. It was challenging to find a suitable participant and obtain their consent so, and only four nurses were interviewed; thus, the result should not be generalized. Also, the interviews were conducted in English, the language of this study, which may have limited the amount of relevant knowledge available for this study since the language of origin of the participants wasn't English.

During covid19, each health care professionals such as doctors, paramedics, social workers, and many nurses working in different setups than hospital have also faced challenges, but the targeted groups for this thesis were registered nurses; thus, research on other healthcare professionals is also recommended.

In this research, the authors interviewed nurses who have worked in a hospital during the time of covid-19, but it differs much from nurses who were working in an ICU (intensive care unit) or infection ward. So, the authors recommend a more in-depth investigation of nurses who deal with covid-19 patients inward, such as ICU or in an infection ward. Also, additional research into the depth of psychological issues as well as other challenges they have encountered when interacting with covid-19 patients is recommended.

The Healthcare field is enormous; there are many ways divided into many different sectors to provide healthcare support to the public, such as retirement homes, general healthcare clinics, homecare, etc. All these fields couldn't be concluded in one thesis. Thus, further research on nurses working in different settings is recommended.

### 7.4 Conclusion

The world is in a destructive phase, and governments, hospitals, doctors, and nurses are being tested like never. The virus has spread at a rapid pace, making it difficult to adapt to the changes. Hospitals are overcrowded, and the pandemic has had the most significant impact on frontline workers. The aim of the thesis is to discover the psychological challenges nurses have faced during the pandemic and to find out their coping strategies. The purpose



of the thesis is to promote psychological well-being in health care, especially of nurses. For nurses and healthcare organizations, this thesis will be beneficial to improve the psychological well-being of nurses in their workplaces.

Psychology is the scientific study of the mind, and it aids in the understanding of mental health, which necessitates an understanding of the psychological pressures faced by nurses. Regardless of the challenges they face, healthcare professionals are obligated to fulfill their responsibilities. This pandemic has put such a heavy burden on nurses that it is difficult to bear. Although delivering patient care, workload for nurses grew dramatically, and they had to teach and learn new ways to help patients.

Findings show that the pandemic has caused distress among nurses, causing anxiety, concern and affecting the performance of the nurses. Nurses felt overwhelmed, frustrated, and depressed due to factors such as lack of resources, insufficient workers, drastic changes in workplaces, and a lack of knowledge about the virus. The psychological pressure has resulted in nurses wanting to change careers. Interviews are the most used data collection method because they provide authors with a complete picture of the situation.

The findings of the interviews confirm the fact that nurses are under psychological stress. The finding is also consistent with many other studies on similar topics. This research and findings outline the explanations and significance of why it is crucial to understand and help nurses. Furthermore, it emphasizes how undervalued nurses are how this can be improved for a better future.

As the findings show that not all nurses think of seeking professional help although they are dealing with immense stress, it could be due to hesitation or lack of time. Management could arrange for professionals of psychological well-being to reach out to nurses rather than waiting for nurses to reach out to them amidst this chaos. Nurses could also be provided further education on coping with increased workload and psychological challenges.

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## APPENDICES

### Appendix 1.

#### Interview Themes

##### Background information

This is the interview form of our research study. This form consists of interview themes and questions related to our research topic, which will help you understand the basis of this interview. The purpose of our study is to summarize the problems confronting nurses during the Covid19 pandemic. The aim to establish a basic idea of what type of experiences and challenges nurses have had during the first year of the pandemic. Through our research, the hope is also to encourage and help ordinary citizens and other nurses to learn and understand how a global pandemic has impacted or still having an impact on nurses.

1. How do the nurses describe the psychological challenges they have faced during the covid-19?

Theme: Psychological challenges during the covid-19

1) Explain what kind of emotional challenges you could describe when thinking about covid-19 patients / or when you have taken care of the covid-19 patients?

- work-related emotions? (work community? feelings towards patients...?)
- emotions are affecting your personal life. (sleeping, relaxing, children.)
- emotion relating to your professional identity. Changed your view towards nursing?

2) How have nurses been coping with the psychological challenges?

Theme: Coping mechanism used by nurses

1) How have nurses been coping with the psychological challenges?

- Explain/describe how do you manage the emotional challenges?

### Appendix 2.

#### Consent Form

This consent form is an invitation for you to take part in a Thesis research project. The authors are currently enrolled in the Bachelor of Science in Nursing at LAB University of applied sciences in Lahti, Finland. The aim of the thesis is to understand the impact of COVID-19 on nurses and outline the challenges that they have faced or are facing during this period.

**Thesis Title** Psychological challenges on Nurses During COVID-19

**Names of the Authors**

Sarswati Timsina & Nishani Bhattarai

- I confirm I have been given, have read, and understood the information sheet for the above study and received answers to any questions raised about the research study.
- I understand that my participation is voluntary and that I am free to withdraw from the study at any time without giving a reason and without my right being affected in any way
- I understand that the authors will hold all information and data collected securely and in confidence and that all efforts will be made to ensure that I cannot be identified as a participant in the study, and I give permission for the authors to hold relevant data.
- I confirm that I am aware that participation in this research involves me being interviewed and that this interview will be used only for research purposes.

I agree to take part in the above study

Participant Name \_\_\_\_\_

Participant Signature \_\_\_\_\_

Date \_\_\_\_\_

Information of the person taking consent

Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

One copy for the subject, one copy for the author

## Appendix 3. Coding

## Increased workload and exhaustion

Transcript	Codes	Subthemes	Themes
<p><i>“More nurses were on sick leave, which added extra pressure on available nurses to do more shifts.”</i></p> <p><i>“When the government decided to introduce standby law and the holidays were canceled, it felt like we nurses were being forced to work, whatever we were feeling or doing. No one asked nurses point of view.”</i></p>	<p>Extra work, shortage of workers, more sick leaves, forced to work.</p>	<p>Insufficient workers</p>	<p>Increased workload and exhaustion.</p>
<p><i>“Our ward had to take care of patients from different wards because some ward was changed to COVID ward. Also was a lack of nursing staff. It caused at some point that I had a lack of motivation too.”</i></p>	<p>Exhaustion, frustration, tiring, lack of motivation</p>	<p>Overwhelming</p>	

<p><i>“Working long hours and the extra shift was physically and mentally exhausting.”</i></p>			
<p><i>“Ignorance of the disease, lack of protective equipment, fear of not being safe.”</i></p> <p><i>“At the beginning of the Covid pandemic, we haven’t received much information about covid; there was so much uncertainty.”</i></p> <p><i>“I don’t have the necessary knowledge and skills to take care of covid patients.”</i></p>	<p>Lack of protective equipment, lack of proper instructions, lack of knowledge, uncertainty.</p>	<p>Lack of resources</p>	

Table 2. Psychological challenges; stress and anxiety.

Transcript	Codes	Sub-themes	Themes
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<p><i>“Fear of infecting my family and having to go to work daily with that thought gave me anxiety.”</i></p> <p><i>“The thought of infecting critically ill patients and that they might die because of me was mentally very depressing.”</i></p> <p><i>“I developed sleeping problems due to corona.”</i></p>	<p>Excessive worrying, sleeping problems, lack of concentration, fear, guilt</p>	<p>Anxiety</p>	<p>Phycological challenges; stress and anxiety</p>
<p><i>“We had patients on that time who came back from North Italy, and we had to take care of them without masks (because we didn’t have them). When these patients had symptoms similar to Covid as high fever and diarrhea as a nurse, I felt that no one protect us; doctors and hospital management didn’t take our concerns seriously. That time I felt anger and anxiety. We were</i></p>	<p>Feeling hopeless stressed, lack of motivation, feeling neglected, helpless, disappointed, anger</p>	<p>Feeling depressed</p>	

<p><i>neglected by the healthcare system.”</i></p>			
<p><i>“Because of the mask, I keep forgetting to drink and get dehydrated, which made me grumpy and dizzy at times.”</i></p> <p><i>“I felt often being unsafe at work because there is always the risk of exposure to the virus at work.”</i></p>	<p>Dehydration, loss of appetite, fatigue, getting infected with the virus</p>	<p>Declining of physical</p>	

Table 3. Coping strategies

Transcript	Codes	Sub-themes	Themes
<p><i>“I have talked with occupational health care, how to cope with sleeping problems. “</i></p> <p><i>“We had a lot of deep conversations, where we shared our feelings, supported each other. We laughed and cried together. there was always someone who said” there is light at the end of the tunnel” and was supported others with positivity.”</i></p>	<p>Deep conversation, being vocal about issues, sharing feelings, seeking professional help, spending time with family &amp; friends</p>	<p>Communication</p>	<p>Coping Strategies</p>
<p><i>“I try to go forward day by day when working.”</i></p> <p><i>“We often said that at least we can go to work ad, see colleagues, patients, people. Others are at home every day. Maybe this was kind of like a” positive coping strategy” we were happy that our” neverydayworking</i></p>	<p>Being and thinking positive, taking one day at a time, thinking practically</p>	<p>Positive thinking</p>	

<p><i>life” is still going on, and we can discuss face-to-face, not online.”</i></p>			
<p><i>“Remembering to go outside for a walk or hike, do something satisfying.”</i></p> <p><i>“I planned to sleep better and eat healthily.”</i></p>	<p>Exercise, relaxing, eating well, sleeping enough</p>	<p>Changes in lifestyle</p>	