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Psychological Experiences of Medical-Surgical Nurses Who Cared for COVID-19 Patients.

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Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

The outbreak of COVID-19 caused unparalleled pressure that brought healthcare facilities and healthcare staff to their knees across the globe, causing multiple deaths and economic despondency. Several studies have documented the effects of COVID-19 on healthcare workers and facilities, but none have addressed the problem from the psychological perspectives of medical-surgical nurses, especially in developing countries. This study explored the psychological experiences of medical-surgical nurses who cared for COVID-19 patients in developing countries. The theoretical foundation that informed this study was the Schachter-Singer's theory of emotions. A descriptive qualitative design used purposeful sampling to interview 10 medical-surgical nurses. Their responses were thematically coded and organized into descriptions. Results revealed uniform perceptions of the fear of exposure to disease and death, social isolation, and quality of care. Findings highlighted the need for policymakers and healthcare facilities management to put in place effective strategies and future pandemic preparedness policies as well as provision of basic medical resources such as personal protective equipment, oxygen, and beds, which can improve healthcare delivery and the general welfare of society, thus bringing positive social change.

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Dedication

I dedicate this dissertation to my late parents, Mr. Niepuo Dapilah and Madam Salamatu Abdulai, my husband, my children, the staff of the study hospital especially John Antwi of the medicine directorate of the hospital and the Dapilah family of Tizza-Nimbare in the Upper West Region of Ghana, West Africa.

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Chapter 1: Introduction to the Study

Coronavirus disease (COVID-19) is an infection that results in severe acute respiratory syndrome with clinical symptoms ranging from asymptomatic to severe during the acute phase of illness (Leviner, 2021). As of August 6, 2023, there were over 769 million confirmed cases and over 6.9 million deaths globally (World Health Organization [WHO], 2023). The contagious nature of the disease coupled with the limited available information on it during the initial stage of the pandemic caused increased public anxiety, pressure on healthcare services such as hospitals, and increased stress, anxiety, and depression among healthcare workers such as nurses (WHO, 2021).

According to Moradi et al. (2021), nurses who cared for Covid-19 patients experienced organizational inefficiencies, physical exhaustion, uncertainties, and the psychological burden of the disease. Extending the viewpoint of Moradi et al., Monjazebi et al. (2021) found that nurses who cared for Covid-19 patients experienced complex, combined, and interrelated physical, mental, and emotional challenges. Since the outbreak of the disease in 2019, several studies have been conducted to explore the experiences of health care workers, especially nurses who cared for Covid-19 patients (Karimi et al., 2020; Kovenor et al., 2021; Monjazebi et al., 2021; Moradi et al., 2021).

Similar research studies have been conducted on other pandemics, such as smallpox, Ebola, and SARS. However, though developing countries are challenged with a weaker health care system and poor staffing (Fenollar & Mediannikov, 2018), which make them vulnerable to COVID-19, there are limited studies on the psychological experiences of nurses who cared for COVID-19 patients in these countries. This supports

Creswell and Creswell (2019) assertion that the need for qualitative research arises when the concept or phenomenon needs to be understood because little research has been conducted on it. This study was designed to explore nurses' psychological experiences using the Schachter-Singer theory of emotions (see Schachter-Singer, 1962) to facilitate an understanding of these psychological experiences. As Karimi et al. (2020) indicated, the psychological emotions and high mental demand nurses go through when caring for emerging infectious diseases can affect nurses' welfare and the quality of health care delivery to patients. It is expected that the findings of this study could help health care facilities management to better understand the psychological complexities medical-surgical nurses encounter in developing countries when caring for infectious disease patients, especially emerging ones like COVID-19. It could also help policymakers to better understand the difficulties frontline health care workers encounter and institutionalize safe measures and preparedness policies that have the potential to strengthen the resilience of medical surgical nurses for future pandemics.

Chapter 1 covers the background of the study, the problem statement, the purpose of the study, the research question, the theoretical foundation upon which this study was built, the nature of the study, and the definition of terms relevant to the study. Also included are assumptions, scope, limitations of the study and significance of the study.

Background of the Study

The outbreak of Covid-19 caused unparalleled pressure that brought health care facilities and healthcare staff to their knees across the globe, especially in developing countries. COVID-19 caught the world in darkness, causing many deaths, economic

despondency, and public anxiety to continuously grow across the globe (Bukari et al., 2021). As frontline workers of any pandemic, medical-surgical nurses faced unsurmountable challenges caring for Covid-19 patients. Billings et al. (2021) expressed worry about the increasing potential of mental health impact of Covid-19 on frontline nurses and the need to provide psychological support for them.

A study that explored contextual factors influencing nurses' practice in the management of emerging infectious diseases revealed that nurses who cared for Covid-19 patients experienced the fear of being infected and lingering uncertainties (Lam et al., 2018). Similarly, Sadang (2021) explored the lived experiences of nurses who worked in Covid-19 community quarantine facilities and found that nurses experienced self-sacrifice, self-fulfilling, and a psychological struggle. The findings of Sadang and Lam et al. (2018) are consistent with other studies that examined nurses' experiences of caring for Covid-19 patients. For example, Zhang et al. (2021) reported that nurses experienced depression and feeling guilty about infecting others. In addition, Lee et al. (2020) identified that nurses reported fear of uncertainty, lingering trauma, and experiencing scenes, like being in a battlefield when treating patients with Middle East Respiratory Syndrome in 2015.

The experiences of healthcare workers during these daunting times of uncertainty exposed them and their immediate families to danger, increased their risk of psychological burnout, and, subsequently, affected their psychological well-being (Arcadi et al., 2020). A sound psychological state of medical surgical nurses is, however, paramount for quality health care delivery. The health status of health care workers can

affect the continuous delivery of quality healthcare to patients and has a considerable effect on how to deal with public health crises and pandemics (Chang et al., 2020).

Psychological burnout can negatively affect the quality of health care delivery to patients (Karimi et al., 2020). Much research had been done on other pandemics such as smallpox, Ebola, and SARS, yet there are limited studies on the psychological experiences of nurses who cared for COVID-19 patients in developing countries. Also, the weaker healthcare system of developing countries, including their lack of material resources and poor staffing (Fenollar & Mediannikov, 2018), make nurses more likely vulnerable to effects of Covid-19. These create a gap and warranted this study to be conducted in a developing country like Ghana.

Problem Statement

The novel coronavirus disease (COVID-19) pandemic has since become a major health crisis. Although over 769 million confirmed cases and over 6.9 million deaths have been reported as of August 6, 2023, the exact number of patients is still unknown because of asymptomatic cases or patients who do not show signs of the disease and might not be identified (WHO, 2023).

Developing countries appear to be less affected by the COVID-19 pandemic in terms of confirmed number of cases and deaths than developed countries. For example, as of September 7, 2022, the entire continent of Africa recorded 9,277,165 confirmed cases and 173,347 deaths (WHO, 2022). These numbers were far too low when compared to Europe's 249,105,808 confirmed cases and 2,080,678 deaths respectively (WHO, 2022). However, the economies of developing countries were harder hit than their

developed counterparts. Developing countries' economies experienced reduced external demands, falling prices of commodities like oil, decreased in tourism, and fall in external remittances (United Nations, 2021). Importantly, the possibility of nurses getting infected with COVID-19 is higher in the developing countries than developed countries due to the poor health care infrastructure. Because developing countries are faced with weak public healthcare systems (Fenollar & Mediannikov, 2018), there were initial projections that the COVID-19 situation could be worse in these countries (Bukari et al., 2021). Early projections by the World Bank suggested that COVID-19 could push 49 million people into extreme poverty in 2020, out of which 23 million were expected to be in sub-Saharan Africa (Valensisi, 2020). In Ghana, for instance, the disease had "significantly increased the poverty levels of households while deteriorating living standards" (Bukari et al., 2021, p.1). This places medical-surgical nurses in developing countries more at risk for psychological challenges.

Meanwhile, as frontline healthcare workers, medical-surgical nurses are the most vulnerable in terms of their exposure to the disease and increase in the nurse-to-patient ratio (Billings et al., 2021). Ghana has one of the weakest public health care systems in South-Saharan Africa, coupled with the lack of medical supplies such as personal protective equipment (PPE), beds, and oxygen, (Dzando et., 2021) thus making nurses vulnerable (. As part of the emotional and psychological stress that health workers, especially nurses, go through, several studies have revealed that nurses caring for COVID 19 patients experienced a significant number of negative emotions, stress, and anxiety about being infected, as well as increased workload (Feng et al., 2020; Sun et al., 2020).

Similarly, Karimi et al. (2020) found that nurses who took care of COVID-19 patients in Iran experienced mental and emotional distress and worked in inadequate conditions though Iran is considered a semideveloped country. Meanwhile, the health status of health care workers can affect the continuous delivery of quality healthcare to patients and has the potential of affecting how to deal with public health crises and pandemics (Chang et al., 2020).

Since the beginning of this pandemic, several studies have focused on the clinical and economic effects of the disease and not the psychological experiences (Wang et al, 2020). Though much research has been done on other pandemics such as smallpox, Ebola, and SARS, there are limited studies on the psychological experiences of nurses who cared for COVID-19 patients in developing countries. This conforms to Creswell and Creswell (2019) assertion that the need for qualitative research arises when the concept or phenomenon needs to be understood because little research has been conducted on it. Since the outbreak of the pandemic, researchers have not given critical attention to the challenges nurses face in developing countries. Hence, this study was intended to bridge the knowledge gap in understanding the psychological experiences of medical-surgical nurses caring for COVID-19 patients in a developing country like Ghana. Describing the psychological experiences may assist in the development of interventions that can be geared toward improving nurses' experiences when caring for patients with infectious diseases such as the Covid-19, thereby producing positive social change in the medical-surgical nurses' population.

Purpose of the Study

The purpose of this qualitative study was to investigate the psychological experiences of medical-surgical Nurses who cared for COVID-19 patients at a teaching hospital in Ghana to better understand the complexities associated with nurses' exposure to the COVID-19 disease.

Research Question

How do medical-surgical nurses in Ghana describe their psychological experiences when caring for patients with COVID-19?

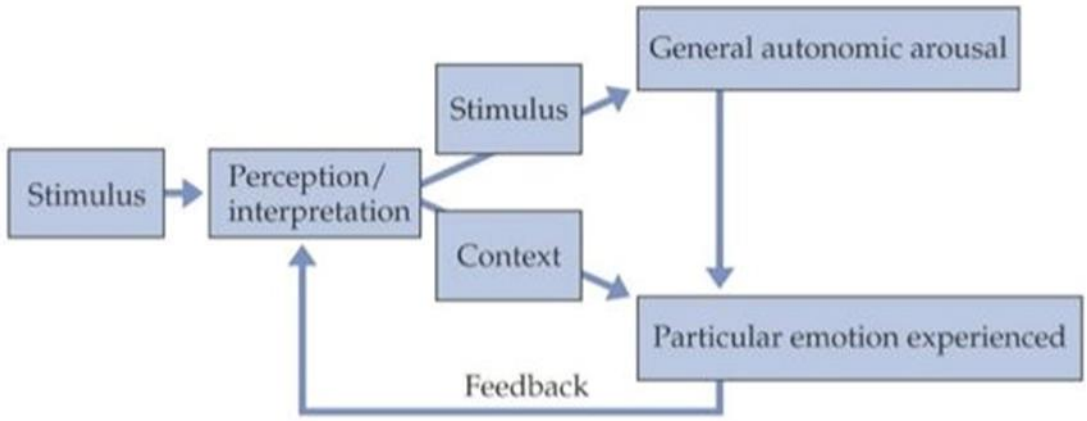
Theoretical Foundation

The theoretical foundation of this study was the Schachter-Singer theory of emotions. According to this theory, emotions are the results of the interaction between two factors: physiological arousal and cognition (Schachter-Singer, 1962). Specifically, the theory avers that physiological arousal is cognitively interpreted within the context of each situation, which ultimately produces the emotional experience. These cognitive interpretations—how a person labels and understands what they are experiencing—are formed based on the person's past experiences. This theory aligned with my study topic in that the fear of contracting COVID-19 is physiological arousal. Although the overarching aim of nurses is to give care to their patients, the contagious nature of COVID-19 may pose a greater challenge to this objective. The physical presence (physiological arousal) of suspected or confirmed cases of COVID-19 patients brought into the hospitals may be cognitively interpreted into psychological emotions by the nurses. These emotions constitute the psychological experiences that could vary from one nurse to another. The

theory thus fit well into my study, which sought to unearth the psychological experiences of medical-surgical nurses when providing care for Covid-19 patients in a teaching hospital in Ghana. Figure 1 illustrates the Schacter-Singer theory of emotions.

Figure 1

Schacter-Singer Theory of Emotions



Note. Adopted from Schacter-Singer, 1962. Stimulus = Covid infection; Perception/interpretation = infectiousness of disease; Stimulus = caring for actual infected patient; Context = perception of environment and support of organization in caring for the patient and helping staff avoid infection; General autonomic arousal = Fear, anxiety; Particular emotion experienced = >physiological parameters related to fear and anxiety, reluctance to care for individual in a caring and respectful manner, nausea, panic, dread, etc.; Feedback = perceptions, observations, conclusions that connect back to original perceptions.

Nature of the Study

To address the research question in this qualitative study, a qualitative descriptive research design was used. Because there is not much literature on medical-surgical nurses' psychological experiences with COVID-19 patients in Ghana, a qualitative descriptive approach was used to study and describe the experiences of nurses who cared for those COVID-19 patients fully and credibly (see Creswell, 2009). Qualitative description approaches seek to study participants' own views and the meaning of their experience by describing the phenomenon being investigated using the words of the participants (Colaizzi, 1978). This approach promotes a better understanding of the nature or meaning of experiences and attempts to portray the principle of that experience (Creswell, 2018).

A qualitative descriptive approach was chosen for this study because it elicits factual responses to questions about how individuals feel about a particular situation they have experienced (see Colorafi & Evans, 2016). Furthermore, a qualitative descriptive study is commonly used to describe qualitative studies in the healthcare and nursing-related phenomenon (Kim et al., 2017). Purposive sampling was used to select respondents, and open-ended interviews were used to conduct interviews with the medical-surgical nurses who experienced the phenomenon to gain insight of this unexplored phenomenon (see Creswell & Creswell., 2019). Data were analyzed using content and thematic analysis (see Kim et al., 2017).

Definitions

Covid-19 infection: An infectious disease caused the SARS/COV2 (Covid-19) virus (WHO, 2022).

Developed countries: A developed country is a country with a Gross National Income capita of $12,536 or higher, with a higher quality of life, and advanced technology (United Nation, 2021).

Developing countries: Countries that have a slow rate of industrialization and low per capita income (United Nation Conference on Trade and Development, n. d).

Infectious disease: A viral, bacterial, fungal, or parasitic disease that can be transmitted from one person to another (Centers for Disease Control and Prevention, 2023).

Medical-surgical nurses: Nurses that care for patients with either medical, surgical problems or a mixture of both in a medical-surgical unit of a hospital (Centers for Disease Control and Prevention, 2021)

Pandemic: A worldwide outbreak of a disease (Mailman School of Public Health, 2021).

Psychological experiences: The emotional and mental impact one goes through as one experiences a phenomenon.

Stimulus: Something that triggers/arouses an action (Schacter-Singer, 1962).

Assumptions

There are many assumptions relevant to the study of the psychological experiences of medical-surgical nurses. First, I assumed that medical-surgical nurses

caring for COVID-19 patients experienced some difficulties/challenges during the pandemic. As Kovenor et al. (2021) noted, nurses who cared for Covid-19 patients experienced stress, fear of infecting others, and mental and physical burnout. Secondly, I assumed that these nurses would have similar or different experiences when caring for COVID-19 patients in terms of their personal involvement and the severity of the cases they handled. The third assumption was that I would not be biased when gathering and interpreting data. The rationale for these assumptions was based on the ontological, epistemological, axiological, and methodological assumptions that are part of qualitative studies. Because I had multiple participants, they may have interpreted the questions I asked from multiple perspectives that have a unique meaning for themselves. As the researcher, I was part of what was being researched, so I was aware of this by bracketing myself and writing journals during interviews. Because the researcher and participants bring their own values to the study, I acknowledged my values and biases as the study progressed and captured the values of the participants as they were being interviewed (see Creswell & Creswell, 2019). Lastly, I assumed that participants would be willing to speak to me honestly and accurately in detail about the phenomenon being investigated. The ethical aspects of this study are discussed in Chapter 3.

Scope and Delimitations

This current study took a critical look at unaddressed gaps in the literature, and it became obvious that the psychological experiences of nurses who care for Covid-19 patients have not been extensively discussed in the literature. As Wang et al. (2020) stated, several studies have focused on the clinical and economic effects of the Covid-19

disease since the outbreak of the pandemic without addressing the psychological experiences. However, the mental and emotional health status of medical-surgical nurses in developing countries affects the continuous delivery of quality health care to patients and has the potential of crippling the public health care pandemic (Chang et al., 2020).

While considering the application of the Schachter Singer theory of emotions, other similar theories were looked at. For example, the cognitive appraisal theory of Lazarus (1966) was considered, but it was less effective in addressing the psychological effects of medical surgical nurses who cared for COVID -19 patients.

The scope of this study is limited to (a) only medical-surgical nurses in a teaching hospital in Ghana who have been involved in caring for COVID-19 patients during the pandemic, and (b) the psychological challenges or experiences they went through when caring for COVID-19 patients. However, the approach and recommendations from the findings may be transferrable to other areas of similarity.

Limitations

Though the study is credible, transferability is limited because the study was solely based on purposively criterion-sampled participants. The results of this study are, however, transferable to medical-surgical nurses in other teaching hospitals similar to this study's participants. Findings of this study would be supported by Leung (2015) by arguing that qualitative research studies are meant to study a specific phenomenon in a certain population; hence, generalizability is not possible.

I expected one of the challenges of this study to be reaching out to nurses for interviews during field data collection. Respondents may not have been willing to spend

much time responding to interview questions because of the in-depth nature of the interview. The work schedule of respondents was also another challenge. For instance, a night shift nurse may not have granted me an interview in the daytime because she may have wanted to sleep. Additionally, I could not interview respondents at their workplaces as this may have interfered with their work responsibilities. Significantly, another limitation of this study was the issue of social distancing due to the current COVID-19 pandemic, making face-to-face interviews unfeasible.

These limitations were addressed by recruiting participants through the charge nurses of the various medical-surgical units of the hospital in person via email or phone. I explained the purpose of the study and sought their permission to place the flyers on their units so that they were visible to the nurses. I received notifications from those who were interested to participate in the study via phone calls and WhatsApp. I described the purpose of the study, what they were expected to do, and that their participation was voluntary. All the respondents were screened to ensure that they met the criteria for participating in the study. I set up interviews with respondents at times that were convenient to both of us. All interviews were conducted via phone calls.

The biases that I anticipated from this study included having a professional relationship with the study institution, which could have affected the study outcome. Another area of bias was that my professional experience and views as a nurse could have influenced the study. These biases were addressed by not having any professional relationship with the study institution. I also bracketed my experiences and views during interviews and did not allow my professional experiences to influence respondents in any

way during interviews and the entire data collection process. I also ensured credibility, as a strategy of reducing bias by "implementing the validity strategies of triangulation, member checking, presenting thick descriptions, using peer debriefers and external auditors" (see Ravitch & Carl, 2016, p. 189).

Significance of the Study

This study was intended to contribute to the knowledge gap in understanding the challenges nurses in developing countries faced while caring for patients with infectious diseases such as COVID-19. Additionally, unraveling the psychological experiences of medical surgical nurses could help health care facilities management to better understand the challenges of nurses treating patients with infectious diseases. This may assist them to develop policies and practices to protect and ensure the resilience of these nurses. It may also help policy makers to put in place effective strategies and future pandemic preparedness policies that can improve health care delivery and the general welfare of society, thus bringing positive social change. This conforms with Walden University's definition of positive social change, which is described as "a deliberate process of creating and applying ideas, strategies, and actions to promote the worth, dignity, and development of individuals, organizations, institutions, cultures and society" (Center for Social Change, 2021, para 2). Finally, this study contributes to the field of research in describing the psychological experiences of nurses caring for infectious diseases such as COVID-19.

Significance to Practice

The findings of this study can help health care facilities' management to better understand the psychological complexities medical surgical nurses in developing countries encounter when caring for patients with infectious diseases, especially emerging ones like COVID-19. It can also help policy makers to better understand the difficulties frontline health care workers go through and institutionalize safe measures and preparedness policies that can promptly respond to future pandemic.

Significance to Theory

The conclusions of the study have implications on how future researchers can apply the theoretical framework of the Schachter-Singer theory of emotions to evaluate the results of other studies on the psychological experiences of nurses caring for infectious disease patients. Almost all the existing literature thus far has focused on the general effects of COVID-19 on health care workers and systems. The unique contribution of this study to research is that I focused specifically on the psychological experiences of medical surgical nurses caring for Covid-19 patients – in this case, nurses in a teaching hospital in a developing country.

Significance to Social Change

Addressing the associated psychological complexities nurses face in caring for Covid-19 patients may not only help to promote quality healthcare delivery to infectious diseases patients but have a significant effect on how to respond to public health crises and pandemics in the future, thus bringing about the needed positive social change.

Summary and Transition

This qualitative descriptive study provided a better understanding of the psychological experiences of medical-surgical nurses in a developing country. The study was built on the Schachter-Singer theory of emotions (See Cotton, 1981). Chapter 1 consisted of the introduction to the study, background, problem statement, purpose of the study, research question, the nature of the study, theoretical framework, and definitions relevant to the study. In addition, the assumptions, scope, limitations, and significance of the study were addressed. Chapter 2 consists of a review of relevant literature. The gap and deficiencies in literature are identified. I also examine the theoretical framework that the study was built on, as well as the related causes of psychological challenges, effects of psychological emotions, and caring for Covid-19 patients, and qualitative descriptive literature.

Chapter 2: Literature Review

Introduction

In Chapter 2, I discussed the literature synopsis, literature search strategies, and the scholarly findings of the Schacter-Singer theory of emotions (Schacter-Singer, 1962). The literature also synthesizes other key authors' contributions to the theoretical framework of psychological experiences of nurses caring for COVID-19 patients. Additionally, relevant key concepts relating to psychological experience are equally discussed. These include related causes of psychological experiences, effects of psychological perceptions on caring for COVID-19 patients, and descriptive qualitative research. I concluded the chapter with an overview of the descriptive qualitative method used for the study and a chapter summary.

Research Problem and Purpose

The Covid-19 virus, also called the SARS-COV-2, was first found and reported by officials in Wuhan, China, in December 2019 (WHO, 2021). The virus that causes the COVID-19 disease is transmitted via human aerosol droplets. Though there are speculations that the virus was a laboratory construct, studies thus far have shown that it is rather a zoonotic infection with a highly likely source as bats (WHO, 2021). The disease initially manifests general symptoms such as fever, headache, and myalgia and usually involves the respiratory system from 2 to 7 days following onset of the systemic symptoms (Centers for Disease Control and Prevention, 2021). As of March 11, 2022, there are a total of 452,201,564 confirmed Covid-19 cases and 6,029,852 deaths (WHO, 2022).

As frontline workers during the Covid-19 pandemic, nurses are among the group of people most likely to have some psychological experiences while providing care to the COVID-19 individuals (Billings et al., 2021). However, there are limited studies on the psychological experiences of nurses who cared for COVID-19 patients in developing counties such as Ghana. Hence, the present study sought to bridge this gap using a descriptive qualitative study guided by the Schacter-Singer theory of emotions (see Schacter-Singer, 1962). The findings from this descriptive qualitative study increased current knowledge and understanding of the psychological complexities associated with caring for Covid-19 patients in a developing country such as Ghana. Additionally, the findings may assist in policy development and intervention to foster resilience in medical surgical nurses who have the potential to increase their response to any future pandemic such as COVID-19.

Literature Synopsis

An extensive review of literature was conducted on the Schacter-Singer theory of emotions, with an emphasis on the psychological experiences of frontline nurses fighting COVID-19. Additionally, I reviewed the literature on three key concepts relevant to the psychological experiences of nurses caring for Covid-19 patients: description of psychological experiences, effects of psychological perceptions on caring for Covid-19 patients, and descriptive qualitative research. The problem of the psychological experiences of nurses caring for Covid-19 patients is still not well documented. Hence, the literature review covered factors that resulted in psychological stress. Moradi et al. (2021) revealed that several challenges could cause severe psychological problems for

nurses throughout the provision of care to COVID-19 patients. A few studies have revealed that nurses caring for COVID 19 patients experienced a significant number of negative emotions, stress, and anxiety about being infected, as well as increased workload (Feng et al., 2020; Sun et al., 2020). Similarly, nurses who took care of COVID-19 patients experienced mental and emotional distress and worked in inadequate conditions (Karimi et al, 2020). It has also been reported by Sun et al. (2020) that nurses who cared for COVID-19 patients reported different psychological problems such as fatigue, discomfort, and helplessness.

Literature Search Strategy

This topic is still somewhat new in the research literature. During my literature search, it was obvious that not much literature exists on the psychological experiences of nurses caring for COVID-19 patients. As a result, gathering literature on this topic was achieved through a holistic process. Throughout my literature search process, several resources both electronic and hard copies were read and analyzed. Using the Walden University Library, I searched the following databases: Sage Complete, Education Resources Information Center (ERIC), ProQuest, Dissertation and Theses Databases, Sage Online Educational Journals, Google Scholar, PsychARTICLES, and Thoreau multidata base search. I used the Walden University library subject area of nursing and psychology to obtain resources pertaining to the research topic.

Key words that evolved from the literature search process included *COVID-19, psychological experience, infectious diseases, nursing care, SARs, MERs, Ebola*, and *emotional experiences*. The literature searches were restricted to full text and peer-

reviewed documents to ensure that only scholarly resources were used. Publications from 2012 to 2022 were mainly reviewed until it became obvious that no new information could be gained from the search. My first search using the keywords *psychological experiences*, *caring*, and *COVID-19* from the Walden library showed only one study that was conducted to assess the worries and concerns among healthcare workers in a facility in Japan during the pandemic (see Sahashi et al., 2021). Also, when I broadened the search to exclude psychological experiences but included experiences and Covid-19, seven articles were populated, which were all conducted in developed countries. Only one published article that appeared in my search was conducted in Ghana on COVID-19 experiences, and it was a meta-ethnographic study. However, the keywords *infectious diseases* and *nurses' experiences* revealed 1,800 published articles.

Theoretical Foundation

The theoretical approach adopted for this study was the Schacter-Singer theory of emotions. According to the theory, emotions are the results of the interaction between two factors: physiological arousal and cognition (Schachter-Singer, 1962). Specifically, the theory avers that physiological arousal is cognitively interpreted within the context of each situation, which ultimately produces the emotional experience. These cognitive interpretations—how a person labels and understands what they are experiencing—are formed based on the person's past experiences. This theory aligned with my study topic in that the fear of contracting COVID-19 is physiological arousal. Although the overarching aim of nurses is to give care to their patients, the contagious nature of Covid-19 seems to diffuse this objective. The physical presence (physiological arousal) of suspected or

confirmed cases of Covid-19 patients brought into the hospitals may be cognitively interpreted into psychological emotions by the nurses. These emotions constitute the psychological experiences that could vary from one nurse to another. The theory thus fit well into my study, which sought to unearth the psychological experiences medical surgical nurses went through during their care for COVID-19 patients in a teaching hospital in Ghana.

Application of the Schacter-Singer Theory of Emotions to the Current Research

There is no existing literature on the application of the Schacter-Singer theory of emotions to the psychological experiences of nurses caring for Covid-19 patients in Ghana. Hence, the gap was addressed through the analysis of relevant comparative literature.

Since the formulation of the two-factor theory (Schachter-Singer, 1962), several studies have attempted to critically examine its relevance. Cotton (1981) reviewed several research studies on the theory and argues that Schachter Singer's two factory theory of "emotion and cognition might not well be supported by literature, but the available evidence has not disproved the theory either" (p.365).

Extending the viewpoint of Cotton (1981), Reisenzein (1983) reviewed three major deductions/components of the theory and averred that there is little support for the component that "arousal reduction leads to a reduction in the intensity of emotional state," and that the hypothesis that "misattribution of emotionally induced arousal to be a neutral source" are unsupported based on reasonable interpretations" (p. 239). According to Reisenzein, basic constructs of the theory such as emotion, cognition, and arousal are

least defined in the psychological context thus making the meaning unexplicit. Furthermore, Reisenzein contended that the constructs emotional experience (subjective feelings), psychological arousal, expressive reactions, and emotion-related instrumental activities have been agreed upon by researchers. He also concluded that Schachter's claim that physiological arousal is necessary for the experience of an emotion (feeling) reaction is adequately supported by data and is consistent with Schachter's use of the construct.

Rationale for the Choice of the Schacter-Singer Theory of Emotions

The present study was well grounded in the Schacter-Singer theory of emotions, as it offered a theoretical lens that assisted in understanding the psychological complexities associated with nurses who cared for COVID-19 patients in a developing country. The theory exemplifies the ontological and epistemological considerations of the current study and thus answers the research question. The stimulus (Covid infection) component of the theory clearly demonstrates the reality/existence of the Covid-19 disease that requires nurses to care for infected individuals. Also embedded in the theory is the context, which spells out the perception of environment and support of organization in caring for infected patients and helping staff avoid infection. This component is relevant to the current study because the study addresses nurses' psychological experiences in a developing country. The theory points out how organizations or the environment protected or exposed nurses to the pandemic. The main objective of this study, to investigate the psychological experiences of frontline medical-surgical nurses in caring for COVID-19 patients, is emersed in the general automatic arousal of this theory.

Hence, applying the Schacter-Singer theory of emotions helped to unearth the fear, anxiety, and stress, among others, associated with caring for COVID-19 patients. The emotions helped to better understand the psychological parameters related to fear and anxiety and increased the knowledge and understanding of the psychological experiences of nurses, thus addressing the epistemology of this study. Significantly, the findings of this study serve as feedback of the purpose of the study and the conclusions drawn from the study c help to address social change the current study can make.

Literature Review

Related Causes of Psychological/Emotional Challenges

The purpose of this qualitative descriptive study was to better understand the attendant psychological complexities nurses experience when caring for Covid-19 patients in a developing country. A growing body of literature described facing an unknown health pandemic as an element of commonality between all those who experience contact with such health threats (Chiang et al., 2007; Nacoti et al., 2020). Hence, the experiences of health care workers in such a daunting battlefield of uncertainty that exposed them, their immediate families, and other social networks to danger increases their risk of psychological burnout and affects their psychological well-being (Arcadi et al., 2020; Kovenor et al., 2021).

According to Monjazebi et al. (2021), the experiences of nurses caring for Covid-19 patients involve complex, combined, and interrelated physical, mental, and emotional challenges. Nurses who cared for Covid-19 patients experienced the organization’s inefficiency, physical exhaustion, uncertainties, and psychological burden of the disease

(Moradi et al., 2021). Sadang (2021) explored the lived experiences of nurses who worked in COVID-19 community quarantine facilities and found that the nurses described their experience as self-sacrifice, self-fulfilling, and as a psychological struggle.

Similarly, a study by Nahidi et al. (2021) exploring the knowledge, preparedness, and experiences of managing the SARS-COV-2 and Covid-19 pandemic revealed that nurses expressed concerns about contracting the disease, families avoiding them, increased workload, and increased stress levels. Similarly, Lee et al. (2020) explored and made meaning of the experiences of nurses who cared for patients with Middle East Respiratory Syndrome and found that nurses experienced fear of uncertainty, hesitation, scenes like a battlefield, and lingering trauma.

Although the studies of Monjazebi et al. (2021), Morandi et al. (2021), and Sadang (2021) were focused on COVID-19, and those of Lee et al. (2020) and Nahidi et al. (2021) focused on MERS and SARS respectively, their findings were similar and address the related causes of psychological experiences of health care workers caring for patients with infectious diseases described as pandemics. Hence, the findings of Monjazebi et al., Morandi et al., Sadang, Lee et al, and Nahidi et al. are strongly linked with the psychological experiences analysis of Lam et al. (2019). Lam et al. conducted a qualitative descriptive study with the goal of exploring contextual factors that influence nurses' practice in the management of emerging infectious diseases. The results revealed nurses reports of fear of being infected and lingering uncertainties. The literature thus far

showed that one of the main triggers of psychological and emotional stress in nurses and other healthcare workers in general is infectious diseases (stimulus).

Although the findings of nurses' psychological experiences differ slightly from the literature, the results are generally similar and thus validate the magnitude of psychological stress nurses and other health care workers go through when confronted with caring for patients with infectious diseases, especially emerging ones that are yet to get an absolute cure, such as Covid-19, ARS-Cov2, MERS, and Ebola. Building on the literature thus far, the current study provides the need for a better understanding of the psychological experiences medical-surgical nurses go through when caring for Covid-19 patients in a developing country.

Psychological Challenges of Caring for Covid-19 Patients

The content of the nursing program is designed to focus on developing certain specific skills that are critical to the nursing practice such as resilience, how to deal with challenges, and the competence for handling infectious diseases pandemics (Cleary et al., 2018; Lam et al., 2018). Experience from past infectious disease outbreaks has shown the lack of early action initiatives in healthcare delivery due to the unpredictable nature of such events (Corley et al., 2010), which has exposed healthcare professionals to psychological challenges.

The health status of health care workers can affect the continuous delivery of quality healthcare to patients and has a momentous effect on how to deal with public health crises and pandemics (Chang et al., 2020). The high mental demands experienced

by nurses such as stress, anxiety, fear, and psychological burnout can negatively affect the quality of health care delivery to patients (Karimi et al., 2020).

Zhang et al. (2021) conducted a qualitative study to explore front-line nurses' experiences four months post the Covid-19 outbreak. Using a purposive sampling approach and face-to-face interviews, Zhang et al. (2021) found that nurses experienced recurring involuntary memories about the Covid-19, cultivation of occupational ability, and feeling guilty and depressed. Although the specific findings of Zhang et al might be different or similar to the current study, the key concepts of nurses' experiences of infectious diseases (COVID-19) were very valuable in framing the psychological experiences of nurses caring for Covid-19 patients in a developing country like Ghana. Highlighting the seriousness of COVID-19 in developing countries, the United Nations Development Program (2020) identified that poor health care system capacity makes developing countries highly vulnerable to COVID-19 and such countries will run out of intensive care unit (ICU) beds if an average of 0.04% of their population is infected. This makes the situation precarious than the developed countries although developed countries too are challenged.

Kovenor et al (2021) investigated the personal and contextual factors associated with the psychological functioning of nurses responding to COVID in the New York City area. Using a cross-sectional approach, the authors conducted a survey of four different hospitals. The findings revealed that nurses who cared for COVID-19 patients expressed concerns not only about personal risks, but also worry about infecting families and other close relatives in society. The study further revealed that the situation increased the risk

of psychological morbidity and burnout as well as mental health concerns. The Kovenor et al. (2021) study differs from the present study in terms of methodology and setting. However, the central phenomenon of psychological experience was valuable in contributing to the success of this study.

Gomez-Ibanez et al. (2020) conducted a qualitative study on final-year students experience in caring for covid-19 patients in Spain. Using a phenomenological approach, Gomez-Ibanez et al. (2020) interviewed 20 students. The findings revealed that student nurses experienced continuous fear, were afraid for their lives, felt guilty about the possibility of infecting the people they live with, and reluctant to care for patients with empathy and a respectful manner. The findings further revealed that the student nurses experienced psychological stress. The findings of Gomez-Ibanez are consistent with that of Zhang et al. (2021) and Kovenor et al. (2021). Gomez-Ibanez et al. results are also like that experienced by health care workers who cared for SARS-COV2 (Nahidi, et al., 2021) and by nurses who cared for MERS patients (Lee et al., 2020). The weakness of Gomez-Ibanez study is that it used final year student nurses who might not have enough in-patients' experiences as compared to regular nurses with average years of working experience which could affect the quality of their study. Although the settings and the methodological approach (phenomenology) of Gomez-Ibanez are different from my current study, the study was valuable in contributing to the current study.

The attendant effects of nurses' psychological experiences or mental conditions can have a profound effect on quality health care delivery to patients with Covid-19 and other infectious diseases. Karimi et al. (2020) explored the lived experiences of nurses

who cared for Covid-19 patients in Iran. Using a descriptive phenomenology with a purposeful sampling of 12 nurses, Karimi et al found that nurses experienced anxiety and stress, as well as fear. They concluded that anxiety and fear can have negative effects on patient care and the mental health of nurses. They further aver that the high mental demands experienced by nurses can affect the quality of health care delivery to patients. Karimi et al study was valuable in framing the present study in that it addresses psychological experiences which is the focus of this study. It also used a qualitative approach which was valuable in framing the methodology of this study. The results of Karimi et al. (2020) are consistent with Khalid et al. (2016).

Khalid et al. (2016) conducted a quantitative study of health care workers who cared for MERS-CoV in Jedda Saudi Arabia. The purpose of their study was to explore the emotions, perceived stressors, and coping strategies of the workers during the epidemic. Using a cross-section descriptive survey design to study 117 health care workers, Khalid et al found that, nurses were feeling fearful, reluctant to work overtime, experienced emotional turmoil during the pandemic. The results further revealed that there was anxiety and nervousness, as well as huge stress and long run psychological consequences.

Although Khalid et al. (2016) study was focused on MERS-Cov compared to the current study which is focused on COVID-19, both studies address infectious diseases and Khalid et al study influenced the current study in terms of framework. Also, Khalid et al. study used a mixed method approach which differs from the qualitative descriptive

approach of the present study. However, the qualitative aspect of the methodology was valuable to this study.

Sethi et al (2020) conducted a study on the impact of COVID-19 disease and associated challenges on front-line nurses in Pakistan. Using a descriptive cross-section survey, they interviewed a total of 210 nurses from both private and public sectors with open-ended questions. Sethi et al (2020) findings show that nurses felt anxious, distressed, and depressed. The findings of Sethi et al. (2020) are consistent with Fernandez et al. (2020) although their methodological approached are different.

Fernandez et al (2020) conducted a systematic review of nurses' experiences working in acute care hospitals setting during a respiratory pandemic. The purpose of the study was to synthesize available evidence of nurses' experiences of working in acute care setting during a respiratory pandemic. Fernandez et al (2020) findings suggest that the nurses experienced physical and emotional distress. The central phenomenon of their study which is the lived experiences is similar to the current study and thus made it appropriate to apply to the present study.

Afulani et al (2021) studied the inadequate preparedness for response to COVID-19 with associated stress and burnout among healthcare workers in Ghana. Using a cross-sectional quantitative approach to sample 409 healthcare workers, the results showed that there was low perceived preparedness to respond to COVID-19, increases stress and burnout, which was partly due to the fear of being infected. The findings of Afulani et al. (2021) are consistent with that of Sethi et al. (2020). Afulani et al. findings were relevant to this study as the study is specific to Ghana and the results of stress, burnout, and fear

can be generalizable to other hospitals in Ghana including the teaching hospital where this study was conducted. Also, Afulani et al. based their study on challenges of health care workers resulting from inadequate preparedness in response to COVID-19 in contrast to the psychological experiences of nurses employed by this study. Though the methodological approach and findings of Afulani et al may be different, the concept of nurses' experiences and the context were valuable in framing the current study.

Arcadi et al. (2020) conducted a study on nursing during the COVID-19 outbreak. The purpose of the study was to explore the experience of Italian nurses involved in caring for Covid-19 patients. Using a qualitative phenomenology and purposeful sampling, Arcadi et al interviewed 20 nurses using semi-structured interviews. The results showed that nurses experienced, fear, uncertainty, and stress amongst others. The findings of Arcadi et al are consistent with other studies such as Lee et al. (2020), Karimi et al. (2020) and Morandi et al. (2021). Although Arcadi et al. (2020) study was conducted in a different setting, the key concepts of qualitative methodological approach and of nurses' experiences were valuable in framing the current study.

Lee et al. (2020) explored and made meaning of the experiences of Korean nurses that cared for patients with the Middle East Respiratory Syndrome of 2015. Using a qualitative phenomenological approach, Lee et al. (2020) interviewed 17 nurses and the results showed that, nurses experienced fear of uncertainty, hesitation, scene like a battlefield, and lingering trauma. Most of the findings of Lee et al. (2020) are consistent with that of Khalid et al. (2020). Though the study of Lee et al. was not specific to Covid-19, it was an infectious disease (MERS) and focused on experiences of nurses that cared

for an infectious disease, which is similar to the central phenomenon of this study thus made it appropriate to apply to the present study.

Sadang (2021) explored the lived experiences of nurses who worked in COVID-19 community quarantine facilities in the Philippines. Using a descriptive phenomenological approach, Sadang (2021) employed purposive and snowball sampling to interview 12 nurses. The findings showed that the nurses experienced fear, risk, stress, and psychological struggle. The findings of Sadang are consistent with some of the findings of the literature (Afulami et al., 2021; Kovenor et al., 2021; Khalid et al., 2020). Even though Sadang's study was conducted in a different setting, key concepts like nurses' experiences, and the qualitative methodology were very significant in framing the direction of the current study.

Lam et al. (2019) explored related factors that militate against emergency room nurses' ability to perform their duties in response to an infectious disease outbreak in Hong Kong. Using a qualitative descriptive approach, Lam et al., (2019) purposively sampled and interviewed 26 nurses. The results of the study showed that nurses experienced risk, uncertainty, and resources constraints. The findings of Lam et al. (2019) are similar to other previous studies (Sadang, 2021; Arcadi et al., 2020; Lee et al., 2020). Although Lam et al. (2019) study does not directly address the psychological experiences of nurses, the key concept of qualitative descriptive design was valuable in framing the present study.

Smith et al (2017) explored the experiences of health care workers who cared for Ebola virus disease patients in Nebraska. Using a qualitative approach, Smith et al

interviewed 21 health care workers. The findings showed that health care workers experienced stress, isolation, anxiety and fear of infecting other members of the community. The findings of Smith et al (2017) are consistent with other findings for SARS (Nahidi et al., 2021), MERS (Lee et al., 2020) and COVID-19 (Kovenor et al., 2021). Although the study of Smith et al. (2017) was not on Covid-19, the key concepts of infectious disease and health care workers experiences in caring for an infectious disease were valuable in framing the present study.

Despite several studies' findings on the challenges health care workers face when caring for patients with infectious diseases (Kovenor et al., 2021; Morandi et al., 2021; Zhang et al., 2021), most of these studies have approached the topic from the general perspective and have not addressed the issue of psychological effects in its specificity. As Karimi et al. (2020) indicated, the psychological emotions and high metal demand nurses go through when caring for emerging infectious diseases can affect nurses' welfare and the quality of health care delivery to patients. In buttressing Karimi et al (2020) point, Kovenor et al. (2021) calls for supporting the mental health of healthcare workers who cared for Covid-19 patients as a critical aspect of public health response to COVID-19. Nevertheless, there is still a knowledge gap on the psychological experiences of nurses who cared for Covid-19 patients in a developing country like Ghana. It is this gap that the current study seeks to bridge.

Qualitative Descriptive Approach Literature

The methodology of this study is extensively described in Chapter 3. The literature provided a fundamental justification for the choice of a qualitative descriptive

study to conduct this research. The aim of using a qualitative descriptive approach was to gain a better understanding of the psychological experiences nurse went through when caring for COVID-19 patients in a developing country, Ghana. Qualitative descriptive study is a term that is widely used to describe qualitative studies of health care and nursing-related phenomena, but it has attracted many discussions in the existing literature (Kim, et al., 2017). Qualitative descriptive study is suitable to health research because it elicits factual responses to questions about how individuals feel about a particular phenomenon they have experienced (Colorafi and Evans, 2016). According to Kim et al. (2017), descriptive qualitative research is commonly used to describe qualitative studies in the health care and nursing-related phenomena. This assertion is supported by Polit and Beck (2009,2014) who aver that descriptive qualitative research is used for studies which are descriptive in nature to examine health care and nursing-related phenomena. Hence, descriptive qualitative studies have been identified as appropriate for research that focuses on exploring individuals' experiences of a phenomenon and gaining insight from respondents of an unexplored phenomenon (Creswell 2013).

Summary and Conclusions

The literature examined so far showed that nurses experience some complexities including fear, anxiety, uncertainty, stress, psychological burn out among others when caring for patients with COVID-19 (Fernandez et al., 2020; Karimi et al., 2020; Khalid et al., 2020; Arcadi et al., 2020; Lam et al., 2019). Lam et al. (2019) effectively outlined factors that militate against nurses' ability to manage infectious diseases outbreak. Nahidi et al. (2021) examined how an infectious disease like SARS-COV caused fear and

stress amongst nurses who cared for patients with the disease. Similarly, Lee et al (2020) gave an account of how nurses who cared for MERS experienced fear, trauma, and uncertainty.

Afulani et al (2021) effectively examined the inadequate preparedness for response to COVID-19 with associated stress and burnout among healthcare workers in Ghana. Although Afulani's study was specific to Ghana, Afulani et al. did not address the psychological experiences of nurses who cared for Covid-19 patients in Ghana. Most of the current literature addressed the experiences of nurses who care for Covid-19 patients from a broader perspective, but none has analyzed the problem from the perspective of psychological experiences especially in a developing country. However, the high mental demands experienced by nurses such as stress, anxiety, fear, and psychological burnout can negatively affect the quality of health care delivery to patients (Karimi et al., 2020).

The objective of this qualitative descriptive study was to better understand the psychological experiences nurses who care for COVID-19 patience went through in a developing country. Hence, the gap in literature on the psychological experiences of nurses caring for Covid-19 patients was addressed through a qualitative descriptive design, which is described in Chapter 3. Bradshaw et al. (2017) describe the qualitative descriptive design as a design that is basically important where the investigator requires information directly from those who have experienced the phenomenon. Addressing the issues of psychological effects and how policy and healthcare management can help address them will bring the needed positive social change to medical-surgical nurses in developing countries like Ghana.

Chapter 3: Research Method

The purpose of this qualitative descriptive study was to investigate the psychological experiences of medical-surgical nurses who cared for COVID-19 patients at a teaching hospital in Ghana to better understand the complexities associated with nurses' exposure to the COVID-19 disease. This chapter highlights the rational for the use of a qualitative descriptive design to address the research problem, it outlines the researcher's role and the research methodology, and it addresses issues of trustworthiness, such as credibility, transferability, dependability, confirmability, and ethical issues pertaining to the study.

Research Design and Rationale

This study addressed the following research question: How do medical-surgical nurses in a teaching hospital in Ghana describe their psychological experiences when caring for patients with Covid-19?

I explored the psychological experiences of medical-surgical nurses who provided care to COVID-19 infected individuals in a developing country using a qualitative descriptive design.

Research Design

Qualitative Descriptive Design

A qualitative descriptive approach was used to interview medical surgical nurses about the situation they have personally experienced, caring for COVID-19 patients, to address the research question stated above. A qualitative descriptive design is appropriate to healthcare research because of its ability to provide factual responses to research

question about how the respondents feel about a particular situation (Colorafi & Evans, 2016).

Rationale for the Choice of Qualitative Descriptive Design

A qualitative descriptive approach was chosen to examine the psychological experiences of medical-surgical nurses because it is an appropriate design to use in nursing and healthcare-related studies when little is known about the phenomenon or in a study that is not well understood (see Doyle et al., 2020). The explorative nature of this design allows participants to freely describe their experiences about the phenomenon, enabling the researcher to make meaning from their responses (Ravitch & Carl, 2016). Most of the characteristics of qualitative research, such as the researcher as an instrument, natural setting, multiple methods, inductive and deductive analysis of data, interpretation, presence of the researcher (reflexivity), and holistic account (Creswell, 2019; Kim et al., 2017), were present in this study and were important in generating data that answered the research question.

A qualitative descriptive approach was considered the most suitable qualitative approach for this study because it provides a broad insight into the central phenomenon of the study and is simple, flexible, and efficient in different healthcare contexts (see Doyle et al., 2019). A qualitative descriptive approach also recognizes the subjectivity of the phenomenon under study. To this end, the different experiences that were shared by respondents were incorporated into the findings in a manner that was consistent with the research question (see Bradshaw et al., 2017).

When choosing a qualitative descriptive design for this study, I considered other methods of qualitative inquiry, but they were less effective in addressing the psychological experiences of medical surgical nurses caring for Covid-19 patients. For instance, I considered phenomenology, which describes the common meaning individuals share about their lived experiences of a concept, but it fell short as it requires deep theoretical context (Neubauer et al., 2019).

Likewise, I considered a narrative approach, which aims at reporting the stories of experiences of a single individual, several individuals, or a blend of autobiographical materials (see Nasheeda et al., 2019). However, this methodology falls short of describing the psychological experiences of nurses caring for COVID-19 patients.

Furthermore, I considered an ethnography approach, which describes and interprets the shared values, beliefs, and behaviors of a social setting or an entire ethnic group (see Creswell & Creswell., 2019). The above qualitative inquiries were not most suitable for this study, which did not require deep theoretical context but only sought to give a direct description of the experiences and perceptions of these medical-surgical nurses (see Kim et al., 2017), especially in an area where little is known about the phenomenon being investigated. Similarly, a qualitative descriptive approach does not require highly abstract interpretation of data compared to other qualitative approaches (Bradshaw et al., 2017).

Role of the Researcher

As a researcher, one of my roles was to contact the Institutional Review Board (IRB) of the institution where this study was conducted for approval of the study.

Another role as a researcher was to focus on collecting data dispassionately while avoiding any body language or tone that could influence participants to respond to the interview questions incorrectly. In line with qualitative research, my role as an instrument of data collection enhanced the richness and depth of data more than the case of quantitative research where instruments are used, and the researcher is separated from the process.

As a researcher, I had no professional relationship with the study institution or any employee of the institution. In the same vein, I had no financial interest in the results of this study whatsoever, aside from gaining knowledge from the conduct of this research, which is purely for academic purposes. To avoid bias, I bracketed out my own experiences and views (see Moustakas, 1994) when collecting data from respondents on their psychological experiences of caring for COVID-19 patients. Furthermore, this study was not conducted at my place/institution of work in order to avoid conflict of interest, and no monetary inducement was given to individuals to participate in this study.

Ethical Issues

The participants in this study were adult male and female medical-surgical nurses in a teaching hospital who were free to decide whether to voluntarily participate in the study. Also, this study has no ties with my professional work in the United States of America. There was no imbalance of power, and no gifts were given as an inducement to participate. Equally, there are no known harms associated with taking part in this study. To address these ethical issues, each participant was given an informed consent form to

complete before being interviewed. Additionally, the confidentiality of each participant was strictly protected.

Methodology

Sampling Strategy and Justification

The choice of a sampling technique for a research study is based on the type of research design and research questions (Bradshaw et al., 2017). In this regard, purposive sampling was appropriate for this qualitative descriptive study, which allowed me to obtain in-depth rich answers to the research question. This is consistent with the assertion by Parahoo (2014) that the sampling technique that is most suitable for qualitative descriptive research is purposive sampling. Purposive sampling involves the identification and selection of individuals who have experienced the phenomenon of interest being investigated (Creswell & Plano Clark, 2011). Purposive sampling also provides the additional advantage of facilitating the selection of participants whose qualities or experiences are required for the study (Patton, 2014).

Participant Selection Logic

Medical-surgical nurses who cared for hospitalized COVID-19 patients at the teaching hospital in Ghana who agreed to participate were selected for the study. These participants shared common experiences of caring for COVID-19 patients but had different accounts of the situation. The following criteria were used for selecting participants:

- The selected participants were registered nurses who had experienced caring for COVID-19 patients.

- The selected participants were full-time employees of the hospital.
- The selected participants had at least 6 months of experience as medical-surgical nurses.
- The selected participants were above 18 years of age.

Before participants selection began, I communicated the purpose of the study to the medicine unit director of the institution, and permission was granted to conduct the study. To gain access to the medical-surgical nurses from this hospital, I communicated with the teaching hospital's IRB and completed their IRB requirements. I was issued an IRB approval letter from the hospital to conduct my study in the facility. This enabled me to also gain Walden University's IRB approval. As part of the hospital's IRB requirement, I was assigned to one of the supervisors of the medical-surgical units of the hospital who read my proposal and the participants requirement. The supervisor posted my recruitment flyer on the units WhatsApp communication platform, notice boards, and the nurses' station. Interested participants posted their phone numbers and email addresses on the platform. I then reached out to the participants via phone to schedule interviews. The participants read, signed, and returned the consent forms to me on the day of the interview prior to starting the interview. The consent form clearly spelled out to the participants that participating in the study was voluntary and that they could decide not to participate at any time. All interview times were scheduled at the convenience of both the respondent and me. Interviews were conducted via phone and were audiotaped with the consent of the respondents.

Saturation and Sample Size

Saturation is reached when participants no longer provide new information/data about the phenomenon under investigation (Ravitch & Carl., 2016). Most qualitative studies rely on saturation to determine the sample size which makes predetermining sample size for a qualitative study difficult for qualitative researchers (Creswell & Creswell, 2019).

Regarding sample size for a descriptive qualitative study, there is no set number; however, it should be large enough to address the research question and describe the phenomenon or until saturation is met (Creswell & Poth, 2018). Though sample size in qualitative research is very significant, there is no prescribed formula to use in calculating sample size (Patton, 2015). However, some researchers have given guidelines for qualitative research sample size. For example, Mocănașu (2020) asserted that determining the sample size in qualitative research is affected by several factors, which methodologists reunite into two large categories: parameters relating to epistemological-methodological considerations and parameters relating to practical research consideration. The most acceptable form of assessing whether sample size is "sufficient" and proper for achieving the purpose of the study are recommendations from members of a PhD dissertation board, members of ethical board, or editors from published research (Mocănașu, 2020). However, Doyle (2019) argued that predetermining sample size before data collection may affect the analysis process, resulting in too much or too little data. The provision of sample size justifications in qualitative health research is limited and not dependent on the number of interviews (Henninks et al., 2017). In view of this,

the sample size of 10 respondents was sufficient and addressed the research question of the phenomenon being investigated. Saturation was reached after interviewing the 10th respondent where no new information emerged.

Instrumentation

Interview Protocol

I developed an open-ended interview protocol based on suggestions by Giorgi (2009) and review of literature on qualitative interview strategies to elicit information from participants (see Appendix A). The rationale for interviews in qualitative descriptive studies is to investigate and understand those things that cannot be directly observed, such as intentions, feelings, thoughts, and meaning, which are made clear through others' perspectives (Patton, 2015).

Interviews allow for the researcher to gain insight into the experiences of the individuals who experienced the phenomenon and make meanings of these experiences (Ravitch & Carl., 2016). Thus, interviews were administered via phone with the participants individually. The open-ended questionnaires allowed participants to freely express their experiences without restrictions. It also allowed me to ask further probing questions about the phenomenon (see Creswell & Creswell., 2018). Also, the use of open-ended questionnaires ensured that all the participants were asked the same questions in the same sequence to ensure consistency.

The objective of qualitative open-ended interviews is to obtain the views of participants in order to capture the difficulties of their individual perceptions and understanding by encouraging them to express their own meaning in their own words

(Patton, 2014). The participants were preinformed that the interviews would be recorded with an audio recording device that allowed for data transcription for analysis.

Procedures for Recruitment, Participation, and Data Collection

I conducted phone call interviews consisting of semistructured open-ended questionnaires with the participants in a sequential manner. Each interview session lasted for an average of 28 minutes without any possible follow-up interview. The interviews took place in quiet, uninterrupted environments without invasion of privacy. I spent 2 months in the field, which facilitated the data collection process. Interviews with participants who withdrew from participating were immediately replaced with other participants. Prior to the start of each interview, participants were emailed/WhatsApp and the consent form to sign and return. All interviews were recorded using a L87 voice recorder and short notes taken in a journal. The interviews were transcribed and stored on a personal computer. Copies of the transcripts were given to respondents to check for any corrections and validation of responses. The voice recorder was pretested and proved to be very effective; hence, there was no need for backup recording apart from jotting salient points of respondents. I interviewed each participant once using the same interview guide. All interviews were conducted in the second week of September 2023.

Qualitative Data Management/Analysis

Qualitative data analysis involves “data organization and management, immersive engagement, and writing and representation” (Ravitch & Carl., 2016, p. 238). Analyzing qualitative data also entails making sense of the responses from participants. Data

analysis requires the researcher to initially read through the responses, generate codes, and organize the codes into categories and themes (Creswell & Creswell, 2018).

Connection of Data to a Specific Research Question

Qualitative research questions are formulated to address the research problem (Patton, 2019). Therefore, the interview questions were formulated to explore the psychological experiences of medical-surgical nurses who cared for COVID-19 patients in a medical-surgical unit and to understand the complexities associated with nurses' exposure to the COVID-19 disease. Responses for each interview question were analyzed systematically.

Procedures for Coding

Coding is one of the ways of analyzing qualitative data (Saldana, 2021). Coding requires the use of short words and phrases (codes) to translate or symbolize visual data (Saldana, 2021). Before coding, I developed an initial coding list of five categories known as a parent coding list and assigned them short labels or codes. These initial codes were developed from the research question, responses from field data, and theoretical framework. The rationale behind precoding was to form a structure that could help to differentiate data by assigning section of data to a code that was linked to a broader conceptual framework. As stated by Patton (2014), the classification, identification, and coding of data are necessary in data analysis to avoid confusion.

Raw data collected from interviews and documents were organized and coded. The process involved transcribing recorded raw data into transcripts and reducing respondents' sentences into words and phrases. These words and phrases were organized

and clearly typed in Excel for coding and analysis (see Figures 3 and 4). This approach is appropriate for analyzing descriptive qualitative data that seeks to explore people's experiences about a phenomenon they experienced (Wirihana et al., 2018).

NVivo Software

The use of software for qualitative data analysis has been on the increase in recent times. Hence, using a computer software for data management and analysis helped in organizing and storing data in one place which facilitated quick access. Computer software helps in the immediate identification and retrieval of files, as well as facilitates data exploration, coding, and organization of bulk data, and backup files (Drisko, 2013). Qualitative computer software however does not assist in analytical decisions such as identification of meaning and codes (Drisko, 2013).

Manner of Treatment of Discrepant Cases

During the coding of qualitative data, it is significant to identify convergent and divergent data to reveal deviant data that do not fit in the dominant identified pattern (Patton, 2015). Hence, to address the situation, I analyzed and incorporated discrepant cases that ran counter to my themes established within this study to better understand the patterns and trends. I explained why the data did not fit but could still be valuable. The credibility of the research is also enhanced by discussing contrary information.

Issues of Trustworthiness

Credibility

Researchers rely on respondents for the meaning of the subject being investigated and interpreted (Dinzin and Lincoln, 2011). To this end, establishing a good relationship

between the researcher and the participant enhanced the generation of information-rich data. The researcher and participants need to understand the need to provide factual and original data backed by trust without causing any harm to either party (Creswell, 2013). To build rapport with participants, I interacted one-on-one with some of the respondents and spoke with others via phone for couple of days to establish trust with them.

I took the opportunity to explain to them how the answers they provide may lead to policy and management interventions to reduce the risk of caring for future infectious disease outbreak. Furthermore, I allowed the findings of the research to be formed by the respondents and not my own bias or interest by remaining neutral during data collection and analysis (Lincoln & Guba, 1985). Participants confidentiality was strictly protected during data collection. I also ensured data triangulation – giving rich, robust and comprehensive and well-developed account to achieve trustworthiness (Lincoln & Guba, 1985).

The credibility (internal validity) of this study was achieved by addressing triangulation, participants validation, saturation, prolonged contacts, and member-checking as suggested by (Lincoln & Guba, 2000).

Transferability

The reason for addressing the external validity of the present study is to determine whether the findings can be applied to other teaching hospitals in Ghana. Qualitative research studies are meant to study a specific phenomenon in a certain population; hence generalizability is not possible (Leung, 2015). The results of this study can however be

transferrable to medical-surgical nurses in other teaching hospitals similar to this study's participants.

Dependability

The dependability of the current study was achieved by ensuring that each interview transcript was reviewed by the respondent to eliminate errors thus ensuring the dependability of any common findings. I also compared data with research question and codes to ensure consistency as suggested by Creswell (2011). Furthermore, I kept an audit trail, which is a detailed and chronological account of all the research activities and processes and other influences on the data collection and analysis process (Morrow, 2005).

Confirmability

The objective of the current study was meant to explore the psychological experiences of medical surgical nurses who cared for Covid-19 patients in a teaching hospital. To this end, the findings were generated from interviews with a purposefully sampled medical-surgical nurses who had experienced the phenomenon of interest and not my own subjectivity. As much as possible, I remained neutral during the data collection process and linked the results to the research problem, research question, and the data that was collected from the field. The audit trail further enhanced confirmability (Morrow, 2005).

Ethical Procedures

Gaining Access to Participants

Easy access to research participants was key to facilitating the data collection process. As stated earlier, I built rapport with departmental heads and nurse managers who served as gatekeepers of the teaching hospital to facilitate the data collection process. Because this is a qualitative study and involved the use of human subjects, the Walden University IRB requires a current certificate proving the researcher has completed the National Institute of Health (NIH) course called "Protecting Human Research Participants." The Walden IRB number for this study was 01-03-23-0469628. Respondents were made aware of the study purpose, procedures, risks associated with the study, their rights to participate or withdraw voluntarily, and privacy of the study. Respondents who were willing to participate in this study were emailed informed consent form to complete before interviews were conducted. By obtaining the approval of IRB ensured that voluntary participation and ethical issues were mitigated.

Description of Ethical Treatment of Human Participants

The use of human subjects for research can sometimes result in a dilemma for the researcher if due process was not followed (NIH, 2011). To this end, it was important to take the rights and welfare of respondents into consideration by showing them respect as exemplified in the core principle for ethical research. In the IRB principle in human subject research, the requirements include beneficence, justice, and respect. Beneficence involves protecting research subjects from harm and helping them secure their well-being (NIH, 2011). Justice involves the assurance of fair procedures and outcomes in the

selection of participants with its associated fair distribution of benefits and costs to all the research participants (NIH, 2011). Respect is granting the individual research subjects the autonomy to consider their opinions or choices without the researcher influencing their actions (NIH, 2011). All the above concerns of IRB were incorporated into the methodology. Though I did not expect any risk, respondents were given the opportunity to withdraw from the study at any time if they anticipated any risk or discomfort. The interview questions were open, voluntary, and easy for participants in a way that did not pose any psychological or physical stress to the respondents apart from normal life experience. The language of the interview protocol was not stigmatizing, offensive, or degrading and did not affect respondents in any way.

Ethical Concerns

When conducting research that involves human subjects, it was vital to outline to the participants that their participation in the study was voluntary and they could withdraw from the study at any time. Before data collection began, I explained to the participants what the study entailed and ensured that all their questions and concerns are addressed. As part of my commitment to ethical procedure, I protected participants' privacy by using pseudonyms and choosing interview locations that were safe from people's interruptions and eavesdropping. An important area of data protection was to ensure that there was no difference in my research objective stated in my informed consent form and the actual research objective. The participants consent letter was developed based on the guidelines of Walden University's IRB. The content of the participants' letter was non-coercive, non-threatening, and without any condition attached

for those who participated in this study. The names of the nurses and the health care facility have been concealed and will not appear in any written report of the study.

Data Treatment

All field data were kept confidential, and all audio-recorded and handwritten interview transcripts safely stored electronically and non-electronically in a password protected computer and a locked safe/cabinet in my home and will be safely secured for 5-years after the study is completed and then destroyed as required by Walden University IRB. Names of participants were concealed, using pseudonyms to protect participants' confidentiality.

After the study is complete, I will share a summary of my findings with the hospital's medicine unit director, the charge nurses of the medical-surgical units, and participants that are interested via email or hard copy. It is recommended that sharing summary of research findings with others helps to promote advancement in the field of investigation (American Psychological Association, 2010).

With respect to personal ethical issues, I played the role of an insider in the entire data collection, analysis, and interpretation process. Personally, I have no financial interest in this research, but wish to gain knowledge in addressing the central phenomenon of the study. Hence, I reduced issues of conflict of interest by correctly reporting the findings of this study and did member-checking.

Summary

The main aim of Chapter 3 was to analyze and justify the choice of qualitative descriptive design, the methodological approach, and data analysis plan for the current

study. A qualitative descriptive design was the most suitable approach that could help to generate rich, in-depth information and a better understanding of the research problem.

The central research question was meant to probe how medical-surgical nurses in a teaching hospital in Ghana describe their psychological experiences when caring for patients with COVID-19. The qualitative descriptive design linked the relationship between the research question, interview questions, data collection and analysis and how to reach saturation. Data collection was focused on generating information through interviews with participants selected based on purposeful sampling technique.

Significantly, all ethical issues had been addressed in each component of the study design. Details description had also been given in ways to adhere to ethical standards prescribed by the National Institute of Health and the Walden University Institutional Review Board. Chapter 4 discusses the data analysis and results of the study including demographics, data collection, recording of filed interviews, unusual circumstances, and variations in data collection. I also provided codes to themes, research findings, discrepant cases, and evidence of trust worthiness.

Chapter 4: Results

This qualitative study aimed to investigate the psychological experiences of medical-surgical nurses who cared for COVID-19 patients at a teaching hospital in Ghana to understand better the complexities associated with nurses' exposure to the COVID-19 disease.

The main research question was as follows: How do medical-surgical nurses in Ghana describe their psychological experiences when caring for patients with Covid-19?

This chapter focuses on addressing the study setting, demographics, data collection, data analysis, and evidence of trustworthiness, which includes credibility, transferability, dependability, and confirmability. Also, the study results and summary are discussed in this chapter.

Research Setting

This qualitative descriptive study was conducted on medical-surgical nurses who cared for COVID-19 patients at a teaching hospital in Ghana. The nurses from this teaching hospital were chosen because the hospital was one of the major COVID-19 referral facilities during the COVID-19 pandemic. To gain access to the medical-surgical nurses from this hospital, I communicated with the teaching hospital's IRB and completed their IRB requirements. I was issued an IRB approval letter from the hospital to conduct my study in the facility. This enabled me to also gain Walden University's IRB approval. As part of the hospital's IRB requirement, I was assigned to one of the supervisors of the medical-surgical units of the hospital who read my proposal and the participants requirement. The supervisor posted my recruitment flyer on the unit's

WhatsApp communication platform, notice boards, and nurses' station. Interested participants posted their phone numbers and email addresses on the platform. I then reached out to the participants via phone to schedule interviews. The participants read, signed, and returned the consent forms to me on the day of the interview prior to starting the interview. The consent form clearly spelled out to the participants that participating in the study was voluntary and that they could decide not to participate at any time. There were no changes made to the organization's budget, management, changes in personal, or other trauma that could influence the interpretation of the study.

Demographics

The study participants were medical-surgical nurses consisting of five males and five females. Their ages ranged between 31 to 38 years. Eight of the participants had a bachelor's degree in nursing, except two who had an associate/diploma in nursing. The participants had a minimum of 4 months of experience caring for COVID-19 patients and a maximum of 2years of experience caring for COVID-19 patients. Two were senior staff nurses, six were nursing officers, and two were senior nursing officers.

Data Collection

The data collection of this study was interviews with participants. Ten medical-surgical nurses participated in the study. I made phone calls to arrange with each participant on a date, time, and convenient location for the interviews. Though I initially thought I could physically meet some of the participants face-to-face at a common location, preferably within the hospital premises, this was not possible because all the participants preferred phone conference interviews for convenience.

Recording of Interviews

The interviews took place in quiet, uninterrupted environments without invasion of privacy. Prior to the start of each interview, the participant was emailed the consent form to sign and return to me. Others preferred it to be sent via WhatsApp, which they also read, acknowledged, and sent back to me. I read out the purpose of the study and the interviews verbatim as stated on top of the questionnaires (see Appendix A) to ensure I did not miss any important information. On the consent form, I clearly stated to each participant that the interviews would be recorded with a secured recording device (L87 voice recorder), transcribed, and analyzed. The voice recorder was pretested and proved to be very effective; hence, there was no need for backup recording apart from jotting salient points of respondents. I interviewed each participant once using the same interview guide. All interviews were conducted in the second week of September 2023. The average interview time was 28 minutes.

Variation in Data Collection Procedure

Two participants initially agreed to participate in the study but did not answer my phone calls for interviews to be scheduled and had to be replaced. Another participant also opted out later after we had scheduled interview date and time because she did not want to share the hospital's problems that could lead to termination of her appointment, despite me informing her that the information would be confidential, and pseudonyms would be used.

Unusual Circumstance

Though I followed all the data collection procedures described in Chapter 3, certain unusual circumstances occurred during interviews. One such circumstances was some participants not showing up at the scheduled time, and I had to wait until they were ready to be interviewed. Another issue is some participants rescheduling when we had few minutes to the start of the interview.

Data Analysis

Overview

The data analysis process started by moving inductively from the master code list generated from synthesizing concepts and theories (etic approach) to the themes generated from the participants' own words, phrases, and perspectives (emic approach). The process involves transcribing recorded raw data into transcripts and reducing respondents' sentences into words and phrases. These words and phrases were organized and clearly typed in Excel for coding and analysis (see Figures 2 and 3).

Though the data collection took place before data analysis, the two processes at some point occurred concurrently or overlapped during the transcription of interviews for validation. The qualitative descriptive design approach was intended to reach saturation. Saturation was reached after interviewing the 10^{th} respondent. It was determined that interviewing more participants would not generate any new information related to the research question. The interview transcripts also showed that responses were consistent apart from a few conflicting cases.

From Codes to Themes

The coding process began when I converted participants' statements in the interview transcripts into words and phrases (emic approach). I did the initial coding from the words and phrases generated from the individual interviews using Excel, which provided a breakdown of the coding results, shown in Figures 2 and 3. The MR and FR represent male and female respondents respectively. The numerals 1, 2, 3… represent interviewees' names in a masked form to protect their identities. Frequency indicates the number of times the word or phrase appeared in each interview transcript. The source shows that data are from one location, and the reference shows the number of times the topic was brought up by respondents.

Figure 2

Initial Coding Results of Male Respondents

MR1	F	MR2	F	MR3	F	MR4	F	MR5	F
Anxiety	0	Anxiety	1	Anxiety	1	Anxiety	3	Anxiety	3
Fear	4	Fear	1	Fear	1	Fear	3	Fear	2
Afraid/Scared	2	Afraid/Scared	1	Afraid/Scared	3	Afraid/Scared	2	Afraid/Scared	1
Depression	2	Depression	2	Depression	1	Depression	2	Depression	1
Isolation	1	Isolation	1	Isolation	0	Isolation	2	Isolation	2
lack of PPEs/Staff	1	lack of PPEs/Staff	1	lack of PPEs/Staff	1	lack of PPEs/Staff	2	lack of PPEs/Staff	0
Care Delivery	1	Care Delivery	1	Care Delivery	2	Care Delivery	2	Care Delivery	1
Trauma	1	Trauma	1	Trauma	2	Trauma	0	Trauma	1
Adequate Staffing	0	Adequate Staffing	0	Adequate Staffing	1	Adequate Staffing	0	Adequate Staffing	0
lack of beds	1	lack of beds	0	lack of beds	0	lack of beds	1	lack of beds	0
No oxygen Machines	0	No oxygen Machines	2	No oxygen Machines	0	No oxygen Machines	0	No oxygen Machines	0

Note. MR = mail respondent; F = frequency of appearance.

Figure 3

Initial Coding Results of Female Respondents

FR1	F	FR2	F	FR3	F	FR4	F	FR5	F
Anxiety	3	Anxiety	1	Anxiety	3	Anxiety	3	Anxiety	1
Fear	4	Fear	1	Fear	1	Fear	1	Fear	1
Afraid/Scared	0	Afraid/Scared	2	Afraid/Scared	3	Afraid/Scared	3	Afraid/Scared	1
Depression	0	Depression	2	Depression	1	Depression	1	Depression	2
Isolation	3	Isolation	1	Isolation	0	Isolation	1	Isolation	1
lack of PPEs/Staff	1	lack of PPEs/Staff	1	lack of PPEs/Staff	1	lack of PPEs/Staff	1	lack of PPEs/Staff	0
Care Delivery	1	Care Delivery	1	Care Delivery	2	Care Delivery	1	Care Delivery	1
Trauma	1	Trauma	1	Trauma	1	Trauma	0	Trauma	1
Adequate Staffing	1	Adequate Staffing	0	Adequate Staffing	0	Adequate Staffing	0	Adequate Staffing	1
lack of beds	0	lack of beds	2	lack of beds	0	lack of beds	1	lack of beds	0
No oxygen Machines	0	No oxygen Machines	0	No oxygen Machines	1	No oxygen Machines	0	No oxygen Machines	0

Note. FR = female respondent; F = frequency of appearance.

The study evolved into an etic approach after the initial coding (see Figures 2 and 3). I reorganized and categorized the codes using the master code list (see Figure 4). I dropped one code (What are nurses' coping strategies when caring for COVID-19 patients' resilience) from the primary master code list because it did not occur anywhere in the data collection process. I inductively coalesced the second-level words/phrases (see Figure 4) from the words/phrases and the number of frequencies displayed in Figures 2 and 3 from an insider approach. The source indicates the data are from respondents from one institution, references refer to the number of times the word/phrase was mentioned by

interviewees, and the frequency refers to the total number of times the word/phrase occurred.

Figure 4

Initial Master Code List

Description	Code
What are nurses' experiences of caring for covid patients (perspective)	PER
What are nurses coping strategies when caring for covid patients (resilience)	RES
How does caring for COVID-19 patients affect nurses' relationship with other members of society (relationship)	REL
How do nurses' psychological experiences affect care delivery (quality)	QUA

Figure 5

Words/Phrases References and Frequency

Woed/Phrase	Source	Reference	Frequency
Anxiety	1	9	19
Fear	1	10	19
Afraid/Scared	1	9	18
Depression	1	9	14
Isolation	1	8	12
lack of PPEs/Staff	1	8	9
Care Delivery	1	10	13
Trauma	1	8	8
Adequate Staffing	1	3	3
lack of beds	1	4	5
No oxygen Machines	1	2	3

Upon analyzing the words/phrases in Figures 4 and 5, three themes emerged: fear of exposure to disease and death, social isolation, and quality of care.

Fear of Exposure to Disease and Death

The words “fear,” “afraid,” “scared,” and “anxiety” all portray respondents’ trepidation towards COVID-19 victims and their inability to withstand the danger COVID-19 victims posed to their health and survival during the pandemic. From the NVivo 14 analysis of the word anxiety, nine respondents (MR2, MR3, MR4, MR5, FR1, FR2, FR3, FR4, & FR5), stated that their care for COVID-19 patients was saddled with too much anxiety among them. FR1 specifically stated that “there was a lot of fear and anxiety amongst us because we were afraid of been infected and die.”

Likewise, the word “fear” was mentioned by all the 10 respondents. They stated that fear gripped them upon seeing COVID-19 patients because of the deadly nature of the disease. In buttressing this point, FR2 stated, “I fear to get the disease and transfer it to my child because I was a nursing mother.” Additionally, nine respondents mentioned the words “afraid” and “scared” and stated that they were afraid or scared of the disease because of its contagious nature and the low survival rate. FR3 stated, “I was scared, afraid, and anxious anytime I was entering a COVID-19 person’s room because I didn’t know what would happen.” MR2 mentioned, “I felt depressed especially those that I see that are going through the stages of death.”

Social Isolation

The findings of the theme that social isolation was a characteristic of the pandemic is associated with words such as “isolation,” “depression,” and “trauma.” In the

case of the word “depression,” nine of the respondents stated that they felt depressed every day because of their own safety and watching people dying of the disease. In supporting this, MR2 stated, “I feel depressed especially those that I see that are going through the stages of death.” Similarly, the word “isolation” was mentioned by eight respondents who indicated that they were totally isolated from families and friends to protect them from being infected in case they contracted the deadly disease. MR3, in buttressing the general opinion of the other interviewees, stated, “I was afraid going to my family and relatives. I only spoke to them on phone. I didn’t want to go close to them because I thought I will infect them.” Regarding trauma, eight respondents stated that they were traumatized due to the social isolation. FR2 stated, “There was a moment of loneliness because I felt the patients were going through this alone, but it was personally traumatizing for me because we were in a lockdown.”

Quality of Care Delivery

The theme of quality-of-care delivery relates to phrases such as “care delivery,” “lack of PPE,” and “lack of staff.” Regarding phrases such as “lack of PPE” and “poor staffing,” eight respondents (MR1, MR2, MR3, MR4, FR1, FR2, FR3, and FR4) mentioned that lack of PPE and inadequate staff numbers was a major factor in their fear of exposure to the disease and death and a threat to quality care delivery as well. The phrase care delivery was mentioned by all 10 respondents although varying opinions support the fact that quality care delivery could be compromised due to poor staffing and lack of PPE. As MR3 stated, “To be honest I was always afraid at the beginning, and I

use to rush patient care but as time went by, I realized it was not worth that so I took my time to complete all the care."

Discrepant Cases

Discrepant cases involve any data that do not fit the themes established within this study. Discrepant cases are very significant as they reveal deviant data that do not fit the dominant identified patterns (Patton 2002). The credibility of the researcher's account is increased through the analysis and discussion of discrepant data (Creswell, 2009). Hence, discrepant cases are applicable to the research question of this study as there was evidence of data that contracted one theme established in this study to be meticulously discussed in the research findings of this chapter.

Evidence of Trustworthiness

Credibility

The credibility of this study depended on data saturation, triangulation, prolonged engagement, validation (member-checking), inclusion of discrepant cases, and Walden University scholars peer review. Significant engagement with interviewees of the institution enhanced the generation of information-rich data which further increased the credibility of this study. Saturation was achieved by focusing narrowly on the research question of all the ten respondents of the institution. The research also incorporated all the views of the 10 respondents in response to the research question. The purposeful sampling technique increased the credibility of the study by allowing me to replace two participants who withdrew from the interview in the early stages of the data collection process. The credibility of this study was further enhanced by the fact that the findings of

the research were formed by the respondents themselves without any form of bias from me. Lincoln & Guba, (1985) will argue that remaining neutral during data collection and analysis increases the credibility of the research. The prolonged engagement I had with all the respondents during the interviews further increased the credibility of this study.

This research though highly credible, is limited when it comes to transferability. Despite the thick description of the findings I have provided, these descriptions are solely based on the purposefully sampled participants in the study institution. Qualitative research studies are meant to study a specific phenomenon in a certain population; hence generalizability is not possible (Leung, 2015). The results of this study can however be transferrable to medical-surgical nurses in other teaching hospitals similar to this study's participants.

Dependability

The dependability of this study was achieved by ensuring that all interview transcripts were reviewed by the respondents to eliminate errors to ensure the outcomes of this study are reliable. Data was also compared with the research question and codes to ensure consistency as suggested by Creswell (2011). Furthermore, I paid adequate attention to details during the research design, data collection, and data analysis process thus improving the dependability of this study.

Confirmability

The integrity of research findings is dependent on data; to this end, the researcher needs to link together the data analytical procedures for handling data with findings to guarantee the confirmability of the findings. Hence, I discussed any concerns regarding

my role as a researcher that have the potential of restricting confirmability by strict adherence to ethical requirements, rigorous research design and remaining neutral in the field. All raw field data were converted into findings with special care to avoid bias. Additionally, I gave a detailed and rigorous chronological account of all the research activities and procedures including themes and discrepancies that emerged from the study.

Study Results

As discussed earlier in the data analysis section of this study, three themes emerged which form the basis for the results. The themes are fear of exposure to disease and death, social isolation, and quality of care.

Fear of Exposure to Disease and Death

This study showed that nurses who cared for COVID-19 patients experience fear of exposure to the disease and death. This phenomenon has contributed to both similar and differing degrees of experiences by all the respondents in the same institution where this study was conducted and exemplified their trepidations towards COVID-19 patients during the pandemic. According to respondents, their fear of contracting the disease was to prevent themselves from dying of the disease or infecting others, especially close family members. As FR1 stated, “There was a lot of fear and anxiety; this was because of the fear of being infected and infecting others.” In a related statement, FR2 stated, “I fear to get the disease and transfer it to my child because I was a nursing mother.” The sentiments expressed by FR1 and FR2 align with Feng et al., (2020) and Sun et al.,

(2020) that nurses who cared for COVID-19 patients experienced several negative emotions such as stress, and anxiety because of the fear of being infected.

The fear, being afraid, and anxiety expressed by the respondents was probably due to the highly infectious nature of the disease and the lack of PPE at that time, which made nurses vulnerable to contracting the disease. In sum, MR1 opined that "there were limited protective resources, and that made us lost patients, which was depressing. I personally contracted the disease, and it caused a lot of anxiety in me." As indicated earlier, there were differing opinions of experiences from the nurses; although almost all the nurses felt scared upon seeing a COVID-19 victim, FR3 stated, "I feel motivated to do my best to save them as I feel empathy for the patients." Though the expression by FR3 was a unique revelation contrary to that expressed by the rest of the respondents, it could be attributed to the fact that FR3 took an oath as a healthcare professional to save lives no matter the situation at hand.

Other words epitomizing the fear of exposure to the disease and death were the consistent use of the words afraid and scared by respondents. Almost all these nurses feared and were scared of COVID-19 patients because of its contagious nature and low survival rate. FR3 stated, "I was scared, afraid, and anxious anytime I was entering a COVID-19 person's room because I didn't know what would happen." The anxiety experienced by nurses because of fear of caring for COVID-19 victims could even lead to the mishandling of some patients if care is not taken. This could also result in a high death rate of COVID-19 patients.

Social Isolation

Results from the study indicated that other factors contributed to the social isolation of nurses who cared for COVID-19 patients. Amongst some of these detrimental experiences was isolation due to discrimination from the public. Almost all the respondents attested to the fact that they experienced isolation of some kind in the form of public discrimination or self-isolation for safety reasons. Concerning public discriminated isolation, FR1 stated, “Apart from me isolating myself from family to prevent possible infection, outsiders who know me as a nurse avoided me anytime they saw me coming towards them.” In buttressing the assertion of FR1, MR2 mentioned, “I was either removed from “trotro” or refused boarding several times when the driver mate realized I was a healthcare worker.” Similarly, MR1 stated, “I stopped going to church and other family gatherings to avoid infecting others in case I contract the disease.”

Another significant sign of social isolation was depression. This study results showed that most of the nurses who cared for COVID-19 patients experienced hopelessness during the pandemic. MR2 stated, “I felt depressed everyday especially when I see those patients that are going through the stage of death.” This hopelessness experienced by the nurses was probably because they had no clue about treatment regimens at the initial stage of the pandemic as more people were dying than surviving.

Additionally, trauma was one of the psychological experiences’ nurses went through during the pandemic. Almost all the nurses were overwhelmed and traumatized. FR2 described her experience as “the situation was a moment of loneliness because patients were just dying any how and it was personally traumatizing for me.”

Quality of Care Delivery

Quality care delivery is significant in any healthcare setup especially during a pandemic. However, the concerns expressed by respondents in the theme "fear of exposure to the death and death" might be a recipe for poor care delivery. Many factors indicate that the quality of care was doubtful. One of such factors is the lack of PPE. According to respondents, PPE that could help to protect nurses against any possible infection were lacking. Inadequate staff was another factor that could affect quality of care delivery. This is exemplified by the statement made by FR3: "Because we were understaffed, lots of nurses did not want to care for COVID-19 patients, so the few of us that volunteered had higher caseloads." In fact, though FR3 might be correct in her statement, the highly contagious nature of the disease could be another reason other nurses were running away from the COVID-19 units.

Similarly, the lack of oxygen machines and other important materials, such as beds, could affect care delivery to COVID-19 patients. In corroborating this, FR3 stated, "The PPEs, oxygen machines, and beds were insufficient to cater for the patients." All these multitude of factors could contribute to poor quality care delivery.

Discrepant Cases

Discrepant data are applicable to the present study since there was evidence of data that contradicted one theme established within the framework of this research. There were also data that did not fit into the research question. For instance, within the theme of fear of exposure to the disease and death, FR1 stated, "I was not scared or afraid, I feel motivated to do my best to save them as I feel empathy for the patients." Similarly,

though most respondents complained about social isolation, FR3 stated, “I never experienced any such thing, I was just doing my normal work.” Within the theme quality care delivery, almost all the respondents agreed that quality of care was compromised at some point when giving care because of several factors including poor staffing, lack of PPE, absence of beds, and lack of oxygen machine, MR4 and FR4 thought otherwise, by averring that poor staffing, lack of PPE, and oxygen machines did not affect their quality care delivery.

Summary

This descriptive qualitative study examined the psychological experiences of nurses who cared for COVID-19 patients at a teaching hospital in Ghana. Three key findings were established from the study. First, there was fear of exposure to the disease and death. The study identified fear, afraid, scared, and anxiety as feelings that constitute fear of exposure to the disease and death. Secondly, social isolation was one of the challenges experienced by nurses caring for covid-19 patients. Social isolation included loneliness, depression, and trauma. Lastly, care delivery, lack of PPE, and poor staffing, and the absence of beds and oxygen machines all conspire to affect the quality of care rendered to COVID-19 patients. Cases of discrepant data have been identified and addressed. The myriad of psychological experiences revealed by this study thus far supports Park and Park (2020) that several challenges could cause severe psychological problems for nurses while providing care to COVID-19 patients.

In Chapter 5, a review of the research question is presented, interpretation of findings, and contributions to scholarly literature on nurse’s psychological experiences

for caring for COVID-19 patients are discussed. The chapter also discusses recommendations for further studies.

Chapter 5: Discussion, Conclusions, and Recommendations

This qualitative study aimed to investigate the psychological experiences of medical-surgical nurses who cared for COVID-19 patients at a teaching hospital in Ghana. A qualitative descriptive approach was appropriate in unearthing rich information about nurses' psychological complexities when caring for COVID-19 patients during the pandemic. The findings from the study were fear of exposure to the disease and death, social isolation, and quality of care delivery. The study extends the Schacter-Singer theory of emotions to the psychological experience of medical-surgical nurses who cared for COVID-19 patients by presenting an in-depth understanding of the complexities associated with caring for COVID-19 patients in a teaching hospital in Ghana. This area has not been previously addressed.

Interpretation of Findings

The results of this study increased current knowledge on the psychological experiences of medical-surgical nurses when caring for COVID-19 patients. The findings underscore the negative complexities that characterized caring for COVID-19 victims during the pandemic, thus affirming the assertion by Monjazebi et al. (2021) that the experiences of nurses caring for COVID-19 patients involve complex, combined, and interrelated physical, mental, and emotional challenges.

Related Causes of Psychological/Emotional Challenges

The findings of this study showed that nurses who cared for COVID-19 patients experienced heavy psychological burnout in different forms. Hence, these interrelated causes of psychological complexities led to similar and deferring experiences nurses went

through. The fear of exposure or contracting the disease was one of such related causes of emotional challenges. The contagious nature of the disease made respondents try all possible means of preventing themselves from contracting the disease, which could lead to death or reducing the possibilities of infecting family members. As MR3 stated, “I was afraid of contracting the sickness and was also afraid of infection my family if I get the disease.” The uncertainties expressed by MR3 corroborate previous findings that nurses who experienced uncertainty that exposed them, their immediate families, and other social networks to danger increases their risk of psychological burnout and affects their psychological well-being (Arcadi et al., 2020; Kovenor et al., 2021). It further corroborates Lam et al.’s (2019) assertion that nurses who cared for COVID-19 patients experienced fear of being infected and lingering uncertainty.

The findings further strengthened the proposition of the two-factor theory that nurses' emotions constitute psychological experiences that could vary from one nurse to another (see Schacter-Singer, 1962). Similarly, a related cause of psychological challenge as revealed by the study was the lack of PPE and other essential materials for use by nurses who cared for COVID-19 patients, which further increased nurses’ psychological anxiety. Although the issue of PPE was not part of the research question of this study, it constantly came up as an antecedent of psychological challenge because it made nurses vulnerable to contracting the disease. MR1 opined, “We did not have enough material resources, which made care difficult, and some of the patients were dying from lack of simple oxygen.” In buttressing the point of MR1, MR4 stated,

> I feel like there were limited resources and felt the patients could do better in developed countries with good resources. There are times we even run low on oxygen and that is the periods of the night the patients die.

These findings clearly support United Nations Development Program's (2020) statement that poor healthcare system capacity makes developing countries highly vulnerable to COVID-19, and such countries would run out of ICU beds if an average of 0.04% of their population is infected. To this end, this finding thus disconfirms previous literature about some of the triggers of psychological challenges, as little literature has addressed the problem of lack of materials and related resources vis-à-vis emotional challenges.

Another significant finding of this study that contributed to nurses' psychological challenges was the lack of adequate medical staff during the pandemic. Poor staffing thus increased nurses' workload with a corresponding increase in vulnerability to the disease. According to the respondents, the nurse-patient ratio was so high that contracting the disease was easy. As revealed by MR1, the reason for the shortage of staff in the COVID-19 units was that few nurses volunteered to work, thus exacerbating the situation.

Psychological Challenges in Caring for COVID-19 Patients

The study results paint a gloomy picture of medical-surgical nurses' condition during the pandemic. According to respondents, concerns about being infected with COVID-19, spreading the disease to families, increased workload and depression, and increased stress levels were the underpinnings for their psychological challenges. The assertions from FR2, FR3, MR3, and MR4 confirmed previous literature that nurses who cared for patients with infectious diseases experienced physical, mental, emotional

challenges, fear of uncertainty, hesitation, and persistent trauma (see Lee et al. 2020; Monjazebi et al. 2021).

In a similar vein, another emotional challenge medical surgical nurses faced was social isolation. As a significant cultural practice, social ties are very significant in the African continent in general and Ghana in particular. These social practices are well exhibited during funerals, church services, naming ceremonies, and other related social activities, such as boarding public transport known in the local parlance as "Trotro." Although these activities were stopped or drastically minimized during the pandemic, nurses were highly discriminated upon when attempting to access any of these services, which made them feel guilty and depressed. The expressions of FR1, MR1 and MR2 confirmed previous studies that nurses who cared for COVID-19 and other infectious diseases faced social discrimination, guilt, and depression (see Zhang et al., 2021).

The psychological effects of nurses caring for infectious diseases could have consequential effects on quality healthcare delivery. The fact that the study findings revealed that medical-surgical nurses sometimes had to deliver care in an unprofessional manner due to lack of PPE, lack of beds, lack of oxygen, poor staffing, and fear of exposure to disease meant that quality care delivery was sometimes compromised, which could ultimately endanger patients' lives. Although the findings of this study showed that nurses did their best to save lives during the pandemic despite limited resources, the words of MR2 and MR3 showed that other nurses sometimes rushed care due to the above stated reasons, which confirms the findings of Karimi et al. (2020) that nurses who took care of COVID-19 patients experienced mental and emotional distress due to

working in inadequate conditions. Working under such inadequate conditions could affect healthcare delivery and thus affirm the position of previous literature that psychological emotions and high mental demand nurses go through when caring for emerging infectious diseases can affect nurses' welfare and the quality of health care delivery to patients (see Karimi et al. 2020).

Limitations of the Study

This study was designed such that its scope was limited to only one teaching hospital in Ghana, where medical-surgical nurses took care of COVID-19 patients during the pandemic. Hence, transferability to other teaching hospitals in the country or internationally is not possible unless the clinical conditions of such hospitals are analyzed separately. Importantly, the experiences of the study teaching hospital provided a critical framework for policy consideration and development that is likely to be transferable throughout the country. Thus, policy makers in other teaching hospitals could gain insights from this study findings to assist in their policy decision making but cannot directly adapt the study findings to their hospitals.

Another limitation of this research was that it was only conducted on medical-surgical nurses, not other nurse groups or population such as psychiatric nurses, maternal and childcare nurses, or pediatric nurses. Hence, its findings cannot be transferred to these nursing populations. Additionally, the study was conducted using medical-surgical nurses in a developing country where healthcare conditions may differ from those of a developed country and, thus, are not transferrable.

One of the limitations of this study was how to get respondents to avail themselves for interview because of their work schedules. This was, however, resolved by interviewing respondents online via telephone at their own convenient time. Another limitation was that some respondents opted out to be interviewed at the last minute. This was resolved by replacing such respondents with different respondents who were ready to be interviewed. Another possible limitation of this study was the issue of social distancing during interviews, which was resolved by phone interviews.

Recommendations

Because this study is limited to transferability, knowledge from the psychological experiences of nurses who cared for COVID-19 patients would profit from successive studies examining nurses in a teaching hospital other than the one under study and comparing the findings possibly using a mixed methods approach. Because the study results showed that negative experiences predominantly characterized nurses who cared for COVID-19 patients, I recommend that future research address the negative effects of nurses caring for COVID-19 patients in a teaching hospital using a qualitative study. This approach may extend the findings of the present study that caring for COVID-19 patients in a teaching hospital was characterized by negative experiences.

As it is now, it is difficult to preempt which recommendation (s) will be implemented by policymakers and/or healthcare facilities management. To this end, I recommend a similar study to be conducted in the same facility or similar facility and compare the findings. That approach could contradict the findings from this study and

further improve the understanding of which recommendations can assist policy decision making to improve healthcare delivery in society.

Implications

Positive Social Change

The objective of this study, as I explained in Chapter 1, was to help bridge the knowledge gap on the attendance psychological complexities associated with medical-surgical nurses who cared for COVID-19 patients in a teaching hospital in Ghana. Further, I intended to suggest how the extent to which the psychological experiences of medical surgical nurses can help health care facilities' management to better understand the challenges of nurses treating infectious disease patients, which may assist them to develop policies and practices to protect these nurses, patients, healthcare institutions, and communities.

The lack of understanding of the psychological experiences medical-surgical nurses faced when caring for COVID-19 and other infectious diseases patients in developing countries could subject this category of healthcare workers to needless psychological issues and even deaths. This research thus represents several steps to help policy makers to put in place effective strategies and future pandemic preparedness policies, which can improve health care delivery and the general welfare of society, thus bringing social change. Positive social change can reflect in individual patients through the delivery of quality health care needs and reduce needless deaths of individuals. To the nurses, positive social change can be realized through improvement in quality care delivery to patients and reduces the risks of being infected from infectious diseases. The

implementation of these recommendations can help to improve the health of community members, thus bringing positive social change to the community. Addressing these recommendations can help the health care institution effectively respond to public health crises in the future.

Methodological/Theoretical Implications

The research findings of fear of exposure to the disease and death resulting in depression and anxiety in medical-surgical nurses, social isolation, and quality of care constitute a significant contribution to the central phenomenon of this study exploring the psychological experiences of nurses who cared for COVID-19 patients in a developing country. Hence, the use of an appropriate methodological approach was very influential in arriving at the results.

The conclusions drawn from this study have implications on how future researchers can apply the theoretical framework of the Schachter-Singer theory of emotions to evaluate the results of other studies on the psychological experiences of nurses caring for patients with infectious diseases. The theory was instrumental in influencing the connectivity between physiological arousal and nurses' psychological experiences, which constituted the central phenomenon of this study. The theory was, however, weak in addressing how the lack of basic medical resources could influence physiological arousal resulting in psychological experiences. Thus far, almost all the existing theoretical literature has focused on the general effects of COVID-19 on health care workers and systems. The unique contribution of this study is that it focused

specifically on the psychological experiences of medical-surgical nurses caring for COVID-19 patients, in this case, nurses in a teaching hospital in a developing country.

A qualitative descriptive study was suitable to health research because it elicits factual responses to questions about how individuals feel about a particular phenomenon they have experienced (Colorafi & Evans, 2016). In view of this, to address the issue of psychological experiences of medical-surgical nurses in a teaching hospital, a different research design should be used to explore the same phenomenon to increase knowledge and understanding of the psychological experiences of medical surgical nurses who cared for COVID-19 patients. This design could be quantitative or mixed methods designs.

Recommendations for Practice

As revealed from this study, the teaching hospital where this research was conducted is facing myriad of challenges. These challenges span from inadequate staffing to lack of PPE, inadequate knowledge on the COVID-19 infection, limited oxygen, and even beds, which all conspire to affect quality healthcare delivery. A recommendation of this study is that hospital management and nursing leadership should endeavor to provide important resources as well as evidence-based policies and procedures that can be activated for the facilities to function well, especially in times of pandemics. I recommend bedside nurses, advance practice nurses, and informatic nurses in the healthcare facility to collaborate with the management and leadership to develop a pandemic preparedness plan for future pandemics.

I also recommend the health care facilities' management and nursing leadership who understand the problems of their facilities better liaise with policy makers to better

understand the difficulties frontline health care workers go through to institutionalize safe measures and preparedness policies that can promptly respond to future pandemics. As a way of protecting healthcare workers, especially during pandemics like COVID-19, as well as improve quality healthcare delivery, I recommend that the central government set up very rigorous quality standards and constant inspection of healthcare facilities to abide by these standards. Lastly, I propose a similar study be conducted in a different teaching hospital in Ghana to test the findings of this study and based on which policymakers and nursing leadership can use the findings and experiences to set quality standards for healthcare facilities, given that nurses in many healthcare facilities are challenged with psychological complexities.

Following the revelation from this study that PPE and other significant medical supplies like oxygen were not readily available for use by nurses caring for COVID-19 patients, I recommend that hospital management and nursing leadership endeavor to always make such important resources available for use by those who need them and have back-up supplies for emergency preparedness. I also recommend as a measure of public safety that the central government create infectious diseases isolation centers in all the regional capitals of the country to reduce the pressure on teaching hospitals during such pandemics. Furthermore, large healthcare systems such as the teaching hospital should include in their emergency preparedness plans a means of transporting staff to and from work during emergency situations.

Conclusions

The findings of this qualitative study showed that medical-surgical nurses experienced diverse psychological complexities during the COVID-19 pandemic, which affected both their personal and social lives. Although the two-factor theory views infectious disease as stimuli for psychological experiences, the findings of this study have extended knowledge in this regard by showing that the lack of important medical materials such as PPE could be stimuli for psychological challenges.

The study further revealed that quality care delivery was sometimes compromised due to nurses' fear of being infected with the disease, and the lack of PPE, which could gravely affect patients' welfare and the overall public healthcare system. The findings led to the proposal of pragmatic approaches by healthcare facility management and the central government to institutionalize measures and preparedness policies that can promptly respond to future pandemics.

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Appendix A: Interview Questionnaires

This questionnaire is intended to elicit information on the psychological experiences of nurses who cared for Covi-19 patients for the award of a Doctor of Philosophy (PhD) Degree in Nursing. Your objectivity in responding to the research question will be highly appreciated as this is valuable in improving the quality of this research study.

Date: ……..

Time of interview:…….

Place of interview:……

Respondents Demographic Information

Age: …….

Sex:……..

What factors constitute psychological experiences of Medical Surgical Nurses who cared for covid 19 patients?

(Psychological experiences: refers to emotional and mental impact you experienced as a result of caring for Covid-19 individuals)

1. Can you please share with me whether you cared for Covid-19 patients, and if yes for

howlong?.....

2. What are your psychological experiences of caring for Covid-19 patients?

……

3. How will you describe your mental image upon seeing a Covid-19 patients?

……

……

4. What feelings come to mind when you begin treating a Covid-19 patients?

……

……...

5. How would you describe what constitutes these psychological experiences?

……

……

6. How do these psychological experiences vary on daily basis?

……

……

7. How will you describe the difficulties or ease associated with your caring for Covid-19 patents?

……

……

How do medical-surgical nurses in a teaching hospital in Ghana describe the effects their psychological perceptions had on caring for Covid-19 patients?

8. How did these psychological experiences affect your personal life?

……

……

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9. How did these psychological experiences affect your personal relationship with your family and other members of the community?

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……..

10. How did these psychological experiences affect your care delivery to the covid-patients?

……

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THANK YOU VERY MUCH FOR YOUR TIME.

Appendix B: Recruitment Flyer

Interview study seeks Medical-Surgical nurses who cared for Covid-19 patients.

There is a new study about the purpose of this qualitative study is to investigate the psychological experiences of medical-surgical Nurses who cared for COVID-19 patients during the pandemic in order to better understand the complexities associated with nurses' exposure to the COVID-19 disease. For this study, you are invited to describe your psychological experiences caring for covid-19 patients.

About the study:

- One 45–60-minute phone interview that will be audio recorded
- There is no incentive for participating in this study.
- To protect your privacy, the published study would use fake names

Volunteers must meet these requirements:

- The selected participants must be registered nurses who have experienced working with Covid-19 patients.
- The selected participants must be full-time employees of the hospital.
- The selected participants must have at least six months of experience as medical-surgical nurses.
- The selected participants must be above 18 years of age.

This interview is part of the doctoral study for Cecilia Dapilah, a Ph.D. student at Walden University. Interviews will take place during September 2022.

To confidentially volunteer, contact the researcher: Cecilia Dapilah
XXX/XXX@waldenu.edu

Appendix C: Participant Validation Form

Date, 2022

Dear……

I want to use this opportunity to thank you very much for taking your time to grant me this interview. I have attached here a draft transcript of your interview. Please read through it for accuracy and to assure me that your responses were reported correctly. Kindly feel free to contact me at (+XXX3) or XXX@waldenu.edu for any questions or concerns you may have and wish to discuss with me.

Sincerely,

Cecilia Dapilah