School of Health, Care and Social Welfare

BEING IN THE FRONTLINE AGAINST COVID-19

An exploratory qualitative study of assistant nurses' working conditions and health in care homes in Sweden

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Public Health Sciences
Advanced level
15 hp
Master in Public Health Sciences
Degree project in Public Health Sciences
FHA079

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Seminar date: 2021-05-25
Grade date: 2021-06-03

ABSTRACT

The COVID-19 pandemic is a current cause for concern worldwide. Frontline workers as assistant nurses in care homes face a significantly higher risk of infection due to high COVID-19 exposure, which has increased physical and mental demands at work. Thus, this study aimed to explore how assistant nurses in care homes experience their working conditions and mental health during the COVID-19 pandemic. The study used a qualitative approach, and semi-structured interviews were conducted with eight assistant nurses working in care homes. A thematic analysis was used to analyze the transcribed material. The findings of this study highlight increased work demands during the COVID-19 pandemic, as the participants described work overload and lack of organizational resources. Furthermore, social support from colleagues was described as the main supportive and motivational factor. However, lack of managerial support and communication challenges were common factors that participants mentioned. Finally, psychological and emotional fatigue and exhaustion, which were directly related to an increased workload during the pandemic, and fear of being exposed to COVID-19 were consequences of the pandemic. Therefore, this study concludes and recommends increased social support and adaptable administrative strategies for care homes to be better prepared for managing contagious diseases.

Keywords: assistant nurses, COVID-19, care of older people, demands, resources, working conditions

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1. INTRODUCTION

The COVID-19 pandemic is a current cause for concern worldwide. It represents a high burden and has spread around the world, with approximately 1.3 billion confirmed cases, including 2.9 million deaths globally as of 12 April 2021 (WHO, 2021). The World Health Organization (WHO) called for action to investigate the immediate needs and measures required to save lives and prevent a serious physical and mental health impact on healthcare workers. In Sweden, the measures of COVID-19 were less invasive than in many other countries, with no general lockdown, as the focus was on slowing, rather than stopping, the pandemic. Sweden has had a higher prevalence of infected people and deaths as the structural shortcomings had the greatest impact on the number of cases of illness and death from COVID-19. This led to care of older people being unprepared and badly equipped to handle a pandemic, resulting in health workers caring for older people being largely left alone to survive the crisis. Lately, the government and agencies implemented several measures to reduce the spread of COVID-19 in society (Coronacommissionen, 2020).

Frontline healthcare workers in Sweden face a significantly higher risk of infection due to high COVID-19 exposure (Ludvigsson, 2020). Previous viral pandemics have shown that healthcare workers are normally at a high risk of acquiring infections and other adverse physical health outcomes during such periods (Ge et al., 2020). Additionally, mental health problems such as anxiety, post-traumatic stress, depression, and burnout are associated with healthcare workers' working conditions during and after pandemics. Such mental health problems in healthcare workers have been observed in several studies during this global health crisis (Kabir et al., 2020).

As the rate of infections continued to rise at an alarming rate, Sweden's Public Health Agency classified COVID-19 as dangerous to the public and society. As healthcare workers are among the most vulnerable groups at higher risk of acquiring COVID-19, this topic is relevant to public health. Therefore, the topic was chosen to enhance understanding of the mental health impact of COVID-19 on frontline healthcare workers. Furthermore, qualitative research is required to explore how assistant nurses in care homes have experienced their working conditions and mental health during the COVID-19 pandemic.

Moreover, in a previous thesis, the author studied mental health issues in different vulnerable groups. Furthermore, the author previously worked as an assistant nurse in both a hospital and care homes. Thus, the author's knowledge of the topic and work experience can improve understanding of the issue. For this reason, the interest in the topic and assistant nurses' perspectives emerged to provide a deeper understanding of assistant nurses' experiences during the pandemic. The study is expected to guide future support and interventions as COVID-19 continues as well as during future outbreaks and stressful situations for healthcare workers in Sweden.

2. BACKGROUND

2.1. The history of COVID-19

The new coronavirus (SARS-CoV-2) first emerged in the city of Wuhan in China in December 2019. The situation became critical, and the coronavirus disease (COVID-19) spread throughout Hubei Province and other parts of China, causing significant morbidity and mortality (Shaukat et al., 2020). Subsequently, COVID-19 spread rapidly worldwide by close contact between people. As its rapid spread caused fear, panic, and anguish globally, government offices and businesses were shut down, schools closed, airlines were grounded, and the world came to an eerie halt (Shaukat et al., 2020). COVID-19 had a history in China through the SARS-CoV-1 virus, as they are closely related genetically. SARS emerged in China in 2002 and caused more than 8,000 cases in 33 countries over 8 months. SARS killed around one in 10 people who developed the infection (Dong et al., 2020).

COVID-19 manifests as a respiratory tract infection in most people. Thus, many different symptoms may be present. Among the reported symptoms in Sweden are cough, fever, runny nose, blocked nose, sore throat, difficulty breathing, headache, muscle and joint pain, nausea, loss of smell and taste, and diarrhoea (Folkhälsomyndigheten, 2020). Most people infected by COVID-19 suffer mild symptoms and can recover at home with medical care from doctors. However, some people suffer a severe form of illness with pneumonia and breathing difficulties. Older age is the main risk factor for more serious illness (Folkhälsomyndigheten, 2020).

2.1.1. COVID-19 in Sweden

The first case of COVID-19 in Sweden was confirmed in January 2020. To date (13 April), the virus has caused 857,401 confirmed cases of COVID-19, with 13,621 deaths in Sweden (Folkhälsomyndigheten, 2021). The virus spreads by close contact between people. Therefore, social distancing is recommended (1.5 m between individuals from different households). Furthermore, most countries acted rapidly due to the COVID-19 severity and implemented lockdowns and travel restrictions to save lives and minimize the disease. Although most countries, including Nordic countries such as Norway, Denmark, Finland, and Iceland, had strict approaches to fighting the situation, Sweden acted differently to these other countries and even the rest of the world. Sweden implemented a normal approach rather than implementing strict approaches like lockdowns and travel restrictions to combat COVID-19 (Ludvigsson, 2020). Therefore, the world debated this policy and wanted to know the outcomes of this approach. The measures were less invasive than in many other countries with no general lockdown, as the focus was on slowing, not stopping, the pandemic. Bars, restaurants, public spaces, and schools for children up to age 16 were kept open. Additionally, Sweden did not implement quarantine for infected households. Social distancing, keeping distance from other people, was the only approach practised but was only mandatory for public services. Moreover, wearing face masks was not recommended initially (Ludvigsson,

2020). The implemented approach was based on belief in the voluntary actions of society. However, this method resulted in higher morbidity and mortality in the country than in its Nordic neighbours (BBC, 2021; Samuelsson et al.,2020).

Recently, the country issued more stringent rules and regulations to combat the spread of COVID-19. Such measures included wearing face masks on public transport during the rush hours (7:00–9:00 and 16:00–18:00) for people born in 2004 or earlier and limited opening hours for restaurants and catering establishments. However, other government restrictions introduced in connection with the pandemic are mainly social distancing and are related to everyone's responsibility to prevent COVID-19 infection (Folkhälsomyndigheten, 2021; Krisinformation, 2021).

2.2. Care of older people in Sweden

Sweden has roughly 10 million citizens, 20 percent of whom have passed the standard retirement age of 65. Due to the large number of Swedish people born in 1940, it is estimated that the number of retirements will rise to 23 percent by 2040 (Sweden, 2020). Sweden has one of the highest life expectancies in the world, with men and women's life expectancies being 81 and 84 years, respectively. Moreover, Sweden is among the nations that developed reforms focusing on high-quality long-term care of older people in home care. Sweden's population will have aged by 2040, and it is estimated that one in four Swedes will then be 65 years or older. Thus, providing good care for older people is becoming increasingly important (Sweden, 2020). This may put many municipalities' systems of care for older people under much stress since the responsibility for support and help in daily life for older people lies with them.

Government grants and municipal taxes fund most care for older people. Additionally, some municipalities choose to privatize some parts of their care for older people. Private care provided services for 23 percent of older people in Sweden in 2018 (Sweden, 2020). Older people who can no longer cope with the demands of daily life can apply for assistance from their municipality. Recipients can then choose to stay in special housing (care home residents) or request home help (home care users) services based on their assessed needs. These could be private or publicly operated (Global Health Aging, 2014; Sweden, 2020). Care for older people in Sweden provides workplaces for many professions, such as nurses, physiotherapists, occupational therapists, and cleaners. However, assistant nurses (undersköterskor) and nursing assistants (vårdbiträden) are the two main professions in care for older people (Behtoui et al., 2020). The main responsibility of these professionals is to maintain and fulfil the daily life needs of individuals living in care centres for older people (Behtoui et al., 2020). Home care for older people involves assistance with daily activities, including personal care, cooking, cleaning, and groceries. Moreover, individuals who lose the ability to live at home even with home care (hemtjänst) assistance can move into care homes (äldreboende). This occurs when the person is generally weak and suffers from a high burden of comorbidity. Accordingly, older adults spend approximately two years in a care home before dying (Sveriges Kommuner och Regioner, 2020).

2.2.1 Care for older people during COVID-19

Care for older people has been badly hit by the COVID-19 pandemic, and clear excess mortality occurred in 2020, with individuals living in care homes experiencing the highest excess mortality (Modig et al., 2021). Furthermore, the number of deaths was higher among people aged 70 years and above, corresponding to 90 percent of the total number of deaths from the illness in Sweden. Of those who died, 50 percent were care home residents while 26 percent were home care users. These people died either in hospital or in their care homes (Socialstyrelsen, 2020). The primary risk factor for mortality from COVID-19 was an older age, consistent with previous studies (Modig et al., 2021). It was found that age clearly impacts the risk of death, and the risk of death increases with every chronological year. Moreover, poor health, such as lung or heart disease, diabetes, or conditions that affect individuals' immune systems, has been identified as a major risk factor for dying with COVID-19 (Modig et al., 2021). Furthermore, it has been identified that the policy of protecting the old and vulnerable groups was unsuccessful during the first wave of the pandemic in Sweden (Coronakommissionen, 2020). Providers of care for older people banned visits from March 30, 2020. Moreover, staff caring for older people or people in risk groups were urged to avoid working after a while. However, staff caring for older people began using face masks from April to May, when COVID-19 mortality became known in care for older people (Ludvigsson, 2020).

2.3. Assistant nurses' working conditions and mental health

2.3.1. Assistant nurses in care for older people

Care for older people is one of the largest occupational groups in Sweden, with over half a million healthcare workers estimated to be working in the occupation. Care home employees are mainly assistant nurses with uper secondary school diploma or Nursing assistants without formal college or university education adapted to the work. In Sweden, an assistant nurse is a person involved in practical nursing in healthcare, home healthcare, care for older people (care home), home care, and psychiatry (Sveriges Kommuner och Regioner, 2021). The main task of an assistant nurse is to work closely with people who need care and support for various reasons. Their tasks include cleaning, cooking, and personal care, such as showering and preparing for bed. They are in physical contact with residents during their shifts. Assistant nurses are sometimes exposed to contaminants and are frequently exposed to diseases or infections from contact with residents (Kommunal, 2020; Modig et al., 2021). In the next few decades, the need for assistant nurses is expected to increase in Sweden due to the number of older people increasing (Kommunal, 2020). Additionally, Sweden's Municipalities and County Council (2021) reports that the recruitment need for assistant nurses depends on 60percent of retirements, 40 percent is due to the increasing need for care of older people, as the number of people aged 70–84 is expected to increase until 2040. For

this reason, both the workload and work complexity have increased for care home workers (Sveriges Kommuner och Regioner, 2021).

2.3.2. High job demands and low job resources for assistant nurses

Several studies showed that job characteristics can impact employee well-being. It has been revealed that job demands, including high work pressure and emotional demands and uncertainty generate tiredness and sleeplessness and negatively impact employees' health (Bakker & de Vries, 2021). Moreover, previous studies showed that assistant nurses face considerable challenges. They have been found to experience substantial strain at work, associated with high workloads, psychological demands, understaffing, and unpleasant shift work (Broetje et al., 2020). Due to job dissatisfaction, several assistant nurses have expressed their intentions to quit within the next 2 years, while others hope to switch occupation (Heijden et al., 2019). Additionally, the number of sick days of care home assistant nurses are excessive due to feeling burnt out (Broetje et al., 2020; Fochsen et al., 2006).

Studies from Nordic countries have shown that numerous negative physical and psychological work environment factors are related to a higher risk of disability pension. These factors include strenuous work posture, heavy manual work, high job demands, low job control, and limited social support. Moreover, these factors increase the risk of long-term sickness absence in assistant nurses due to physical and psychological illness (Gustafsson et al., 2020; Östergren et al., 2005).

Numerous studies have indicated that the combination of high job demands and low job resources represents a high-stress work environment, which may finally lead to mental illness (Bakker & de Vries, 2021; Heijden et al., 2019). Additionally, both the physical and mental workload has increased significantly, where care home employees reported high workloads, conscience-related stress, high rates of sick leave, and burnout. Szebehely et al. (2017) revealed that the number of residents a care home employee must assist has increased gradually from around four residents in the 1980s to six or seven residents in the 2000s. Assistant nurses must now care for almost 13 residents. When someone has burnout from their job, they are no longer interested in making a positive contribution, as their daily job demands begin to exceed their personal and job resources (Roiguez-Muñoz et al., 2014). In that case, the healthcare workers in care homes will intend to leave their job, which will increase the workload and work complexity of care homes (Broetje et al., 2020; Fochsen et al., 2006).

A study by Sjöberg et al. (2020) found that assistant nurses with a high workload had a lower quality of life than those with a normal workload in Sweden. This study suggests that interventions aimed at increasing social support could reduce work-related illness. Moreover, organizational conditions creating demands and resources appear to play an important role in the high turnover. Poor organization of work, working conditions, and social work climate were found to be factors predicting an assistant nurse's intention to leave their profession (Sjöberg et al., 2020). Similarly, a study by Eriksson et al. (2021) found that job demands predicted an assistant nurse's intention to leave their job in Sweden. The study

revealed that physical and mental workload has increased significantly in Sweden due to poor working environments.

During COVID-19, assistant nurses were placed amongst the high-risk groups for acquiring this infection since they have close physical contact with residents exposed to it (Kabir et al., 2020). Assistant nurses were helping residents and performing their tasks without personal protective equipment during the pandemic. Poor working conditions such as these psychologically affected most assistant nurses. Furthermore, they experienced mental health problems associated with their occupational activities during the pandemic. Moreover, they reported suffering from anxiety, depression, insomnia, burnout, and post-traumatic stress (Kabir et al., 2020).

2.4. Theoretical framework

The author will use and apply the job demands-resources (JD-R) model. The aim of this study led to selecting and applying the JD-R model. The JD-R model proposes two main pathways, linking high job demands to strain and linking job resources to motivational outcomes such as work engagement (Bakker & Demerouti, 2007; Demerouti et al., 2001). The model's components will use to discuss the findings from this study regarding the issue-related job demands and job resources of assistant nurses working in care for older people during the pandemic.

2.4.1. Job demands-resources model (JD-R model)

Demerouti et al. (2001) developed the JD-R model to study and address workplace characteristics to determine negative and positive factors of well-being at work. This model is classified into two general categories: job demands and job resources. The first category, job demands, refers to the physical, mental, social, and organizational factors of the work that require sustained physical and mental effort (Bakker & Demerouti, 2007). For instance, high emotional demands, high work pressure, an unfavourable physical environment, and conflicts with clients may exhaust employees' psychological and physical resources. While job demands are not necessarily negative, they create job stressors. A combination of these demands requires high energy that the employee may not possess (Bakker & Demerouti, 2007).

The second category, job resources, refers to the physical, mental, social, and organizational factors of the work that are instrumental in achieving work goals and reducing job demands as well as the related physical and mental efforts. Furthermore, job resources stimulate and foster employees' growth, knowledge, and development (Bakker & Demerouti, 2007). As such, job resources are necessary to address job demands. They are also important, as they fulfil fundamental needs, including autonomy, feedback, and competence (Bakker & Demerouti, 2007; Heijden et al., 2019). Furthermore, job resources are useful at the organizational level. They comprise social relations, including support and team climate, and

the organization of work, such as decision-making participation and role clarity (Bakker & Demerouti, 2007).

Moreover, this model is built on two fundamental psychological processes that play important roles in developing job strain and motivation (i.e. job demands and job resources). The first underlying process is the health impairment process, comprising chronic or poorly planned job demands, such as emotional demands and work overload, where too high job demands exhaust the mental and physical resources of the employee and may consequently result in health problems and exhaustion, which eventually leads to them quitting (Bakker & Demerouti, 2007; Heijden et al., 2019). The second underlying process of the model is motivational. It comprises job resources with potential motivational value that lead to positive work outcomes, including high job performance and work engagement. Moreover, job resources have either intrinsic value because they foster an individual's growth, learning, and development or extrinsic value because they are useful in achieving work goals (Bakker & Demerouti, 2007; Heijden et al., 2019). Processes created by job demands and job resources occur concurrently, not sequentially (Bakker & Demerouti, 2007).

The JD-R model has been applied to healthcare workers since job stress and job satisfaction in healthcare workers are correlated. Furthermore, Sverke et al. (2017) stated that excessive demands in combination with limited resources at work are usually related to lower job satisfaction and lead to reduced work performance and poorer physical and mental health. A study by Adil and Baig (2018) showed that the JD-R model impacts employees' well-being and that lack of balance could produce burnout. They emphasized that this model includes variables such as workload, work imbalance, time pressure, autonomy, and feedback, similarly to the original model (Bakker & Demerouti, 2007). Increased workload and reduced autonomy as well as imbalanced work life showed a significant negative impact on employees' well-being (Adil & Baig, 2018).

Moreover, Heijden et al. (2019) were guided by the JD-R model in their study. They conducted a longitudinal study of registered nurses to investigate whether the model's variables impact nurses' health and work performance. They identified that emotional and physical demands appeared to increase perceived effort levels, as increased stress resulted in higher burnout. Moreover, they identified that quality of leadership, developmental opportunities, and social support from supervisors and colleagues increased work performance and the meaning of work, decreasing burnout levels. A study by Bakker and de Vries (2021) used the JD-R model to address how acute job strain causes enduring and severe job burnout. The study identified that when the job becomes more stressful, stable resources become more important. Furthermore, organizational resources such as healthy leadership and human resource practices may assist staff in controlling their short-term fatigue and avoiding enduring burnout.

Additionally, a study by Broetje et al. (2020) summarizes the scientific literature on working conditions of nursing staff applying the JD-R model to identify the key job demands and job resources. They identified three key job demands and six job resources of nursing staff: work overload, lack of formal rewards, work-life interference, supervisor support, fair and authentic management, transformational leadership, interpersonal relations, autonomy, and

professional resources (Broetje et al., 2020). Accordingly, these findings were similar to the previously published reviews consistent with the JD-R model. Therefore, the JD-R model was suitable for investigating the experienced working conditions and mental health of assistant nurses during the COVID-19 pandemic.

2.5. Problem formulation

Assistant nurses face substantial challenges. They have been found to experience significant strain at work related to high workloads, emotional demands, understaffing, or shift work. Furthermore, numerous studies have shown that physical and psychological workloads have increased significantly for assistant nurses in Sweden. Moreover, increased physical and emotional workloads negatively affect individuals' health. Sjöberg et al. (2020) found that assistant nurses with a high workload had a lower quality of life than those with a normal workload. Moreover, Eriksson, Jutengren, and Dellve (2021) found that job demands predicted assistant nurses' intentions to leave their jobs in Sweden. However, since the COVID-19 pandemic started, the psychological and emotional demands have increased, where studies investigating job demands and job resources for care home workers during the pandemic are still lacking. Therefore, this study will fill the scientific gap concerning assistant nurses' mental health and working conditions in Sweden. Using a qualitative approach to explore assistant nurses' work experiences during COVID-19, the study will contribute to the current work to increase social support at work and better understanding of working conditions, which could help to reduce work-related ill-health.

3. AIM OF THE STUDY

This study aimed to explore how assistant nurses in care homes experience their working conditions and mental health during the COVID-19 pandemic.

Research questions

- How do assistant nurses experience demand at work during the pandemic?
- How do assistant nurses experience resources at work during the pandemic?
- How do assistant nurses feel that their mental health has been affected during the pandemic?

4. METHODS AND MATERIALS

This section presents the methodological approach, participants, data collection, data analysis, and ethical considerations. The applied analysis is further illustrated in Appendix C.

4.1. Methodological approach

The study aimed to explore the experiences of assistant nurses working in care homes, regarding their working conditions, and mental health during the COVID-19 pandemic. Therefore, a qualitative research method with an inductive approach was considered most appropriate as the study focuses on participants experiences. A qualitative approach defines as an inquiry process in which a researcher deeply explores, understands, and interprets social phenomena within their natural setting (Creswell & Creswell, 2018). Furthermore, a qualitative method aims to achieve a broader understanding, where participants produce answers concerning aims and research questions (Kvale & Brinkmann, 2009).

4.2. Participants

A purposive sampling method was used to recruit participants to the study. According to Bryman (2018), purposive sampling is directly referenced to the research question being asked. It selects participants relevant to the aim and research questions of a study. Thus, this study was initiated by selecting study participants with relevant experiences related to the research problem. These participants were assistant nurses working in care homes in Sweden. The inclusion criteria for selecting participants were 1) assistant nurse, 2) working in care homes in Sweden, 3) worked during the COVID-19 pandemic with residents exposed to the infection.

In practice, the sampling process was based on a snowball method of recruiting and selecting participants. The snowball method is explained as a sampling method where a researcher identifies one or two people they would like to participate in their study and relies on them to help identify more study participants (Creswell & Creswell, 2018). The author identified two assistant nurses who had worked in care homes for more than 10 years. These two assistant nurses had different social networks and referred the author to relevant individuals (i.e., assistant nurses). Referred individuals were contacted via Facebook and e-mail by the author using an information letter (Appendix A). The selection of participants was based on the above criteria, pursuing variation regarding their age, gender, and duration of their work experience to attain different experiences from a diverse group of people.

In total, 30 assistant nurses working in care homes in Sweden were contacted. All individuals were sent an information letter written in Swedish. Moreover, the written form presented the purpose of the study, ethical considerations, and further contact details if needed. The written document allowed the participants to read and understand their rights and indicate their willingness to participate in the study. Eight assistant nurses were recruited for individual interviews, and all participants were female, aged 27–50 years. Moreover, their work experience as assistant nurses ranged from 8–20 years, and they worked during the pandemic, with their workplaces located in different cities in Sweden. The care homes for older people in which participants worked were both private and municipality-provided services. Moreover, these care homes were both large and small, with approximately 35–65 flats each.

4.3. Data collection

Semi-structured interviews with the eight assistant nurses were conducted to collect data and help explore the study objectives. A semi-structured interview is a dialogue that allows suggested questions based on themes. This data collection method is useful for obtaining depth in answers, where the interviewees can speak freely and bring new ideas to the interview (Kvale & Brinkmann, 2009). Additionally, an interview guide was created to structure the interviews (Appendix B). The interview questions were categorized into three themes: i) work demands during the pandemic, ii) work resources during the pandemic, and iii) the impact of COVID-19 on the mental health of assistant nurses. These themes were created based on the aims and research questions of the study.

Before the data collection, a pilot interview was performed with an assistant nurse who had experience in working in care homes. After performing the pilot interview, a few concepts and sentence structures were modified to improve understanding of the interview questions. One question was deleted from the interview questions due to its similarity to other questions. Due to the COVID-19 circumstances, the interview was based on the distance between the participants and the author and conducted digitally through video call via Skype and Zoom meetings. Additionally, the author was located in her home setting during each interview, while each participant was located at a personally chosen settings. All participants were interviewed for 25 to 40 minutes; the median length of the interviews were 32 minutes. Each interview was separately recorded, transcribed verbatim, and later coded before being labelled with the corresponding unique interviewee number (IP1-IP8). Moreover, the interviews were conducted in Swedish, transcribed in Swedish and the quotes presented in the result part were translated into English.

4.4. Data analysis

The transcribed interviews were analyzed using thematic analysis with semantic approach, which Braun and Clarke (2006) explains as a method for analyzing, finding, and reporting themes or patterns within data. Thematic analysis is useful because it provides a flexible and useful analytical tool that easily organizes and describes a data set in detail (Braun & Clarke, 2006). Furthermore, an inductive approach was used when data were analyzed. An inductive approach is explained as identifying themes that are strongly related to the data. Accordingly, it is a process of coding the data without attempting to fit it into a pre-existing coding frame or analytical preconceptions of the researcher (Braun & Clarke, 2006).

Braun and Clarke (2006) provide an outline guide to the six analysis phases as follows: "These six phases of thematic analysis are 1) familiarizing yourself with your data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes and 6) producing the report" (Braun & Clarke, 2006, p. 86-87). In this study, the phases were followed starting with reading and rereading actively the transcribed data by the author to reach familiarity with all aspects of data and search for meanings and patterns. The author read and keenly scrutinized the transcribed data. This involved checking the transcript against the original audio recordings for accuracy. Close attention to transcribing data may facilitate the close reading and interpretative skills required to analyze it (Braun & Clarke, 2006).

After becoming familiar with the data and generating an initial list of ideas concerning its contents, production of initial codes from the data commenced. The analysis process was conducted systematically through the entire data set by giving full attention to each data item to identify aspects in the data items that may form the basis of repeated patterns across them. The extraction involved using highlighters to indicate potential patterns. Thereby, the different codes identified across the dataset were listed in a computer file.

After all data were initially coded and collated, the different codes were sorted into potential themes, and all the relevant coded data extracts within the identified themes were collated. Braun and Clarke (2006) argue that at this point, it is uncertain whether the themes hold as they are or whether they need to be combined, refined, and separated, or discarded. At this stage, some initial codes were used to form main themes, whereas others formed subthemes, and others were discarded. Finally, candidate themes, subthemes, and all data extracts coded in relation to them were collected.

After devising candidate themes, two steps were followed to review and refine themes recommended by Braun and Clarke (2006). Firstly, the author reviewed at the level of coded data extracts by reading all the collated extracts for each theme and considered whether they appeared to form a coherent theme. Secondly, the validity of individual themes in relation to the whole data set was considered to assess whether the candidate themes accurately reflected the meanings evident in the data set as a whole. Finally, it became evident that some of the candidate themes were not strictly themes since they had insufficient data to support them. Other themes were collapsed into each other while others were separated into separate themes.

After reaching satisfactory themes, the next step was defining and refining themes by checking how they fitted into the overall story describing the data in relation to the research questions to ensure minimal overlap between themes. As part of the refinement, the author also checked whether a theme contained any subthemes, which were identified according to their usefulness in providing structure to some of the broad and complex themes. After the refinement process, the final initial themes and subthemes were identified. For increased workload and organizational problems, the subthemes were “work overload” and “lack of organizational resources”; for support and communication issues, the subthemes were “colleagues as a main motivational factor”, ”lack of utilized support” and “communication challenges”; for psychological consequences, the subthemes were “work-related stress and exhaustion” and “ feeling fear and need to protect their families lives”. A set of fully identified themes was produced, and the final analysis is presented in the results chapter, where the author has provided sufficient data extracts to show the occurrence of the theme, as well as in Appendix C. At this step, the analysis was partly theory-driven using the JD-R model and the study’s research questions (i.e. demands and resources).

4.5. Research ethics

Bryman (2018) writes that when performing scientific research involving people, researchers must assess its ethics, and each participant has legal rights that must be considered. In that regard, this study considered four basic ethical principles consistent with the requirements set by the Swedish Research Council (2017). The four guiding principles are information requirement, consent requirement, confidentiality requirement and utilization requirement (Swedish Research Council, 2017).

The first principle was the information requirement. This indicates that the researcher must inform participants about the purpose of the study, their tasks in the study, and their right to withdraw at any time without giving any reason and without any negative consequences (Swedish Research Council, 2017). This aspect has been followed in the study by sending an information letter to all contacted individuals. The received letter contained the overall aim of the study and a clear description of the information requirement. Moreover, the participants’ information about their right to withdraw at any time for any personal reason was presented in the letter.

The second principle was the consent requirement, which focuses on consent (Swedish Research Council, 2017). This was followed by handing material to every contacted individual, where they could consider further participation and receive sufficient information before participating (see above). Moreover, the author collected oral consent from the participants before conducting the interviews.

The third principle was the confidentiality requirement, which indicates that all participants must be treated with the greatest possible confidentiality; the collected material and personal data must be stored so that outsiders cannot access it (Swedish Research Council, 2017). This has been considered through keeping collected material strictly confidential, where the interviewees were made unidentifiable, and names were dissociated from the research

material by coding all included participants as IP1–IP8. Additionally, no one outside the study team, which comprised the author, supervisor, and examiner, could access the collected material, and unidentified data will be erased after the completion of this study. Moreover, the participants' workplaces were not mentioned in this study to respect their work role and preserve their anonymity.

Finally, the fourth and final ethical requirement raised was the utilization requirement, which indicates that the collected data may only be used for the purpose of the study (Swedish Research Council, 2017). This aspect has been followed by declaring that collected material will only be used for this study, and the material will be deleted when this study is completed and approved. Furthermore, the participants were informed that this thesis will be published in the database, DiVA at Mälardalen University after completion of the study.

5. RESULTS

This chapter presents main themes and subthemes that have emerged in the analysis. The results are presented as a coherent narrative on the collected data and provides a visual representation of themes and subthemes by presenting quotes expressed by the participants.

5.1. Increased workload and organizational problems during COVID-19

In the following theme, findings from the collected data concerns the job demands of assistant nurses in care homes during the COVID-19 pandemic, are presented. This is achieved by describing two relevant subthemes: work overload and lack of organizational resources.

5.1.1. Work overload

One of the most important factors that participants mentioned during the interview was excessive workload, which appeared demanding. Participants expressed that they had too much work to do within a limited time. The participants highlighted that they were working longer hours and had an increased workload during the pandemic. They performed excessive tasks during their working hours, as they had to handle excessive demands on their cognitive and emotional skills. Furthermore, participants explained that they had to protect the residents and themselves from the infection by performing additional hygiene routines and wearing personal protective equipment (PPE) for prolonged periods.

> "I feel that there is a lot of tasks to do during the pandemic … I feel stressed … I do not have time for everything I should do during my work shift … There is not enough time." -IP5

> "During the pandemic, more demands were increased, so we were understaffed … we did not have time for everything that were demanded … and in general, the work environment became bad, insecure …" -IP6

The work role of an assistant nurse in care homes is characterized as performing excessive tasks and prolonged work shifts. These tasks must be completed within a given time, and workers do not have the opportunity to recover, which resulted in stress fatigue and psychological exhaustion. Work overload included time pressure, unclear tasks, and work difficulty, and these aspects increased throughout this period. The increased demands at work led to mental and physical exhaustion and might result in many health problems for assistant nurses in care homes.

5.1.2. Lack of organizational resources

Lack of organizational resources were related both material and human resources that all countries affected by the virus are facing. Participants in this study experienced a lack of PPE during the first phase of the pandemic, which increased virus transmission. The participants described that more assistant nurses were becoming infected due to not having adequate PPE or having to reuse single-use PPE many times. However, these high numbers decreased considerably when adequate protection steps were applied. Additionally, the participants described that there was lack of human resources, mainly related to two elements: sick leave due to the virus, which was directly linked to inadequate PPE, and saturation of the organization, as the organizations previously had insufficient staff. Therefore, the current job demands were difficult to meet due to having insufficient human resources. Participants also mentioned the difficulties when some residents were unaware of COVID-19 rules, such as isolation and social distancing. The most necessary resource was additional staff.

> "Right now, we have enough protective equipment in our place, but there was a time we did not have enough equipment; we were forced to help residents with the same face mask as a whole day." -IP8

> "During the COVID-19, a lot of demands has increased; if someone become sick, then they should stay at home little bit longer than before, which causes understaffing in care home centre; it was hard to find staff during the COVID-19" -IP3

> "When we have someone who get symptoms now, we need extra personnel to take care of that person and keep them inside their room until we get the result (negative or positive) ... If we do not have enough staff, then we may risk not doing good quality work." -IP4

Lack of organizational resources, such as the PPE shortage and understaffing, increased transmission risks in care homes for assistant nurses, residents, and other household members. Moreover, lack of these resources increased emotional and physical demands, increasing the risk of increased fatigue and stress in assistant nurses in care homes.

5.2. Support and communication issues

This theme addresses the job resources that assistant nurses experienced during the pandemic. Three relevant subthemes emerged from the analyzed material. The first revolves around support from colleagues. The second subtheme emphasizes the shortage of utilized support, such as support from managers, and the third subtheme involves communication aspects.

5.2.1. Colleagues as a supporting and motivational factor

According to the participants' opinions, social support can be both practical and emotional support at work. The most commonly described protective factor associated with reduced

risk of mental health problems was having social support from colleagues, which contributed to a sense of resilience in participants. Participants expressed that they worked in a team and handled the tasks together. They also felt that they were receiving practical and emotional support at work from their colleagues. This was why many participants continued to work every day. The inspiration and motivation within the assistant nurses influenced and stimulated their work behaviour during the crisis.

> "I experience that I get support from my colleagues, we inform each other, we ease each other, we help each other ... you sometimes have to work overtime or stay at work so that your colleague does not work alone ... So, in that way we usually support and help each other" -IP8

> "We don't have the support we used to have now ... there is some kind of motivation like, you guys can do this and that, kind of encouragement ... I hear many times that I do a good job, and I have to keep on it, we will fight together with this COVID-19 and so on ... that is emotional support from each other ... that is what we got during the pandemic."-IP4

Supportive and appreciative relations between colleagues were apparently a protective factor for psychological problems. These contributed to a positive work climate and made social interactions as resources at work, as participants highlighted. Practical support, such as handling tasks together, and emotional support, including feedback and appreciation, is particularly important and useful for improving participants' mental health. This may help to reduce the negative impact of the workplace and work-related stress. Additionally, working in groups provides opportunities for giving and receiving feedback and criticism, contributing to a better performance.

5.2.2. Lack of utilized support

The participants in this study expressed that the manager plays a significant role in motivating and inspiring employees at work. However, most participants in this study described that they did not feel supported by the management. They did not receive regular social support. Instead, they felt ignored by management, leading to frustration. Although social support is considered as an important factor in care homes, many participants explained that the social network at their workplace had reduced due to COVID-19. Each team of two people was forced to stay in their wards, and even these two people could not sit beside each other.

> "We did everything ourselves, adjusted our work to take care of the residents ... The manager should have prioritized us because we worked with older people ... Now we can manage things well ... but it was very difficult in the beginning of the pandemic" -IP3

> "Corona has affected the social networks quite badly ... one cannot sit next to each other and relieve each other when needed ... even it's not the same smiles in the corridor any more, when we meet, people are exhausted, people just want to go home right after work, it's not that you stand and talk any more" -IP7

Regarding managerial support, employees can gain confidence and understanding if the manager is supportive and encouraging. However, employees who did not receive support from their manager experienced a higher workload, which was likely to cause stress that could negatively affect their mental health. Accordingly, support from managers should reduce the quantitative demands on assistant nurses and increase the developmental opportunities available to support them during the pandemic.

5.2.3. Communication challenges

The participants in this study perceived communication as an important resource in care homes. However, COVID-19 was accompanied by several communication challenges for assistant nurses in care homes. Such problems include lack of communication from managers and team members; participants did not receive clear information concerning tasks from each other or their supervisors or managers. Lack of work meetings due to COVID-19 was another communication problem. Assistant nurses did not have the opportunity to improve their working routines and structure through discussion. Feedback from their managers and accessing necessary information were important to the participants during the pandemic. Moreover, participants highlighted that no verbal reports occurred between day and night team assistant nurses, which affected the work routine, including providing quality care to the residents and achieving structure and predictability. Another common challenge during this period was an increase in difficult conversations with residents, as the need for PPE and social distancing accentuated these difficulties.

> "The COVID-19 has destroyed everything at our work ... there was no structure at work, we did not have clear tasks ... poor communication between managers and employees ... before the pandemic, we had work meetings once or twice a month to communicate, discuss, and improve work routines and work structure. During the pandemic, everything disappeared." IP5

As a result of the COVID-19 pandemic, various communication challenges within the teams in care homes showed. Therefore, team members felt less connected. This led to a loss of solidarity and depersonalization among team members. Moreover, lack of feedback, unclear tasks, and inadequate information from managers may lead to a high emotional workload and a less productive workforce.

5.3. Psychological consequences during COVID-19 pandemic

This theme relates to mental health aspects and concerns the psychological consequences of COVID-19 for assistant nurses. Two subthemes emerged from the analyzed data: work-related stress and exhaustion, and feeling fear and a need to protect their lives and families, which are presented in the following section.

5.3.1. Work-related stress and exhaustion

Assistant nurses in care homes described that they experienced a range of challenging emotions and psychological difficulties. Increased workload and changing working conditions were the most important factors creating these difficulties. Fatigue and exhaustion were commonly described by participants throughout this period, as these problems related to working longer hours with an increased workload. Other participants expressed that they felt sad and guilty concerning residents, as the physician decided to give palliative rather than curative care to those residents who tested positive for COVID-19. Some participants describe that they were extremely upset by this, and that it had negatively affected their psychological well-being.

> “You just become quite tired … I feel like work has taken over my whole life … I am exhausted … my routine end up just wake up, go into work and stay in care home for 12–31 hours, go home and eat something, go to sleep … then wake up and then go to work again … I find that really impact me” -IP1

5.3.2. Feeling fear and need to protect their lives & families

Most participants in this study described that they experienced worry about being infected by the disease, as some staff members disappeared because they were afraid of the disease, and some others in high-risk groups did not dare to come to work. Moreover, a common concern for participants was ongoing worry about family due to fear of transmitting the virus to them since participants had an increased risk of catching the virus at work. Moreover, participants described taking additional measures to protect their families. Uncertainty and insecurity for assistant nurses due to not knowing whether their PPE protected them adequately were also expressed; this generated feelings of fear and insecurity. Consequently, worrying about family members being infected was a risk factor for psychological health problems.

> “Every time when I go home, I was thinking of every step I took at the care home … I couldn’t sleep well as everything I did had a risk of contamination and it was very difficult to avoid the virus … every time when I come home, I was developing symptoms … I felt feverish … I had diarrhoea … I felt now I have the virus … all the organs inside me was burning … but then I realized that was my emotional feelings.” -IP2

> “When I come home, I couldn’t have a giant hug from my husband … I knew it was impossible since I was more at risk to catch anything at work … so I slept on the couch at living room during the whole pandemic.” IP5

Furthermore, participants experienced many routines being introduced by the municipality throughout the period, which they did not always agree with. Such routines caused frustration, fear, and insecurity for workers.

> “At the beginning, if someone is affected by COVID-19, he has to stay 14 days at home now; lately, it has shortened to 7 days … and then to 4 days. I also heard that some people were told to come back to work after 4 days, and working with their symptoms, I was like, why? It feels

> like unsaved; I have to be careful, wear the face mask the whole day; it is very scared. The restrictions are crazily changing" -IP4

One of the most psychological and emotional consequences the pandemic generated was fear, which is an emotion that allows individuals to react to something considered to threaten their physical and psychological well-being. Fear might increase the risk of developing high stress levels, anxiety, panic disorder, and post-traumatic stress disorder (PTSD). Assistant nurses were more vulnerable to the psychological effects of the pandemic than other groups of the population since they were at risk of exposure to the virus by caring for residents affected by it. Moreover, shortage of PPE, longer work hours, and concerns about infecting and caring for their families were factors that might increase psychological illness during the pandemic.

6. DISCUSSION

6.1. Method discussion

6.1.1. Methodological considerations

This study aimed to explore assistant nurses' experiences concerning how COVID-19 impacted their working conditions and mental health throughout the pandemic. Since the aim was to explore and study a phenomenon, a qualitative method with an inductive approach was used. Using a qualitative research method to study assistant nurses' perspectives is appropriate as this method provides the ability to answer questions about how or why a particular phenomenon occurs (Creswell & Creswell, 2018; Kvale & Brinkmann, 2009). Therefore, a qualitative method was considered suitable for attaining a deeper understanding of the topic, which is a strength of the method. However, a possible limitation described by Bryman (2018) is the generalizability of qualitative findings due to the small number of participants. However, this study aimed not to generalize the results but to provide a deeper understanding of working conditions and mental health during the pandemic.

A purposive sampling was used to select participants with knowledge and experience relevant to the study aim. The practical recruitment was conducted using snowball sampling and eight assistant nurses working in care homes in different cities were recruited and selected to address the study aim and enrich understanding of the issue. This might be one of the limitations of this study since sample limitation occurred. This study planned to recruit 10 participants at the beginning of the data collection where almost 30 assistant nurses in care homes were contacted. However, eight participants were finally included due to difficulties in recruiting participants within the limited time frame. Participant selection was based on

variation in work experience and age, which is considered a study strength. Graneheim and Lundman (2017) explains that selecting study participants with various experiences can increase the possibility of attaining different perspectives concerning the aim of a study. This study included participants who had different experiences of working as assistant nurses, and they also worked in care homes caring for residents infected by COVID-19. Furthermore, the included participants in this study were females, which reflects that working in elderly care is dominated by women as several studies highlighted, that most assistant nurses in care homes are females and the work in elderly care is built and developed by women.

Semi-structured interviews were performed using an interview guide with prepared questions to collect data and address the study aim. This interview guide facilitated structuring interviews and analysis, as it was based on the study aim. Before the data collection, a pilot interview was conducted with an assistant nurse with experience of working in care homes. After performing a pilot interview, some interview questions were modified to improve comprehension of the questions. Thus, a pilot interview is considered a strength, as it ensures the trustworthiness of the interview questions and improves the quality of the study. The digital interviews, especially via Zoom, were considered a useful tool for collecting qualitative data because of Zoom's relative ease of use, data management features, security options, and cost-effectiveness (Archibald et al., 2019). Therefore, despite the COVID-19 difficulties, this helped the author collect data in an easy, manageable, and cost-effective way. However, a limitation arose from technical difficulties, as some interruptions occurred due to poor internet connection. This affected the interview quality to a small extent since one participant had several internet connection disruptions. However, this participant was asked to repeat the meaning of a context to avoid losing part of the interview.

The collected data were analyzed by using thematic analysis with semantic approach. This type of analysis is useful since it provides a flexible and useful analytical tool, and it is easy to organize and describe a data set in detail (Braun & Clarke, 2006). The main focus of thematic analysis is to present themes concerning collected data, as it fits a large amount of data. This is consistent with this study because of its large amount of transcribed text with both short and more extensive statements. The researcher is an important tool in identifying the answers to the aims and research questions from participants' responses to achieve a wider understanding of the topic. In this case, the researcher must have sharpened senses for interpretation during the whole research process (Braun & Clarke, 2006).

Braun and Clarke (2006) provide a clear outline guide based on six analysis phases. However, these phases do not represent a linear process of moving from one to another. They represent a more recursive process where the author must move back and forth throughout the phases, as applied during this study. Thematic analysis is not a complex method, which is an advantage. However, a disadvantage relates to inappropriate research questions rather than on the method itself or poorly conducted analyses. Data analysis has been challenging and time-consuming, as the author has not previously analyzed qualitative data, which may be considered a study limitation. Moreover, due to the flexibility of the method, a disadvantage is that it makes "developing specific guidelines for higher-phase analysis difficult and can be potentially paralysing to the researcher trying to decide what aspects of their data to focus on" (Braun & Clarke, 2006, p. 97). Thus, the author of this study set

boundaries and used the study aim as a guideline during the data collection and data analysis.

Themes and subthemes were formed by extracting relevant codes from the collected data, and the credibility of themes was considered in relation to the whole data set, as it was discussed by external people. Moreover, the identified subthemes were useful for structuring some large and complex themes. The accuracy of the themes and subthemes was ensured by providing sufficient evidence from the material collected from the participants, which is considered a strength of this study. However, some difficulties may occur when creating themes because the work environment is complex and job demands and job resources are linked and interact to each other. In addition, themes and sub-themes were initiated from the collected data and subsequently discussed in relation to the JD-R model. The analysis was not solely inductively done rather than it was partly theory-driven when addressing and identifying the issue-related job demands and job resources of assistant nurses in care homes.

6.1.2. Quality criteria of this study

According to Bryman (2018), four criteria are broadly used to assess the trustworthiness of qualitative research. These criteria are credibility, dependability, transferability, and confirmability. In this study, quality assurance was conducted during the entire study process. The criterion credibility concerns the aspect of truth-value and can be attained by selecting participants who can provide in-depth aspects of the study aim. Creswell and Poth (2018) argue that seeking participants' feedback is the most crucial way to create credibility by allowing participants to determine the accuracy of the research findings, enhancing the validation process. Nevertheless, seeking participants' feedback was not possible due to the limited timeframe. Furthermore, the interview guide questions were based on the study aim and research questions. According to Graneheim and Lundman (2017), this can enhance credibility when selecting a suitable data collection method. Additionally, a pilot interview was conducted before the actual interviews occurred. Thereafter, interview questions were modified to enhance understanding of the concepts, enhancing the interview quality.

When conducting thematic analysis, some candidate themes were discarded, as they had insufficient data to support them. Other themes were collapsed into each other while others needed to be divided into separate themes. Braun and Clarke (2020) explain that it is crucial to list themes (table of themes) in the report, which this study included. The emerged themes were assessed appropriate to the purpose of the study. Moreover, the accuracy of interpreting themes was confirmed by presenting quotations from participants' statements, which Graneheim and Lundman (2017) also emphasize as increasing credibility. Additionally, the author has constantly checked the interview questions and assessing whether the result addressed the study aim, which enhance the study's credibility.

Dependability is the second criterion and includes consistency: the researcher must present the research process clearly (Bryman, 2018). The researcher is responsible for describing the research steps, from the beginning of the research project to the development, and finally reporting the results. This enables the reader to examine the transparency of the research

path (Bryman, 2018; Creswell & Poth, 2018). This criterion was considered by constantly striving for a clear research process, including the analysis, and carefully documenting the study process in as much detail as possible through selecting and developing methods and results. This was achieved through a “research diary”, where limitations and difficulties were also documented. This, in turns, helped the author to write a clear method process, which is also crucial for dependability.

Transferability is the third quality criterion and concerns the aspect of applicability. The researcher must provide a thick description of the participants and the research process. This helps the readers to examine whether the research findings are transferable to another context (Bryman, 2018). This criterion was addressed by providing a rich account of descriptive data in the methodology, such as the research context, purposeful sampling and participant characteristics, interview procedure, and interview guide. Furthermore, the participants were from different cities in Sweden. Even though the organizational conditions may differ from year to year, the results from this study are assessed to be transferable to similar situations and contexts.

Confirmability is the last criterion; this concerns the aspect of neutrality, as the inter-subjectivity of the data must be secured (Bryman, 2018). Furthermore, the interpretation should not be based on the researcher’s own interests and viewpoint. Instead, it should be grounded in the data. In this aspect, the focus is on the interpretation process rooted in the analysis (Bryman, 2018). This criterion has been applied, as the recorded data were transcribed verbatim to avoid including the author’s interpretation and personal values in the results. Even though the data analysis has been partly challenging, the author has strived to report data consistent with the participants’ terms and their views of points related to the study issue.

6.1.3. Ethical considerations

As mentioned in the method chapter, this study considered four basic ethical principles consistent with the requirements of the Swedish Research Council (2017). The first principle was the information requirement. This was met by sending an information letter to all contacted individuals. The written document included the study aim and rights concerning participation. These aspects were repeated verbally before the interview occurred when obtaining oral consent from participants. The confidentiality requirement was considered by making the collected material unidentifiable and storing it on a computer requiring a password to prevent unauthorized people from accessing the collected data. Finally, the utilization requirement was considered by using the collected data only for this study. Moreover, transcripts and audio files will be deleted when the study is completed and approved.

When recruiting the study participants, many assistant nurses in care homes were contacted. However, few of them chose to participate in this study. This might be because COVID-19 is perceived as a sensitive issue, and some people either want to be loyal to their employer or are afraid of being perceived as disloyal or suffering reprisals if they allow themselves to be interviewed.

6.2. Result discussion

This study aimed to explore how assistant nurses in care homes experience their working conditions and mental health during the COVID-19 pandemic.

In accordance with the study aim, this study's findings highlight increased work demands during the COVID-19 pandemic, as work overload and lack of organizational resources were described by the participants. Furthermore, the results show that social support from colleagues was described as the main support and motivational factor. However, lack of managerial support and communication challenges were common elements that most participants experienced during the pandemic. Finally, the pandemic generated psychological fatigue and exhaustion in assistant nurses in care homes, which were directly related to increased workload during the pandemic and fear of being exposed to contracting COVID-19.

6.2.1. Result discussion related to previous studies and the job demands-resources model (JD-R model)

This section critically examines the job demands and job resources assistant nurses experienced during the pandemic, as well as the psychological consequences the pandemic generated, in relation to previous studies and the JD-R model. As noted previously, the JD-R model discusses two fundamental psychological processes that play important roles in developing job strain and motivation: job demands and job resources. Thus, the first underlying process includes poorly planned job demands, such as emotional demands and work overload, whereas the second underlying process comprises job resources with potential motivational value leading to positive health and work outcomes (Bakker & Demerouti, 2007).

The content of the JD-R model was well reflected in responses derived from the participants in this study. It was clarified that all participants were concerned about the excessive workload as demanding to handle during the pandemic. They could not meet demands due to limited time, and they lacked sufficient resources to meet them. The workload was expressed as performing an excessive number of tasks within a limited time, and the participants needed to cope with excessive demands on their cognitive and emotional skills. This is consistent with the first component of the model, the health impairment process. The work role of an assistant nurse in care homes involves performing excessive tasks and prolonged work shifts, which resulted in stress, fatigue, and psychological exhaustion in assistant nurses. These findings are consistent with previous research, as they indicate how mental and physical ability worsens when demands become excessive, reducing job satisfaction and productivity (e.g., Adil & Baig, 2018; Sverke et al., 2017.

During the first phase of the COVID-19 pandemic, the Government of Sweden was mainly focused on voluntary measures (physical distancing), with few other actions to address the high mortality rates (Coronacommissionen, 2020). Moreover, the Swedish strategy to COVID-19 was different to those of many other neighbouring countries. This has been criticized and praised (Coronacommissionen, 2020; Ludvigsson, 2020). Facemasks and face shields were not recommended for staff in care homes for older people. This contrasted with

the WHO recommendations, as the availability of protective equipment was low in many care homes during the early pandemic. This led to excessive spreading of the virus in care homes in Sweden, with higher mortality among residents (Ludvigsson, 2020). Moreover, the assistant nurses worked on the frontline during the crisis, caring for residents exposed to the virus. The pandemic has affected them physically and mentally due to extreme COVID-19 exposure, resulting in increased sick leave within this target group. This increased psychological and emotional demands on assistant nurses working in care homes, which is also reflected in this study's results.

The results also show that lack of human resources (i.e., understaffing) was one of the common concerns of participants. This was generated by COVID-19, as many assistant nurses acquired the infection, whereas some disappeared due to fear of catching the virus. Lack of human resources increased emotional and physical demands. This increased the risk of fatigue and stress in assistant nurses in care homes. This finding is also consistent with the components of the JD-R model, where the study of Bakker and de Vries (2021) highlighted that organizational resources, such as human resource practices, may assist staff in controlling their short-term fatigue and avoiding enduring burnout.

Despite being exposed to high pressure related to time limitation and understaffing during the pandemic, the results show that participants received social support from their colleagues, improving their motivation and job satisfaction. Practical and emotional support from colleagues is particularly important and useful for improving participants' mental health (Bakker & de Vries, 2021). It may help to reduce the negative impact of workplace and work-related stress. However, the results show that the assistant nurses did not feel supported by management. They did not receive regular social support from their manager; instead, they felt ignored by management, which led to feelings of being overwhelmed. Most of the participants in this study did not feel the presence of their managerial leadership. They did not have communication and emotional connection with their managers, increasing feelings of loneliness, stress, and anxiety. That being the case, the findings from this study are consistent with the previous studies and the components of the JD-R model. Heijden et al. (2019) demonstrates the importance of quality leadership, developmental opportunities, and social support from managers and colleagues, as these factors increased work performance and the meaning of work, decreasing burnout levels.

The results show that lack of communication and unclear work tasks were issues for the participants. Several participants talked about the importance of communication from managers and within the team. A lack of work meetings and non-verbal reports due to COVID-19 were the main communication problems participants experienced. Moreover, participants describe that feedback from their managers and accessing necessary information were crucial for their work performance, and these were lacking. These findings are also consistent with the second component of the JD-R model, as job resources describe support and team climate, role clarity, and feedback (Bakker & Demerouti, 2007). Imbalance of work-life, such as increased workload and reduced communication and feedback, were factors that negatively impacted employees' well-being (Adil & Baig, 2018), which is also reflected in this study's results. Increased workload and reduced social support and communication

challenges were those factors that participants highlighted, which in turns affected participants' emotional and psychological well-being.

Expressed factors affecting participants' emotional and psychological well-being were increased workload and changing work conditions. The results show that such factors; work overlaod and reduced social support (support from the managers and communication challenges) caused emotional and psychological fatigue and exhaustion in assistant nurses throughout the pandemic, which is also consistent with the study of Broetje et al. (2020). These factors are consistent with the first component of the JD-R model, the health impairment process, which explains that a high number of emotional demands, high work pressure, and an unfavourable physical environment may exhaust employees' psychological and physical resources (Bakker & Demerouti, 2007). Moreover, these findings are consistent with previous studies, as researchers confirmed that the amount of sick leave of care home assistant nurses is considerably exceeded due to psychological illness (e.g., Bakker & de Vries, 2021).

The results of this study show that the pandemic generated fear. Numerous participants express that they were worried about being infected with the disease. Some assistant nurses describe that colleagues disappeared because they feared the disease, whereas others were in risk groups and decided not to work. Moreover, participants describe that they were worried about their families and experienced fear of transmitting the virus. Furthermore, the availability of PPE was low early in the pandemic (Ludvigsson, 2020), which is also reflected in this study. The study participants also mentioned uncertainty and insecurity due to not knowing whether the PPE protected them adequately. Being worried and fearful about their health and that of their families were factors that might increase psychological illness, such as high stress levels and anxiety. These findings can be classified as an emotional workload; assistant nurses exhausted their cognitive and emotional skills, which can be considered the first component of the JD-R model. Moreover, these findings are consistent with recent studies, as the researchers state that assistant nurses are at high risk of acquiring this infection since they have close physical contact with elderly people exposed to it (Kabir et al., 2020). Consequently, assistant nurses developed high stress levels and anxiety. It is also important to be aware of more long-term consequences for the staff in the future, such as developing depression, insomnia, and PTSD. Based on the findings from this study, the imbalance between job demands and job resources during the pandemic has been identified as lack of balance produced burnout and anxiety in assistant nurses. A healthy work environment with a balance between demands and resources is important to achieve good care for the elderly, which is also highlighted by the study of Bakker and de Vries (2021), when job demands increased, stable resources became more important.

7. CONCLUSIONS

- During the pandemic, assistant nurses in care homes experienced excessive workload and increased working hours. Demands placed on assistant nurses could not met due to limited time and lack of organizational resources, such as human resources.
- Assistant nurses in care homes highlighted that they received social support from colleagues during COVID-19. However, they did not feel supported by their managers. The participants also described communication challenges and a lack of feedback from the managers.
- Assistant nurses experienced emotional and psychological fatigue and exhaustion due to increased workload and changed working conditions during the pandemic. Moreover, the pandemic generated fear and worry concerning themselves, their families, and residents, which increased psychological illness, such as high stress levels and anxiety in assistant nurses.

7.1. Further research and relevance for public health

The participants in this study described numerous limitations and a few strengths concerning demands and resources at work, as well as the psychological consequences that the pandemic generated. Further research should focus on investigating organizational conditions, including well-functioning work organizations and implementing and evaluating organizational interventions, that reduce the increased workload and improve managerial support at work for assistant nurses. Factors like social support, specifically from their managers, clearer work tasks, and feedback also needs further investigation as being important for health and well-being and work performance.

This study is relevant to public health based on its findings: increased job demands and reduced job resources for assistant nurses, which increased psychological and emotional consequences during COVID-19. Moreover, as the study highlights the increased workload, insufficient PPE, and key stressors experienced by assistant nurses during the pandemic, it is important to assistant nurses, managers, and policymakers in Sweden. Therefore, this study recommends adaptable administrative and clinical routines for care homes to better prepare them to manage contagious diseases. Furthermore, interventions aiming to provide better social support, especially from the management, could be an effective tool for improving the psychological well-being of assistant nurses in care homes. This can be achieved by developing better organization where the managers in care homes have managerial responsibility for their employees. Due to the increased workload during the pandemic, managers are also recommended to reduce the workload as much as possible to prevent health implications and work-related illnesses.

REFERENCES

Adil, M. S., & Baig, M. (2018). Impact of Job Demands-Resources Model on Burnout and Employee's Well-Being: Evidence from the Pharmaceutical Organisations of Karachi. *Management review*, 30(2), 119–133. https://doi.org/10.1016/j.iimb.2018.01.004

Archibald, M., Ambagtsheer, R., Casey, M., & Lawless, M. (2019). Using Zoom Videoconferencing for Qualitative Data Collection: Perceptions and Experiences of Researchers and Participants. *International Journal of Qualitative Methods, 18*, 160940691987459. https://doi.org/10.1177/1609406919874596

Bakker, A., & de Vries, J. (2021). Job Demands-Resources theory and self-regulation: new explanations and remedies for job burnout. *Anxiety, Stress, and Coping, 34*(1), 1–21. https://doi.org/10.1080/10615806.2020.1797695

Bakker, A.B. & Demerouti, E. (2007), "The Job Demands-Resources model: State of the art", *Journal of Managerial Psychology, 22* (3), 309-328. https://doi-org.ep.bib.mdh.se/10.1108/02683940710733115

Baxter, R., Jemberie, W., Li, X., Naseer, M., Pauelsen, M., Shebehe, J., Viklund, E., Xia, X., Zulka, L., & Badache, A. (2021). COVID-19: Opportunities for interdisciplinary research to improve care for older people in Sweden. *Scandinavian Journal of Public Health, 49*(1), 29–32. https://doi.org/10.1177/1403494820969544

BBC. (2021). Coronavirus: Swedish King Carl XVI Gustaf says coronavirus approach 'has failed' Retrieved 2021-04-13 from https://www.bbc.com/news/world-europe-55347021

Behtoui, A., Boréus, K., Neergaard, A., & Yazdanpanah, S. (2020). Why are care workers from the global south disadvantaged? Inequality and discrimination in Swedish elderly care work. *Ethnic and Racial Studies, 43*(16), 155–174. https://doi.org/10.1080/01419870.2020.1734220

Braun, V., & Clarke, V. (2020). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology, 1*–25. https://doi.org/10.1080/14780887.2020.1769238

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Broetje, S., Jenny, G., & Bauer, G. (2020). The Key Job Demands and Resources of Nursing Staff: An Integrative Review of Reviews. *Frontiers in Psychology, 11,* 84–84. https://doi.org/10.3389/fpsyg.2020.00084

Bryman, A. (2018). *Samhällsvetenskapliga metoder*. (tredje upplagan). Stockholm: Liber.

Coronacommissionen. (2020). *The elderly care in the pandemic*. Available as pdf https://coronakommissionen.com/wp-content/uploads/2020/12/summary.pdf

Creswell, J. W., & Creswell, D. J. (2018). *Research design. Qualitative, Quanitative & Mixed methods approches* (5:ed). London: SAGE Publications.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design.* Choosing Among Five Approaches (4:ed). London: SAGE Publications.

Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W. (2001). The Job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Dong E, Du H, Gardner L. (2020). An interactive web-based dashboard to track COVID-19 in real time. *Lancet Infectious Diseases*. https://doi.org/10.1016/S1473-3099(20)30120-1.

Eriksson, A., Jutengren, G., & Dellve, L. (2021). Job demands and functional resources moderating assistant and Registered Nurses' intention to leave. *Nursing Open, 8*(2), 870–881. https://doi.org/10.1002/nop2.694

Fochsen, G., Josephson, M., Hagberg, M., Toomingas, A., & Lagerström, M. (2006). Predictors of leaving nursing care: a longitudinal study among Swedish nursing personnel. *Occupational and Environmental Medicine (London, England), 63*(3), 198–201. https://doi.org/10.1136/oem.2005.021956

Folkhälsomyndigheten. (2021). Bekräftade fall i Sverige – daglig uppdatering. Retrieved 2021-04-12 from https://www.folkhalsomyndigheten.se/smittskydd-beredskap/utbrott/aktuella-utbrott/covid-19/statistik-och-analyser/bekraftade-fall-i-sverige/

Folkhälsomyndigheten. (2021). Nationella allmänna råd och rekommendationer för att minska spridningen av covid-19. Retrieved 2021-04-13 from https://www.folkhalsomyndigheten.se/smittskydd-beredskap/utbrott/aktuella-utbrott/covid-19/skydda-dig-och-andra/rekommendationer-for-att-minska-spridningen-av-covid-19/

Folkhälsomyndigheten. (2020). The virus and the illness. Retrieved 2021-04- 12 from https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/covid-19-faq/the-virus-and-the-illness/

Ge, H., Wang, X., Yuan, X., Xiao, G., Wang, C., Deng, T., Yuan, Q., & Xiao, X. (2020). The epidemiology and clinical information about COVID-19. *European Journal of Clinical Microbiology & Infectious Diseases, 39*(6), 1011–1019. https://doi.org/10.1007/s10096-020-03874-z

Global Health Aging. (2014). Sweden: A role model for elderly care. Retrieved 2021-04-14 from: https://globalhealthaging.org/2014/08/03/sweden-a-role-model-for-elderly-care/

Graneheim, U., Lindgren, B., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today, 56*, 29–34. https:// doi: 10.1016/j.nedt.2017.06.002

Gustafsson, K., Marklund, S., Aronsson, G., & Leineweber, C. (2020). Interaction effects of physical and psychosocial working conditions on the risk of disability pension among nursing professionals and care assistants in Sweden: A prospective study. *International Journal of Nursing Studies, 102,* 103484–103484. https://doi.org/10.1016/j.ijnurstu.2019.103484

Heijden, B., Mahoney, C., & Xu, Y. (2019). Impact of Job Demands and Resources on Nurses' Burnout and Occupational Turnover Intention Towards an Age-Moderated Mediation Model for the Nursing Profession. *International Journal of Environmental Research and Public Health, 16*(11), 2011–https://doi.org/10.3390/ijerph16112011

Kabir, Z., Boström, A., & Konradsen, H. (2020). In Conversation with a Frontline Worker in a Care Home in Sweden during the COVID-19 Pandemic. J*ournal of Cross-Cultural Gerontology, 35*(4), 493–500. https://doi.org/10.1007/s10823-020-09415-7

Kommunal. (2020). Undersköterska. Retrieved 2020-04-15 from https://www.kommunal.se/yrke/underskoterska

Krisinformation. (2021). Restriktioner och förbud. Retrieved 2021-04-13 from https://www.krisinformation.se/detta-kan-handa/handelser-och-storningar/20192/myndigheterna-om-det-nya-coronaviruset/restriktioner-och-forbud

Kvale, S. & Brinkmann, S. (2009). *Interviews: learning the craft of qualitative research interviewing*. (2. ed.) Los Angeles: Sage Publications.

Ludvigsson, J. (2020). The first eight months of Sweden's COVID-19 strategy and the key actions and actors that were involved. *Acta Paediatrica, 109*(12), 2459–2471. https://doi.org/10.1111/apa.15582

Modig, K., Lambe, M., Ahlbom, A., & Ebeling, M. (2021). Excess mortality for men and women above age 70 according to level of care during the first wave of COVID-19 pandemic in Sweden: A population-based study. *The Lancet Regional Health - Europe, 4,* 100072. https://doi.org/10.1016/j.lanepe.2021.100072

Roiguez-Muñoz, A., Sanz-Vergel, A., Demerouti, E., & Bakker, A. (2014). Engaged at work and happy at home: a spillover-crossover model. *Journal of Happiness Studies, 15*(2), 271–283. https://doi.org/10.1007/s10902-013-9421-3

Samuelsson, I.P., Wagner, J.T. & Ødegaard, E. E. (2020). The Coronavirus Pandemic and Lessons Learned in Preschools in Norway, Sweden and the United States: *OMEP Policy Forum. IJEC 52,* 129–144. https://doi.org/10.1007/s13158-020-00267-3

Shaukat, N., Ali, D.M. & Razzak, J. Physical and mental health impacts of COVID-19 on healthcare workers: a scoping review. *International Journal Emergency Medicine 13*, 40. https://doi.org/10.1186/s12245-020-00299-5

Sjöberg, A., Pettersson-Strömbäck, A., Sahlén, K., Lindholm, L., & Norström, F. (2020). The burden of high workload on the health-related quality of life among home care workers in Northern Sweden. *International Archives of Occupational and Environmental Health, 93*(6), 747–764. https://doi.org/10.1007/s00420-020-01530-9

Socialstyrelsen. (2020). Statistics on infected and deceased with COVID-19 among the elderly by form of housing. Available as pdf: https://www.socialstyrelsen.se/globalassets/1-globalt/covid-19-statistik/engelska-sidan/faktablad-statistik-covid-19-bland-aldre-eng.pdf

Sveriges Kommuner och Regioner. (2020). Fakta om äldreomsorgen i ljuset av corona-pandemin. Retrieved 2021-04-14 from https://rapporter.skr.se/fakta-om-aldreomsorgen.html

Sveriges Kommuner och Regioner. (SKR). (2021). Rekryteringsmaterial undersköterskor. Retrieved 2021-04-14 from https://skr.se/skr/arbetsgivarekollektivavtal/sverigesviktigastejobb/attraktivarbetsgivare/rekryteringsmaterial/rekryteringsmaterialunderskoterskor.13382.html

Sverke, M., Falkenberg, H., Kecklund, G., Magnusson Hanson, L., & Lindfors, P. (2017). Women and men and their working conditions: The importance of organizational and psychosocial factors for work-related and health-related outcomes. Stockholm: Work Environment Authority.

Sweden. (2020). Elderly care in Sweden. Retrieved 2020-04-14 from https://sweden.se/society/elderly-care-in-sweden/

Szebehely, M., Stranz, A., Strandell, R. (2017) Vem ska arbeta i framtidens äldreomsorg? Working Paper/Department of Social Work, Stockholm University 2017:1

The Swedish Research Council. Vetenskapsrådet. (2017). *Good Research Practice*. Available as pdf https://www.vr.se/download/18.5639980c162791bbfe697882/1555334908942/Good-Research-Practice_VR_2017.pdf

WHO. (2021). WHO Coronavirus (COVID-19) Dashboard. Retrieved 2021-04-12 from https://covid19.who.int/.

Östergren, P., Hanson, B., Balogh, I., Ektor-Andersen, J., Isacsson, A., Örbaek, P., Winkel, J., & Isacsson, S. (2005). Incidence of shoulder and neck pain in a working population: effect modification between mechanical and psychosocial exposures at work? Results from a one year follow up of the Malmö shoulder and neck study cohort. *Journal of Epidemiology and Community Health (1979), 59*(9), 721–728. https://doi.org/10.1136/jech.2005.034801

APPENDIX A. THE INFORMATION LETTER IN SWEDISH

Hej!

Jag heter Hamdi Sardeye och studerar mastersprogrammet i folkhälsovetenskap vid Mälardalens högskola i Västerås. Jag ska nu skriva mitt examensarbete på avancerad nivå. Syftet med studien är att utforska hur undersköterskor som arbetar på äldreboende upplever arbetsvillkor och psykisk hälsa under pandemin.

Jag planerar att genomföra tio intervjuer under april månad med undersköterskor som arbetar inom äldreomsorgen i Sverige. På grund av rådande omständigheter med Covid-19 kommer intervjuerna genomföras som videosamtal via Skype eller Zoom. Varje intervju beräknas ta cirka 30-50 minuter och kommer att ljud spelas för att underlätta vid analys av materialet.

De etiska principerna som finns vid forskning kommer beaktas under hela studien. Det innebär att ditt deltagande är helt frivilligt och du kan när som helst avsluta din medverkan i studien utan att ange något skäl och att det ska få några konsekvenser. Ditt deltagande samt de insamlade materialet kommer att behandlas konfidentialitet, vilket innebär att endast jag, min handledare och examinator har tillgång till insamlad information. Därtill kommer det insamlade materialet endast användas i forskningsändamål. Det insamlade materialet kommer makuleras när examensarbetet har godkänts. När examensarbetet är klart och godkänt kommer arbetet publiceras i databasen DiVA vid Mälardalens högskola. Om du är intresserad att läsa resultatet av arbetet kan du kontakta mig så skickar jag en kopia till dig.

Din medverkan är viktigt för min studie och jag är tacksam om jag får möjlighet att intervjua dig som är undersköterska inom äldreomsorgen för att få ta del av dina upplevelser under pandemin.

Du är välkommen att kontakta mig eller min handledare om du har några frågor eller funderingar kring studien.

Med vanlig hälsning,

Hamdi Sardeye

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APPENDIX B. THE INTERVEIW GUIDE IN SWEDISH

Bakgrundsfrågor:

1. Kan du berätta kort om dig själv? (ålder)
2. Kan du berätta om ditt arbete som undersköterska på särskilt boende? (arbetsuppgifter etc.)
3. Hur länge har du arbetat inom äldreomsorgen?
4. Hur länge har du arbetat på din nuvarande plats?

Tema 1: Krav i arbetet under pandemi

1. Hur skulle du beskriva dina arbetsvillkor före pandemin? (arbetstider, bemaningen, osv)
2. Har du varit i kontakt med äldre personer som har haft misstänkt eller bekräftad Covid-19?
   Om ja, vilken psykologisk/emotionell inverkan har detta haft på dig?
3. Hur skulle du beskriva dina arbetsvillkor under pandemin? Beskriv generellt hur du upplever din arbetsmiljö nu.
4. Hur upplever du kraven i arbetet på din arbetsplats? (psykologiska, känslomässiga krav osv.)
   Eventuella följdfrågor:
   - Kan du berätta om hur du upplevt/upplever din arbetsbelastning under pandemin
   - Hur tänker du avseende tid och tidspress?
   - Hur upplever du de känslomässiga/ emotionella kraven under pandemin?
   - På vilket sätt upplever du att du får tydliga arbetsuppgifter från din chef?
   - Hur upplever du bemanningen på din arbetsplats under pandemin?
5. Hur hanterar du kraven du beskriver?

Tema 2: Stöd och resurser i arbetet under pandemi

1. Hur upplever du dina möjligheter att påverka din arbetssituation?
2. Hur har pandemin påverkat dina sociala relationer på arbetsplatsen?
3. Hur upplever du stödet i ditt arbete under pandemin?
   Eventuella följdfrågor:
   – Hur upplever du stöd från kollegor?
   – Hur upplever du stöd från chef?
4. Vad motiverar dig att fortsätta arbeta under krisen?

Tema 3: Psykisk hälsa under pandemi

1. Hur upplever du att pandemin påverkat din psykiska hälsa? (känslor, tankar etc.)
2. Har du haft möjlighet att prata om din psykiska hälsa med din chef under pandemin?
   a) har du haft möjlighet att prata om din psykiska hälsa med kollegor
3. Hur upplever du skyddsutrustning som finns på din arbetsplats?
   a) känner du dig trygg med skyddsutrustning när du gör ditt arbete under pandemin?
4. Hur har regeringen och kommunens restriktioner kring äldreomsorgen påverkat dig under pandemin?

Är det något ytterligare som du vill lägga till eller förtydliga?

APPENDIX C. THEMATIC ANALYSIS MATRIX

Codes	Sub-themes	Themes
Performing excessive tasks Working excessive hours Excessive workload Maintain extra hygiene routine Elderly people were unconscious for COVID-19 rules Work pressure Time pressure Lack of personal People get sick easily People were having sick leaves Not having adequate personal protection equipment (Lack of PPE) Unclear tasks from the managers	• Work overload • Lack of organizational resources	Increased workload and organizational problems
Support from colleagues Lack of managerial support Reduced social networks at work due to COVID-19 Lack of communication from managers and within the team Lack of work meetings due to COVID-19	• Colleagues as a main motivational factor • Lack of utilized support • Communication challenges	Support and communication issues
Challenging work Feeling of fatigue Feeling sad and guilt Emotional exhausted Feeling stressed out due to heavy workload Working longer hours Feeling depressed People did not want to work due to fearful of COVID-19 Feeling unsafety for PPE People were scared for their lives People were scared for their families lives	• Work-related stress and exhaustion • Feeling fear and need to protect their lives & families	Psychological consequences during the pandemic

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