COPING STRATEGIES FOR MOTHERS DURING CHILD SICKNESS IN HOSPITALS OF LIMPOPO PROVINCE, SOUTH AFRICA

by

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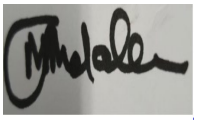
DECLARATION

I, **Rebecca Nditsheni Mundalamo**, declare that this thesis on **"Coping strategies for mothers during child sickness in hospitals of Limpopo Province, South Africa"** is my own work in style and design; it is submitted for the requirements of Doctor of Nursing in the Department of Advanced Nursing Science at the University of Venda. It has never been submitted before for any degree at this or any other university or institution. All the sources that I have used or quoted have been duly indicated and acknowledged by means of complete references in the thesis.



07/10/2022

Student Signature Date

DEDICATION

I am dedicating this study to:

- My late dad, Mr. Thanyani Amos Tshisevhe
- My mom, Mrs. Esther Thinadzanga Tshisevhe
- My mother-in-law, Masindi Kwinda
- My dear and loving husband, Pandelani Raymond Mundalamo
- My only son, Ramudzuli Vhuhwavho Mundalamo
- My daughter, Denga Ndivho Mundalamo

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ABSTRACT

Sickness comes to families unexpectedly and frustrates family members, especially when a child falls ill. The whole family is affected by the experience of sickness and the health care process. Sickness in children happens worldwide and the person most affected is the mother. The purpose of this study was to develop coping strategies for mothers during child sickness in the hospitals of Limpopo Province (LP), South Africa (SA). The study employed an exploratory, sequential, mixed-method design wherein qualitative and quantitative data collection methods were used.

Phase 1(a) explored and described the challenges of mothers during child sickness in the hospitals of Limpopo Province. Whilst Phase 1(b) was quantitative descriptive surveys. The objectives in phase 1(a) explored and described the experiences of mothers during child sickness in the hospitals of LP, SA. The sample was mothers with critically ill children under five years of age, admitted to the paediatric unit of hospitals during 2018/2019. A non-probability, purposeful sampling technique was used to select 50 participants from seven hospitals in two districts of LP, SA. Data were collected through in-depth interviews and coded and categorised using the eight steps of Tesch's thematic analysis. Measures to ensure trustworthiness were observed. Saturation was determined when no new information was identified. Phase 1(b) included exploring coping strategies for mothers during child sickness in the hospitals of LP, SA through a quantitative approach. The population was all the health professionals at the hospitals of LP, SA. In the quantitative strand, the sample of districts and hospitals was health professionals. Questionnaires were used for data collection and the data were coded and analysed using the Statistical Package for Social Sciences (SPSS), version 26.0. Descriptive statistics based on inferential statistics were used.

Results from Phase 1b were interpreted in the form of graphs, charts, and tables. The major findings of this study confirm that mothers were failing to cope during child sickness and hospitalisation. Validity, reliability and ethical considerations were ensured. In Phase 2, coping strategies were developed. Phase 3 validated the coping

strategies developed in Phase 2. Conclusions and recommendations were that health professionals should be trained in customer care. The coping status of the mothers should be assessed to provide the necessary care. The results indicated that mothers were failing to cope during child sickness hence the development of strategies may assist mothers to cope.

Keywords: child, coping, mother, sickness, strategies

LIST OF ABBREVIATIONS AND ACRONYMS

AIHW	Australian Institute of Health and Welfare
ANA	American Nurses Association
ATS	America Thoracic Society
CHQHHS	Children's Health Queensland Hospital and Health Services
DFH	Donald Fraser Hospital
DIFI	Doha International Family Institute
DOH	Department of Health
HCCC	Health Communication Capacity Collaborative
Km	Kilometers
LP	Limpopo Province
NICU	Neonatal Intensive Care Unit
PICU	Paediatric Intensive Care Unit
RAN	Registered Assistant Nurse
RSN	Registered Staff Nurse
RPN	Registered Professional Nurse
SA	South Africa
SDG	Sustainable Development Goals
SHDC	School Higher degree Committee
SPSS	Statistical package for social sciences
UHDC	University Higher Degree Committee
UNICEF	United Nations Children's Fund
UNIVEN	University of Venda
USA	United States of America
WHO	World Health Organisation

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CHAPTER 1: OVERVIEW OF THE STUDY

1.1 Introduction

Coping with child sickness is one of the most challenging experiences that parents can face in life. Sickness is the state of being ill or affected by disease when the body is unable to adapt to new threats. Sickness is a health problem that limits an individual's ability to live a normal life. It is the improper functioning of body organs and a deviation from normal, related to personal experience of disease and finally, it is the undesirable state of health (Seidlein & Salloch, 2019: 4).

An interruption in the normal function of any part, organ and system of the body is manifested by the characteristic set of signs and symptoms like pain, distress and suffering. The well-being of a person may be affected because of complex interplays among biological, socioeconomic, lifestyle, societal and environmental factors. A failure of the adaptive mechanisms of an organism to prevent adequately the stimuli and stresses to which it is predisposed results in a disturbance in the normal function of some parts of the body (Plianbangchang, 2018: 384).

Child sickness is something that comes to individuals and families unexpectedly, frustrating them especially when it strikes a child. The whole family is affected by the process of sickness and the experiences surrounding the healthcare process. The mother as the primary caregiver is the most affected person when a child is sick. When the child's sickness does not become better, the mother takes the child to health facilities like a hospital where they could be admitted. Unfortunately, some children admitted to hospitals also die, causing pain and frustration to families, especially to the mothers (Nassery & Landgren, 2019: 266).

In addition, sickness occurs to everyone irrespective of age, colour, religion or culture and how individuals respond differs. It becomes more devastating if sickness occurs to a child and mothers tend to face challenges in coping with the sickness of a child. Sickness might be sudden or gradual, anticipated or unanticipated. It seems no one

expects sickness to occur within their family, especially in children. Mothers become deeply affected, devastated, frustrated, stressed, and hopeless during the period of child sickness. However, mothers are expected to cope with both physical limitations and psychological effects, amongst others, during child sickness (Murthy, Guddattu, Lewis, Nair, Haisma & Bailey, 2020: 20).

In countries such as the United State of America (USA), despite being developed, mothers experience traumatic stress due to the sickness of their children. Five in 100 children in the USA are admitted to hospital because of major acute or chronic illness, injury, or disability; 20 million children suffer unintentional injuries, over 11 million are diagnosed with cancer each year and 69 million deaths will have occurred in 2030. Approximately 480 thousand sick children across the globe, accounting for 8 percent of all deaths among children under age five. Most deaths from child sickness occur among children below the age of two living in South Asia or sub-Saharan Africa (Chan, 2018: 34).

The experience of mothers mostly makes them vulnerable to negative situations that affect their physical, psychological, social, and spiritual life. Despite mothers being affected, family members also experience frustrations as a result of the sickness of a child (Lumsden, Smith & Wittkowski, 2019: 9). Therefore, the researcher sought to develop coping strategies for mothers during child sickness in the hospitals of Limpopo Province, South Africa.

1.2 Background to the study

Child sickness is a condition that affects children, but at the same time, it affects mothers and family members. When mothers are caring for their sick children, they have significant emotions of stress, anxiety, and social isolation and they are vulnerable to the negative effects thereof (Yousef, 2018: 24).

Horwood, Haskins, Luthuli and McKerrow (2019: 6) show that open communication may be contrary. Mothers reported relying on caring, positive, available nurses who are always dedicated to taking care of children as the best coping strategy. Furthermore,

mothers were satisfied with the care provided, particularly when they could see improvements in their child's condition. Mothers felt supported when health professionals listened to their concerns and communicated with them in a friendly and respectful manner. Furthermore, mothers also appreciated information given more than once and continuously.

The study conducted by McBride-Henry, Miller, Trenholm and Officer (2020: 10) in New Zealand shows that families indicated that uncertainty and insecurity were displayed when professionals did not give information. Families stressed the need for explanations from health professionals on the care and choice of treatment provision. In addition, the study indicates that coping was facilitated when the staff showed comfort and warmth whereas other staff members were rude. Differently, support and a clean and conducive environment created good conditions for mothers. Ohene, Power and Raghu (2019: 2) indicate that collaborating with other healthcare teams during sickness can be the best strategy for families to adapt to the situation. In addition, it was realised that the support and comfort needed by families are not provided as required, hence creating challenges for families to cope with sickness and end of life. The gap was identified in that health professionals need excellent knowledge to provide counseling and appropriate information.

Moreover, another study conducted by Nassery and Landgren (2019: 274) in Sweden indicates that coping strategies can be linked with health-related challenges like physical and psychological distress. Therefore, mothers with sick children experience challenges in coping with health-related quality of life. In this regard, coping strategies were assessed and avoidant coping was associated with both physical and psychological problems. Anxiousness and exhaustion due to child sickness increased mothers' stress. Seeking social support related to emotional and tangible support was seen as valuable.

The study conducted in Brazil by Silveira, Paula and Enumo (2019: 9) reveals that high stress in mothers and a high perception of social support were identified in mothers with sick children. 23% of mothers needed emotional support and had no one available even to share personal issues with, hence causing stress to the mother. Child sickness

results in lifestyle changes and financial difficulties, leading to stress for mothers. Knowledge of more assertive interventions was shown to have a more effective impact on mothers with stress. However, social support is perceived to prevent sadness and anger.

According to Mishra and Mohanty (2019: 22), in India, care is provided in both private and public facilities. In public facilities, most of the poor mothers received care wherein health professionals' attitude towards patients was reported to be very bad and mothers were poorly supported. Mothers did not receive any support during child sickness. Despite that, mothers travelled a long distance of two to three hours to reach the hospital where they received no support. Mothers ended up influencing each other not to visit hospitals because health professionals ill-treated patients during child hospitalisation. This shows that there is a need for health facilities to be accessible, working environments that are conducive to providing health care and healthcare professionals should be equipped with knowledge and skills to assist mothers during child sickness. Mishra and Mohanty (2019: 11) report that comprehensive, cross-sectional urban policies, plans and strategies for maternal and child health are developed, but not in terms of support of mothers. Furthermore, it is reported that in Nairobi, mothers are expected to pay before any service is provided at well-developed private hospitals and clinics, making it difficult for mothers to be assisted with the health services they need (Murunga, Mogeni & Kimolo, 2019: 127).

In Pakistan, Nigeria, India, Ethiopia, the Democratic Republic of Congo and Rwanda more than four percent of mothers with children under the age of five experienced the stress of child sickness in 2015. The impact of child sickness on mothers is a serious concern, as is revealed by the statistic of child deaths every year, especially the under-fives, and mothers develop a fear that their sick child might die (UNICEF, 2018: 13).

In Rwanda, parents experience multiple stresses as a result of child hospitalisation in Neonatal Intensive Care Units (NICUs). Several factors contribute to mothers' stress, including professionals giving insufficient information or no explanation at all of what is happening with their children. Poor staff-family interaction was a challenge and parents were not allowed to stay with the child in the hospital, resulting in anxiety and a fear of

family separation from the child. Furthermore, poor support from health professionals was identified as contributing to parents failing to cope with the challenges faced during child hospitalisation (Byiringiro, Wong, Logan, Kaneza, Gitera, Umutesi & Kirk, 2021: 6).

In Nigeria, mothers failed to cope after having the shock of hearing that their child is critically ill upon being admitted to the hospital. Mothers experienced increased psychological distress, low levels of depression, anxiety and stress, and felt intimidated by the environment. Separation from the sick child increased fears of losing the child. Despite all the challenges, adequate support from the health professionals and other mothers in the ward enabled them to cope and overcome psychological distress. Health professionals who did not have time for mothers reportedly increased the mothers' anxiety (Olabisia, Olorunfemib, Bolaji, Azeez, Olabisi & Azeez, 2020: 5).

The study conducted in Cape Town, rural South African community shows that mothers experience challenges that cause stress in their life. Child sickness affects mothers in a way that daily life activities are affected leaving mothers with negative and challenging impacts on their physical and psychological health status. In most cases, mothers are shown to be deeply affected, showing concern in coping with child sickness. Despite the challenges, some used praying to God for strength and acceptance of the situation as strategies to cope with the stress resulting from the sickness of the child (Sih, Bimerew & Modeste, 2019: 6).

South Africa is no exception when it comes to the challenges that mothers face in coping with child sickness. Sih, Bimerew and Modeste (2019: 7) report that mothers in Cape Town demonstrated distress and anxiety about coping with their child's ill health. In addition, the study indicates that mothers needed support from health professionals and family members to cope with the challenges that come with child sickness.

On the 24th of October 2017 at 22h00, the researcher watched the eNCA News Checkpoint. A woman who gave birth to quadruplets in a hospital in Gauteng Province indicated that all her babies had died a day after being born and that nobody explained to her what exactly was the cause of death. It was painful to hear that she had never received support from the health professionals at the hospital. The worse part for the

researcher was that the mother wanted to commit suicide because the trauma was too much to handle.

The study conducted by Nemathaga, Mafune and Lebese (2017: 1) in Vhembe District, LP, reveals that caregivers experienced financial and family challenges during child illness. Furthermore, caregivers faced challenges when a child was hospitalised and diagnosed with a stigmatised condition because if the caregiver then failed to disclose the child's health status, there would be no financial and family support. Hence, the caregiver ended up facing a stressful environment alone and needed attention from health professionals.

In the Vhembe District of LP, in August 2017, on the programme between 09h00 to 12h00, a Phalaphala FM broadcaster interviewed a listener who explained a bad experience after her child died after birth. She expressed her experience as horrible. She was frustrated, stressed and had both internal and external pressures which she could not handle by herself. She indicated that she needed support and comfort which she never got. She ended up starting an organisation named Mom Nest which is aimed at supporting mothers who experienced stressful situations in hospitals. Unfortunately, some of the mothers are still experiencing poor social support in the hospitals hence the researcher was prompted to develop coping strategies for mothers during the sickness of a child in the hospitals of Limpopo Province (LP), South Africa (SA).

1.3 Statement of the problem

Paediatric wards in LP admit children with childhood illnesses, who are cared for by mothers while hospitalised. Unfortunately, some of these children die in front of their mothers in the hospital's paediatric units. In most cases, all attention is geared toward the critically ill child while the mother is of the least concern. The well-being of the mother is not attended to, resulting in difficulties for the mother to cope with child sickness during hospiatalisation. Guidelines were put in place by the government to assist in saving the lives of children; however, these guidelines are silent regarding the psychological support of mothers during child hospitalisation.

In South Africa, the Department of Health's 2017/2018 annual performance plan reveals that the Department of Health in Limpopo is experiencing a backlog in infrastructure development resulting in some facilities being dilapidated. Hence, mothers with sick children experience challenges of a poor environment for both the children and their sleeping areas resulting in deprivation of sleep.

The researcher is a professional nurse working in the paediatric unit of a hospital in LP where sick children are admitted in multitudes. During her experience of more than twenty years, she has observed mothers taking care of their critically ill children. Mostly, the researcher observed that mothers seem to be suffering trauma, pain and stress when seeing their critically ill children fighting for their lives. Mothers were observed to be failing to cope during the hours of adversity, watching a child suffering. Mothers cry uncontrollably and scream with denial and disbelief while holding their children with deep, agonising pain and no hope of life. The situation becomes worse and more frightening if some mothers observe other mothers failing to cope. In the hospitals of LP, mothers seem to be insufficiently assisted regarding coping strategies for child sickness.

1.4 Purpose of the study

The purpose of the study was to develop coping strategies for mothers during child sickness in the hospitals of Limpopo Province, South Africa.

1.5 Research question

What are the coping strategies for mothers during child sickness in the hospitals of Limpopo Province, South Africa?

1.6 Research objectives

The objectives of this study were divided into three phases: Phases 1, 2, and 3.
Phase 1 of this study comprises Phase 1(a) and Phase 1(b).

Phase 1(a): Qualitative strands

The objectives in Phase 1(a) are:

- To explore and describe the experiences of mothers during child sickness in the hospitals of Limpopo Province, SA.

Phase 1(b): Quantitative strands

- To identify the views of health professionals regarding the coping strategies for mothers during child sickness in the hospitals of Limpopo Province, SA.

Phase 2

- Developing coping strategies to assist mothers during child sickness in the hospitals of Limpopo Province, SA.

Phase 3

- Validating the coping strategies for mothers during child sickness in the hospitals of Limpopo Province, SA.

1.7 Significance of the study

The study might assist in informing the South African Department of Health (DOH) on the challenges faced by mothers during child sickness. The DOH might benefit by filling the knowledge gaps of the health professionals, and creating opportunities for training the employees. The findings of the study might guide the DOH to plan staff development programmes hence building staff competency. The DOH might be assisted by planning programmes related to the gaps identified. The DOH might have a reduction in lawsuits and less expenditure on the treatment of mental health problems of mothers caused by the stress of child sickness.

The findings of the study might help health professionals to be trained and improve skills to assist mothers to cope during child sickness in the hospital. The study's results might contribute to equipping health professionals with relevant information to apply during stressful situations faced by mothers in hospital. Health professionals might gain

a better understanding of the needs of mothers during child sickness in the hospital. Furthermore, if health professionals are knowledgeable about the importance of providing support to mothers, coping strategies will be applied effectively and objectively.

The information acquired through this study might be used as a basis for other studies related to this study. The findings of the study might help the researcher to recommend further studies related to coping strategies.

The findings of the study might assist mothers to cope with child sickness. During the sickness of a child in the hospital, mothers might be observed as being devastated, afraid, shocked and stressed. This study might assist in taking away the fears of mothers through proper counseling and support. The findings of the study might assist mothers to have more insight and adopt positive coping strategies to enhance recovery. The study might also assist mothers to adjust and continue with life if the child happens to die. Furthermore, the study might provide a platform where all aspects associated with the pain of child sickness can be open for discussion and reflection. The study might empower mothers with information relating to the existing structures that may be of help.

1.8 Theoretical framework

A theory is a set of an accepted multitude of sources and facts that are related and attempt to describe, explain and understand a specific phenomenon that guides practice (Kivunja, 2018: 46). The theoretical framework of a study is a collection of plans that supports the theory of the research study and forms the foundation of someone understanding the view of the study (Adom, Hussain & Agyem, 2018: 438).

Furthermore, the theoretical framework is the foundation from which all knowledge is constructed for a research study. It serves as the guide, structure and support for the rationale for the study, the problem statement, the purpose, the significance and the research questions. The theoretical framework guides the paths of research and offers the foundation for establishing its credibility. It further explains the path of research and

grounds it firmly in theoretical constructs intending to make research findings more meaningful, acceptable to the theoretical constructs in the research field and ensuring generalisability (Adom *et al*., 2018: 438).

This research study was based on Neuman's model that used Gestalt's theory, stress theory, system theory and levels of prevention. In this study, the researcher chose to use Neuman's model for the rationale to support the mother as a total being to maintain their total well-being. In this study, the intervention was to positively assist mothers to cope during child sickness in hospitals. Hence, avoiding all the consequences that might arise if all the challenges that the mothers face are not attended to during child sickness.

Child sickness can cause stress and pain, depending on how that specific individual respond and adjusts to that stressor. Human individuals need stability in everything and any disruption can cause disharmony like physical illness, psychological impact and social problems. Child sickness is one of the most challenging stressors and when it occurs, it affects parents negatively, especially the mother. If mothers are not assisted with coping during child sickness it can cause complications, even to a state of death of the mother. Hence the researcher chose Neuman's model to address purposeful intervention to outside stressors.

This study used a theoretical framework based on Neuman's theory that was chosen because Neuman believes in human beings as a whole, unique with different reactions to stimuli. In this study mothers are unique, and they react differently to the stress caused by child sickness. This study explored the experiences of mothers during child sickness and the information given by participants was used to develop coping strategies for mothers during child sickness.

The researcher used Neuman's theory because it describes optimal wellness, which represents the greatest possible degree of system stability at a given point in time. The objective of this study was achieved because the findings of this study revealed that mothers are affected physiologically, psychologically, socially, evolutionary and spiritually. The strategies developed were based on the findings of this study.

1.8.1 Neuman's Systems Model

Neuman's systems theory focuses on the wellness of the person's system in relation to environmental stressors and reactions to stressors. Neuman defines the environment as all the internal and external forces surrounding the person, influencing and being influenced by the person at any point in time. The model identifies three relevant environments: The internal, external and created environments. The use of this theory is important to improve quality patient care. Betty Neuman looked at an individual holistically, that is at a physiological, psychological, social, evolutionary and spiritual level. Neuman's theory was used as a basis of this study to explore the experience of mothers during child sickness. Mothers expressed that they were failing to cope because of different stressors that affected them during child sickness (Ahmadi & Sadeghi, 2017: 5).

Neuman's systems model is rooted in a general system theory. The person is viewed as an open system in interaction with each other and with the internal and external environment for maintaining the balance between stressors. According to Neuman's theory, the person may be an individual, a family, a group, a community, or a social entity. In this study, the person of concern is the mother with a sick child who is hospitalised. Based on Neuman's theory, every mother's system is unique and can react positively or negatively to stressors, depending on the person's ability to cope with them at a given time. The researcher chose Neuman's systems theory because mothers are human beings that experience multiple roles and frustrations during child sickness. Mothers react differently to the situation of child sickness depending on how the sickness occurred and how the person lives (Ahmadi & Sadeghi, 2017: 3).

The Neuman systems model emphasised health promotion, maintenance of wellness, prevention and management of stressors. Child sickness is a concern to the family as a whole but especially to the mother who is mostly the primary caregiver. Neuman's theory is applied in this study because it is concerned with mothers with sick children's continuous interplay and relation with environmental stress factors. The support provided by health professionals to mothers is the intervention that minimises the

negative effects of child sickness on mothers, promotes health stability, and assists mothers to achieve optimal levels of daily performance.

Health practitioners should assist mothers to cope with the stress of child sickness and hospitalisation but they also contribute to causing the stress. Neuman emphasises that the human being, in this study the mother, is a total person who is unique and characterised by different stressors including intrapersonal, interpersonal and extra-personal stressors. Intrapersonal, interpersonal and extra-personal stressors are essential to the concept of environment. They are outlined as environmental forces that interact with, and may potentially alter the system's stability.

1.8.1.1 Intrapersonal stressors

Intrapersonal factors include interactions contained within the boundaries of the person's system, such as conditioned responses. Intrapersonal stressors involve physiological, psychological, sociocultural, spiritual and developmental variables which are explained as follows:

- The physiological variable

An individual organism is said to have a central core of basic survival mechanisms, such as temperature control, ego, and organ function. The physiological variable refers to body structure and function that are shown by physiological parameters, such as heart rate, blood pressure, body temperature, serum levels of various stress hormones and immunological functions for example suppression of lymphocyte activity. This is manifested when mothers experience physical problems like increased blood pressure when the child is sick and they fail to tolerate the situation. During this study, neurological dysfunctions that mothers experienced were headaches and gastrointestinal dysfunctions, mostly loss of appetite. Even though other systems may be affected, in this study, respiratory, genitourinary and dermatology challenges were not raised (Ahmadi & Sadeghi, 2017: 3).

- The psychological variable

The psychological variable refers to mental processes in interaction with the environment, like the hospital environment, which is stressful for the mother. Mothers perceive and understand the child's sickness and hospitalisation through the senses, and that epistemic connection with the environment occurs through the transmission of information from the environment through those senses into the mind. Therefore, in this same assumption, the environment influences mothers both micro-genetically and developmentally through the information that is generated in the hospital environment and transmitted into the minds of those mothers (Ahmadi & Sadeghi, 2017: 3).

The mother cannot express any feelings about the sickness but is depressed and anxious, and looks tired and bored. Depression, hopelessness, and anxiousness are considered intrapersonal factors that caused stress to mothers. The stress of mothers due to child sickness needed intense support from health practitioners, family members, and the church.

- The sociocultural variable

The socio-cultural variable refers to the effects and influences of social and cultural conditions. How one person experiences and characterises a situation influences how another experiences the situation (Ahmadi & Sadeghi, 2017: 3).

- The spiritual variable

The spiritual variable refers to the sense of relationship to spiritual beliefs and influences behavior, emotions and thoughts. In this study, mothers believe in God and seek spiritual intervention by praying (Ahmadi & Sadeghi, 2017: 3).

1.8.1.2 Interpersonal stressors

Interpersonal factors arise from the interaction between two or more individuals, such as role expectations. Mother and child interaction and interactions between mothers and health professionals are the forces that occur between people. These include being away from family due to child sickness and hospitalisation; being away from other

children left at home as the mother attends to the sick child; and other extra-personal stressors. Communication with health professionals and family, getting the opportunity to express their feelings about the child's sickness and being kept updated reduced mothers' concerns, which arise from their desire to get attention.

1.8.1.3 Extra-personal stressors

Extra-personal factors comprise all interactions occurring outside the person, such as financial circumstances. Extra-personal factors are forces that occur as a direct result of the wider environment or culture in which the person lives. The external influences exist outside the person and the created environment is unconsciously developed and is used by the person to support protective coping. Neuman believes that nursing is concerned with the whole person and individuals should be treated in totality. Neuman believes that anything that can cause disequilibrium in the system or affect the mother should be taken into consideration. When mothers bring sick children to the hospital, already feeling stressed by the situation, health professionals' primary aim regarding the mothers should be the stability of their system and to respond to stressors affecting them (Ahmadi & Sadeghi, 2017: 3).

Neuman believes that the person should be assessed fully and the health professional should come up with an outline of the nursing diagnosis, nursing goals to be achieved, and nursing outcomes expected. When mothers bring the sick child to the hospital and the child is attended to, the mother's needs should also be a concern because they are invariably stressed. The intervention by health professionals might reduce mothers' stress. According to Neuman, she believes that mothers should be assisted even before they respond to a stressor that is they should be assisted to cope with the stress of child sickness. Health professionals should interact with mothers at all times and this study revealed that mothers were stressed because of poor communication between health workers and mothers. Moreover, this aggravated the stressful situation. (Hannoodee & Dhamoon, 2021: 7)

Health professionals should assist the mother to reintegrate and adjust to the condition of the sick child and becoming stable. Following Neuman's system theory, the

experiences of mothers during child sickness were explored to develop coping strategies for mothers during child sickness. Betty Neuman's theory was used and applied as a framework in this study. Interviews were done to collect in-depth information or data. Coping strategies were developed based on the information that was given by mothers. (Hannoodee & Dhamoon, 2021: 7)

The researcher chose Betty Neuman's theory because it is based on the person's relationship to stress, response, and reconstitution factors that are progressive in nature. The Neuman Systems Model presents a broad, holistic and system-based method of nursing that maintains a factor of flexibility. In this study, the researcher aims to assist mothers to cope with child sickness by developing coping strategies.

1.8.2 Unique perspectives of the Neuman Systems model

According to Hannoodee and Dhamoon (2021: 9), the unique perspectives of the Neuman Systems model as the framework for this study include the following:

- Each individual is unique; each system is a composite of commonly known factors given the range of responses contained within a basic structure. Neuman views health as a continuum of wellness to illness that is dynamic in nature and constantly changing. Optimal wellness exists when the total system's needs are completely met, and illness exists at the opposite end of the continuum from wellness and represents a state of instability and energy depletion.
- The person as a system is in a dynamic, constant energy exchange with the environment.
- Many known, unknown and universal environmental stressors exist. Each differs in its potential for disturbing a person's usual stability level, or normal line of defense. The particular interrelationships of personal variables are physiological, psychological, sociocultural, developmental and spiritual
- Each system has evolved a normal range of responses to the environment which is referred to as a normal line of defense.

- The flexible line of defense has an accordion-like function. If this line is expanded beyond the normal line of defense, it provides high protection; if it is close to the normal line of defense, it provides lower levels of protection. When the protection, accordion-like effect of the flexible line of defense is no longer capable of protecting the person, the person's system against an environmental stressor, the stressor breaks through the normal line of defense. The interrelationships of variables that are physiological, psychological, sociocultural, developmental and spiritual, determine the nature and degree of a system's reaction or the possible reaction to the stressor.
- The person, whether in a state of wellness or illness, is a dynamic composite of the interrelationships of variables − physiological, psychological, sociocultural, developmental and spiritual. Wellness is experienced on a continuum of available energy to support the system in an optimal state of system stability.
- Implicit within each person's system is internal resistance factors known as lines of resistance, which function to stabilise and return the person to the usual wellness state that is the normal line of defense or possibly to a higher level of stability following an environmental stressor reaction.
- Primary prevention relates to general knowledge that is applied in a person's assessment and intervention in the identification and reduction or mitigation of possible or actual risk factors associated with environmental stressors to prevent a possible reaction. The goal of health promotion is included in primary prevention.
- Secondary prevention relates to symptomatology following a reaction to stressors, appropriate ranking of intervention priorities, and treatment to reduce their noxious effects.
- Tertiary prevention relates to the adaptive processes taking place as reconstitution begins and maintenance factors move the person back in a circular manner toward primary prevention.

1.8.3 The strength of Neuman's theory

Neuman's theory is specific and it is used as a framework in nursing research and intermediate theories. It provides a strong foundation for some research studies. However, in the absence of the latter, the researcher felt it necessary to apply this theory in this study.

1.9 Definition of concepts

Coping

Coping is to progress well during the process of attending to internal and external demands that are more than what an individual can handle, especially using behavioral strategies of comforting and adapting to a stressful situation (Bak & Zarzycka, 2021: 2). Coping is described as the ideas and actions used to control stressful conditions both internally and externally (Whitney, 2022: 6). In this study, coping was to progress well, gain strength throughout child sickness during the hospital stay, and the mother to continue with normal life after the sickness of the child.

Strategies

According to Barad (2018: 4), strategies are planned to achieve one or more goals under conditions of uncertainty; perspectives and purposeful directional guides are essential to be followed for the vision. In this study, strategies were a systemic plan to act on, for assisting mothers to cope during child sickness in the hospital.

Mother

According to Waterhouse, Hill and Hinde (2017: 771), a mother is said to be a person who holds a societal position in a relationship of child and woman, whereas according to the western views a mother is said to be nothing else but a biological mother. A mother is a female parent of a child, either biological or non-biological who performs the role of bearing relation (Segal, 2018: 994). In this study, a mother was a biological female parent taking care of a sick child under five years of age in the paediatric unit of a hospital.

Child

According to the Child Care Act No 74 of 1983 as amended, a child is any person under the age of 18 years. In this study, a child was a person who is sick, under the age of five, admitted to the hospital in a paediatric unit, and under the care of the mother.

Sickness

Sickness is the state of being ill or affected by disease when the body is unable to adapt to new threats. It is an unhealthy condition or unhealthy state of the body or mind (Plianbangchang, 2018: 384). In this study, sickness was the critical illness of a child who was under the age of five years and was admitted to the hospital in a paediatric unit.

1.10 Summary

Chapter 1 outlined the overview of the study which covered the introduction and background of the study, statement of the problem, purpose of the study, research question, significance of the study, theoretical framework and the definitions of relevant concepts as related to the study. Chapter 2 reviews the literature in relation to this study.

1.11 Layout of the chapters

Chapter 1: Overview of the study

In this chapter, the overview of the study gives the reader an idea of the topic being researched. The purpose, research question, objectives and significance of the study are outlined. The theoretical framework is explained and the key concepts are defined.

Chapter 2: Literature review

An overview of previously published studies on the current topic was reviewed. The literature review was done to demonstrate the knowledge and understanding of the academic literature on the current study.

Chapter 3: Research methodology

The research methods and contextual framework were outlined. Specific techniques used to identify, select and analyse data were thoroughly explained.

Chapter 4: Data analysis, presentation and discussion of the results of the qualitative and quantitative data collection methods

In this chapter, the collected data is analysed and the findings of both qualitative and quantitative data collection methods are presented and discussed.

Chapter 5: Development of coping strategies for mothers during child sickness

In this chapter, coping strategies for mothers during child sickness are developed based on the information collected from participants.

Chapter 6: Recommendations, conclusions and limitations of the study

The last chapter presents the recommendations, conclusions, and limitations of the study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature review is an evidence-based, in-depth analysis of a topic. Information is gathered based on peer-reviewed articles, books, dissertations, and conference papers to contextualise the research data. The literature review is an essential feature and information of academic research. Fundamentally, the researcher's knowledge advancement must be built on prior existing work (Ojimelukwe, 2018: 2). In addition, a literature review is material that the researcher consumes and interprets to introduce the researcher to what is previously known about the subject scenario. The literature review is necessary and the information gathered is widely recognised, because prior knowledge allows researchers to analyse other publications for their research project (Xiao & Watson, 2019: 11).

2.1.1 Scope of the literature review

The literature was evaluated in nations all over the world, beginning with affluent countries such as Sweden and the United States, Asian countries such as Iran, Sub-Saharan countries such as Nigeria, and developing countries such as South Africa.

2.1.2 Purpose of literature review

The goal of the literature review was to find out what previous researchers did to determine what was unknown about the current topic. Before undertaking the current study, a literature review was conducted to ensure familiarity with and comprehension of the current research topic field which is the development of coping strategies for mothers during child sickness in the hospitals in LP, SA.

2.1.3 Method and strategy used

Most of the reviewed articles depicted mixed-method research designs. The keywords used were coping strategy, mother-child and sickness. The gathered information was based on peer-reviewed articles from Science Direct, Google Scholar and Sabinet, books, dissertations and conference papers to contextualise the research data on coping strategies of mothers in hospitals during the illness of their children. The literature reviews were summarised to provide a comprehensive understanding of coping strategies as an essential feature and information of academic research.

2.2 Challenges faced by mothers with sick children

Child sickness remains a problematic issue that will always occur and cause challenges in families, especially mothers who remain the primary caregivers of these children. Currently, health departments worldwide have done much to save children under the age of five even if it is still a challenge, with the least concern on a mother as a caregiver. According to Fairfax, Brehaut, Colman, Sikora, Kazakova, Chakraborty and Potter (2019: 14), the physical and emotional well-being of a mother who is caring for a sick child potentially influences the recovery of the child. During child sickness, the mother can be affected by stressors physically, psychologically, financially, and socially that may lead to decreased physical activity and impairment in social and family life.

The concept of sickness can be difficult to define and measure as to how individuals feel. Sickness encompasses a wide range of experiences and events and their interpretation may be relative to social norms and contexts. As such, individuals, groups, and societies may have very different interpretations of what constitutes sickness and what it means to be in good health. The process of sickness is traumatic to a significant person, therefore even mothers as the primary caregivers of the child experience difficulties coping during the sickness of the child in the hospital (Owoo, 2017: 16).

According to Children's Health Queensland Hospital and Health Services (CHQHHS) (2018: 15), taking care of a sick child is exhausting and mothers experience stress

physically and emotionally, changes in appetite and sleep patterns, and withdrawal from social activities. Mothers may experience increased anxiety, like heightened emotions that may be evidenced by excessive irritability or decreased emotions wherein mothers may feel empty inside.

Despite the mother bearing witness to all the processes of the child's sickness in the hospital, the mother becomes devastated during the process of the child's sickness. However, the way the mothers react to child sickness can be influenced by how the sickness occurred, the meaning attached to the sickness, and the threat thereafter. The positive meaning attached to the child's sickness can make it possible for the mother to adjust positively to the pain and stress (Koch & Jones, 2018: 11).

In olden times, every sickness used to be treated mostly at home because there were no hospitals, and no professional healthcare workers to attend to the stress faced by mothers. Today's challenge is no longer the availability of hospitals but poor and insufficient care provided to mothers during child sickness (Nassery & Landgren, 2019: 276). In some cases, despite health professionals' best intentions during child sickness, establishing open communication and mutual care goals with a distressed family may be difficult. Nursing children every day and witnessing the death of children most frequently poses a challenge to health workers, families, and parents end up traumatised, hence service delivery is also affected (Lumsden *et al*., 2019: 2).

According to Nassery and Landgren (2019: 4), the study conducted in Sweden revealed traumatic experiences by mothers during the hospitalisation of their children. Child sickness and hospitalisation demanded more from parents which led to more stress and disturbed sleep and rest. Mothers resulted in failing to cope with child sickness and hospitalisation. The effects on the mothers included an impact on their physiological functions, cognitive function, memory and emotional regulation. Furthermore, the Swedish study continues to indicate that long-term hospitalisation and deprivation of sleep led to depressive symptoms, and physiological effects which include hypertension, obesity, Type ll diabetes and stroke. Mostly negative attitudes and not sleeping next to the child were described as frustrating, causing anxiety and difficulties for mothers to cope. Thus, in Sweden, the involvement of mothers during child

hospitalisation was encouraged by the staff to relieve anxiety. At least one member of the family, especially the mother, is expected to stay with the child.

The study conducted by Koch and Jones (2018: 5) in the USA shows that 30 percent of mothers indicated that they did not receive any support or guidance from health professionals during child sickness in the hospital, whereas nine percent of mothers reported the support provided by health professionals was sufficient and very helpful in coping with the sickness. Mothers reported that the support received was helpful and 10 percent reported that the intervention by health professionals was not helpful. Whilst, according to Raju, Chithra, Suguna and Madani (2019: 1), 65 percent of mothers were reported to have a high level of stress because of the severity of child sickness and hospitalisation; and even when the child was not able to eat or drink. Furthermore, 87 percent of mothers who were contacted telephonically by health professionals in two to six weeks after a stressful situation of the child indicated that it was well-timed whereas 8 percent suggested that contact should be earlier.

The study conducted in the Brazilian state by Santos-Pinto, de Almeida Soares-Marangoni, Ferrari *et al*. (2020: 23) shows that mothers are mostly affected by the processes of child sickness, but there are gaps in assisting them to cope. Mothers reported medical interventions as ineffective including delays in the provision of medical care to children who arrived at the hospital too late in the day to be scheduled for a consultation. Even if fathers are mostly affected psychologically by the child's sickness in the hospital, the researcher is more interested in how the mother, as a primary caregiver, is assisted during child sickness. Poor or lack of support to mothers with sick children in the hospital poses serious concerns which lead to complicated grief and mourning if the child happens to die. This study aims at developing strategies to assist mothers to cope during child sickness in the hospital to prevent complications that may arise because of neglecting how mothers are coping during a stressful situation.

According to Waterhouse, Hill and Hinde (2017: 2), a combination of work and childcare had negative consequences for a mother’s well-being. Child sickness frustrated mothers who already had multiple roles such as social, economic, domestic work and childcare. This results in serious role conflicts for mothers, especially when the child is

hospitalised and the mother has to stay with the child while at the same time their work situation makes it difficult to attend to the child, resulting in psychological and financial stress.

Nassery and Landgren (2019: 4) concur with the Department of Health's report (2017/2018: 43) that sleep disturbances can lead to mothers' depressive disorders and difficulties in coping with child sickness. Mol, Argent, Paed and Morrow (2018: 46) indicate that parents in paediatric units need a place to sleep in the hospital to be close to their critically ill child.

2.3 Sickness of the child and effects/ reaction of the mother

The experience of having a child diagnosed with a life-threatening condition is traumatic and distressing to mothers. Despite if the sickness is acute or chronic; in both circumstances it negatively affects the health of mothers especially when the child is unexpectedly critically sick. A significant distress reaction might result in the manifestation of long-term effects that can lead to parental depression, acute stress or posttraumatic stress reactions. Mothers may have difficulty understanding, hence posing questions with no answers which may be followed by failing to cope with the situation. Furthermore, if difficulties experienced by mothers are not attended to, there can be psychological effects leading to failure to cope with child sickness. Mothers end up having severe stress because of caring for a critically or terminally ill child (CHQHHS, 2018: 18).

According to Neuman's model, the provision of patient care in the hospital is expected to be in totality, taking into consideration the whole being of an individual, therefore, care should be extended to mothers as caregivers and family members. Moreover, individuals can be affected differently due to child hospitalisation and normal functioning becomes affected. Therefore, health professionals providing care should strive by all means to maintain the optimal well-being of mothers if possible, preventing all potential adverse events that may arise because of not supporting mothers during initial stress caused by child sickness. If the child is diagnosed with a life-threatening disease the mother experiences and undergoes the following stages: shock, denial, adjustment,

guilt and self-accusation, bitterness and anger, re-integration and acknowledgement (Mangeli, Rayyani, Cheraghi & Tirgari, 2017: 7).

2.3.1 Shock

Shock is the first response after a child is diagnosed with a life-threatening diagnosis. The mother can be upset after the doctor breaks the news of diagnosing a life-threatening disease in the child; however, the feeling of being surprised is experienced (Mangeli *et al*., 2017: 9). This is an alarm reaction that occurs when the mother first becomes aware of the child's diagnosis. The mother will go into a temporary state of shock. This is the stage when the body's ability to deal with the stressor falls below the normal level. Physiologically the blood pressure may rise, body temperature and muscle tone drop as a response to the new diagnosis of the child. Positive adjustment to child sickness is associated with good coping mechanisms rather than a negative attitude towards sickness (Nassery & Landgren, 2019: 4).

2.3.2 Denial

Surprisingly when sickness arises in a child at home, the mother will seek a physician and when the child is diagnosed with a life-threatening disease, most mothers will take the child from one physician to another as a sign of denial. A father and mother receiving a new diagnosis of the child experience a stressful situation. However, mothers become more affected and are devastated when their children are first diagnosed with a serious condition. Instead of focusing on the child, she starts to think of facing the reality of the newly diagnosed illness. Mothers mostly felt confronted with the vulnerability of their child's sickness. Additionally, the fear of losing a child if the sickness worsens, results in a condition of denial. (Verberne, Kars, Scouten-van Meeteren, Bosman, Colenbrander, Grootenhuis & Van Delden, 2019: 3).

2.3.3 Adjustment

According to Akhlaghi, Babaei and Abolhassan (2020: 3), no matter how difficult the situation might be, reality ought to be faced wherein an individual has to admit and accept the reality of what is happening. After the stage of shock and denial, gradually an individual ought to adjust to the environment. It is not easy but it can take a long period to progress. Furthermore, it is indicated in the study by Akhlaghi *et al*. (2020: 3) that it is difficult for a parent to adjust as they lose hope for what they expected for their child after being diagnosed with a life-threatening disease. Most importantly, it becomes difficult as they need more attention and mothers become frustrated when they are least cared for (Masa'Deh, Hall & Collier, 2017: 7).

2.3.4 Guilt and self-accusation

Some individuals experience feelings of guilt that may arise especially when the child's diagnosis is genetically or hereditary, in some cases mothers have given traditional medication with negative effects on the child. Furthermore, mothers might have soothed the sick child and not disclosed the illness to anybody hence the reaction of the mother can be influenced by the cause of illness. At the end of these reactions, acceptance should be a reality. It is essential to support mothers to overcome the stage of guilt and accusation to cope with child sickness and to avoid complications of grief if the child happens to die (Masa'Deh *et al.,* 2017: 5).

2.3.5 Bitterness and anger

Individuals react differently to bad news, more especially concerning close relatives and loved ones like your own child. Anger may be directed inward as evidenced by self-neglect and outward as manifested by aggression, arguments or self-withdrawal. However, some mothers sought internal explanations (Gonzalo, 2021: 5). This brings to the attention that it is essential to support mothers during difficult situations to prevent abnormal or negative reactions due to child sickness.

According to Ferrell, Wittenberg, Battista and Walker (2018: 3), parents became angry because of their child's sickness and turn to blame God for allowing the child to be sick. Furthermore, the anger may be extended to some family members. However, the need

to support parents during child sickness was identified as essential. It is necessary for health professionals to closely communicate with the mother. Lonio, Mascheroni, Colombo, Castoldi and Lista (2017: 5) show that the effect of mothers' anger may lead to increased depression and anxiety.

2.3.6 Re-integration and acknowledgement

It is a difficult process for mothers to accept that their loved child is sick or is diagnosed with a shocking disease. In reality, mothers will have to accept the reality that their child is sick. In most cases, parents are told about the prognosis of the child but no one really expects death or even to be ready to hear about the loss until the child gives the last breath (West, Dusome, Winsor & Rallison, 2020: 9).

There is a difference between accepting that the child is sick and trying to ignore the reality of the matter. Every wound has pain that differs in severity as with the sick child there will always be a pain for the mother. With time will come a lessening of the pain, until finally, the pain is accepted as a new part of the life that has just occurred (West *et al*., 2020: 9).

Within the experience of the pain of child sickness in the hospital, there is a continuum of behaviors for the mother with sick children; so many mothers are not able to cope with the pain (Freeman & Ward, 2017: 3). Verberne *et al*. (2019: 3) argue that it is difficult for mothers to re-integrate and have resolution until the child dies. Therefore, the researcher finds it necessary to identify what the mothers think of their child's illness. Furthermore, Foster, Young, Mitchell, Van and Curtis (2017: 7), emphasise that professionals should understand the process that mothers undergo to adjust to painful situations and strive to identify the positive meaning of their experiences.

According to Waterhouse, Hill and Hinde (2017: 8), employed mothers experience challenges that affect their work if a child's hospitalisation is prolonged since allocated leave days become exhausted. If one is self-employed, it becomes difficult to perform duties. Mothers experience financial constraints during ups and downs and physical and emotional stress to mothers is mostly a challenge. When child sickness occurs, mothers

are affected but they have different responses to the stress caused by the sickness of the child. Therefore, the reaction will be influenced by the meaning attached (Waterhouse *et al*., 2017: 9).

2.4 Effects of child sickness on the mother

Five effects of child sickness on the mother are discussed physical effects of child sickness on the mother, psychological effects of child sickness on the mother, social effects of child sickness on the mother, financial implications of child sickness on the mother and spiritual implications of child sickness on the mother.

2.4.1 Physical effects of child sickness on the mother

Nassery and Landgren (2019: 4), in a Swedish study, show a major concern regarding the influence of environmental factors on the physical exhaustion of mothers during a hospital stay, such as disturbing noise and uncomfortable beds. Depressive symptoms and long-term physiological effects including hypertension, obesity, Type-2 diabetes and stroke arise as a result of long-term sleep deprivation. The hospitalisation of a child in Saudi Arabia had a negative impact on the physical health of the mothers of sick children. Out of twelve of the mothers interviewed, half of them were said to have serious physical challenges like heart problems, irritable bowel syndrome and increased levels of blood pressure. Mothers further revealed that physical reactions occurred as a result of their presence in the hospital while caring for the sick child (Yousef, 2018: 149). Child sickness and hospitalisation are said to cause a damaging experience to both the child and the family. In Iran, several studies were conducted and one of the studies revealed different health challenges.

In Nigeria, the study conducted by Oyegbile and Brysiewicz (2017: 4) shows a burden of health problems faced by caregivers while taking care of sick children, with physical health as one among others especially if the care is prolonged. Physical exhaustion is experienced as the child depends on the mother for every care.

In South Africa, in the study conducted by Mol *et al.* (2018: 4), during a child's hospitalisation in the Paediatric Intensive Care Unit (PICU) parents felt sick when they see the environment and the condition of the child. Social support is needed by providing mothers with food and amenities while they support their children in the hospital. Furthermore, it was indicated that previous research showed a need for a place to sleep in the hospital next to the children to promote rest. In rural Eastern Cape, Lentoor (2017: 4) reveals that the panic associated with recurrent sickness of the child, combined with other stressors, affected the mothers' physical and mental health. Child sickness is identified as an extreme burden that provokes anxiety and stress in the mother.

2.4.2 Psychological effects of child sickness on the mother

According to Basnet, (2019: 62), in a study conducted in Nepal, the diagnosis of a life-threatening disease constitutes traumatic stress to parents, especially to mothers who witness the process of painful experience during hospitalisation of the child. Psychological effects on the mother can be feeling of guilt, the mother blaming herself for sickness, anxiety and fear of the death of the child. Furthermore, out of the total 90 mothers interviewed, 42 mothers had extremely severe stress and 19 mothers had severe stress.

Mothers' experience during child sickness is an essential factor that influences their coping strategy during child sickness. The most common outcomes for parents during child sickness were anxiety, stress, depression, and posttraumatic stress symptoms (Doupnik *et al.,* 2017: 2). In addition, the severe emotional burden was reported by 91.1 percent of mothers whereas worry was reported by 85.2 percent of mothers and 68 percent reported stress and anxiety (Laizane *et al*., 2018: 14).

In the study conducted by Basnet (2019: 2) in Nepal, 46.7 percent of mothers responded to being extremely stressed, whereas 21.1 percent responded to being severely stressed as a result of child sickness. Increasingly the stress was from the hygienic environment mothers lived in during hospitalisation of the child. Mothers with

their sick children are admitted to an extremely inadequate medical care institution. The hospitalisation of a child exerts a great deal of psychological distress that a mother can experience in a lifetime. The mother lives in constant worry about the condition of the child. Most importantly, the mother has to think of the hospital as a home as long as the child is still sick (Koch & Jones, 2018: 3).

Raju *et al*. (2019) concur with Mol *et al*. (2018: 46) in that globally, hospitalisation is often a critical situation that usually causes stress to parents, especially the mother. Most importantly there is no action plan or training program to reduce the stress on the mother.

Countries like Nigeria, India, Pakistan and the Democratic Republic of Congo are still faced with a high burden of child sickness and as a result, mothers are faced with a great deal of psychological stress. According to the World Health Organisation (WHO) (2020: 1) in 2019 an estimated 5.2 million children under 5 years died mostly from preventable and treatable causes. 1.5 million Children aged 1 to 11 months accounted for these deaths while 1.3 million deaths were in children aged 1 to 4 years. Neonates under 28 days accounted for 2.4 million deaths. Out of the above child sickness and mortality rates, Nigeria accounted for 858 children; India accounted for 824 children, Pakistan had 399 children and the Democratic Republic of Congo had 291 children.

2.4.3 Social effects of child sickness on the mother

According to Doupnik *et al*. (2017: 2), child sickness and hospitalisation are the greatest sources of family life disruption in the USA. Social life is adjusted to feature the child's sickness and hospitalisation. During this period mothers experienced disruption as the source of physical, mental and social health stress that negatively affected child care and support. The total concentration of the mother is geared towards the child's sickness, hence other spheres of life suffer. Regarding social burden, 79.3 percent of caregivers reported the need to introduce changes into their daily routine due to viral infections in their children (Laizane *et al*., 2018: 14).

In Egypt, child sickness affects family relationships and results in frustrations and tensions as further elaborated by Mohamed and Mohamed (2019: 2). According to the study conducted by Mol *et al*. (2018: 3), a striking feature was the importance of social support among mothers of critically ill children, which was facilitated by the availability and use of parent accommodation in the hospital premises. Being close to the child was important to parents, similar to what has been reported by (Laizane *et al*., 2018: 14).

The study conducted by North *et al.* (2020: 9) indicates that during child sickness, a disturbance in social health is not an exception; however, mothers have affected society as a result of child sickness. Furthermore, the study outlines that mothers described that being served courteously by health professionals and being treated with dignity and respect in all interactions positively influenced mothers socially. Health professionals were described as interested in and actively responding to a mother's social and emotional well-being and health needs.

2.4.4 Financial implications of child sickness for the mother

Globally, financial implications seem to be a challenge to mothers and families during child hospitalisation though it differs in some countries. Though it is found to be a concern in some mothers, others do not experience this concern. The study conducted by Mumford, Baysari, Kalinin, Raban, McCullagh, *et al*. (2018: 9) in South Australia revealed that there was a significant financial impact on child hospitalisation, especially for mothers who come from rural and remote areas, and those who needed recurrent admissions. The study further showed a 69.4 percent burden to families. Mothers reported financial constraints regarding economic burden, 55.1 percent of mothers needed to be off work because of their child's sickness and 76.1 percent of mothers reported additional expenditures in the family's budget as a result of a child's sickness (Laizane *et al*., 2018: 14).

In Iran, 70.7 percent of mothers had insurance coverage for child sickness and 29.3 percent had no insurance coverage hence they experienced financial challenges. Furthermore, 69.4 percent of children's sickness and hospitalisation poses financial challenges to mothers and insurance coverage for child sickness and 29.3 percent had

no insurance coverage hence they experienced financial challenges (Mumford *et al*., 2018: 9).

Most mothers in African countries are not able to fund hospital treatment. In South Africa, mothers experienced challenges to care for their sick children (Lentoor, 2017: 7; Laizane *et al*., 2018: 14). Most mothers were said to be unemployed because of their low educational level. Employed mothers facing the challenge of a sick child were forced to quit their job in order to prioritise the care of the child; hence they struggle to cope financially. 24 percent of mothers experience financial distress, 30 percent reported medical financial burdens. 54 percent showed that medical financial burden was due to costs associated with hospitalisation of the child (Bassett, Coller, Beck, Hummel, Tiedt, *et al*., 2020: 4).

2.4.5 Spiritual implications of child sickness for the mother

The actions of mothers with sick children in the hospital are based on their beliefs, just as Christian mothers' behaviours are a result of theology. What mothers do is based and derived from what they value and believe. In the USA, it is reported that mothers feel both positive and negative spiritual coping concerning child sickness and hospitalisation. Indeed they might find child sickness as a challenging and testing period. Furthermore, it is reported that parents' religious coping was significant in relation to a family's relational functioning including the mother and negative religious coping was related to poorer family cohesion and denial (Brelsford, Ramirez, Veneman & Doheny, 2016: 3).

According to Nikfarid *et al*. (2017: 7) in Iran, spiritual distress raised problems during child sickness. Mothers experienced spiritual and philosophical challenges after a life-threatening disease came into their life. The feeling of not understanding a child's diagnosis based on spiritual facts raised concerns. In most African countries mothers feel spiritually down and socially isolated during the sickness of their child. The study conducted by Ferrell *et al*. (2018: 7) in Brazil indicates that spirituality provides mothers with a sense of support, comfort and peace. In addition, spirituality has a great influence

on decision-making in relation to the treatment of the child and the well-being of the mother.

According to Ferrell *et al*. (2018: 1), spirituality is taken as an important coping mechanism used by families, especially during difficult times like the sickness of a child. During difficult times mothers use spirituality as a form of strength to overcome difficult moments. It has been further explained that there is a need for health professionals to assist mothers to communicate their spiritual needs, and on the other hand, some of the mothers blamed God for their child's sickness. Olabisi, Olorunfemi, Bolaji, Azeez, Olabisi and Azeez (2020: 6) concur that in times of difficulties of child sickness and hospitalisation mothers showed that they prayed to God as their hope and comfort.

2.5 Coping strategies for mothers during child sickness

Child sickness poses a challenge to mothers worldwide, especially when the child is hospitalised. Different stressors on a mother, with multiple roles in the family, need to be addressed cautiously to assist in coping during a devastating period of child sickness. Coping and facing a child with a life-threatening sickness seems to have serious consequences for mothers (Mooney-Doyle, Rodrigues dos Santos, Szylit & Deatrick, 2017: 1). Worldwide coping with the sick poses challenges to mothers. The study conducted by Bąk and Zarzycka (2021: 5) in Poland confirmed that when the child is attacked by sickness, parents are more affected than any other family member. A mother has more responsibilities of assisting the sick child. In addition, child sickness has an impact on the physical health, socioeconomic state, psychological and behavioral wellness of the mother.

In both rich nations like the USA and developing nations like India and Indonesia, including Iran, a child's sickness poses a threat to the parents. Nowadays, diseases that were once dangerous and thought to be incurable can be diagnosed and treated using cutting-edge techniques in developing nations like Iran. Survival of these children needs specialised care and programmes which in the end causes chronic stress to the mother and other members of the families, hence emotional and behavioral challenges (Gheibizadeh, Gholami, Bassknejad & Cheraghian, 2017: 3).

In addition, Gheibizadeh *et al*. (2017: 3) further indicate that strategies for coping included the ability to identify stressors and redefine stressful situations, problem-oriented coping strategies such as diet management, short-term care, and emotion-oriented strategies such as beliefs in supernatural powers, prayer and spiritual recovery. Positive spiritual coping mostly involves beliefs, a sense of connection with others on a spiritual level for support, and a sense that there is a secure relationship with God. According to Ahmadi and Sadeghi (2017: 7), mothers experience intrapersonal stressors among which there are spiritual stressors. When coping with spiritual stressors, mothers consider their religious belief trusting in God and pray. However, negative spiritual coping involves a less secure sense of a relationship with God and having challenges with finding meaning in life through a spiritual lens.

It has been indicated in Neuman's theory that human beings are unique and react differently to stressors which are primary, secondary and tertiary, therefore, Bradshaw, Bem, Shaw, Taylor, Chiswell, *et al*. (2019: 7) concur that mothers adjust to child sickness in three different stages, namely: Crisis stage, chronic stage and terminal stage. Some mothers adjust to child sickness, while others will experience ongoing distress resulting in poorer health outcomes for parents, the child and the family as a whole. In addition, the provision of effective intervention to mothers during child sickness and hospitalisation is seen as an effective way to offer support to mothers.

Mothers in African countries experience distress during child sickness. The study conducted by Shiweda and Amukugo (2018: 9) reveals that mothers in Namibia were afraid during the hospitalisation of their children, but at the same coped well because of the emotional support that they received from the nurses and doctors. Moreover, the spiritual support helped them to cope in ways such as praying and trusting God.

In Zambia, Walubita, Sikateyo and Zulu (2018: 5) explain that mothers experienced several challenges during child sickness. Mothers experienced challenges of stress because of inadequate knowledge of the child's condition and lack of finances during the period of hospitalisation of the child. That affected mother's ability to perform multiple responsibilities. In addition, challenges of inadequate support to address emotional and physical distress and social problems were also experienced by mothers.

Coping strategies used by mothers on an individual level in Zambia included praying to God and material support from organisations and churches. Moreover, mothers used the coping strategy of talking to friends about other stories that have nothing to do with child sickness. Talking to other mothers assisted them in not thinking negatively about the sick child's condition.

In South Africa, the Department of Health (2017: 38) indicates that caring for a sick person can be emotionally and physically exhausting. Mothers need some form of support or counselling. Healthcare professionals need stress management skills to assist mothers and in turn, the health professionals' working environment needs to be improved to reduce stress.

2.6 Summary of the chapter

In this chapter, the researcher described and introduced the literature review, sickness of the child and effects/ reactions of the mother, effects of child sickness on the mother and coping strategies for mothers during child sickness were outlined. The literature revealed that mothers were failing to cope during child sickness and hospitalisation. Furthermore, the literature revealed that mothers experience physical, psychological, social, spiritual and financial challenges during child sickness. The theoretical framework was based on the Neuman Systems Model theory. The literature review assisted in developing coping strategies because mothers explained their lived experiences and how they cope with stress during child sickness. Out of the information given by mothers, coping strategies during child sickness in the hospitals of LP, SA. were developed. In the next chapter, Chapter 3, the methodology of this study will be discussed.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter discussed the literature review as related to this study. This chapter outlines the research methodology and study design, study setting, population and sampling, data collection, data analysis, measures to ensure trustworthiness and the ethical considerations of the study.

3.2 Research Methodology

Research methodology is the systematic process associated with identifying the problem and arriving at solutions through objective, planned and systematic data collection, analysis and interpretation (Osuagwu, 2020: 4).

In this research methodology, an exploratory sequential design was employed wherein qualitative data is collected and analysed first, followed by quantitative data collection to explore and describe a detailed description of coping strategies used for mothers during child sickness in the hospitals of LP, SA. In the qualitative, the researcher interviewed participants and probed for more information with semi-structured questions to gain in-depth insight. In the quantitative study population, sampling frame, sample and sample size were considered. This qualitative approach provided information concerning data related to the quantitative approach. Accuracy and consistency were adhered to at all costs. Validity and reliability were done through a pre-test and the findings were not included in the study (Brink, van der Walt & van Rensburg, 2018: 200).

3.2.1 Mixed-methods research

Mixed-methods research is a research approach that includes philosophical assumptions to provide direction for the collection and analysis of data from multiple sources in a single study (Baig, Hashmi, Ali & Zehara, 2020: 9). It allows the researcher to address research questions in an appropriate and principled manner that involves

collecting, analysing, interpreting and reporting both qualitative and quantitative data. Furthermore, mixed methods is a research approach that integrates philosophical frameworks of both post-positivism and interpretivism, interweaving qualitative and quantitative data in such a way that research issues are meaningfully explained (Dawadi, Shrestha & Giri, 2021: 3). In this study, a mixed-methods approach implied that the researcher used an exploratory sequential design and collected qualitative data and analyse it, then followed by the collection of quantitative data and its analysis.

Furthermore, a mixed-methods research approach is a set of beliefs that guides a person's actions and reflects the researcher's world views. A mixed-methods approach combines the strengths of both qualitative and quantitative approaches to answer research questions (Othman, Steen & Fleet, 2020: 6). In this study, the researcher aims to get quality results as both the strength of qualitative and quantitative data collection methods are combined.

The characteristics of a mixed-methods approach are indicated in the following section.

3.2.2 Characteristics of a mixed-methods research approach

- It combines qualitative and quantitative data collection methods by including both qualitative and quantitative data in a single research study.
- The analysis of both qualitative and quantitative data is included.
- The collection of both open and closed-ended data (qualitative and quantitative data) in response to a research question.
- Persuasive and rigorous procedures for the qualitative and quantitative methods.

3.2.3 Rationale for using a mixed-methods research approach

The researcher used a mixed-method research approach for the rationale below:

The researcher used a mixed-method as it offered a logical ground, methodological flexibility and an in-depth understanding of smaller cases of this study. A mixed-methods approach enabled the researcher to answer the research question of what the

coping strategies of mothers are during child sickness in the hospitals of LP, SA with sufficient depth and breadth. The mixed method helped to generalise findings and implications of the researched topic to the whole population of the selected hospitals.

The quantitative strands helped the researcher to collect the data from a large number of participants; thus, increasing the possibility to generalise the findings to a wider population of the selected hospitals. The qualitative strands, on the other hand, provided a deeper understanding of the topic under study, honouring the voices of its participants. In other words, quantitative data bring breadth to the study and qualitative data provides depth. The mixed-method approach offered the best chance of answering the research question by combining two sets of strengths while compensating at the same time for the weaknesses of each method.

3.2.4 Purpose of the study

The purpose of the study was to develop coping strategies for mothers during child sickness in the hospitals of LP, SA.

3.2.5 Study setting

The setting of the research study or the actual environment where the research study was conducted was LP, SA. LP is one of the nine provinces in South Africa and is the northernmost province. It borders Zimbabwe, Botswana and Mozambique. Limpopo Province has five districts: Mopani, Sekhukhune, Waterberg, Capricorn and Vhembe Districts. There are 43 hospitals in Limpopo Province located in the five above-mentioned districts. Vhembe District has six district hospitals, and one regional hospital and Capricorn District also has seven regional hospitals and two tertiary hospitals. These two districts were selected because Vhembe district has one regional hospital to which the district hospitals refer patients and Capricorn has two tertiary hospitals with paediatric units with bed occupancy of more than 20 patients and they have a high statistic of children who are admitted with mother lodgers. Additionally, the researcher needed to explore mothers' experiences from the district, regional and tertiary levels.

Figure 3.1 depicts the map showing the selected districts of Limpopo Province and the hospitals.

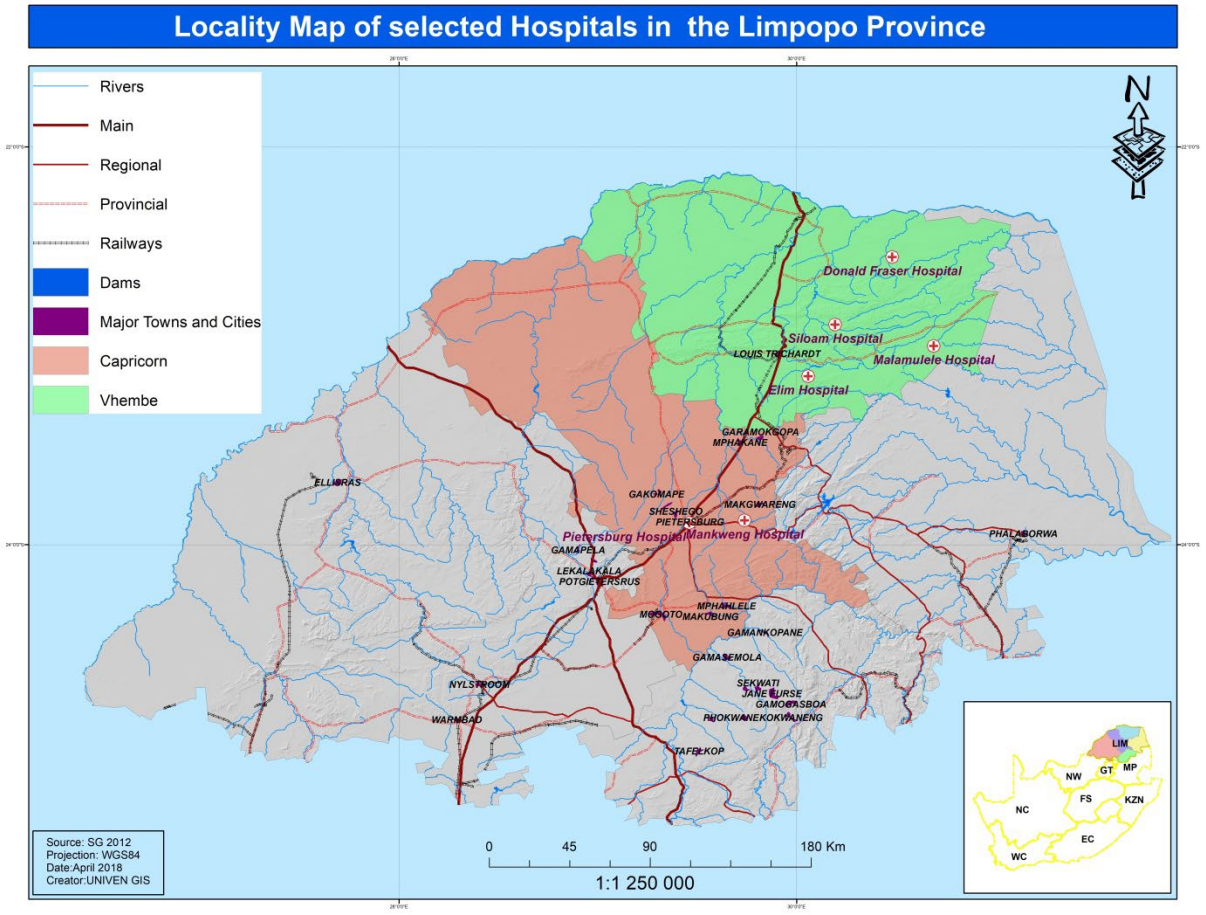

Figure 3.1: Locality map of selected hospitals in two districts of Limpopo Province, SA

3.2.6 Research design and methods

In this study, an exploratory sequential design was used to attain specific objectives for the research study. The exploratory sequential design was used to explore and describe the experiences of mothers during child sickness in the hospitals of Limpopo Province, SA and develop the coping strategies of mothers during child sickness while hospitalised. This design was flexible and rooted in pre-existing data found in the literature review. Findings from the quantitative phase were used to explain and provide

a more comprehensive contextualisation of findings and interpretations drawn from qualitative phase (Othman *et al*., 2020: 2).

3.2.6.1 Exploratory sequential design

Figure 3.2 shows the design as characterised firstly by the qualitative phase of data collection and analysis, followed by a phase of quantitative data collection and analysis, with a final phase of integration or linking of data from the two separate strands of data (Creswell & Creswell, 2018: 52). According to Polit and Beck (2017: 728), an exploratory design is a sequential mixed-method design in which qualitative data is collected in the first phase and the second phase quantitative data is collected based on the in-depth exploration of the first phase.

The researcher collected qualitative data and then analysed the data. The findings of the qualitative data directed the researcher to the next phase which is the quantitative phase. Quantitative Phase 1(b) is a survey data collection. The qualitative analysis provided fodder for developing specific research questions for the quantitative phase. Data in the quantitative study was collected using a questionnaire.

The rationale for using an exploratory sequential mixed-method design was first to explore the coping strategies used by mothers during child sickness in the hospitals of LP, SA. The literature review was done to determine what is already known. Qualitative data is gathered and analysed first in order to get additional conceptual leverage before conducting a survey.

The exploratory-sequential design is progressive and is used when the researcher is interested in following up on qualitative findings with quantitative analysis. This two-phased approach was particularly useful because the researcher was interested in developing a new instrument.

The researcher used the qualitative findings from Phase 1(a) to help develop the instrument and then tests this product during the quantitative Phase 1(b). This approach was useful to identify important variables (Phase 1(a) for subsequent quantitative analysis in Phase 1(b) as per Figure 3.3).

In this study, the researcher employed a mixed-method approach to develop coping strategies for mothers during child sickness in the hospitals of LP, SA. This study was conducted in two phases: Phase 1(a) was a qualitative strand, whilst in Phase 1(b) the quantitative strand used was descriptive surveys. As indicated in Figure 3.3 below, the researcher used qualitative data collection and analysis that builds to quantitative data collection and analysis. In the process of the study, data were integrated and well-organised (Creswell & Creswell, 2018: 254).

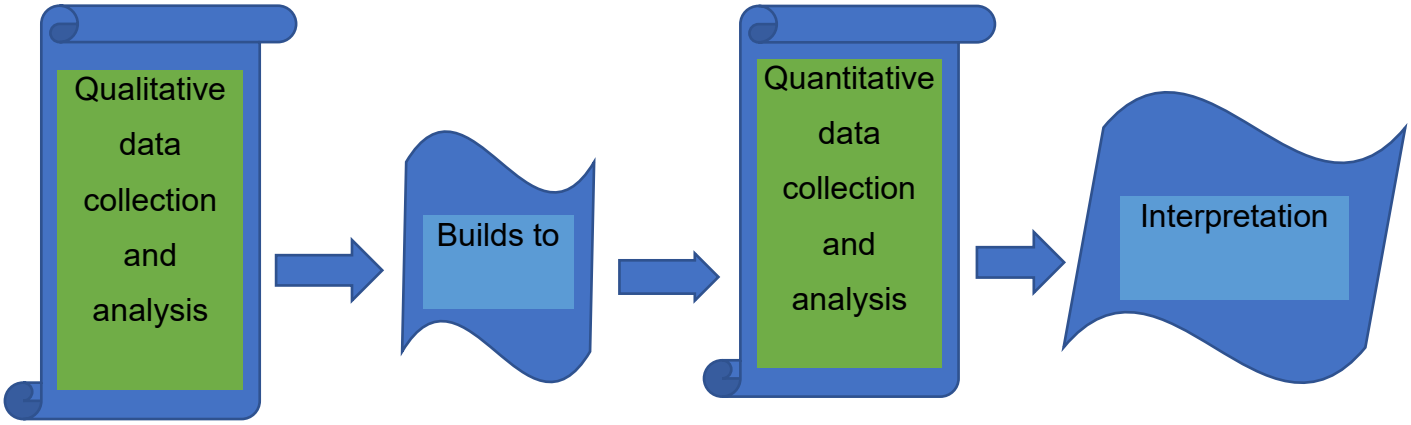

Figure 3.2: Exploratory sequential mixed method design

The researcher used an exploratory sequential mixed-method design as depicted in Figure 3.3 because combining qualitative and quantitative approaches balanced out the limitations of each method. It provided stronger evidence and more confidence in the findings of this study and it gave the researcher more granular results than if an individual method was used. Separate phases make the inquiry easy to explain, implement and report on (Polit & Beck, 2017: 586).

3.3 Phase 1(a): Qualitative strands

3.3.1 Objective of Phase 1(a)

The objective of this study was to explore and describe the experiences of mothers during child sickness in the hospitals of Limpopo Province, SA.

The qualitative strand is a multi-method form of social action that stresses the way people interpret and make sense of their experiences to understand the social reality of individuals. Qualitative research makes use of a collection of a variety of empirical materials that include case studies, personal experiences, introspective reflections, life stories, interviews, observations, historical, interactional, and visual texts, diaries, journals, and immersions and it is open-ended (Aspers & Corte, 2019: 142).

A qualitative strand is the research method employed by the researcher to answer the research question in a natural setting. It involves making sense of and interpreting phenomena in terms of the meaning participants reveal to them. In this study, the researcher was able to explore, describe, explain and contextualise as the participants explained their views (Creswell & Creswell, 2018: 258). In this study, the researcher explored the experiences of mothers with sick children by asking mothers a question to describe their experiences during child sickness in the hospital. For this study, the researcher was able to probe for more information by in-depth interview questions. Interviews were rooted contextually in paediatric units of selected hospitals in LP, SA. It was contextually bound to a specific time, place, and event. The study was done in a setting that was free of manipulations.

In this study, mothers were able to explain and describe their lived experiences during their hospital stay. Participants gave meaning to what they experienced. The researcher was therefore focused on what was experienced and how it was interpreted by those who experienced it. The researcher intended to understand the meaning attached to the phenomenon as people interpret their lived experiences.

The characteristics of qualitative research are as indicated below:

In a natural setting, researchers collect data in the field at the site where participants experience the issues or problems under study. Data is provided as narrative, pictures, or objects as asked through semi-structured questions. In this study, participants were interviewed in the selected hospitals, the relevant participants were selected and the researcher focused on the objectives set for this study.

The researcher is the key instrument and it includes the researcher's involvement in the identification of meaning or relevance of a phenomenon to the individual which means it seeks to explore, explain and understand phenomena.

The qualitative strand used multiple methods that are less structured. Data is gathered through interviews, observations, and content analysis. A semi-structured interview guide was used by the researcher to stay focused when asking questions throughout the interview process.

In qualitative strands, there is complex reasoning and participants' meanings are identified. Research design has flexibility in that it can emerge as the study advances and evolves as the study develops.

Bracketing: In this study, the researcher put aside preconceived ideas about the phenomenon under study and took into consideration all information that was available about the study.

Intuition: In this study, the researcher was open to the meaning attached to the phenomenon by mothers during the research study.

Making sense of the data: In this study, the researcher explained clearly to guide the reader in order to make an accurate decision on the study.

3.3.2 Population and sample

3.3.2.1 Population

The population is the set or group of all the individuals having common characteristics to which the findings of the research are to be applied (Shukla, 2020: 2).

Furthermore, the population is the entire group of individuals that one seeks to understand and to which the study results may be generalised or transferred (Casteel & Bridier, 2021: 343). Populations create boundaries for the scope of a study and provide environmental and contextual cues for the reader (Casteel & Bridier, 2021: 343). In this study, the population was all mothers with children admitted to the hospitals of Limpopo Province, South Africa.

The target population is the specific group of participants who meet the sampling criteria that is a conceptually bounded group of potential participants to whom the researcher may have access that represents the nature of the population of interest. (Casteel & Bridier, 2021: 344). In this study, the target population was mothers whose children were admitted to the paediatric units of Limpopo Province, South Africa, the child being under the age of five years and critically ill.

The accessible population is the portion of the population to which the researcher has reasonable access and it may be a subset of the target population (Brink *et al*., 2018: 116). The accessible population refers to a part of a target population to which the researcher has reasonable access (Casteel & Bridier, 2021: 344). In this study, the accessible population was available mothers in the paediatric units of selected hospitals during the time of the study.

3.3.2.2 Sampling

Sampling is the process or technique of selecting a suitable portion of the population to represent the whole population to obtain information for the research study (Brink *et al*., 2018: 116). Sampling refers to the procedure to select a sample from an individual or a large group of the population for a certain kind of research purpose (Bhardwaj, 2019: 151). In this study, a non-probability, purposive sampling technique was used to select the two districts, seven hospitals and participants for the study.

3.3.2.3 Sampling of participants

In this study, participants were purposively selected. Mothers with critically ill children were selected in the public hospitals' paediatric units. All selected participants were free and willing to participate in the study. Participants with relevant knowledge of the study were purposefully selected to give in-depth information.

3.3.2.4 Sample of district and tertiary hospitals

Sampling is the process whereby the researcher selects a subset from a larger group or population for the study in a research investigation (Turner, 2019: 8). The process of selecting a portion of the population to represent the entire population is known as sampling (Shukla, 2020: 3). The researcher purposively selected the districts and hospitals of interest where the study was conducted. The researcher conducted the study in two selected districts of Limpopo Province namely the Vhembe and Capricorn Districts. The districts were selected because Capricorn District has a tertiary hospital that receives critically ill children from Vhembe regional hospitals and Vhembe District has a regional hospital that receives critically ill children from district hospitals and district hospitals that receive critically ill children from clinics and homes.

In Vhembe District the following hospitals were selected: Siloam Hospital, Donald Fraser Hospital, Elim Hospital and Malamulele Hospital. The selected hospitals from Capricorn District were Mankweng Hospital which is 200km from UNIVEN and Lebowakgomo Hospital. Siloam Hospital, situated 100 kilometers (km) from the University of Venda (UNIVEN) with a capacity of 35 paediatric beds. Donald Fraser Hospital (DFH), situated 35km from UNIVEN, with 66 paediatric beds. Elim Hospital, situated 65km from UNIVEN, with 37 paediatric beds. Malamulele Hospital, situated 60km from UNIVEN and Tshilidzini Hospital which is 20 km from UNIVEN and has 43 paediatric beds.; has a paediatric medical unit with 23 paediatric beds and a paediatric surgical unit with 23 paediatric beds. Lebowakgomo Hospital is 200 km from UNIVEN with 34 paediatric beds. These hospitals were selected based on the fact that they have paediatric wards and more than twenty beds occupancy of children and that critically ill children are admitted. Below is Table 3.1 which depicts the selected districts and hospitals:

Table 3.1: District hospital sample frame and sample size of Phase 1(a): Qualitative strands

District	Names of the hospitals	Population
Capricorn	Lebowakgomo Hospital	1361
Capricorn	Mankweng Hospital	1629
Vhembe	Donald Fraser Hospital	1047
Vhembe	Siloam Hospital	795
Vhembe	Malamulele Hospital	809
Vhembe	Elim Hospital	1039
Vhembe	Tshilidzini Hospital	1612
Total	7 hospitals	8292 patients

3.3.2.5 Sample and Sample size

3.3.2.5.1 Sample

The sample is the set of individuals selected to represent the population of interest (Casteel & Bridier, 2021: 350). In addition, a sample is a selected part of the population to be studied in order to gain information about the whole (Majid, 2018: 4). In this study, the sample was mothers with children admitted to the hospital in a paediatric unit during 2018/2019. The children were under five years of age and critically ill.

3.3.2.5.2 Sample size

The sample size is the number of participants recruited who consent to participate in the study (Majid, 2018: 6). In this study, the sample in the qualitative study was 50 mothers and the sample size was determined by data saturation when no new information was coming out.

3.3.2.6 Pre-test

A pre-test is the trial administration of a newly developed instrument to identify flaws and gain an understanding of how the construct in question is conceptualised by participants. (Polit & Beck, 2017: 740). A pre-test was done at Louis Trichardt Hospital where five participants were selected purposefully. The pre-test hospital was not included in the study because it was not one of the selected hospitals. The results of the pre-test were not included in the study. A pre-test aims to test the instrument, identify problems with the data collection instrument and find possible solutions.

3.3.2.7 Inclusion criteria

Inclusion criteria are the predefined characteristics that qualify participants to be included in the research study (Brink *et al*., 2018: 116). Inclusion criteria are defined as the key features of the target population that the researcher used to answer the research question (Patino & Ferreira, 2018: 84). In this study, mothers with critically ill children of five years or younger who were admitted to the public hospitals in paediatric units were included. Participants who were interested in the study were free to participate and only mothers who were able to give information were allowed to take part in this research study.

3.3.2.8 Exclusion criteria

These are elements that were not included in the study because of not meet the criteria of inclusion of the study (Brink *et al*., 2018: 116). In this study, mothers with children above five years of age and mothers with children who were not very sick were not included in the study. If a mother of a critically ill child in the hospital was not able to give information she was exempted.

3.3.3 Data collection

Data collection is the systemic process of gathering information relevant to answer the research question (Kabir, 2018: 202). In this strand, qualitative data were collected by the researcher as the main data collector. Data were collected in seven selected

hospitals. The method used to collect data was face-to-face interviews. The researcher communicated with the participants face to face and in-depth information was obtained. Semi-structured questions were asked and the data collection was done with the interest of participants in mind. A cubicle where the interview was conducted was arranged by the researcher before the interview with each mother. The cubicle was free of interruptions and conducive for both the researcher and participants. The cubicle was free from any threats or harm.

Data were collected during the day when mothers were not attending to the children. The interviews lasted between 45 minutes and an hour for about three months. Privacy and confidentiality were always maintained. Mothers were reassured that no information given will be linked to their names. Furthermore, the information was not used for any other reasons except for the research study.

Participants were relaxed and had more time to explain their experiences, views and opinions. Participants' experiences and opinions were respected. Data collection was conducted in English, Xitsonga, Sepedi and Tshivenda languages. Language experts translated data from English to three local native languages. Mothers who were comfortable expressing themselves in English were allowed to do so. A voice recorder was used during interviews and participants were made aware that the voice recorder was used. The researcher transcribed data verbatim from the voice recorder back to English. The researcher also took field notes. Facial expressions and any other behaviors observed, which cannot be recorded by a voice recorder, were written down by the researcher. Approximately 50 mothers were interviewed and saturation was determined on the 13th participant when no new information was given. The researcher continued with the collection of data even though data were saturated to check if in other hospitals the information will still be the same. Semi-structured questions were asked, followed by probing questions encouraging participants to give in-depth information. An interview guide with three sections was used information asked in section a: demographic data, in section b: effects of child sickness on the mother was asked and in section c: coping strategies for mothers during child sickness.

During interview sessions, when no more information was coming, data were taken as saturated.

The main question in this research study was: ***"Can you please share your experiences during your child's sickness here in the paediatric unit?"***

During interview sessions, the researcher used communication skills to seek more in-depth information in the following ways:

3.3.3.1 Probing

The researcher encouraged participants to further explain statements that could have multiple meanings. Non-verbal gestures with pauses were also used. When the researcher wanted to obtain more specific information, follow-up questions were asked for clarity and to gain an understanding of a response by participants.

3.3.3.2 Listening

During an interview, the researcher actively listened to the information from the participants with the aim of understanding and making sense of what was said. The researcher showed interest in what was discussed with the participants and responded accurately.

3.3.3.3 Paraphrasing

The information stated by the participants was restated by the researcher without losing the original meaning given by the participants. The purpose of restating was to show participants that the researcher was listening and understood what has been said. The researcher maintained the meaning of the information as it is.

3.3.3.4 Clarification

The meaning of what was said by the participants was offered back as was understood by the researcher, hence avoiding misunderstanding and confusion. The researcher allowed the participants to repeat what was said.

3.3.3.5 Summarising

During the interview session, the researcher summarised the most valuable and necessary information given by participants to provide context for the interview in a meaningful way.

3.3.4 Data analysis

In this study, the researcher used the eight steps of Tesch (in Creswell and Creswell, 2018: 198) to analyse data. Data were transcribed verbatim and transcripts were coded using an independent coder. The eight steps included the following:

- Get a sense of the whole.
  Transcripts were read carefully. The opinions and ideas of the participants were written down in the margin.
- Pick a document in the pile, read it thoroughly, ask yourself what it was about and read again.
- A list of all topics was made after completing reading the document.
  Similar topics were clustered together in a column and arranged as major topics, unique and left-over topics.
- A list was taken and went back to data.
  Topics were abbreviated as codes. Codes were written next to segments of the text. The researcher checked if new codes and categories emerged.
- Most descriptive wording was categorized for the topic.
- A final decision on the abbreviation for each category was made and codes were alphabetised.
- Assembled data materials belonging to each category were compiled in one place and a preliminary analysis was performed.

- Existing data were recorded.

3.3.5 Measures to ensure trustworthiness

3.3.5.1 Credibility

The researcher made sure that participants were accurately identified and described (Korstjens & Albine, 2018: 121). The researcher had confidence in the prospective findings of the study. The researcher increased credibility by using techniques of prolonged engagement, persistent observation, triangulation, peer debriefing, and member check (Brink *et al.,* 2018: 158) as described below:

Prolonged engagement: The researcher built up a relationship with participants and invested time to be with the participants in the situation. Staying for 45 minutes to an hour with participants until data were saturated also prevented distortion of information (Brink *et al.,* 2018: 158; Korstjens & Albine, 2018: 122).

Persistent observation: The fact that the researcher spent time with participants provided the opportunity to seek necessary information and discard irrelevant data. Data were constantly analysed and interpreted differently. The researcher identified behaviors of the participants (Brink *et al*., 2018: 158; Korstjens & Albine, 2018: 122).

Triangulation: In this study, the researcher conducted an interview, asking different questions using different methods for example observation and field notes. Data were collected on different situations and relationships from different perspectives (Brink *et al.,* 2018: 158; Korstjens & Albine, 2018: 122).

Reflexivity: In this study, the researcher was part of the phenomenon under the study and was the main research tool. The researcher set aside preconceived ideas.

Peer and participants debriefing: The researcher discussed with colleagues exposing the study to peers for positive criticism. The researcher was asked questions by colleagues with more experience in the field. Every step of the research study was

discussed and effectively analysed. Peer debriefing increased credibility (Brink *et al.*, 2018: 158; Korstjens & Albine, 2018: 123).

Member check: The researcher purposefully checked the intentions of the participants. Errors identified were corrected. The researcher reverted the emerging findings of the study to the participants for data interpretation. Adequacy and accuracy of the study findings were discussed with participants (Brink *et al*., 2018: 158; Korstjens & Albine, 2018: 122).

3.3.5.2 Transferability

Transferability is the ability of the researcher to provide the reader with evidence that the findings of the study can be applied to a similar situation (Korstjens & Albine, 2018: 122). The findings of the study as originally developed might be applied in another context. Transferability makes the reader of the research study connect their own experience with the elements of the study. The reader will have to read more detailed information about the original research and compare the similarities with their study. The transferability and generalisability of the study to another context depend on the reader (Brink *et al*., 2018: 159; Korstjens & Albine, 2018: 122).

Detailed data were collected and detailed methods were used and the location was described to allow the reader to make an informed judgment of their own study. The researcher purposefully selected the sample. Participants with relevant knowledge of the study were purposefully selected to give in-depth information. Furthermore, detailed information maximised the description of the study. The sample in this study was adequate when the information given by participants was saturated, meaning no new data were emerging and information was duplicated. Data collected was analysed and raw data is available for reference. Transferability in this study provided a dense description of the research method and design, sample, and results (Othman *et al*., 2020: 5).

3.3.5.3 Dependability

Dependability is the evidence provided by the study to prove stability and consistency that if the same study is repeated with similar participants, it will still produce the same results (Brink *et al*., 2018: 158). An inquiry audit was conducted by an independent auditor or outside researcher to establish dependability. The auditor assessed consistency in data collected, findings, interpretations and recommendations. The research study process and the documents of this study were monitored throughout by research experts (Brink *et al*., 2018: 158; Othman *et al*., 2020: 5).

3.3.5.4 Confirmability

Confirmability is a representation of the narrative information of participants and not the researcher's thoughts. Data interpretation does not include additional information other than that given by participants. Furthermore, the researcher put aside any preconceived ideas in relation to coping strategies for mothers during child sickness in the hospital. During the research process, the researcher had the interests of the participants in mind to avoid bias. The researcher engaged peers for discussions to put aside observations and the researcher's ideas whilst working in the paediatric units. Therefore, audit inquiry, reflexivity and triangulation techniques were used throughout the process of the research study (Brink *et al*., 2018: 159; Othman *et al*., 2020: 5).

3.3.5.5 Authenticity

Authenticity is the manner that the research shows truthfulness and faithfulness of data (Brink *et al*., 2018: 159). In this study, the findings of the research study reflected the true experiences, feelings and views of mothers regarding coping strategies during child sickness in the hospitals of LP, SA. The researcher by all means respected the views and beliefs of the participants. Evidence of data collected will be available and kept by the researcher in a safe place.

3.4 Phase 1(b): Quantitative strand

3.4.1 Objective of Phase 1(b)

To identify the views of health professionals regarding the coping strategies for mothers during child sickness in the hospitals of Limpopo Province, SA.

3.4.2 The survey

A cross-sectional descriptive survey was used for health professionals on the coping strategies to assist mothers during child sickness in the hospitals of Limpopo Province, SA. A cross-sectional descriptive survey described the relationship between one or more variables in a sample. The researcher selected the design because it does not involve the manipulation of variables. This study was done at selected hospitals as identified in Table 3.2 at specific times. The descriptive design allowed the researcher to answer the research question, generate new knowledge and in-depth information. Current problems were identified and how the current problems would be handled or justified was determined. Furthermore, how other people handled the same problems (Kabir, 2018: 244).

3.4.3 Population and sampling

3.4.3.1 Population

In this study, the population was all health professionals working in the public hospitals of LP, SA. Table 3.2 below shows the district, names of hospitals and population size.

Table 3.2: Population frame of Phase 1(b): Quantitative study (Department of Health, Limpopo Province, 2017)

DISTRICT	NAMES OF THE HOSPITALS	POPULATION
Capricorn	Lebowakgomo Hospital	1361
Capricorn	Mankweng Hospital	1629
Vhembe	Donald Fraser Hospital	1047

Vhembe	Siloam Hospital	795
Vhembe	Malamulele Hospital	809
Vhembe	Elim Hospital	1039
Vhembe	Tshilidzini Hospital	1612
TOTAL		8292

3.4.3.2 Sampling method

The probability method was used in this study. It is the best sampling method in the quantitative study because all elements have an equal opportunity to be selected for the sample. The researcher calculated the probability of selecting the desired sample size. Bias was reduced and the researcher estimated bias errors. Probability sampling was used because the researcher aimed to generalise the findings to the entire population (Brink *et al*., 2018: 119; Majid, 2018: 3)

3.4.3.2.1 Sampling of districts and hospitals

The researcher purposefully selected the districts and hospitals of interest where the study was conducted. The researcher intended to conduct the study in two selected districts of Limpopo Province, namely Vhembe District and Capricorn District. The total number of hospitals in Limpopo Province is 43. Vhembe District has seven hospitals and Capricorn District has seven hospitals and two tertiary hospitals. The hospitals that were selected had paediatric units. In Vhembe District the selected hospitals were Siloam, Elim, Malamulele, Tshilidzini and Donald Fraser Hospital respectively. Capricorn District has two level-three hospitals that were selected namely Mankweng Hospital and Lebowakgomo Hospital. These hospitals were selected based on the fact that they have paediatric units and more than twenty beds occupancy of children's admissions.

3.4.3.2.2 Sampling of respondents

Respondents were health professionals working in public hospitals. A random sampling technique was used to select respondents. Fishbowl sampling was used where those who chose a cross (x) were included in the study. All selected respondents were free and willing to participate in the study.

3.4.3.3 Sample and sample size

3.4.3.3.1 Sample

The sample is a selected part of the population to be studied in order to gain information about the whole (Majid, 2018: 3). In this study, the sample was health professionals working in the hospitals' paediatric units during the 2018/2019 financial year. Only health professionals who were willing to give information were allowed to take part in this research study.

3.4.3.3.2 Sample size

Sample size is selecting the appropriate number of respondents needed in the study taking into consideration scientific and pragmatic factors (Brink *et al*., 2018: 128). The researcher used Slovin's formula in the calculation of survey size for the 8292 population, allowing for a 95% confidence level and a 5% margin of error (Memon, Ting, Cheah, Thurasamy, Chuah & Cham, 2020: 3). According to the formula below, the sample size was 286 respondents.

n=N/(1+Ne) where N= population size, n= number of sampling size and e= accepted level of error set at 0.05. Therefore the sample size is:

$n= N (1+N e^2)$

N= 8292 and e= 0.05

n= 8292/ (1+8292 x 0.05^2)

=8292/ (1+8292 x 0.25)

=8292/ (1+27.96)

8292/28.96

n=286

Table 3.3: Sampling frame

District	Hospitals	Sample of hospitals	Percentage
Vhembe	Siloam	(286/ 8292) x 566 = 27	9.4%
Vhembe	Donald Fraser	(286/ 8292) x 818 = 36	12.6%
Vhembe	Malamulele	(286/ 8292) x 580 = 28	9.8%
Vhembe	Elim	(286/ 8292) x 810 = 36	12.6%
Capricorn	Mankweng	(286/ 8292) x 1400 = 56	19.6%
Capricorn	Lebowakgomo	(286/ 8292) x 1132 = 47	16.4%
Vhembe	Tshilidzini	(286/ 8292) x 1386 = 56	19.6%
	Total: 7	**286**	**100%**

3.4.4 Data collection

In this study, data collection was the process of getting information from the respondents. Arrangements with respondents were done prior to the initial collection of data. Self-designed questionnaires were developed from the literature review and findings from qualitative findings and used as an instrument to collect data that gave answers to the set objectives. A quantitative study questionnaire was written in English

that included closed and open-ended questions and the time frame to complete the questionnaire was 45 minutes to an hour. Respondents who needed assistance were helped by the researcher to complete the questionnaire. Anonymity was ensured when using questionnaires since names were not attached to the questionnaires.

Research assistant: In this study the researcher recruited and trained two research assistants based on their qualifications to help during the collection of data. The research assistants selected were master's students for capacitating purposes. The training of the research assistants lasted only one day and included how to administer questionnaires, how to do fieldwork and how to assist during the workshop respondents. After the training, the research assistants were allowed to demonstrate their new skills by going into the field and administering questionnaires. The researcher checked and compared the questionnaires before the actual data collection. Data collection lasted four months. 30 questionnaires were done per day. The researcher met with the research assistants daily after work to evaluate the data collected.

3.4.5 Pre-test

A pre-test is when the limitation or shortcomings in the instrument is investigated before the main research study is done. In this study, a preliminary test was carried out before questionnaires were used (Brink *et al*., 2018: 161). Pre-testing was done in Louis Trichardt Memorial Hospital, LP, SA. Questionnaires were tested on 10 percent health professionals to identify unclear wording or if taking long to administer. Furthermore, the pre-test was done with the reason to identify whether health professionals understood instructions or what was expected from them. The pre-test also identified potential challenges that might have occurred during the research study. The results of the pre-test were not included in the study.

3.4.6 Instrument for survey

A self-designed, self-administered questionnaire was used which was a set of written questions, well designed to collect valuable data. Respondents chose answers from ones provided by the researcher. In this study, the questionnaires consisted of three

sections i.e. demographic data, experiences of mothers during child sickness in the hospitals of LP, SA. and strategies used for mothers during child sickness in the hospitals of LP, SA. Semi-structured questions were asked. Questionnaires were presented to the supervisors, statisticians and experts in the field of study.

3.4.7 Measures to ensure validity and reliability of the instruments

3.4.7.1 Validity

Validity is the ability and extent of the instrument to measure that which it is intended to be measured (Brink *et al.,* 2018: 151).

- **Content validity**

The instrument was able to represent the factors the researcher intended to study. In this study, supervisors and co-supervisors who are experts in this study field evaluated if the instrument (questionnaires) was able to ask relevant questions regarding what is known in the study area. All components were included to measure what the researcher was interested in (Surucu & Maslakci, 2020: 7).

- **Face validity**

Face validity evaluates the degree to which an instrument appears to be able to measure the variable that is supposed to be measured. The researcher used the questionnaire to collect data from Louis Trichardt Memorial Hospital in LP, SA. to test and retest the instrument.

- **Internal validity**

A pre-test of the instrument was done to ensure internal validity. Questionnaires were tested on a small number of health professionals to identify unclear wording or if was taking long to administer, furthermore, identify whether health professionals understood instructions and what was expected from them. Potential challenges that might have occurred during the research study were identified.

- **Construct validity**

In construct validity, the researcher was intending to determine whether inferences made about the results of the study were meaningful and served the purpose of the study. In this study, construct validity was useful in measuring the coping strategies of mothers during child sickness.

3.4.7.2 Reliability

Reliability was ensured through the stability and extent of the instrument to produce the same results each time when measuring a variable, even if was used by different researchers. In this study, to ensure stability, the instrument was tested and retested on a small group of participants and it still produced the same results. Internal consistency was ensured and the instrument (questionnaire) was taken as reliable. To ensure equivalence an independent coder assisted in data analysis.

3.4.5 Data analysis

Data were organised and analysed based on the questionnaires that directed the study. Statistical Package of Social Sciences (SPSS) Version 24.00 was used. The demographic data of respondents were summarised using frequency distribution and descriptive statistics. Some of the data were categorised and proportions and percentages were calculated. Data were analysed with the assistance of the statistician.

3.5 Phase 2: Strategy development

Coping strategies for mothers during child sickness were developed using the findings from Phase 1(a) and Phase 1(b). Neuman's theoretical framework was followed to develop strategies.

3.5.1 Objective

The objective of Phase 2 was to develop coping strategies to assist mothers during child sickness in the hospitals of LP, SA.

3.6 Phase 3: Validation of coping strategies

Coping strategies for mothers during child sickness in the hospitals of Limpopo Province, SA were validated.

3.7 Summary

In this chapter, the research methods and design for Phase 1(a) and Phase 1(b), Phase 2 and Phase 3 were outlined, wherein the population, sampling and sample, data collection and analysis were discussed. Measures to ensure trustworthiness and ethical considerations were outlined. The next chapter deals with the discussion and interpretation of the qualitative and quantitative results.

CHAPTER 4: DATA ANALYSIS, PRESENTATION AND DISCUSSION OF QUALITATIVE AND QUANTITATIVE DATA

4.1 Introduction

Chapter 3 outlined the research methods and design that were used for Phases 1 and 2 of this research study. Chapter 4 presents the results of the data collection and analysis of the qualitative phase (Phase 1(a)) and the quantitative phase (Phase 1(b)). The findings of the study of the experiences of the participants relating to the coping strategies for mothers during child sickness in hospitals of Limpopo Province (LP), South Africa (SA.) are presented as revealed by participants during data collection in seven selected hospitals.

In order to describe the parallels and distinctions between this analysis and the literature, the results are examined in light of previous research findings available in the literature review. When reporting on the findings, a summary of the methods of analysis will be added. In this study, the qualitative findings were presented first, followed by quantitative findings because the qualitative findings informed the quantitative results.

This research study was conducted based on Neuman's model that used Gestalt's theory, stress theory, system theory and levels of prevention. The sample of this qualitative study comprised fifty (50) interviewed mothers who were admitted to seven participating hospitals in LP, SA, during the time of the study.

Data saturation was reached during the 13th participant, but the researcher continued to interview participants to explore and understand the experiences of all the selected hospitals. In each hospital, a minimum of five participants were interviewed but amongst the five the researcher found that data saturation was reached while interviewing the third person, hence the researcher ended up interviewing fifty participants. Data were collected from July to October 2019. Mothers who were present during the period of study voluntarily took part in the interviews.

4.2 Phase 1 (a): Qualitative data findings

In Phase 1(a) qualitative data were collected by the researcher as the main data collector using semi-structured questions. The main objective was to determine the experiences of mothers during child sickness in the hospitals of LP, SA. This study aimed to answer the following question: "***What are the coping strategies for mothers during child sickness in the hospitals of LP, SA?"*** The questions were divided into three sections: Section A was the demographic data, Section B was the effects of child sickness on the mother and Section C was coping strategies for mothers during child sickness.

Data were collected in seven selected hospitals in Vhembe District namely Tshilidzini Hospital, Donald Fraser Hospital, Siloam Hospital, Malamulele Hospital and Elim Hospital and Mankweng Hospital and Lebowakgomo Hospital in the Capricorn District. Semi-structured interviews were done and face-to-face, in-depth information was obtained. The venues for the interviews were arranged prior to data collection which took place between 45 minutes to an hour and lasted for about two months.

In the qualitative phase, Phase 1(a), Section A comprised the demographic data of mothers, Section B was an exploration of the effects of child sickness on the mother and Section C included information to generate coping strategies for mothers during child sickness. The eight steps of Tesch's inductive, descriptive, open coding technique (Creswell & Creswell, 2018: 198) were followed, as discussed in detail in Chapter 3. Themes and sub-themes were discussed with the supervisors until a consensus was reached. The results of this study were discussed based on the participants' responses and emerging themes.

4.2.1 Demographic data of the participants

Institutions: Seven institutions (hospitals) were selected as part of the study.

Participants: A total of 50 mothers with sick children of less than five years and admitted to the hospital participated in the study.

The mothers' ages were as follows: 4 mothers were under the age of 20, 12 were between the ages of 20 and 25, 12 were between the ages of 26 and 30, 12 were between the ages of 31 and 40, and 7 were above 40 years of age.

Marital status: 16 participants were married, 31 were unmarried, 2 were divorcees and 1 was a widow.

Educational level: 1 participant attended school up to primary level, 36 up to secondary level, 12 went to tertiary level and 1 never attended school at all.

Employment status: 12 of the participants were employed, and 38 were unemployed.

Duration of the sickness: Participants who stayed less than 24 hours were not interviewed because they would not have enough information for the study. 29 stayed in the hospital for between 1-7 days, 16 stayed between 8-15 days and 5 stayed for longer than a month.

Admission experience: 39 of the participants were admitted for the first time and 11 were admitted more than once in the hospital.

The demographic data for the participants as shown in Table 4.1 was obtained to understand the background of the participants. The demographic information included the institution where data were collected, the age of participants, marital status, educational level, employment status, duration of the child's sickness and admission experience.

Table 4.1: Summary of demographic data analysis

Data	Name of hospital	Frequency
Institutions (7)	Malamulele	7 participants
	Donald Fraser	7 participants
	Tshilidzini	6 participants
	Siloam	7 participants
	Elim	8 participants

Data	Name of hospital	Frequency
	Mankweng	8 participants
	Lebowakgomo	7 participants
Total number of participants	All institutions	50
Age of the child	<6/12 months	14
	6/12 to < 12 months	11
	1 year to < 2years	18
	2 years to < 5 years	7
Age of the mother	< 20 years	4
	20 years to 25 years	12
	26 years to 30 years	12
	31 years to 40 years	18
	> 40 years	4
Marital status	Married	16
	Unmarried	31
	Divorced	2
	Widow	1
Educational level	Primary	1
	Secondary	36
	Tertiary	12
	Never attended school	1
Employment status	Employed	12
	Unemployed	38
Duration of the sickness	1 < 24hrs	0
	Days	29
	8-15 days	16
	>1 month	5
Admission experience	1st admission	39
	Admitted more than once	11

4.2.2 Presentation of themes and sub-themes

The findings were discussed in relation to the themes and responses from the participants' interviews. The themes and sub-themes are presented in Table 4.2 below.

In this study, qualitative results were discussed based on the four main themes that emerged from the data collected. Some of the quotations made by participants during data collection have been reflected in the discussion. The discussion integrated the qualitative findings with the quantitative findings. Confirmation of the qualitative themes was obtained through statistical data in qualitative findings. The qualitative and quantitative findings were merged.

Table 4.2: Themes and sub-themes of the experiences of mothers during child sickness in hospitals

Themes	Sub-themes
1. Paradoxical stories of mothers' experiences during child sickness	1.1 Mothers' experiences during child sickness in hospitals. 1.2 The emotions of mothers when children are sick and hospitalised. 1.3 Mothers experience good versus poor services provided during their sick children's admission to hospital.
2. The effects of child sickness on mothers during admission in hospitals	2.1 The effects of children's sickness on mothers. 2.2 Unbearable effects of children's sickness on mothers. 2.3 The effects of child sickness on the family.
3. Challenges experienced by mothers of sick children	3.1 An outline that leaving other children at home is problematic to mothers while the sick one is hospitalised.

Themes	Sub-themes
during their stay in hospitals	3.2 Unbearable treatment received by mothers from health professionals. 3.3 Negative impact on mother's performance due to inadequate updates of a sick child's progress. 3.4 Outline of the fear of children dying experienced by most of the mothers.
4. Support needed by mothers from the health care professionals during the admission of the children in the hospital	4.1 Inadequate support received by mothers during the hospitalisation of the child. 4.2 Support and existence of counseling experienced by mothers from nurses, and doctors. 4.3 The support and existence of counseling by other mothers (peers) and family members help one to cope with the situation. 4.4 An outline of paradoxical (different) strategies used by mothers during children's admission. 4.5 Existing spiritual interventions invited by mothers during children's admission. 4.6 Engaging in several activities and sharing experiences as a strategy to cope with the situation.

Description of the findings of major themes and categories

In this study, the discussion of the results was done based on the themes and sub-themes that emerged from the data collected.

Four main themes emerged from the findings of the study, namely:

1. Paradoxical stories of mothers' experiences during child sickness.
2. The effects of child sickness on mothers during admission in hospitals.
3. Challenges experienced by mothers of sick children during their stay in hospitals.
4. Support is needed by mothers from the health care professionals during the admission of the children to the hospital.

Findings with direct quotes from participants were indicated to give meaning to the discussion. Besides, appropriate quotes were used where necessary to clarify the findings and the literature provided to support the reported findings. The findings indicated both positive and negative experiences by mothers during child sickness in the hospital.

4.2.2.1 Theme 1: Paradoxical stories of mothers' experiences during child sickness

Paradoxical stories of mothers' experiences during child sickness described inconsistent care, as explained by the mothers, that there were good and bad experiences during their stay in the hospital. Three sub-themes emerged that is mothers' experiences during child sickness in hospitals, the emotions of mothers when children are sick and hospitalised and mothers' experience of good versus poor services provided during their sick children's admission to hospital.

4.2.2.1.1 Sub-theme 1.1: Mothers' experiences during child sickness in hospitals

This sub-theme discusses the bad and the good experiences as revealed by mothers. Some of the participants in this study expressed that even if their children are sick they felt that both the mothers and their children are treated well. Mothers complimented the good treatment from some of the health professionals as evidenced by some of the participants' quotes. The following statements from the participants express their satisfaction:

Participant 4 expressed satisfaction by showing the happiness of the experience during her child's sickness and hospitalisation and said:

"I see that we are well taken care of. I am happy." Through probing, she further said: "*Nurses assisted me a lot when my child was very sick. When I report some changes in my child they came quickly to assist my child."* She continued to say: "*The only thing I like about this hospital is that they gave my child good service and I am pleased because I am also part of what they do. I wish they can do this every day."*

Friendly relationships were experienced from the health professionals towards mothers with sick children as they provided care for the children, it was shown that health professionals' communication towards mothers was good and this was mentioned by Participant 8 who expressed that:

"Nurses are like my friends. They communicate well, and it helps me to cope with my situation, my child was not well at all and it really helps. Nurses greet patients bed to bed and they show love to children." She further explained that: *"The staff is working very hard to assist my child and I always ask questions about my child because I was worried about her sickness and the doctor explain everything to me about the condition of my child."*

A friendly relationship towards mothers was also confirmed by participant 15 who verbalised that health professionals' communication is good for mothers. *"Doctors and nurses speak well with me. The staff takes care of me well and in a way that I did not expect it."* Through probing, she continued to say: *"Even though my child is very sick, however, nurses and doctors do care in such a way that you forget that your child is sick."*

Despite the experience of friendliness, mothers also expressed that health professionals in some hospitals showed the spirit of love and kindness towards mothers.

Participant 9 also supported the good experience of mothers and said: *"The love of nurses and the doctor can make you feel better when the child is sick."* She continued to

say: "*The way that nurses and doctors showed concern for the sick child gave me hope."*

Participant 12 indicated that she had a good experience with health professionals and expressed: *"Nurses are kind they comforted me in a good way, they care for the child also comforted me, and I was so distressed and feeling pain when I saw the way my child was so sick."*

This study revealed that despite the sickness of the child, mothers' good experiences of friendliness, kindness, love and good care from health professionals made them feel better. Mothers with sick children appreciated the way the health professionals assisted them while the child was sick. Furthermore, participants showed that there are good health practitioners who look after their children while also considering the well-being of the mothers. In addition, there are some compliments towards service delivery as stated by participants during this study. Participants displayed satisfaction with the way the health professionals handled them during child sickness. This indicates that there are still those hospitals that display good practice with Ubuntu and courtesy. The philosophic base of Neuman's Systems Theory encompasses wholism; the wellness of the mothers. Caregivers form part of desired outcome goals for optimal health of both the child and the mother.

A hospital stay for mothers during child sickness can be affected or impacted by several things that mothers experience, but this study showed that it can also be improved by several issues, hence Neuman's model indicated that the well-being of an individual comprises physical, psychological, spiritual and social status, therefore, child sickness is a stressor that can affect mothers and families in one way or another (Ahmadi & Sadeghi, 2017: 6). Neuman concurs with Koch and Jones (2018: 38) those child sickness troubles mothers, especially when they witness physical distress and pain experienced by the child. As the health professionals manage the child's pain and distress, the psychological distress of the mother is reduced.

The current research findings concur with Neuman's theory that during child sickness, patient care should be provided while also taking into consideration the concern of the

mother. As a result, if the staff displays a good attitude towards the mother, the stress the mother may be minimised. Doupnik *et al*. (2017: 1) concur with Ohene *et al*. (2019: 1) that distress to mothers may negatively affect the child's outcomes.

Mothers' experience with friendly, loving and kind health professionals showed that they were pleased by such behaviour even though they were stressed by child sickness. Furthermore, according to Cimke and Mucuk and Mucuk (2017: 5), to increase mothers' satisfaction during child illness, they should be involved in the child's care the moment the child is admitted. Good communication between health professionals and mothers is essential. In addition, stress is reduced in mothers who are regularly informed of the health status of the child.

In the study conducted in New Zealand on the parents with hospitalised children and health care providers' perception and experiences of family-centered care within a paediatric critical care setting, it was revealed that participants valued health professionals with a sense of humour, personal warmth, kindness and compassion towards both the mother and the child, as this helped to ease anxiety and stress (Foster & Whitehead, 2020: 22). Doupnik *et al*. (2017: 11) concur with Foster and Whitehead (2020: 22) that opportunities to experience empathy from health professionals and offers of assistance help to reduce stress and disruption to family life as a result of hospitalisation.

This current study revealed that when mothers are admitted with sick children at the hospital, mothers had bad experiences. Mothers explained the bad experiences as unpleasing to them. Most of the participants viewed the service provided during child sickness as substandard, bad and problematic for both the children and mothers. In this current study bad treatment received by mothers from health professionals was identified as a cause of increased emotional trauma to mothers as exemplified by some mothers:

Participant 5 said: "*I wish nurses can change because even if they know that they cannot help me, they can just speak well and even to rub me on the shoulder, I will feel*

better, remember that my child is not well and depend on them for anything that can help my child and they are hash to me."

Participant 11 supported what was said by participant 5 and verbalised that: "*I am not pleased at all. Sometimes nurses leave sick children alone busy with their cell phones. I am not pleased at all by this behavior."*

Through probing, she further said: *"It is painful when the child is sick and when nurses are harsh I become angry and frustrated but I don't answer them. When I came I already had a problem. My father passed on last year and my mother is a Zimbabwean, both of my parents have passed on. I am assisted by my aunt with some of the things I need. Here nurses are harsh and my child is sick, I wish my child can be ok."* (She looked like a person who was deeply thinking. Mostly she will pause with tears in her eyes, and she ended up crying). She further said: *"I want to go home with my child and buy medicine at the chemist because here I am not assisted, I am frustrated and my child is not getting better."*

This study further revealed that some of the treatments that mothers received frustrated mothers instead of helping them. Participants indicated that instead of receiving help, the health professionals accuse the mother of not taking care of the child at home. Furthermore, this study showed that it might happen that child sickness might be a result of the mother's fault but when the mother is with the child what is needed is relief from the stress of the child's sickness, rather than blame. Most mothers reported being frustrated as a result of child sickness. Some were not able to detect the illness early on, but when they brought the child to the hospital the health professionals blamed them before assisting the child.

Here are some of the quotes by participants that indicated blame by health professionals:

Participant 2 said: "*When I came to the hospital I was frustrated when nurses started blaming me to say why didn't I bring the child to the hospital, and I am not able to see if the child is sick or not."*

This was supported by participant 14 who experienced the same situation, quote: *"They blamed me, for example, I am working shift, sometimes I go to work at 06h00 and knock off at 16h00, and sometimes 15h00 to 22h00 and it is not easy."* In a further interview, she continued to indicate that: *"I am blamed because the nurse said I don't take care of my child. It is painful because no one expects her child to be sick. As you are being blamed you will just accept but is painful."*

The findings of this study show that mothers were already frustrated when they come to the hospital. Mothers indicated that health professionals should not blame them during child sickness as blaming makes their stressed situation and frustration with the child's sickness worse.

This study revealed that mothers experienced negative responses and that vulgar words were used towards them; sometimes health professionals used language that mothers could not understand and mothers needed to understand everything about child progress, hence, mothers became more frustrated and stressed. Some of the experiences that were quoted by participants are as follows:

Participant 22 explained that she experienced a negative response and said: "*I feel that when patients have a concern about the child's condition and report to nurses, nurses should listen and not say "*she mentioned the vulgar word*".* On probing if a vulgar word was used by the health professional, the participant responded to say: *"Yes and they send you back."* (She even demonstrated with her hands how mothers are sent back). She further said: "*I went to nurse because I needed help with my child and it looked like I was irritating the nurse, it is really painful."*

Mothers showed that the health professionals do not respond well to their challenges, instead, they receive a negative response. Mothers reported that it is important that mothers are well attended to by health professionals in every challenge they have concerning their sick children. This is evidenced by the following direct quotes as expressed by the participants:

Participants' direct quotes:

Participant 10 expressed that: *"I am an inquisitive person and I was told that by the time I will be discharged I will be a nurse because I am too inquisitive. I felt bad because I have the right to know about what is happening with my child"*

Participant 42 also expressed concern about not being attended to well and said: *"As a patient when I go to the sister to report anything that I have observed to my child, the nurse will just say I am too busy instead of referring me to the next person she will just be rude, and I cannot just go to the nurse to report if I did not observe something wrong with my child*." (She showed a frown face).

Participant 44 supported the statement that was also said by participant 42 and said: *"Maybe sisters are stressed; they answer the way they think. I think sisters must be trained in customer care and they must stick to it. Sometimes they treat you like you don't have brains and you cannot think. We know that they are mothers and they are married but here are at work and we are concerned about our sick children, my child is severely burnt. In Burns unit, I did not experience that."* She continued to say *"They should alert doctors when the child is transferred to another unit, if the doctor did not write medication, they say it is not their problem you should tell your doctor and if your child has been stepped down on Friday you won't get medication for the rest of the weekend and the child will be in pain, it is painful."*

A bad experience was also confirmed by participant 7 who was also admitted with her sick child and said: *"I am also a nurse working in Gauteng and they don't know that I am also a nurse. Nurses send students to do the work and students are always on their phones. Today children were not weighed until I followed nurses and asked, are you not giving medication to children today? Students are not supervised and they work on their own. I am also a professional nurse working in Bara. When I confronted one of the sisters she said she was not aware that children were not given medication. Vacolitre was changed and the drip was not opened. I ended up attending to my child. I opened the drip line myself. This is bad because children are sick."*

Participant 37 showed concern and said: *"My experience is that as mothers we are fine but there is one doctor who does not greet me. Even if I am asleep next to my child, he*

will just come and scratch me and say whatever he wants to say." Through probing she further said: *"I do not understand why the doctor is like that to me and my child is sick. When he came with the other doctor, they just open the file and they speak in Tsonga and I do not understand Tsonga, how will I know about the progress of my child?"* She continued to say: *"One day he found me scrolling my phone trying not to think much about the child and he said to me I also have a phone, do you want me to show you my phone? Since that day he has had a bad attitude toward me. He causes pain to me because of his attitude but other doctors are fine." She continued to say: "The other thing is that my child lost too much weight and he gave me oil to use together with breast milk. I asked the doctor what is the oil for and he said to me what did they tell you about the sickness of your child? I said to him when I came my child was in distress, not able to breathe well. He told me that I must not ask him a lot of questions because he has flu and I will cause him to be sicker, I felt so much depressed".* Sadly, she said: *"I always keep quiet when he comes. Today when he came I was asleep because I did not sleep the whole night. My child was not well and he said to me again, what did I tell you to do? Before I could answer he said to the other doctor let's go, this one does not listen, she does not cooperate. It is painful and distressing for me because I do not understand Tsonga and he speaks to me in Tsonga, my child is sick and I am being frustrated by the doctor, I am really not satisfied to be treated like this when my child is sick."*

The findings revealed that mothers expected to receive quality care from the staff members, but unfortunately, the expectations were not met. This study showed that the bad responses that participants received from the health professionals negatively affected them. The study showed that it is very critical to assist mothers during child sickness to reduce difficulties experienced regarding child sickness. Nurses and doctors are said to display a negative attitude when participants were seeking assistance. When mothers bring their children to the health facilities, they have hope and trust that they will be treated well but mothers explained the painful and exposed experiences they went through during child sickness. Different studies conducted in different countries supported the findings of this study in the literature review regarding all the lived experiences observed by mothers during their stay in the hospital, as is indicated below.

The findings of a study conducted by Mol *et al*. (2018: 36) concur with this study that mothers experienced a language barrier and became frustrated when health professionals used a language that mothers did not understand. Therefore, health professionals must communicate with mothers using the language best understood by the patient and the mothers. Furthermore, the study revealed that if mothers do not understand what is happening with their children, it worsened the burden that they have regarding child sickness.

Mol *et al*. (2018: 36) indicated that language barriers may negatively affect health care provision. Furthermore, it was indicated that mothers should understand the information they receive about the condition of their children. Mothers felt frustrated by the language barrier as they felt excluded from the child's care. Communication has been identified as a contributory factor to mothers' psychological distress and dissatisfaction with health care services whereas Neuman's theory allows mothers to take up a partnership of child care to gain wellness of the mother.

Kristjansdottir, Sjostrom-Strand and Kristjansdottir (2020: 10) concur with Mol *et al*. (2018: 36) in that parents described how their own education enabled them to seek and gain understanding. However, a lack of knowledge like created vulnerability and a feeling of disconnect to mothers with sick children. It was further explained that some of the Swedish nurses just didn't want to speak English and parents did not understand Swedish and they just avoided talking to parents. Language barriers were the most common issues raised by parents in Swedish hospitals. Parents became frustrated because of the situation.

The findings of this study revealed that health professionals used vulgar language when communicating with mothers. The use of vulgar language caused anger and hopelessness in mothers, however, the study conducted by Molina-Mula and Gallo-Estrada (2019: 20) indicate that language can be used as a tool of power and can build a mutual relationship between health professionals and mothers that may also smoothen the provision of quality care to both the mother and the child. This is in contrast with the present study where healthy mutual relationships were lacking

between health professionals and mothers. It implies extra training for health professionals on good human relations among themselves and patients.

Good communication skills are essential when providing care in the hospital as revealed in this study. If this appears to be lacking, the health department should consider training the staff since mothers experience a negative impact.

This study revealed that mothers experience a feeling of guilt and they are mostly blamed by a health professional as the cause of sickness. They are accused and not handled properly and as a result, they become frustrated and stressed and end up not coping with the situation of the child's sickness. According to Mohamed and Mohamed, (2019: 2), child sickness causes mothers to be worried, more especially if the cause of sickness is preventable. Mothers may have a feeling of guilt during the illness and when the health practitioners blame the mother for the child's sickness, it causes more frustration.

Findings from the current study showed that participants experienced negative to very bad attitudes as demonstrated by health professionals and this was said to have contributed to causing more pain during child sickness. Participants expressed some of the bad experiences during hospitalisation of the sick child.

Observation made by mothers during child hospitalisation was that they are receiving substandard care. Participants revealed that quality patient care is compromised for the children, and when mothers observed this they developed more stress than they already had due to the fear and uncertainty of the child's sickness.

Sick children and their mothers are supposed to be attended to at all times and at no time must they be found unattended. Mothers expressed that they were not pleased when nurses were found to concentrate on cell phones, not on sick children, which resulted in mothers being irritated and left with no one to attend to the needs of the child. Observations made by mothers during child hospitalisation were that they are receiving substandard care; junior personnel are not supervised when caring for sick children. They were found to be on cell phones, leading to a delay in attending to the

sick child. Mothers voiced that the provision of substandard care received increased the burden of stress felt by mothers during the period of sickness.

In the study conducted by Pucciarelli, Madonna, Simeone and Virgoles (2017: 102) on smartphone use in the nursing population, as much as a smartphone has potential benefits, misuse may have a negative impact on the provision of quality patient care. The use of smartphones disrupts and interferes with patient care. Most often the nurse is interrupted during service delivery. Pucciarelli *et al*. (2017: 102) is supported by the study conducted by Caminiti, Deng, Greenberg, Scolpino, *et al.* (2020: 3) on the impact and perception of cell phone usage in a teaching hospital setting, as much as the use of cell phones is beneficial in the clinical setting, there are also risks and adverse events that affect quality patient care.

4.2.2.1.2 Sub-theme 1.2: The emotions of mothers when children are sick and hospitalised

Observing child sickness and the condition of the child is a stressful situation for mothers. In this study, mothers expressed the feeling of being frightened due to unknown outcomes. Various experiences were observed by mothers while taking care of a sick child in the hospital. Mothers expressed the feeling of pain as they observed sick children going through critical conditions.

These are the participants' quotes that showed the emotions of mothers:

Participant 1 indicated that: *"It is painful when the child is sick. My child is still young. I am always crying because of my child's sickness."* She said this emotionally and she was crying. The researcher had given her time to be relieved and to wait for her to be calm. The researcher asked if she will be able to continue with the interview. She continued and said: "*I am really depressed and feel so depressed; my child is not well at all."*

Participant 2 explained that: "*I am always worried whether my child will be fine, and the doctor told me that there is no material and he was not transferring my child to other facilities where there is the material."* On follow up she said: *"I heard one of the mothers*

told by the doctor that she can buy medication for her child because that medicine is not available in the hospital."

Participant 4 said the same things that were shared by participant 1 and said: *"I used to cry always and I was frustrated and so much frightened. I did not sleep well because I was worried because of the condition of my child and sometimes I felt so hopeless."*

Participant 15 expressed that: *"My child sickness affected me psychologically. I will look at my child and cry. In most cases, I even thought of destructive behaviours like I even thought of killing myself and my child, because I am always at the clinic as she is always sick. This time is worse, my child is very sick, and I felt very tired of this situation and confused, but this hospital assisted me a lot."*

Participant 41 stated that: *"I am not well. I used to send my child to the unit several times, I feel hopeless, I do not know what to do and I do not have courage*." When encouraged to explain further she said *"Flu troubles my child. Eish, it is a long that I was in the hospital, my child was critically ill. Other children are admitted, treated and go home while I am here. I saw some of the children die and I ask myself what is the problem with me, my child is not getting better, I was anxious and even thought that maybe even mine will die."*

From the above quotes, mothers expressed the feeling of being hopeless, frustrated and feeling pain because of the sickness of their children. During the interview, some of the mothers expressed their emotions by just crying, in some cases the interview had to pause until the participant is ready to continue with the interview again. The philosophic base of Neuman's Systems model encompasses the wholism of human beings. Therefore, Neuman's System theory states that quality patient care should be provided to the child at the same time as attending to the needs that the mother during the difficult times of a child's sickness and hospiatalisation.

In support of the participants, Verberne *et al*. (2019: 3) indicate that mothers who provide care to sick children need healthcare professionals who can understand their stressful situations and carefully handle worries and uncertainties as to their concerns.

Lonio *et al*. (2017: 5) concur with Verberne *et al*. (2019: 3) in that mothers experience negative feelings such as anxiety, depression, anger, helplessness and confusion.

This study revealed that serious child sickness develops unexpectedly and mostly upsets the lives of mothers. Most mothers felt overwhelmed by waves of difficult emotions such as fear, worry, profound sadness, hopeless and despair. In most instances, mothers expressed child sickness as stressful and frightening. Therefore, as a result of the uncertainty of a child' sickness, emotional effects were displayed and mothers showed difficulty functioning or thinking straight, even leading to mood disorders such as anxiety and depression.

McBride-Henry *et al*. (2020: 8) show that mothers felt powerless and helpless with difficulties observing their children struggle to breathe. They wanted to relieve the child's burden.

4.2.2.1.3 Sub-theme 1.3: Mothers experience good versus poor services provided during their sick children's admission to hospital

The paediatric unit is one of the environments with a high level of stress for mothers during the hospitalisation of children. The hospital environment on its own is stressful, moreover, mothers experience increased levels of stress if the environment where mothers sleep is not conducive to rest. Some of the environments expose mothers to cross-infection. Participants indicated that the place where mothers sleep is a risk because it is not safe. The hygiene of the sleeping area was also said to be unacceptable.

Participants explained with the following statements:

Participant 29 said: *"We are so congested where we sleep. Our children have different sicknesses, and I am afraid that my child can be sicker because we are mixed. Two will put their heads in the other direction and two will face the opposite direction. We are not pleased."*

Participant 38 indicated: *"When I came here there was only one lady who cleans the bathroom she is a cleaner she only cleans on the weekend but she cleans very well but throughout the week there is one lady who works during the week. That one, eish, she doesn't even touch the bathroom at all and is always dirty and I don't expect myself as a mother to clean the bathroom. I have got a child who is supposed not to get infections. I am worried about cross-infection with my child who is very sick because after cleaning the toilet I am going to touch my child."* The participant continued*: "My child was preterm and very sensitive to various infections but somebody will expect me to do that and there is someone hired to do it that is getting paid. I cannot do that you don't even have gloves but in the end, you end up cleaning because you are the one who wants to bathe there."* With probing she further said: *"The lady who is working here does not even clean properly when you go there you find it very dirty and you as a mother or human being you cannot use the toilet which is dirty when it is not mopped you end up doing it because hygiene comes first at hospital and that might even make my child sicker."*

Mothers showed concern about the environment which was not conducive due to poor hygiene in the area where children and mothers were admitted. That affected them as they felt that their children can become sicker because of the infections that they contract due to the poor hygiene of the area. Mothers were worried about the congestion of patients which may cause cross-infection of their children.

This current study concurs with Hockenberry and Wilson (2018: 673) in that the hospital environment and the paediatric ward on their own aggravate stress to mothers. The hospital environment during child sickness affects both the mother's and the child's health. When the mother is tired she cannot take care of the child and can also develop a physical and psychological illness. In support of this, the study conducted by Canga, Malagnino, Malagnino and Malagnino (2020: 3) on evaluating different stressors among parents with hospitalized children, 65% of mothers were stressed by the hospital environment that they were in during child sickness. This is also supported by the Doha International Family Institute (DIFI) (2018: 33) confirming that the environmental stressors are physical aspects in the hospital that may not be directly associated with

child care but influence the general atmosphere of the hospital environment and consequently, the mothers' emotional experience is affected.

Mothers increasingly experienced stress from the poor hygienic environment that they lived in during the hospitalisation of the child. 38.9% of mothers were in an unpleasing and unhealthy environment that could seriously influence the child's condition. Mothers with their sick children are admitted to an extremely inadequate medical care institution where both the child and the mother are at risk of infection (Basnet, 2019: 2).

The Neuman Systems Theory reflects the nature of living organisms as open systems in interaction with each other and with the environment. Neuman's theory considers mothers as important figures to both the child and the family. An important assumption of the Newman theory is that each mother and child are unique and respond differently to stressors (sickness), hence they must be treated as unique, as one child may respond quicker to sickness whereas another does not.

4.2.2.2 Theme 2: The effects of child sickness on mothers during admission in hospitals

In this study, Theme 2 is composed of two sub-themes namely the effects of children's sickness on mothers and the effects of child sickness on the family. In this theme, the majority of mothers indicated that they experience negative effects on physical, social, psychological and financial areas due to child sickness, however, the mothers' daily normal functions and responsibilities are impacted.

4.2.2.2.1 Sub-theme 2.1: The effects of children's sickness on mothers

Physical health is something that when it is affected, normal life becomes a problem. The majority of interviewed mothers pointed out to have been affected physically because of child sickness. Child sickness and hospitalisation are sources of physical and psychological health disturbances. Mothers are regarded as essential resources in the care of the hospitalised child and are expected to continuously take care of the sick child while they too need to be cared for because they are affected by their child's sickness. In most cases, the effects of child sickness on mothers can lead to physical

manifestations because of stress experienced by the mothers. In this study, during interview sessions, participants reported being affected physically by the sickness of the child and expressed a feeling of physical pain like headaches, not eating well, failing to sleep well, and elevated blood pressure.

The effects of children's sickness on mothers' health are evidenced by the following direct quotes from some of the participants:

Participant 13 said: *"My child's sickness affected me a lot and I do not have strength. I am still feeling pain even now as I am speaking."*

Participant 22 also indicated: *"I felt much pain since my child started to be sick, I am always having a headache. I feel much stressed and I have pain in the neck, like heaviness."*

Participant 23 expressed that: *"I was very much affected because my child was severely burnt on the face. Eish, I am just mixed up, I just started eating yesterday. I am a hypertensive patient; because I was so much affected my blood pressure was elevated."*

Participant 24 explained that: "*Eish when my child is sick I feel like I am also sick, especially when I realised that he is not able to breathe well and again he has an abscess. I once had an abscess too, and now when it has developed on my child I think of the pain that I once had and it was very painful. (*She said this with a frown face). *"I used to cry always and I was frightened. I did not sleep well, I feel so much pain."*

Participant 25 confirmed the same as participant 23 and said: *"I was not eating food well because my child is sick. I am not well.*

Participant 32 said: *"Today I felt like I am sick, feeling pain and I was failing to sleep, tried to sleep but I couldn't."*

Participant 19 showed that: *"I am not sleeping well since my child started to be sick, I try to sleep but I will just sleep a few minutes and woke up."*

Participant 20 indicated that: *"Physical I am not well. I am sick and it is becoming worse because we sleep on the sponges in the mother rooms.*" (She was coughing throughout the interview).

The quotes showed that the sickness of the children has negative effects on mothers' health psychologically and physically. This study revealed that child sickness led to psychological and physical effects on mothers as primary caregivers while the child is hospitalised. The mothers expressed that they were not sleeping well and that caused them to be sick as well. Lack of sleep affected mothers. This study revealed that mothers failed to sleep well as a result of child sickness. Some mothers experienced a loss of appetite.

The study conducted by Oyegbile and Brysiewicz (2017: 4) points to the burden of health problems faced by mothers while taking care of a sick child, physical health as one among others, especially if the care is prolonged. Physical exhaustion is experienced as the child depends totally on the mother for every care.

According to Shah and Krishnan (2019: 2), in the American Thoracic Society, enough quality sleep refreshes and recharges your energy and mood. Furthermore, good sleep help to relieve pain and anxiety and controls blood pressure and blood sugar levels. In addition, quality sleep helps attention and memory to function well. Novotney (2019: 10) agrees with the ATS in that physical health is associated with adverse health consequences including poor sleep quality, impaired executive function, accelerated cognitive decline, poor cardiovascular function and impaired immunity at every stage of life.

Koch and Jones (2018: 26) reveal that mothers are more likely to have depressive symptoms, be fatigued, lack vitality and have problems with sleeping as a child's sickness stress. Koch and Jones (2018: 26) concur with Ormel *et al*. (2017: 72) and support that mothers had an increased burden of care that led to fatigue and exhaustion.

However, mothers facing consistent stressors may experience neurological processes dominated by the limbic distress response, instead of a more cognitive response of

adaptive coping. This means that parents who are under strain will become more behaviorally distressed in crises, like in the sickness of the child instead of accessing more adaptive and resilient responses.

Neuman's theory believes that the human being is a total person, characterised by five variables; one of which is the physiological variable and which refers to body structure and function. Stressors may cause physical dysfunction in mothers hence most of the mothers showed that when their children are sick they also felt sick. Some of the neurological dysfunctions of this system include severe headaches as was expressed by mothers during this study.

Regarding the effects of children's sickness on mothers, physical effects experienced due to child sickness were inadequate sleep, loss of appetite, elevated blood pressure and pain.

This study revealed that the social health of mothers was affected during child sickness. Mothers needed the company of others; they felt they needed comfort from other people. Mothers also needed health professionals to talk to them but in some cases, it never happened like that.

Some of the quotations of the participants that needed or felt much better by the support of others:

Participant 30 said: *"I am always thinking of my child, no one comes next to me to comfort me, nurses only talk when they pass by."*

Participant 15 also said: *"Other nurses will just say good morning and will never talk to you until they knock off, you even admire if somebody can just talk to you."*

This study showed that mothers felt that it is essential to communicate with them as they face the stressful situation of child sickness. Mothers expressed feeling of loneliness and needed to speak to someone. However, health professionals were explained to be not available to talk to mothers.

In support of what participants said, Koch and Jones (2018: 27) indicate that during child sickness mothers suffer from social isolation due to caregiving tasks and responsibilities during hospitalisation.

With regard to social health, interaction can have a huge impact on mothers' mental health and when mothers are facing the stress of a serious medical condition. Providing practical assistance and having people to lean on is essential to mothers' social and emotional well-being. Staying connected to others and continuing to enjoy social activities can make a difference in mothers' moods and outlooks as their child undergoes treatment.

Some mothers, on the other hand, did not want anyone near them or even to converse during their child's illness.

Some quotes from participants who preferred to remain alone and not speak are as follows:

Participant 4 said: *"I did not want to talk about it, because when I talk about it I felt pain, I was even afraid that my child will die."*

Participant 20 indicated that: *"I feel my situation is better without friends because I had experience and bad company, I don't want to be visited by a friend because I decided to live my own life without friends."*

Some of the mothers felt that they did not want to talk about the situation of the child as it triggered pain. They explained feeling better when they kept quiet. Some did not want friends because of previous experiences with their friends.

The quotes showed that when the child is sick it also affected the mother psychologically. The participants expressed that they needed to be alone, it was overwhelmed by critical conditions and thought maybe the child could die.

Neuman's theory support that a human being is a social being that needs interaction with other beings. The biological, psychological and social systems are evolved to thrive in collaborative networks of people. However, in some cases, people want to isolate

themselves and this is said to be unhealthy. This study revealed that some mothers disconnected from social interaction and wanted to isolate themselves from people.

Singer (2018: 5) stated that interaction enabled human beings to survive and thrive. Human beings are programmed to need social interaction; therefore, it is logical that social isolation may impose stress on mothers' minds and bodies that have a significant impact on health.

Novotney (2019: 10) concurs with Singer (2018: 5) that social isolation has adverse health consequences including depression and that a lack of encouragement from family or friends to those who are lonely may result in unhealthy habits.

Psychological effects such as stress occur when a person has difficulty dealing with life situations. Child sickness and hospitalisation cause psychological problems for mothers. The findings of this study revealed that some of the mothers have difficulties in accepting that the child is sick hence they end up affected psychologically, but others accept it. During hospitalisation of children, levels of stress in mothers are increased as they concentrate more on the child's sickness than any other thing. The situation is unfortunately damaging and results in heightened stress, depression, and anxiety in a mother due to the balancing of the healthcare needs of the sick child with daily commitments. Mothers with sick children have an increased risk of poor health and a lack of well-being, mostly due to psychological strain.

Quotes from participants:

Participant 2 expressed that: *"Truly I am failing to cope because I told you I have prepared everything for this child, I am really failing to cope but I will try."*

Participant 7 said: *"I am stressed, when the child is sick it is very painful and emotionally you are affected but the sister who assisted me is good. She can comfort you and give you hope."*

Participant 21 stated that: "*Psychologically I am not happy when I leave my child. It is just that I don't have a choice but I feel irritable and it is painful."* On follow up she said: *"It is painful, the child is sick and left unattended, I feel stressed."*

Participant 27 said: *"I am worried much about the issue of taking long without my child, I always think of what is happing to my child when I am not around and feel anxious. In most cases when we come back children will be crying, I am really worried."*

The findings of this study further revealed that child hospitalisation can cause severe anxiety, stress, maladjustment, and other psychological problems that have been observed in mothers. Mothers handle stress differently. The hospitalisation of sick children is always associated with tension, worry and pressure on mothers during child sickness. Anxiety and stress can interfere with the mother's ability to function and also to take care of her child. In addition to the usual demands imposed by motherhood during child sickness, mothers with children with health problems face multiple tasks arising from child sickness.

Basnet (2019: 64) indicates that 76.7% of mothers felt irritable and 73.3% experience pain during child sickness. Mol *et al*. (2018: 44) indicate that it is important for mothers to be close to their children in order to improve their understanding of their child's condition, build trust in the health workers, reduce stress and anxiety and improve coping. On the other hand, Mangeli *et al*. (2017: 6) indicate that mothers experience various responsibilities as mothers and feel restricted, imprisoned and unable to fulfill self-desires due to child sickness.

According to Kristjansdottir *et al*. (2020: 10), mothers were psychologically affected during child sickness and hospitalisation because they felt lonely in attending to their health problems; their needs were overlooked and not taken into consideration. Children were attended with less concern to mothers who were already stressed. Mothers with sick children hospitalised and providing extensive care to a child with a life-threatening disease are among the most stressful parental experiences, according to Verberne *et al.* (2019: 1). Doupnik *et al*. (2017: 11) concur with the current study in that child sickness and hospitalisation are a source of anxiety, depression, and stress for mothers. Caring for the sick child in the hospital compromises the emotions of the mother

According to Neuman's theory, the human being is characterized by five variables a total person. Amongst the five variables, there is a psychological state of a human being that can be affected by outside stimuli. Ahmadi and Sadeghi (2017: 14) state that the psychological variable refers to mental processes in interaction with the environment and child sickness is one of the stressors to mothers. Any disturbance causes disequilibrium in the psychological health status of mothers.

This study revealed that the psychological effects that mothers' experiences are reflected as psychological problems as the result of child sickness. Most of the mothers were stressed, anxious and depressed about the situation of their children. Some indicated not being happy as they leave the children for a long time without them and they were irritable.

4.2.2.2.2 Sub-theme 2.2: Unbearable effects of children's sickness on mothers

Mothers experienced unbearable effects as a result of child sickness and hospitalisation. The findings of the current study showed that mothers had extreme feelings that led to thinking of destructive behaviour like killing themselves, wanting to take the child home because the condition has not improved and unaccepted behaviours by health professionals. Another effect reported was that mothers were uncertain of what will happen if the child happens to die in the hospital. Unbearable effects were too painful and unpleasant for the mothers to continue to experience. Some of the participants' responses were:

Participant 15 said: "*I even thought of killing myself and my child because I am always at the clinic as she is always sick. The problem of my child was always recurring and now my child is very sick."*

Participant 11 indicated that: *"Eish, my child is very sick and I also think of what will happen if my child dies in the hospital."* She continued to say: *"both of my parents have passed on, I am not married and I am not working."*

Participant16 said: *"One sister at night duty harassed one of the mothers and pulled the patient by clothes and I did not like that. That child is sick, and the mother is at home, I wish she can come and take care of her child."*

Participant 27 said: *"We are told to go out and children remain crying. Especially in the morning, two hours of patients left alone is too much. I was even pushing the doctor to discharge my child; he refused because my child is sick."*

Participant 40 said: *"I am pregnant, and it is difficult to take care of my child. When I see my child in pain, pregnant and also my child being sick, it is too much for me, it is really unbearable. Sometimes when I am not able to help him, it becomes stressful."*

Mothers with admitted children had unbearable pain and uncertainty of what will happen to the child, thinking of taking their own life and some were taking care of the child whilst they were also sick. Some of the mothers indicated challenges that they may face if the child happens to die, more especially because of financial constraints due to unemployment and not being married.

Mothers showed unbearable experiences of children being ill-treated by health professionals. Some even wanted to take children home while still sick because of the unbearable effects they were facing during child sickness.

A study conducted by Basnet (2019: 5) supports the lived experiences of mothers that some of the mothers do experience uncertainty of the future of the child's illness and become stressed thinking of what will happen if the child dies. Furthermore, nearly half of the mothers of children admitted were found to have extremely severe levels of stress, and some in severe stress.

What was said by participants was supported by Hubert and Aujoulat (2018: 5), who report that during child sickness some mothers reacted violently because of the unbearable effects of child sickness and the inability to control themselves. Besides, the study indicated that mothers have experienced very intense fatigue, closely interconnected with perceived stress and anxiety.

4.2.2.2.3 Sub-theme 2.3: The effects of child sickness on the family's finances

A description is that children's sickness has negative effects on family finances leading to stress on mothers and the entire family.

This study revealed that child sickness is a situation with a high level of stress for families, mostly mothers. When a child is hospitalised it turns out to be one of the stressors that also have financial implications for mothers and mostly for unemployed and self-employed mothers. In addition, the demographic data in this study showed that most of the mothers indicated that they were unemployed and had children while they were still at the secondary level. However, out of 50 participants, 38 of the participants were unemployed. The majority of mothers indicated having financial constraints and they have experienced painful situations because of financial constraints. The financial constraints expressed by the participants were evidenced by the following participants' quotes:

Participant 3 indicated: *"It is affecting me financially because; I am not able to get what I want. I was also told that there is no medication, I was told to buy it and I have no money. The money I used to come to the hospital I asked my mother. This child does not receive a grant because I do not have an ID and the child does not have a birth certificate to apply for the grant."*

Participant 6 said: *"When it comes to the sickness it was not expected and I don't keep money with me for child sickness. When my child got sick I requested money from his granny and she gave me R50, if nurses at the clinic did not call an ambulance to bring me here to the hospital, I was going to have a problem. The change left is R34.00. I will use it to go back home. Money is a problem when the child is sick."*

Participant 17 explained that: *"I have a financial problem that is why my child is sick. I don't even have an ID. I never attended school, I am not working. My husband divorced me and now he is late. I am failing to cope because I don't want to lose my child, I am really afraid of that."*

Participant 27 said: *"My child's sickness stresses me a lot and I am still stressed even now. I have stopped my business and there is nothing I can do because my child is sick. I am self-employed, and as I am taking care of my child here in the hospital it means*

there is no money that I will receive. It is really a problem for me because I cannot leave my child."

This current study specified finance as a major challenge to most mothers. The majority of mothers reported disturbances in their source of income because some of them were self-employed, whereas some were unemployed.

The quotes of participants are supported by the study conducted by Walubita *et al.* (2018: 4) who report that child sickness has a negative impact on finances as clarified by some of the participants. Mothers are confined in the hospital environment to attend to the child's sickness leading to their source of income being disturbed, for example, self-employed mothers. Unemployed mothers find it difficult to take their children to the hospital due to financial constraints. This study revealed that employed, unemployed, and self-employed mothers experience financial difficulties during child sickness and as a result mothers failed to continue with daily income-generating activities due to the hospitalisation.

According to Canga *et al*. (2020: 4), in the study conducted on evaluating different stressors among parents with hospitalised children, it was revealed that a child's illness can affect the financial state of the family negatively, as it also affects the mother's employment. However, the study further noticed that parents who reported high levels of stress did not have a job hence, causing more challenges during child sickness and hospitalisation.

Furthermore, participants raised financial concerns since mothers who had to stay with sick children in the hospital were unable to work and as a result, some were eligible to leave while others were forced to take unpaid leave. Some of the parents were self-employed hence financial impacts were more intense on the families. Participants further pointed out that they don't have any spare funds or budget for child sickness. When the child becomes sick it becomes a problem as it implicates financial challenges. In addition, participants revealed financial constraints as a burden during child sickness. In addition, Koch and Jones (2018: 30) elude that during child sickness, mothers experience financial problems due to healthcare costs. At the same time, they are

needed to take care of the sick child in the hospital. Mothers have to reduce their work schedules to meet the caregiving demands of their children. Their source of income is thus affected.

Neuman's theory showed financial constraints as one of the extra-personal factors. Extra-personal factors affect mothers inside and outside hospitalisation. Some of the mothers mentioned difficult financial circumstances that also affected the family at home (Ahmadi & Sadeghi, 2017: 1).

In as much as the majority of the participants indicated financial challenges during child sickness, some participants did not have any problems financially. The following quotes demonstrate the financial challenges as expressed by participants' responses:

Participant 7 indicated that: *"I should have been admitted in the private ward because I am a nurse but I chose to be admitted here because medications are the same."*

Participant 9 said: *"I am not affected financially, my in-laws support me and my child. My husband is also working."*

Participant 19 said: *"I don't have a financial problem. My child started to be sick at I month and now he is 10 months. I don't have a problem even with bringing my child to the hospital because I am assisted by my parents. They finance all my trips when I have to go to the hospital."*

The current study showed that some of the participants chose to come to a public hospital for care even if they can afford private institutions' services. Mothers realised that all medications are the same and participants raised a concern that health professionals should treat patients fairly and equally. Some of the mothers alluded that they do not have financial problems although they depend on family members for financial assistance.

Mumford *et al.* (2018: 7) pointed out that there are ways to handle the costs of child care during sickness and hospitalisation. Some parents may think that insurance will cover all or most of their child's medical expenses or that being able to afford their child's healthcare needs would not be a problem. Some of the mothers depend on

family members for assistance. The costs of health care can be staggering, but when mothers are faced with a child with sickness, mostly they are just worried about getting the child back to health.

4.2.2.3 Theme 3: Challenges experienced by mothers of sick children during their stay in the hospital

Theme 3 is composed of five sub-themes, namely: an outline that leaving other children at home is problematic to mothers while the sick one is hospitalised, unbearable treatment received by mothers from health professionals, inadequate support received by mothers during hospitalisation of the child, negative impact on mother's performance due to inadequate updates of sick children's progress and an outline of the fear experienced by most of the mothers of children dying.

4.2.2.3.1 Sub-theme 3.1: An outline that leaving other children at home is problematic to mothers while the sick one is hospitalised

The current study revealed the challenge that mothers face when a sick child is hospitalised. Participants outlined that leaving other children at home unattended is problematic to mothers, while the sick one needs the attention of the mother too.
The findings of this study further revealed that mothers' concentration on the sick child was always disturbed and divided by thinking of children left at home. Mothers become more concerned because at home they find themselves taking up the primary role of taking care of children and the family at large.

Participants outlined the following quotes as evidence:

Participant 1 indicated that*: "I cannot stop crying because my child is sick. At night my child had a breathing problem and I was told that I must tell the nurses during the day about the condition of my child. This thing made me think of the children that I left at home."* The researcher asked how many children are left at home*. "They are three children and the firstborn is born in 2002, I am always thinking of how my children are*

doing at home as I am in the hospital. I left them abandoned at home." On following up she said: *"there is no adult person at home who is taking care of them".*

Participant 6 said: *"My child who is in grade R did not go to school because when I went to the clinic I did not think that I will be transferred to the hospital. I locked the house where I keep my child's uniform and the child will go to school when the granny comes to visit me here in the hospital. I will then give her the keys."*

Participant 8 explained that: *"I have accepted that my child is not well, but I also have three children whom I left at home. My sister took one child who is in grade 1 to her place. Two children are left at home on their own. The other one is in grade 8 and the other one is in grade 11. My mother comes on Fridays to check on them and goes back on Monday because she has other grandchildren to take care of, she also does piece jobs."* On probing she further said *"My children are also concerned about my sick child and they always ask me when am I coming back home with the child. My children are cooking for themselves on the other hand they have to attend homework."*

Participant 32 *said that: "Today I went home this morning because the one in the hospital was no longer having clothes. I think of my child because the person that remained with my eight-year-old child at home told me that my child was restless at night and was complaining of abdominal pains, but she advised me to give her the child's clinic card. She promised that she will observe her at night and if he is not well, she will take him to the clinic."*

Participant 44 said: *"I have a firstborn child at home who is eight years old. When I am here I feel my child is abandoned. I also have a three-year-old child. When their father comes with the three-year-old child, they don't allow him to come in, he is left with security and that makes me feel stressed. I feel my child is not safe when I am here.*"

This study revealed that child sickness affects the mother especially when the sick child is hospitalised and the mother has other children who are left at home without a caregiver. Some of the children are still attending secondary schools and have schoolwork that needs to be done at home with the supervision of parents. The eldest child in the family is left with all the responsibilities of the mother who is attending to the

sick child in the hospital. Grandmothers and other family members are also affected because they need to assist with attending to children who are left without an adult. The safety of children is compromised when they are left in the care of other minors. When mothers think about all these problems it becomes too much for them to handle on top of their sick child.

Neuman's theory indicates that patient care concerns a person as a whole, therefore, she believes that nursing care should be viewed in terms of all the needs affecting an individual's response to different stressors. This indicates that during child sickness mothers should be attended to as a whole (Ahmadi & Sadeghi, 2017: 2). The implication, therefore, could be that mothers suffer from depression, stress, and frustration while caring for their hospitalised children. Mothers could end up being hospitalised themselves, thus making it difficult to look after their sick children.

In support of the participants' quotes, Nassery and Landgren (2019: 9) argue that despite the quality care that mothers receive from health professionals in the hospital setting, mothers always had tension in caring for a hospitalised child and the demands of caring for the siblings and family at home. Additionally, the nature of child sickness contributed to how the mother and family reacted. Mothers wanted to take part in providing care to ensure the recovery of their children and felt comforted by being there with the child and not abandoning the child. At the same time, the (Doha International Family Institute (DIFI) (2018: 36) shows that mothers experience stressors, including worrying about the well-being of the hospitalised child as well as the siblings at home.

According to Niinomi and Fukui (2018: 3), parents are expected to be with the hospitalised child for 24 hours to participate in the care provided by health professionals. Mothers become affected because other siblings at home are left unattended and they end up stressed because of the situation.

Mothers revealed that they are affected by leaving the siblings of the sick child at home unattended. Participants showed more concern about the role they play at home while being affected by child sickness and hospitalisation. More stress develops in mothers as

they think of the roles they play at home that are being compromised. Mothers are unique and as such, they respond differently to the problems of child sickness.

McBride-Henry *et al*. (2020: 11) report that more than half of the participants in their study had a problem leaving other children at home while taking care of the hospitalised child. Some had recurrent hospitalisation and the separation created and further aggravated an already difficult situation. In addition, Walubita, Sikateyo and Zulu (2018: 6) support that whilst mothers were attending to the sick child, they were also concerned about the welfare of children that were left at home.

4.2.2.3.2 Sub-theme 3.2: Unbearable treatment received by mothers from health professionals

In this current study, unacceptable and unbearable treatment by health professionals was identified as a factor that increases emotional trauma in mothers during child sickness. Mothers' experiences during child sickness are partly shaped by the quality of the relationship between health professionals and themselves. Health professionals' behaviour, attitudes and skills and the extent to which health workers provide respectful and competent care determine the quality of this relationship. Trust is vital to the relationship between health professionals and mothers during child sickness.

From the participants' experiences when mothers bring their children to the health facilities, they have hope and trust that they will be assisted. Contrary to what is expected during child sickness, the current study showed that the unbearable treatment received by mothers contributed to causing more pain and stress during child sickness.

The following five statements are evidence of the unbearable treatment that mothers received from health workers:

Participant 3 said: *"Nurses must not shout at us when seeking help and they must give us what we want. Nurses must be quick to respond to our challenges and not to refer us to somebody.*" She continued to say: *"The staff has never talked to me about the child's condition and whatever I am telling you I have never talked to anybody because they do not have time with us, but I think if the staff can talk to me it will be fine."*

Participant 5 said: "*Other nurses cannot speak well but some are good*, *when I came, my child was severely dehydrated having sunken eyes. The doctor could not put up the drip, he failed in the outpatient department. He then said I must rush to the ward for a drip because my child is shocked. When I arrived in the ward and told the nurse she said to me when did I become a nurse? I know everything please do not teach me to work. One nurse felt pity for me and said to me I must bring the child to her and she inserted the drip, my child was then placed in high care."* She further said: *"We are forced to go for the prayer while our children are crying, I do not like it because my child is not right."*

Participant 9 said: *"I was aggressively told and not in a good way that I must never give my child tea because it is not good for the child. I was even shouted at by the doctor telling me that I will kill my child with the tea that I am giving on daily basis. That was very bad to me because I did not know that I should not give the child tea."*

Participant 16 said*: "If nurses can communicate well with us and not show their anger and problems to us it will be better. I was even afraid to tell the nurse that I am using some medication because her face was frightening."* On follow up she continued to say: *"I am taking blood pressure treatment, the sickness of my child is too much for me without support. Look at my child with this huge head, [*meaning (hydrocephalus)], *I am young, divorced and without support from my parent."*

Participant 27 showed that: *"Here in the ward other staff members are right and others are very rough."* While probing for more she further explained: "*One sister at night duty harassed one of the mothers and pulled the patient by clothes and I did not like that. As mothers, we did not talk to her because we thought that she might be having a problem".* She continued and said: *"I even thought of going back home and not being assisted because of this negative attitude. I am just coping because the doctor spoke with me well."* In addition, she said: *"This place is right; the problem is with the nurses' parade. We are told to go out and the children remain crying. We know that it is the nurses' responsibility to take a report but they take longer."*

In addition, she further said: *"Especially in the morning, two hours of patients left alone is too much. The rest is fine and sometimes they take two hours and a half."* (She said that not looking at me.) Through probing, she further said: *"Nurses have their own rooms; they can take too long reports there and allow us to be with the children. Eish, what can we do? It is their duty."*

This study revealed that children's sickness causes suffering in mothers while the child is hospitalised because of unbearable treatment received by mothers from health professionals. In addition, the negative utterances by health professionals led to more stress for the mother whilst the child is sick in the hospital. Mothers of children who are sick and hospitalised experienced distress in the process of childcare caused by health professionals. Negative experiences during child sickness compromise the health status of the mother.

The mothers reported that they are affected by unbearable utterances from health professionals. Participants revealed great difficulty in accepting the way health professionals spoke to them. Negative utterances that mothers heard during child sickness caused more suffering to mothers.

Neuman's Systems theory showed that health professionals must play a key role in the interaction with children, mothers, and their families to improve the health of both the mother and the child. Neuman's theory guides health professionals to improve the quality of life of mothers during child sickness and hospitalisation (Ahmadi and Sadeghi, 2017: 9).

According to Hockenberry and Wilson (2018: 671), health professionals are expected to assist mothers during the process of child sickness. However, mothers should also be assisted to understand the process of care. Unfortunately, this study revealed that health professionals are not patient enough with mothers. Some health professionals are not able to tolerate or allow mothers to verbalise their feelings concerning their child's sickness. Hockenberry and Wilson (2018: 671), furthermore, explained that health professionals should be friendly, approachable, and receptive in relieving the anxiety that mothers have about their sick children. Additionally, Nassery and Landgren

(2019: 10) supported Hockenberry and Wilson (2018: 671) that if health professionals showed empathy and provide the assistance needed to mothers, anxiety, stress, and burden that they have becomes lighter.

4.2.2.3.3 Sub-themes 3.3: Negative impact on mother's performance due to inadequate updates of sick children's progress

The current study identified that participants needed health professionals to communicate with mothers from the time of admission. It was also revealed that a bad attitude was displayed by health professionals and the progress of the child was not explained to the mother despite her presence in the unit, hence causing stress to the mother. Explanations of the child's prognosis and the need of mothers to talk about their children's sickness showed to be a necessity and doctors' explanations showed to carry weight. Participants voiced the need to be updated on the developments of their child's sickness as evidenced in the following quotes:

Participant 13 said: *"I am not coping. I just need somebody knowledgeable to sit down with me and explain to me what must I expect in life about my child, or this sickness is like flu or what? I have a problem."* Through probing, she again stated that: *"I really need somebody to explain to me to understand. I am blank; maybe if it is explained to me when it reoccurs again I won't feel pain as I am feeling it now. I also want to know how to take care of my child at home."*

Participant 16 said: *"I also had a problem one time when I went to Polokwane hospital. One nurse was attending to many patients; others were going to Mankweng hospital. He left us alone and it was the first time for me to go there. I was not able to understand the nurses because they speak their language which I do not understand and I was so frustrated, I was sent back without being attended."*

Participant 38 stated: *"One thing I found as a concern was babies are being checked by different doctors in a day or a week. As a mother, I will be there when they review the child, but most doctors are really not friendly. They do not explain to you what they are doing to your child or the reason why they are giving such medication and so on.*

Whatever that they are writing in the file they do not explain to you and you are not allowed to touch the file."

This study revealed that communication between health workers and mothers was very important in helping the mother to understand the progress of the child. However, updating mothers about the condition of a sick child was identified as necessary. Mothers indicated that they gained strength through the information that was given by health workers concerning the progress of the child. Moreover, this study pointed out that good communication, good interpersonal relationships, and continuous information updates to mothers should be considered paramount in relieving stress levels. Mothers indicated being satisfied when they were informed and provided with a report that the children are reviewed daily but raised concerns when they were not informed about the children's progress.

Neuman's theory highlighted that a human being is a whole being and should be treated as a whole to promote their well-being. According to Newman's Systems theory variables interact with the environment to mitigate possible harm from internal and external stressors. Mothers and health professionals should form a partnership to negotiate desired outcomes and set goals for children's optimal health retention, restoration and maintenance.

According to Cimke (2017: 8), mothers' satisfaction and performance in the care of their children increased when they were informed about the care of their children and when the health professionals established prompt and continuous communication with them.

The study conducted by Horwood *et al*. (2019: 5), in support of Cimke and Mucuk Mucuk (2017: 8), highlights that information sharing between health professionals and mothers resulted in positive communication. Mothers felt involved in the care of their children, whereas lack of information led to poor communication. Rudeness by health workers led to mothers feeling anxious, reserved, and excluded from the care of their children. Furthermore, Aarthun, Oymar and Akerjordet (2018: 6) concur that consistent and sufficient information received by mothers from health professional improves coping and the understanding of the quality care provided for the child.

In addition, Kristjansdottir *et al*. (2020: 9) state that creating good relationships between mothers and health professionals is essential and that transparency and honesty about the child's condition and progress are fundamental components of trust-building. Ohene *et al*. (2019: 6) add that mothers' minimal interaction with health practitioners created fear of the unknown. The lack of updates on the progress of the sick child created uncertainties in medical treatment outcomes and fear of the child dying also persisted. According to mothers, updated information was scant, they were not reassured, and often the information, if given, was not clear or inadequate.

On the other hand, a participant expressed that some of the information that was given by health professionals caused more fear and anxiety. Quotes of the participants regarding this matter are as follows:

Participant 2 said: *"What will comfort me the most is when my child is transferred because the doctor told me that here, they do not have proper equipment, that statement made me lose hope about this hospital."* She further emphasised that: *"The information that I was given by the doctor made me lose hope,"* and on asking the reason why she had lost hope, she further explained that: *"because the doctor said there is no proper equipment to help my child."*

Participant 3 said: "*I was also told that there is no medication, I was told to buy, and I have no money. I did not expect to be told to buy medication for my child because I am in the hospital. I was so discouraged, and do not know whether my child will be as I am told that there is no medication."*

Supporting participants' quotes, Ohene *et al.* (2019: 3) indicate that mothers had no previous experience related to hospital care of a sick child. Moreover, health practitioners' comments and information given to mothers caused further anxiety in addition to the child's sickness.

Kristjansdottir *et al*. (2020: 8), on living with the memories of parents' experiences of their newborn child undergoing heart surgery abroad, revealed that the act of knowing indicated a need for control and hope. It was further indicated that the way parents

needed information knowledge differs. Some sought an in-depth understanding of the situation, while others felt that too much information created fear and anxiety.

4.2.2.3.4 Sub-theme 3.4: An outline of the fear experienced by mothers of children dying

Fear of children dying has been experienced by mothers who participated in this study. This is because mothers do not expect their children to die. Most mothers were not even ready to see their children sick. In this study, the hospitalisation of a sick child caused severe anxiety and stress to mothers. Child sickness is one of the most intense and painful experiences that mothers had, especially when they observed other children dying in front of them. The participants stated several comments to confirm the fear that mothers had during child sickness and hospitalisation. Most of the mothers expressed fear and worries about the sickness of their children. When participants were asked about their feelings regarding the hospitalisation of their sick children, participants had the following to say:

Participant 2 said that: *"Eish, it is affecting me a lot because I love my child and I have prepared everything for him and he is only three months old and is very sick. I am afraid that what if my child dies, what am I going to do with all the clothes? I do not want my child to die."*

Participant 4 said that: "*I was frightened because I did not know whether my child will be healed or die. I did not want to talk about it because as I start to talk, I will start crying, even when I talk to family members I will just cry. Yesterday one child died, and the mother was crying a lot. So, I was also afraid when I looked at my child. It is painful and I am stressed."*

Participant 13 said that: *"I was frightened, feeling pain because it was the first experience my child to have severe convulsions. My child started convulsing from home to the hospital, I was shocked and did not know what to do; until he was given an injection then it was a little bit better.* "

Participant 30 said: *"When my child is sick, I don't feel well. I am always thinking about whether my child will be fine or not and whether this problem is going to end or what. I*

also think about whether this problem will still recur, especially when I am alone, I am always thinking."

Participant 33 said that: *"I was feeling pain when my child was not breathing well. He stopped breathing and I was frightened, and I was thinking that my child will die but he is now better."* (Observation made was that she was really afraid.)

The impact of a child's sickness as unveiled during this study was that mothers experienced a lot of fear as to whether the child will survive the sickness or die. This brought anxiety and stress to most of the mothers with sick and hospitalised children. In this study, participants reported feelings of distress, shock, coping difficulties and emotional pain as part of the psychological impact of child sickness. Participants showed high levels of anxiety and stress experienced due to fear of child death. This study, in addition, showed fear as one of the most pertinent stressors that mothers have when a child is sick and hospitalised.

During the period of care, fear and anxiety develop especially when mothers are not sure or not prepared for what will happen to the child during the process of childcare. To relieve trauma and fear to patients and mothers, health professionals should explain the care of the child as an on-going process.

The study conducted by Yousef (2018: 169) explains that the most essential need of mothers during child hospitalisation is to be kept informed about the child's progress. It was further explained that mothers were clear and satisfied with the information given to them that concerned their children's sickness. In addition, mothers feel five times more stressed and helpless without information, as compared to parents with adequate information. Furthermore, Nassery and Landgren (2019: 1) support this by reporting that continuous, adjusted information given to the mother was important in helping the mother to cope with the child's sickness.

According to Ohene *et al*. (2019: 3), parents confirmed experiences of a high level of stress and anxiety due to the fear of child death after a child was diagnosed with a life-threatening condition. Moreover, psychological challenges may be difficult to be identified as they often overlap with everyday problems. Therefore, health professionals

must be able to interact with mothers closely in order to identify, support and provide intervention during the stressful situation of child sickness.

According to Ahmadi and Sadeghi (2017: 7), the intense fear and anxiety that the mother has due to the observation of children dying in the hospital indicated that mental support is needed, while Basnet (2019: 3) reflected that 80% of the mothers had stress due to the uncertainty of the child's future medical condition.

Neuman's System theory emphasises the provision of patient care in totality, however, the stress experienced by mothers during child sickness requires a lot of counseling and the need for mothers to be understood in totality. Child sickness negatively impacted mothers' emotions. Most of the participants were emotionally disturbed and in most cases, fear of uncertainty was mostly experienced.

4.2.2.4 Theme 4: Support needed by mothers from the health professionals during admission of the children in the hospital

Theme 4 is composed of five sub-themes, namely: support versus lack of support experienced from nurses, doctors, peers, and family members; an outline of paradoxical (different) strategies used by mothers during children's admission; existing spiritual interventions invited by mothers during children's admission; engaging in several activities and sharing experiences as a strategy to cope with the situation; and the existence of counseling by nurses and other mothers helps one to cope with the situation. These sub-themes are explored in the following sections.

4.2.2.4.1 Sub-themes 4.1: Inadequate support received by mothers during the hospitalisation of the child

This study revealed that mothers experienced inadequate support from health professionals. Lack of support led to mothers failing to cope with the situation of their sick children. Most of the mothers complained of inadequate support and lack of assistance.

The following quotes from participants attest that mothers lacked support from health professionals:

Participant 3 showed that: *"The staff has never talked to me about my child's condition and whatever I am telling you* (referring to the researcher) *I have never talked to anybody, but I think if the staff can talk to me, it will be fine."* She continued to say: *"Nurses must be quick to respond to our challenges and when you requested assistance, they should not refer us to somebody. Nurses don't have time with us and is painful we depend on them for assistance."*

Participant 5 said: *"They do not assist us. I was comforted by one of the mothers who stay in the same ward with me. She said to me I must not worry it will be fine* before the end of the interview she was crying saying *"this situation is painful."* The researcher had to attend to her until she is calm. "*This situation is painful because my child is very sick, and nurses do not care. I am short-tempered and when nurses are rude like this I cannot tolerate it."*

Participant 7 said: *"I got better support after I complained."* She further said: *"I think patients should be treated equal, she repeatedly said "you do not have to know the patient first in order to give better treatment" I should have been admitted to a private ward because I am a nurse but I chose to be admitted here because medications are the same. I am disappointed because the attitude of the staff was not right and after I complained they changed. Please everyone must be treated the same."*

Participant 11 expressed that: *"There is no support; I even thought that if the staff can be changed, take staff from somewhere and bring them here, and maybe these things will be better, it is painful and when nurses are harsh I become angry but I don't answer them. They must not forget that we are stressed because of child sickness."*

Participant 14 explained that: *"Nurses are not supportive at all, but the doctor talked to me, telling me that my child is not fine, but she will try to assist my child and that gave me strength."*

Participant 29 indicated: *"I heard one of the mothers talking to the nurse asking to lodge for her child, and the nurse said we don't have food for you here. That mother said I am not coming here for the food. I just want to take care of my child. I am used to bath my child and doing everything for the child."*

This study revealed that mothers experienced poor support from health professionals. It was explained that nurses inadequately assisted mothers when they needed help. In some cases, health professionals did not communicate or if they communicated, they were harsh to mothers. More than that, some of the mothers wished that the staff can be changed because of poor support to mothers. Some mothers witnessed health professionals being harsh to mothers whereas, some of the mothers indicated that they were treated well because they complained. Participants who experienced a lack of support from doctors and nurses felt that it had a negative impact during child sickness. Participants stated that bad responses from the staff were not good for mothers. Participants indicated that they were stressed because of the lack of support from the health professionals.

Neuman's theory showed that parents differed in terms of how they responded and received the support offered by health professionals. Some found the support adequate and helpful, whereas others felt that they had not been offered much support from the health professionals or that it was not offered in a meaningful way.

Doupnik *et al*. (2017: 18) show that every effort and plan designed to provide support to mothers during child sickness may help mothers to experience less stress and adjust to the situation of child sickness. North *et al*. (2020: 8) concur with Doupnik since health professionals reported an authentic intention to provide care aimed at promoting the physical, social, emotional and psychological well-being of both the mother and child.

Sener and Karaca (2017: 4) report that during child sickness and hospitalisation, mothers expect health professionals to be supportive and have a friendly attitude rather than being critical. Lack of support for mothers could have a negative effect on the coping strategies for mothers during child sickness. According to Raju *et al.* (2019: 20),

65% of mothers were reported to have a high level of stress as a result of the severity of child sickness.

Quotes of participants who received a lack of support from their family:

Participant 16 expressed a very painful situation and said: *"This admission is affecting me a lot and I am too stressed. My husband divorced me, and I went back home. In 2018 when I fell pregnant with this child, my parents rejected me because I will leave my siblings and go to stay with my new husband. My mother and my father no longer speak to me, I sent messages to them they do not respond to my messages and the situation is stressing me while my child is also sick."*

She continued to say: "*I need support and they do not care. I even sent somebody to go to my parents to apologise for me they told her they accept my apology but to me, they seem not to have accepted it because they still do not communicate with me. My mother does not call me or respond to my messages, I am really stressed. My child was admitted as an emergency and his head is growing big every day and this is too much for me. I have undergone 40 days of stress alone and now am continuing."*

On further probing, she explained that: "*This problem is too much if my family is not supporting me. I am all by myself. My in-laws are also stressing me because on my family side there was a death case and I did not inform them because my child was admitted as an emergency and they are not coming to visit me in the hospital and my child is sick and the doctor told me that I will frequent Polokwane. I am telling you this is too much for me."*

Family support was necessary for mothers of sick children while they endure tremendous stress. Family support for mothers is crucial as mothers have demonstrated that dealing with child sickness on their own without family support is stressful (Nayeri, Roddehghan, Mahmoodi & Mahmoodi, 2021:6).

4.2.2.4.2 Sub-theme 4.2: Support and existence of counseling experienced by mothers from nurses and doctors

The current study revealed that mothers experienced support from nurses and doctors. Mothers who experienced good support were pleased and acknowledged the service provided by the health professionals.

Quotes of participants who received support from the health professionals:

Participant 15 said that: *"Doctors and nurses speak well with me. The staff takes care of me well and in a way that I did not expect it. I am coping because the doctor talked to me and she is always taking care of my child. The doctor also promised to teach me how to take care of my child, I feel so much supported."*

Participant 46 said: *"Shoo, these people will help you to the last degree."* The researcher followed up to ask what she means by "the last degree". She continued to say: *"I mean the way they are dedicated to their work is good. I am happy about the service. Even though my child is sick, they will assist me."*

Participant 49 expressed that: *"I was more stressed when I came to the hospital, but it did not take long because sisters are good and assisted me a lot. They told me it will be fine, and my child will be well. I appreciated much the way they took care of my child and I trusted them when they say my child will be well."*

Participant 5 said: *"Nurses try to support me. My child was very sick and was given oxygen, but they supported me. They told me to be next to the child. They comforted by telling to be next to the child."*

Participant 7 said: *"The sister who assisted me is good. She can comfort and gives you hope. One other thing is that she was rubbing my shoulder telling me to take it easy and I felt so much supported."*

Participant 10 said: *"When I was deeply thinking of my child, I felt better when nurses spoke well with me, and one of the mothers stated that at first I was failing to cope but later I accepted when the nurses kept on talking to me."*

Participant 31 said: *"I was encouraged by the nurses who told me that I must believe that my child will be fine, and it is true he is becoming better. Now I see my child is playing it is no longer like before. My child was not able to move the limbs."*

This current study revealed that mothers needed counseling to influence them to cope. Some of the participants were pleased by the relationship with the health professionals. Moreover, positive support to mothers during child sickness is helpful to mothers. Some of the participants expressed that they received good and supportive treatment from the health professionals and that relieved the stress of the child's sickness, just a mere talk with mothers showed great relief to the pain they experienced. Most of the participants needed health professionals to communicate well with them. It was also indicated that mothers were stressed but that it did not last because of the support.

Health professionals should have the ability to support mothers and families during the critical time of child sickness. Health professionals should have the knowledge and skills to manage pain and other distressing symptoms that mothers go through in order to cope with child sickness (Cardinali, Migliorini & Rania, 2019: 4).

Mahmoud and Elkreem (2017: 5) report that during child sickness, mothers needed support from health professionals more than any other thing. Mothers showed that they needed guidance and to be assisted by health professionals during the childcare process. According to Lumsden *et al*. (2019: 11), mothers acknowledged counseling from other mothers who have gone through the same experience of child sickness.

This study showed that if mothers are well supported during child sickness the burden of not coping well is reduced. Some of the participants expressed the feeling of being satisfied with the support from health professionals whereas some mothers expressed the feeling of being stressed because of a lack of support from the health professionals.

Mothers bring sick children to the hospital to receive quality care; unfortunately, what is expressed by mothers is contrary to this. It is necessary to treat both mothers and children well while in the hospital to relieve the stress of sick children. This study showed that support is necessary from both the health workers and the family.

Neuman's theory postulates that health professionals should be able to always identify mothers' perceptions, in order to assist mothers with coping during the child sickness process. According to Sener and Karaca (2017: 39), mothers expected nurses to provide physical support and oral and intravenous medication. In addition, mothers expected emotional support in terms of health workers having a friendly, rather than a critical attitude and being approachable and receptive to mothers' questions and anxieties. Nurses stated that they were aware of these expectations but needed mothers to be understanding and tolerant, considering their difficult working conditions.

Furthermore, Imanigoghary, Peyrovi, Nouhi and Kazemi (2017: 8) support that mothers experience stress related to daily exposure in caring for a sick child. The pressure of taking care of a sick child caused them to experience physical and mental problems. Therefore, mothers need attention, care and support in considering their health, but unfortunately, mothers are of less concern in most cases. Health professionals are said to not be giving enough support to mothers with sick children.

4.2.2.4.3 Sub-theme 4.3: The support and existence of counseling by other mothers (peers) and family members help one to cope with the situation

The existence of counseling by other mothers assisted them during child sickness. Mothers used positive strategies like social support, teamwork and receiving support from other mothers with sick children. This study revealed that participants in the study received and accepted support from other mothers who were also going through the same pain of child sickness. The way mothers supported one another during child sickness assisted some of the mothers to adjust to child sickness. They even realised that some of the children were critically ill when they were admitted. Mothers who engaged in sharing and communicating with each other had less stress and showed that they received support from one another.

Some of the quotes of participants who received support from their peers:

Participant 45 said: *"During sharing, I realised that the next person had more problems than I do. I started to recognise that some of the children are even sicker than my child and then I told myself that I will also be ok."*

Participant 14 said: *"I listened to other mothers when they talk to me because some of them realised that I am not feeling well because of my child. They supported me a lot. They told me that my child will be fine; some comforted me by just sitting next to me. I felt that these mothers needed me to be fine."*

Participant 24: *"I also felt better when other mothers who were elderly people staying with me in the ward comforted me telling me that I should not worry, my child will be fine, they were so good to me."*

Participant 28 said: *"I feel better when we communicate together as mothers. Mothers explained how they were on the first day. One of the mothers told me that her child was critically ill and had stopped breathing. The child was resuscitated. Now my child has improved. I was so comforted."*

Participant 41 said: *"Some of the mothers will counsel me, telling me that I must not be stressed. I am not alone, my child will be better, and they also told stories that made me not think of my child's sickness."*

Participant 45 said: *"During sharing, I realised that the next person had more problems than I do, and explaining how bad the situation their children were, then felt so comforted and I told myself that I will also be ok and my child will also make it.*"

Walubita *et al*. (2018: 5) revealed that mothers at the peer level talked about other stories that have nothing to do with child sickness, trying to relieve the pain of child sickness. Taking to other mothers assisted them in not thinking negatively about their child's sickness. Moreover, the main support was said to be from mothers within the hospital, in the same unit.

Murthy, Guddattu, Lewis, Nair, Haisma and Bailey (2020: 8) support that mothers bonded because of shared experiences with their peers, especially with those mothers who were there before them. These mothers were the most helpful in providing emotional support to newly admitted mothers. In realising that other children were suffering from the same conditions, mothers felt less lonely in their child sickness experiences and gained more hope that their children would recover.

The existence of counseling by family members assisted mothers during child sickness. This study revealed that participants needed support from their families. Family members showed support by taking care of children that are left at home and visiting the mother to take care of the sick child in the hospital.

Quotes of participants who received support from the family:

Participant 5 said: "*My mother came to visit me recently to support me. I have a good relationship with my mother. She is a domestic worker next to home, but she takes care of me and my child. Presently I stay with my stepmother, and she is old. My father is working at Mpumalanga and, but he phones me every day to comfort me. He told me that he will come and visit me if he can be released from work. I am so much comforted by my family.*"

Participant 9 also supported and said: "*The love of my in-laws comforts me because they make me feel better. They support me and they are also taking care of the child in a way that I left at home. When I am here, I concentrate on my sick child because even at home they are very supportive."*

Neuman believes that nursing is concerned with the whole person. During the hospitalisation of the child, mothers are affected by the condition of the child. When the child is provided with care mothers need to be supported too. Neuman views nursing as a unique profession and believes that it is concerned with anything affecting an individual's response to stress. When mothers are not adjusting well to the situation of hospitalisation they need intervention as it may affect the provision of care to the child. The primary aim of nursing is the stability and coping of the client's system. This is achieved through nursing interventions to reduce stressors. The concerns of mothers imply that they needed support from health professionals during the difficult times of child sickness.

The study conducted by Yousef *et al*. (2018: 160) supports the quotes of participants that having trust in family members taking care and giving support assisted to reduce negative emotions that the mothers might experience during child sickness.

According to Mohamed and Mohamed (2019: 9), when a mother lives with an extended family she feels less stressed because family members provide more support to the mother at the hospital and provide care for the children at home. Furthermore, it assisted mothers to share their emotions with the family and built strength in providing care to the child.

The researcher concluded that child sickness could be one of the greatest stressors to the mother during child sickness and hospitalisation. Therefore, this study showed that the negative support of the health professionals, families and peers created more stress for mothers who are already stressed by their sick children. Mothers must receive support during child sickness.

4.2.2.4.4 Sub-theme 4.4: An outline of paradoxical (different) strategies used by mothers to cope during children's admission to hospital

This study revealed that mothers used different strategies to try and cope with the situation of the sick child. Some of the strategies used were said to be helpful to the situation whereas other strategies were not helpful. However, the study revealed that positive and negative strategies were indicated by the participants in response to stressors caused by child sickness. In this study, participants who were interviewed responded differently to child sickness. Some of the participants reacted positively whereas others reacted negatively.

Quotes from participants who employed effective coping strategies:

Participant 8 said: *"What made me feel better is when I asked the staff about my child, and they explained everything to me. When I keep on asking questions to the nurses and doctors, I feel relieved, especially when they respond well to me."*

Participant 22 said: *"I am praying to make myself better. I believe that God will heal my child that is why I keep on praying. When I look at my child, I feel pain and I pray a lot, to ease my pain."*

Participant 23 said: *"I felt better when some mothers talked to me saying this child will be ok."* On follow up she said: *"When mothers are speaking and I am just listening, I feel that I am becoming well, but it is difficult. It is not easy to cope when you look at the way the sick child is suffering. They showed me children who were even worse than my child, and I started to gain strength and hope that even my child will improve."*

Participant 27 said: *"I told myself that I have to accept. I had to address myself to be strong, but I was more comforted when the doctor told me why he is not discharging my child, that one made me feel better."* On probing, she then said: *"I now understand why my child is supposed to stay more days."*

Participant 28 said: *"Sometimes I try to ignore the pain. My child is sick. I try to think about something else but cannot, because my thoughts always concentrate on my sick child, it is painful. Sometimes I read this magazine book which was brought to me here in the hospital so that I ignore the pain."*

Participant 29 said: *"If my child is treated, I also want to engage myself to assist because I feel better when I am helping my child. By so doing I feel well and become better, I feel fine in my spirit."*

The quotes indicate that mothers reacted differently to the child's sickness. Talking to each other and comforting one another assisted mothers in dealing with their emotions. Some encouraged themselves by addressing themselves. Others engaged in assisting other mothers during the care of the child.

Neuman's theory reflects balance in the functioning of the body system and living organisms as open systems in interaction with each other and with the environment. Mothers are already exposed to the stress of child sickness and getting proper counseling may assist mothers to cope better with child sickness. Exposure to stressors of child sickness may result in a series of coordinated responses, often referred to as stress responses. Stress responses are composed of a series of reactions in the body including alterations in behaviour, autonomic function, secretion of multiple hormones and various physiological changes in the body.

The support from other mothers with children who are sick enabled some of the mothers to cope better. Azevedo *et al*. (2018: 6) indicated that mothers become strengthened when they share their lived experiences and stand together for support. Besides, sharing the stressful situation with the health professionals assisted mothers to adapt and cope with child sickness.

Doupnik *et al*. (2017: 11) show that different interventions that are designed to support parents in coping with the hospitalisation are effective in improving mothers' anxiety and stress symptom burden. Communicating with different stakeholders, empathy and education interventions taught parents skills and knowledge potentially beneficial in coping during the hospitalisation of a child. Concrete resources or other means are well-positioned to improve parents' well-being during and after the child's hospitalisation.

Quotes from the participants who used unhelpful coping strategies:

Participant 4 said: "*I did not want to talk about it. I just kept quiet because as I start to talk, I will start crying*. *I do not want to communicate."*

Participant 8 said: *"I avoid thinking about my child's sickness and it is not easy because I am always here watching him; I feel very weak and helpless. Sometimes I will pay attention to something else avoiding concentrating on the child."*

Participant 15 said: *"I even thought of killing myself and my child because I am always at the clinic as she is always sick. I was very tired of this situation; I am really failing to accept the way my child is suffering."*

This study showed that mothers used unhelpful coping strategies and it was confirmed by Canga *et al*. (2020: 4) that 1% of mothers observed reported having suicidal attempts as the result of stress during child sickness.

Scott and Gans (2019: 1) indicate that avoidance as a coping mechanism is a strategy that may cause more stress than less. Keeping quiet is used to avoid the current situation for a while but the mother still thinks about the problem.

According to Lumsden *et al*. (2019: 2), coping strategies used by mothers during the sickness of a child were any strategies that effectively managed emotional, physical, or psychological burden that is considered sufficient or appropriate to cover the breadth of mothers coping. Mothers used anything that diverged their thinking to anything else than to concentrate on the child's situation.

Scott and Gans (2019: 9) explain avoidance as maladaptive or unhealthy because it often exacerbates stress without helping mothers to deal with the things that are causing the stress. Avoidance coping involves trying to avoid stressors rather than dealing with them. It may seem that avoiding stress is a great way for mothers to feel less stressed, but this isn't necessarily the case; often, mothers need to deal with the situation so that they may either experience less stress or feel less stressed by what they experience without avoiding the problem entirely.

Martínez-Montilla *et al*. (2017: 40) show that avoidance and denial were some of the most common strategies used. Avoidance strategies aim to reduce the emotional disturbance caused by a stressful situation of child sickness, in which the mother feels helpless and thinks that she can't do anything to modify it.

4.2.2.4.5 Sub-theme 4.5: Existing spiritual interventions invited by mothers during children's admission

This study showed that participants seek spiritual intervention during child sickness. In spiritual intervention, a positive religious intervention was used as a coping mechanism whereby mothers had a feeling as though God is supporting them through a difficult time or praying to God for love and grace. Participants focused on what they believed to relieve them as the stressful situation increased. Below are the utterances by participants as they expressed their responses:

Participant 2 said: *"Previously I used to pray and now I can see that everything with me is not going well, but I will always trust God and I will always pray."*

Participant 6 said: *"I feel pain but I also pray for my child when I am sitting here in the hospital because my child cannot be healed by medication alone. I put everything before God."*

Participant 38 said: *"The spiritual side of my life is strong because it is only through faith and prayer that the situation of my child may change. What I believe is that a child is a gift from God and life comes from God so I always pray, and hope God will do the best for me and my child. My spiritual level keeps me going. Another thing is that we pray together as mothers before we sleep."*

Participants in the current study revealed that during child sickness they prayed and believe that God will intervene in their situation of child sickness. Most mothers seek help from God by praying and believing in Him for healing.

In support of participants' quotes, Adistie, Lumbantobing and Asriyan (2019: 3) show that during child sickness mothers face traumatic challenges of the uncertainty of child sickness, therefore, they showed a need for spiritual intervention. In addition, healthcare professionals are faced with the challenge of providing for and assisting mothers to meet their emotional, psychological and spiritual needs.

According to Walubita *et al.* (2018: 5), the beliefs of mothers and families had an impact on the effect of the treatment. When mothers showed a sense of believing in God during child sickness, nurses respected that faith, however, it assisted mothers to cope by having positive thinking. Furthermore, believing in God assisted mothers to promote serenity and reduce anxiety toward child sickness. Prayer was a major source they accessed for spiritual support.

Bussing (2018: 9) concurs with Adistie *et al*. (2019: 3) that spirituality is part of the basic needs of all humanity. It is said that mothers felt supported by health professionals and relatives, but they experienced unmet inner peace that is supposed to be fulfilled spiritually.

Yousef *et al*. (2018: 168) support the quotes by indicating that mothers relied on praying to God when facing the challenges that are associated with being a mother. Taking care of a sick child needed strength that was gained through prayer.

Neuman's theory valued the spiritual beliefs of mothers as important and states that it needs to be taken into consideration. The spiritual variable refers to spiritual beliefs and influences. Individuals have different beliefs and they should be treated as such. Most mothers expressed their beliefs as essential and helped them to cope as they were facing the stress of child sickness.

4.2.2.4.6 Sub-theme 4.6: Engaging in several activities and sharing experiences as a strategy to cope with the situation

Engagement in several activities and sharing of experiences assist mothers to cope with challenging situations. Anxiousness, stress, depression and physical health problems were found to be experienced by mothers during child sickness.

In this study, participants revealed that engagement in several activities and sharing their lived experience assisted in coping with child sickness. Some of the participants preferred to diverge and not concentrate on the current situation of child sickness that they are facing. Health professionals, especially nurses, engaged mothers to take their minds off their concerns by asking them what could be done to assist them to cope with a child's sickness by encouraging them to share stories. The more they concentrate on these subjects, the less they dwelt on their fears of child sickness and death. This is evidenced by the following quotes from the participants.

Participant 9 said: *"I call others and talk to them. Sometimes I concentrate on my phone so that I must not be too stressed."*

Participant 12 expressed that: *"Nurse showed me children who were even worse than my child. I started to gain strength and to have hope by seeing some of the children who were said to have been very sick."*

Participant 28 said: *"Maybe you can create some activities for mothers, something that can keep us busy than to sit doing nothing and just looking to a very sick child for the whole day."* (She then cried.)

Participant 30 said: *"I avoid thinking about my child's sickness; I keep myself busy by communicating with other mothers because if I think about my child, I become stressed. I even assist other mothers who come with sick children. I tell them about my experience that my child was also very sick and given blood and you have to accept that your child is sick, is then that you will not be much affected."*

Participant 38 said: *"I watch television and play with my phone. Sometimes I sit with other people who are telling stories and making jokes."*

Participant 44 said: *"I sing and play with my phone, sometimes I keep myself busy by cleaning the ward. Sometimes I talk to other mothers and we sing. When we sing with other mothers, I feel much better."*

During child sickness, mothers displayed that playing with their phones assisted them during hospitalisation. Communicating with health professionals, family members and mothers in the unit was helpful. Some opted to watch television and sing. All the different strategies assisted mothers in different ways. Participants also requested that some activities that can keep mothers busy should be created as they help relieve the stress of child sickness.

Doupnik *et al*. (2017: 2) show that the involvement of mothers in activities performed to a hospitalised child relieves stress. The time spent with other mothers with the same experience explaining experiences and views showed to be of great importance in coping with child sickness.

4.3 Phase 1 (b): Quantitative data (Survey)

The previous sections described the Phase 1a described qualitative results of Phase 1 (a), while the following sections will discuss the quantitative data analysis, interpretation and discussion of the findings of Phase 1(b).

Data were analysed using the Statistical Package of Social Sciences (SPSS) Version 24.00. In Phase 1(b), quantitative study questionnaires were developed that gave answers to the set objectives. The questionnaires were written in English, with both closed and open-ended questions and completing the questionnaire took 45 minutes to an hour. Two research assistants were recruited and trained to assist with data collection. Data were collected from July to October 2019 at a rate of 30 questionnaires per day.

The questionnaires were self-designed and self-administered. Respondents chose from a list of possible responses provided by the researcher. The demographic data and experiences of mothers during child sickness in the hospitals of LP, SA, and tactics employed for mothers during child sickness in the hospitals of LP, SA, were all included in the questionnaires. Before data collection commenced, the questionnaires were presented to the supervisors, statisticians and experts in the field of coping strategies for evaluations.

The purpose of this chapter is to present the findings obtained after carrying out the quantitative analysis of survey data which was collected from participants from seven selected hospitals in LP, SA. Data analysis was performed according to the research study's objectives and questions. Descriptive statistics such as the measures of central tendency (that is, mean, mode and median) and measures of dispersion (such as the minimum, maximum, standard deviation, range, quartiles, etc.) were used to describe and gain an understanding of patterns and trends in gathered data. Further, frequency tables and graphs were also used to describe and summarise the survey results. Chi-squared tests were also employed to test the level of association between variables and other socio-demographic variables.

The data which forms the basis of analysis constitutes the second phase of this research survey. Data were collected from 307 nurses who worked in paediatric wards

belonging to seven selected hospitals in LP. SA. The period of data collection spanned from July to October 2019. Questionnaires were used to collect data from health professionals. Data were coded, captured, organised and analysed using Statistical Package for Social Sciences (SPSS Version 24.0). However, before carrying out quantitative data analysis, data were checked for outliers and treated for missing values. Variables with missing values were first subjected to a normality test using the Kolmogorov test. The missing values for all normally distributed variables were replaced by their mean values whilst the median values were used for the non-normally distributed variables.

4.3.1 Socio-demographic variables

In this section, descriptive statistics describing the socio-demographic characteristics of the respondents are presented. Specifically, this section presents the descriptive statistics for variables such as the institution name, ward name, occupation and duration of service.

4.3.1.1 Institution

Table 4.3 below presents frequencies for the distribution of participants by their respective hospitals. Nearly 25% of the participants were from Tshilidzini Hospital, 20% (from Mankweng Hospital), 13% (from Siloam Hospital), 12% (from Elim Hospital), 11% (from Malamulele Hospital), 10% (Donald Fraser Hospital) and 9% (Lebowakgomo Hospital). These hospitals were selected for this study because they all had paediatric units.

Table 4.3: Distribution of participants by their respective institutions

Institution (Hospital)	Frequency	Percentage
Donald Fraser	32	10.4%
Elim	37	12.1%
Lebowakgomo	27	8.8%
Malamulele	33	10.7%

Mankweng	61	19.9%
Siloam	41	13.4%
Tshilidzini	76	24.8%
Total	307	100.0%

4.3.1.2 Occupation

Table 4.4 below presents a summary frequency distribution for occupation variables, that is, the number of doctors, social workers and psychologists who participated in the survey. As clearly shown in the table, the majority of participants were nurses 87.9% (n =270; 88%), 7% (n=21) were doctors, 3% (n = 10) were psychologists while 2% (n = 6) were social workers.

Table 4.4: Distribution of participants by their respective occupations

Occupation	Frequency	Percentage
Nurse	270	87.9%
Doctor	21	6.8%
Social work	6	2.0%
Psychologist	10	3.3%
Total	307	100.0%

Out of the 270 nurses who partook in this study, some were Registered Assistant Nurses, Registered Staff Nurses, and Registered Professional Nurses by title. Table 4.5 below presents the frequency distribution for the nurses by the work titles.

Table 4.5: Distribution of nurses by their respective nursing titles

Title	Frequency	Percentage
RPN	157	58.1%
RSN	53	19.6%
RAN	60	22.2%
Total	270	100.0%

4.3.1.3 Duration of service

Table 4.6 below presents the frequency distribution of the survey participants by their duration of service. Approximately 81% was equally shared among 1-5 years, 6-10 years and more than 15 years whilst the remaining 19% consisted of participants who had served the hospitals for a duration ranging between 11 and 15 years.

Table 1.6: Distribution of participants by their respective employment tenure

Year Range	Frequency	Percentage
1-5years	82	26.7%
6-10years	84	27.4%
11-15years	58	18.9%
more than 15 years	83	27.0%
Total	307	100.0%

Descriptive statistics

Table 4.7 below shows a summary of statistics of data for employment variables considered in the survey.

Table 4.7: Descriptive statistics for participants' characteristic variables

Variables	Frequency	Mean	Standard Error of the Mean	Standard Deviation
Institution	307	4.57	0.116	2.040
Occupation	307	1.21	0.036	0.632
Duration of service	307	2.46	0.066	1.152

4.3.2 Experience of mothers during child sickness

The table below shows the mean response scores and their associated standard deviations. The mean response values show that participants disagreed with the views that mothers were referred to the psychiatrist during child sickness, staff was sufficient to allow nurses to do counseling as well as the view that nurses were trained to do counseling. The internal consistency of the proxy items collectively measuring the experiences of mothers during child sickness was measured through reliability analysis. The Cronbach Alpha value for the instrument was found to be 0.773, which is the ability of the 20 proxy questions to gather information about the experiences of mothers during child sickness. The Cronbach Alpha value ranges from 0 to 1 for which a value exceeding 0.7 is considered good while a value of 1 is considered excellent and hence, most favourable.

Table 4.8: Means and standard deviations showing experiences' item mean responses and their dispersion around the means

Variables	Frequency	Mean	Std. Deviation
Child sickness affects mothers physically	307	3.13	0.816
Child sickness affects mothers psychologically	307	3.59	0.519
Child sickness affects mothers socially	307	3.44	0.593
Child sickness affects mothers financially	307	3.36	0.715
During child sickness mothers are referred for counseling by social work	307	2.77	0.845
During child sickness mothers are referred to Psychologist	307	2.76	0.907
During child sickness mothers are referred to Social Worker	307	3.79	0.582
During child sickness mothers are referred to Psychiatrist	307	1.96	0.760
Counseling was done by nursing staff/ Doctor	307	3.20	0.721
You have enough time to counsel the mother	307	2.85	0.869
Counseling received by mothers are sufficient	307	2.87	0.875

Variables	Frequency	Mean	Std. Deviation
I am clear on what information to tell the mother during child sickness	307	3.18	0.669
When the child is sick looks frustrated	307	3.48	0.596
When the child is sick looks depressed	307	3.38	0.647
When the child is sick looks angry	307	2.96	0.787
When the child is sick looks hopeless	307	2.98	0.806
When the child is sick looks lonely	307	2.94	0.779
There is a counseling room	307	2.80	0.978
Staff is enough so I can do counseling	307	2.10	0.893
I am trained to do counseling	307	2.35	0.993

** 1 – Strongly Disagree (SD), 2 – Disagree (D), 3 – Agree (A), 4 – Strongly Agree (SA).

This means that if the means/averages as reported in Table 4.8 are rounded off, we will get the nominal label to describe how survey participants overall responded to any given item. For instance, a mean of 2.35 rounded off to 2 shows that participants overall disagreed that they were trained to do counseling.

4.3.2.1 Child sickness affects mothers physically

The results describing how mothers are physically affected when their children are sick show that the majority (81.1%) of health professionals believed that mothers were physically affected by a child's sickness (46.6% agreed; 36.5% strongly agreed) whilst the remaining 19% believed that mothers are not physically affected during child sickness (4.2% strongly disagree; 14.7% disagreed) (see Figure 4.1 below). This indicates that 81% of mothers are physically affected during child sickness which

concurs with the qualitative results. The overall mean response was 3.13 with an associated standard deviation of 0.82. This means that overall; health professionals believe that a child's sickness affects the physical health of mothers.

In the study conducted by Yousef *et al*. (2018: 39), it is indicated that the burden of taking care of a sick and hospitalised child negatively impacted not only the mental health but also the physical health of the parent. Child sickness demands extra care for the child, posing more challenges of rest and sleep to the mother. Long-term physiological challenges in rest and sleep result in physical illness to the mother (Nassery & Landgren, 2019: 3). According to Waterhouse *et al*. (2017:8), most mothers reported having negative implications on their own health like tiredness and dizziness because of the demands of care for a sick child.

4.3.2.2 Child sickness affects mothers psychologically

Health professionals were also asked to give their views regarding the effects of a child's sickness on mothers psychologically. The majority (99,3%) of participants indicated that all mothers are affected psychologically whilst the remaining small proportion (0.6%) indicated otherwise (see Figure 4.1 below). The results show that 40% and 60% of the health professional agreed and strongly agreed that mothers are psychologically affected during child sickness. An overall mean response of 3.59 and a standard deviation of 0.52 is reported which shows that, on average, participants strongly agreed that mothers are affected psychologically by the sickness of their children.

According to Doupnik *et al*. (2017:10), mothers experience psychological distress during child sickness that in turn results in negative effects on the child. However, the study that was done by Basnet (2019: 1) reveals that out of 90 mothers with hospitalised children, 42.7% showed to have been extremely affected by severe stress whereas 21.1% had severe stress due to child sickness.

4.3.2.3 Child sickness affects mothers socially

The summary of responses to the views of participants regarding how child sickness affects mothers socially revealed that 49% and 48% of health professionals agreed and strongly agreed respectively that mothers are affected socially by their child's sickness (see Figure 4.1 below). In addition, the mean response of 3.44 and its associated standard deviation of 0.59 are reported implying that, on average, participants agreed that mothers are socially affected during child sickness. Approximately 3% of the total health professionals disagreed with the view that child sickness affected mothers socially.

This study revealed that mothers are socially affected because of child sickness. Mothers separate from other members of the family to stay with the hospitalised child. Mothers feel that social interaction with the family becomes deprived. Furthermore, this study showed that is important to understand social stress in relation to family interaction and it is important to ensure that appropriate psychosocial care services are provided to the mother and the family.

According to the DIFI (2018: 35), child sickness affects the mother and other family members. Social interaction becomes affected and mothers and families need support to cope effectively with the numerous stressors that characterise this intense and potentially overwhelming experience.

4.3.2.4 Child sickness affects mothers financially

To determine the possibility of a child's sickness affecting mothers financially, health professionals were asked to give their views on the statement: "child sickness affects mothers financially". The results on financial implications indicated that most mothers had concerns because the sickness of the child affected them financially as evidenced by 42% of the participants who agreed and 48% who strongly agreed with the statement (see Figure 4.1 below). Hence, 90% of all the participants agreed that mothers are financially affected during child sickness with a reported mean response of 3.36 and an associated standard deviation of 0.72.

The study conducted by McBride-Henry *et al.* (2020: 12) in South Auckland indicates that some of the parents had financial challenges as they were not able to work due to child sickness and hospitalisation. Some parents were forced to take unpaid responsibility leave to take care of the sick child. The study further reveals that the financial challenges deeply affected self-employed mothers.

A small proportion of health professionals (10%) reported that child sickness does not affect mothers financially. McBride-Henry *et al*. (2020: 12) further reveal that there were parents who had rights and opportunities for leave to care for their children. According to Waterhouse *et al.* (2017: 5), child sickness in Ghana is reported to have interfered with mothers' businesses resulting in reduced profits. The economic work commitment showed to have been affected as most mothers were self-employed.

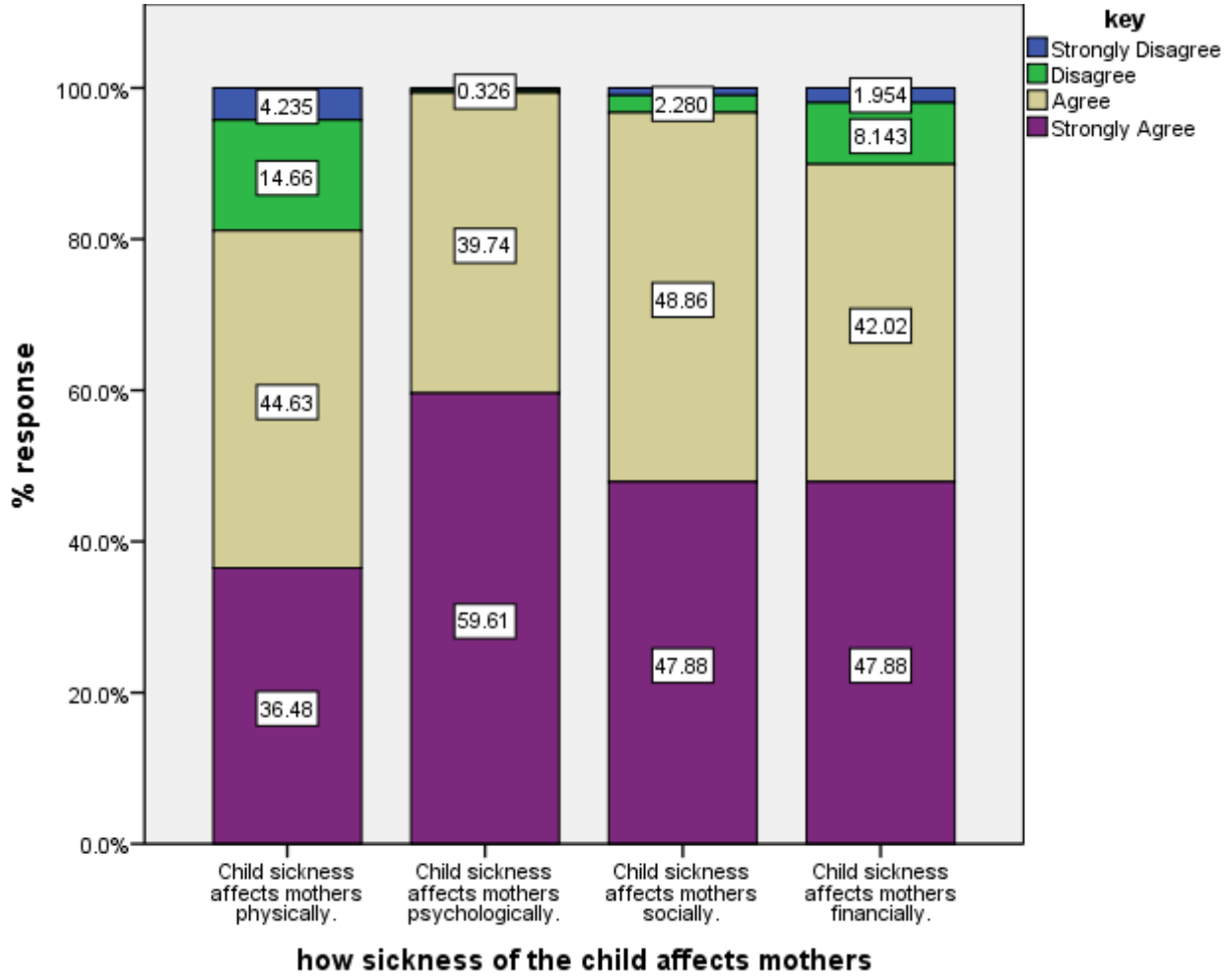

Figure 4.1: Graph depicting how mothers' physical, social, psychological and financial well-being is affected during child sickness

The following sections will examine mothers' responses/reactions during child sickness and their expressions amid a child's illness.

4.3.2.5 When the child is sick mothers look frustrated

On participants' views on how mothers look during child sickness, the majority (96%) believed that mothers looked frustrated when the child is sick (that is, 43% agreed and 53% strongly agreed) whilst the remaining 4% believed otherwise (that is, 0.3% strongly disagreed and 4.2% disagreed) (see Figure 4.2 below). On average, participants agreed

that mothers look frustrated during child sickness (mean response = 3.48; standard deviation = 0.60). Mothers become frustrated and traumatised due to the situation of child sickness. Azevedo *et al*. (2017: 1) point out that child sickness and hospitalisation are indeed frustrating especially when mothers re-locate and reorganise their roles for the sake of providing care to the sick child in the hospital.

4.3.2.6 When the child is sick mothers look depressed

On whether mothers look depressed when the child is sick, the study results revealed that the majority (94%) of all the participants agreed that mothers look depressed when the child is sick (48% agree and 46% strongly agree) (see Figure 4.2 below). On average, participants agreed with the view that mothers look depressed when their children are sick (mean = 3.38; standard deviation = 0.65).

4.3.2.7 When the child is sick mothers look angry

With regards to angry looks on mothers' faces during child sickness, the study revealed that 82% of all the participants agreed that mothers feel angry during child sickness (46% agree and 26% strongly agree) whilst the remaining 18% disagreed with the view that mothers looked angry when the child is sick (see Figure 4.2 below). Overall, participants agreed that mothers look angry (mean = 2.96, standard deviation = 0.79).

According to Lonio *et al*. (217: 5), mothers experience anger during child sickness, and the effect of anger may lead to depression and social alienation due to a high level of stress when the child is critically ill and on respiratory support. Stress-related to child sickness with alterations in mothers' roles negatively affects mothers with a high level of anxiety and depression.

The study conducted by Lumsden *et al*. (2019) states that mothers with sick children expressed feeling strong anger, especially after hearing the life-threatening diagnosis. They expressed anger towards God about the sickness of the child.

4.3.2.8 When the child is sick mothers look hopeless

The majority (83%) of survey participants believed that mothers feel hopeless during child sickness (44% agree and 29% strongly agree) whilst the remaining 17% believed otherwise (see Figure 4.2 below). On average, participants agreed that mothers look hopeless when the child is sick (mean = 2.98 and standard deviation = 0.81).

Many factors negatively affect mothers during child sickness, more especially, when a diagnosis of a child is made and perceived as life-threatening. The unexpected, uncontrollable and unpredictable nature of child sickness makes mothers assume the situation is hopeless (Rokach, 2017: 3).

4.3.2.9 When the child is sick mothers look lonely

Regarding loneliness, the majority (74%) of participants believed mothers are lonely during child sickness and hospitalisation (50% agree and 24% strongly agree) whilst the remaining 26% believed otherwise (see Figure 4.2 below). The mean response of 2.94 and its associated standard deviation of 0.78 are also reported which shows that, on average, health professionals agreed that mothers look lonely during child sickness.

Loneliness is experienced by mothers during child hospitalisation and results in depression, aggression and hostility. In this study, some of the participants showed negative attributes like having suicidal thoughts because of child sickness. The results of loneliness experienced by mothers during child sickness were indicated by health professionals and concur with the findings from mothers in qualitative findings.

A recent study conducted by Rokach (2017: 3) in Canada, showed that the feeling of loneliness in mothers during child sickness triggers hyper-vigilance for social threats. Loneliness affects mothers both physically and mentally and is hostile to happiness. As the mother is caring for the child in the hospital, the absence of social relations triggers loneliness and a lack of affection is experienced. The environment that the mother finds herself in because of child sickness is found to be unpleasant and affects her social

being. According to Yousef (2018: 39), the support system was reported to be drained out, leading to mothers feeling lonely in the hospital setting.

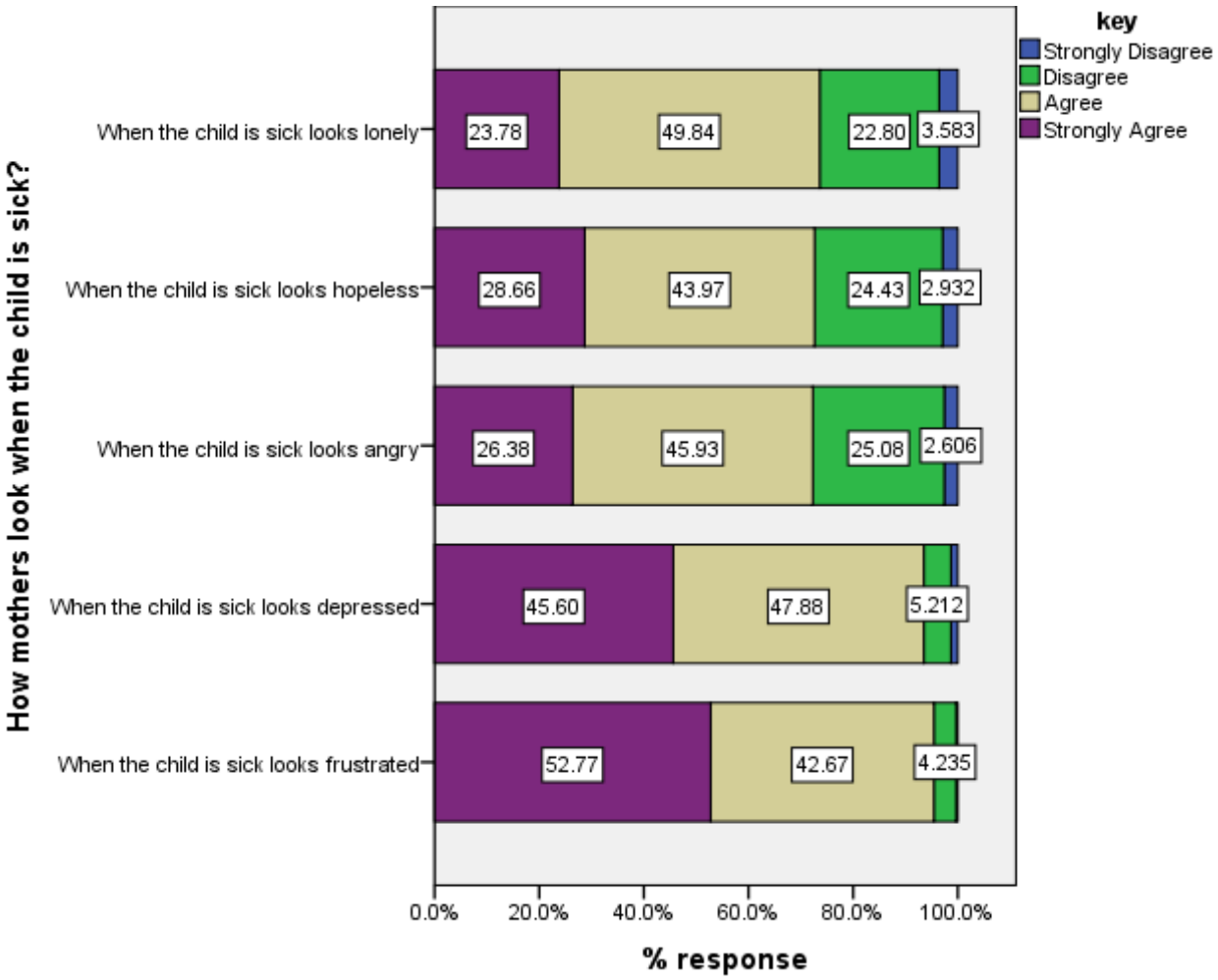

Figure 4.2: Graph showing the distribution of mothers' reactions during child sickness

4.3.2.10 During child sickness mothers are referred to a psychiatrist

Figure 4.3 below shows that the majority (82.7%) of participants revealed that mothers were not referred to a psychiatrist during child sickness (57% disagree and 26% strongly disagree) whilst only the remaining 17.3% revealed that mothers were referred to the psychiatrist during child sickness (12.4% agree and 4.9% strongly agree). Overall, participants disagreed that mothers were referred to the psychiatrist (mean = 1.96 and the standard deviation = 0.76).

4.3.2.11 During child sickness mothers are referred for counseling by social work

Nearly two-thirds (65.8%) of participants revealed that mothers were referred to the social worker during child sickness (47% agree and 19% strongly agree) whilst only the remaining 34.2% revealed that mothers were not referred to the social worker during child sickness (26.4% disagree and 7.8% strongly disagree) (See Figure 4.3 below). Overall, participants agreed that mothers were referred to the social worker (mean = 2.77 and the standard deviation = 0.85).

4.3.2.12 During child sickness mothers are referred to a psychologist

Figure 4.3 shows that the majority (65.1%) of participants revealed that mothers were referred to the psychologist (43.6% agree and 21.5% strongly agree) whilst the remaining 35% did not agree that mothers were referred to the psychologist (10.4% strongly disagree and 24.4% disagree). On average, health professionals agreed that mothers are referred to the psychologist during child sickness (mean = 2.76 and standard deviation of 0.91.

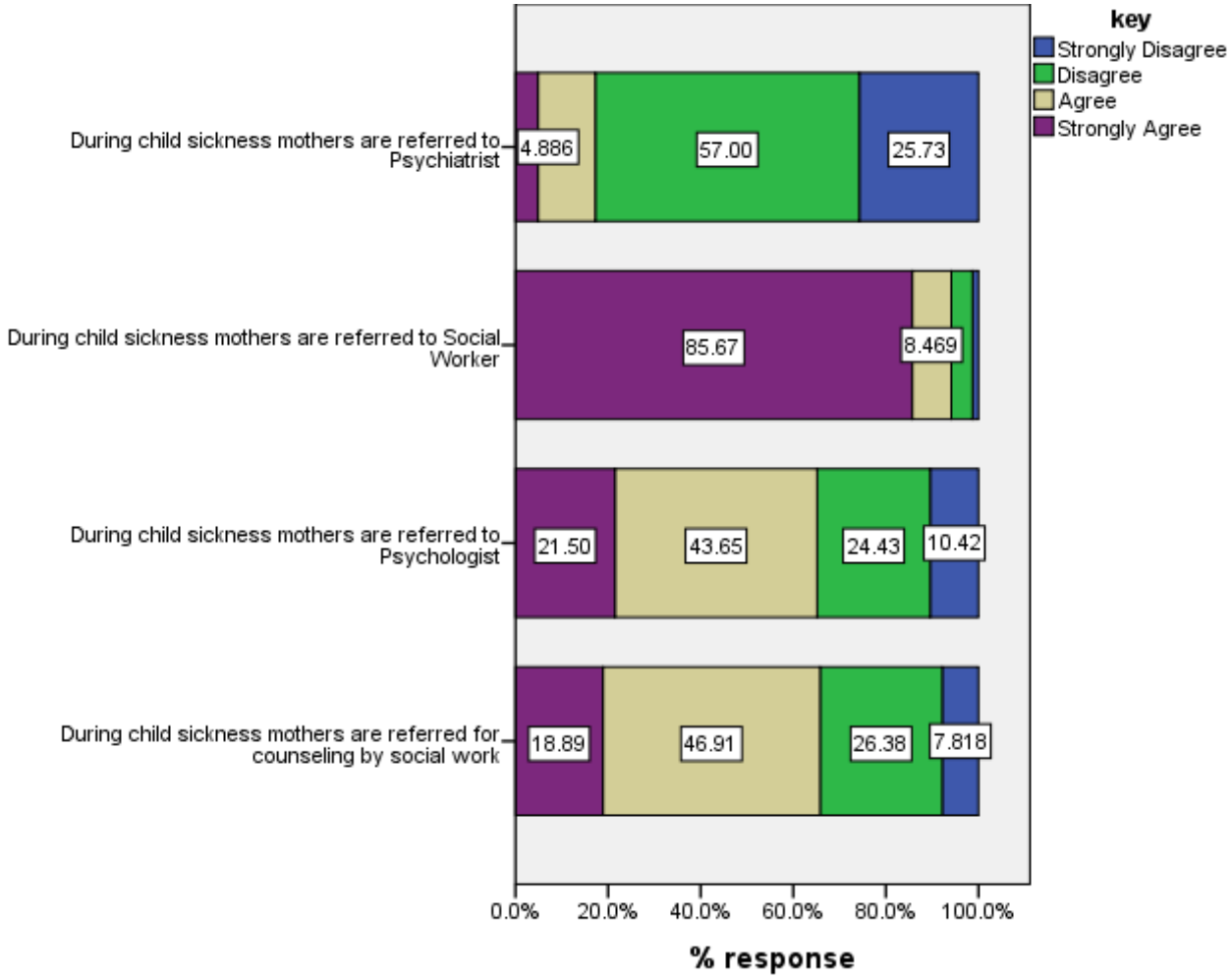

Figure 4.3: Graph summarising item responses regarding the referral of mothers for counseling

4.3.2.13 Counseling of mothers: I am trained to do counseling

Figure 4.4 shows that more than half (58%) of the participants indicated that they were not trained to do counseling to mothers (22% strongly disagree and 36% disagree) whilst the remaining 42% revealed that they were trained to do counseling to mothers (26% agree and 16% strongly agree). On average, health professionals indicated that they were not trained to do counseling (mean = 2.35 and standard deviation = 0.99).

4.3.2.14 I am clear on what information to tell the mother during child sickness

Figure 4.4 shows that the majority of participants (89%) agreed with the view that they were clear on what information to share with mothers during child sickness (58.0% agree and 30.9% strongly agree) whilst the remaining 11% did not agree (2.0% strongly disagree and 9.1% disagree). Hence, nearly 9 in every 10 health professionals were clear on what information to share with mothers during child sickness whilst 1 in every 10 revealed that they were not clear with regards to information they must share with mothers during child sickness. The mean response of 3.18 and its associated standard deviation of 0.67 are reported implying that, on an overall basis, health professionals agreed that they were clear on what information to tell the mother during child sickness.

4.3.2.15 Counseling was done by nursing staff/ doctors

Health professionals who participated in this study were also asked to indicate the extent that counseling was done by nursing staff or doctors. Figure 4.4 shows that the majority of participants (89%) agreed with the view that counseling was done by staff or doctors (54.1% agree and 34.5% strongly agree) whilst the remaining 11% were in disagreement (3.3% strongly disagree, 8.1% disagree). Therefore, nearly 9 in every 10 health professionals agreed that counseling was done by nursing staff or doctors whilst only 1 in every 10 was in disagreement. On average, participants agreed that counseling to mothers during child sickness was done by nursing staff or the doctor (mean = 3.20 and standard deviation = 0.72).

4.3.2.16 Counseling received by mothers is sufficient

Figure 4.4 below shows that the majority of participants (65%) reported that counseling received by mothers was sufficient (agree (37.8%) and strongly agree (27.4%)) whilst the remaining 35% were in disagreement (strongly disagree (5.2%), disagree (29.6%)). Hence, nearly 6 in every 10 health professionals believed that counseling received by mothers was sufficient whilst the remaining 4 in every 10 believed otherwise. On

average, health professionals believed that counseling received by mothers was sufficient (mean = 2.87 and standard deviation = 0.88).

4.3.2.17 You have enough time to counsel the mother

Figure 4.4 below shows that the majority of participants (66%) believed they had enough time to counsel the mothers (agree (40.1%), strongly agree (25.4%)) whereas 34% believed otherwise (strongly disagree (5.9%), disagree (28.7%)). Therefore, 7 in every 10 revealed they had enough time to counsel mothers whilst the remaining 3 in every 10 revealed that the time for counseling mothers was inadequate. On average, health professionals who participated in this study agreed that they had enough time to counsel the mother during child sickness (mean = 2.85 and standard deviation = 0.87).

4.3.2.18 Staff is enough so I can do counseling

Survey participants were also asked if the staff was enough to allow them to do counseling. Figure 4.4 below shows that the majority (69%) of participants disagreed with the view that hospital staff was enough to allow them to counsel mothers during child sickness (strongly disagree (28.0%), disagree (41.0%)) whilst only the remaining minority (31%) expressed that staff was enough to allow them to do counseling (agree (23.8%), strongly agree (7.2%)). Thus, nearly 7 in every 10 participants revealed that staff was adequate to allow them to do counseling whilst only 3 in every 10 participants reported that staff was enough to allow them to do counseling. The mean response of 2.10 and the standard deviation of 0.89 was reported implying that, on average, participants expressed that staff was inadequate and as such, could not allow them to do counseling.

According to Winter, Schreyogg and Thiel (2020: 9), quality health service is affected as a result of a depleted workforce wherein there are insufficient health professionals to provide expected quality care. Mothers are not receiving proper counseling due to lack and shortage of staff. According to Griffiths, Recio-Saucedo, Dall'Ora, Briggs, Maruotti, *et al*. (2018: 14), numerous studies review has been conducted in numerous nations on

the connection between "missed care" and nurse staffing levels in hospitals. All of the research that we found, meanwhile, relied mostly on retrospective data and employed subjective assessments of missed care. Missed care was very high.

4.3.2.19 There is a counseling room

Figure 4.4 shows that the majority of participants (68%) agreed that there is a counseling room for mothers during child sickness (agree (41.7%) and strongly agree (26.1%)) whilst the remaining (32%) were in disagreement (strongly disagree (13.7%) and disagree (18.6%)). Thus, nearly 7 in every 10 participants reported that rooms for counseling at their hospital whilst the remaining 3 in every 10 revealed that counseling rooms were not there. Overall, counseling rooms are there in hospitals considered in this study (mean = 2.80 and standard deviation = 0.98).

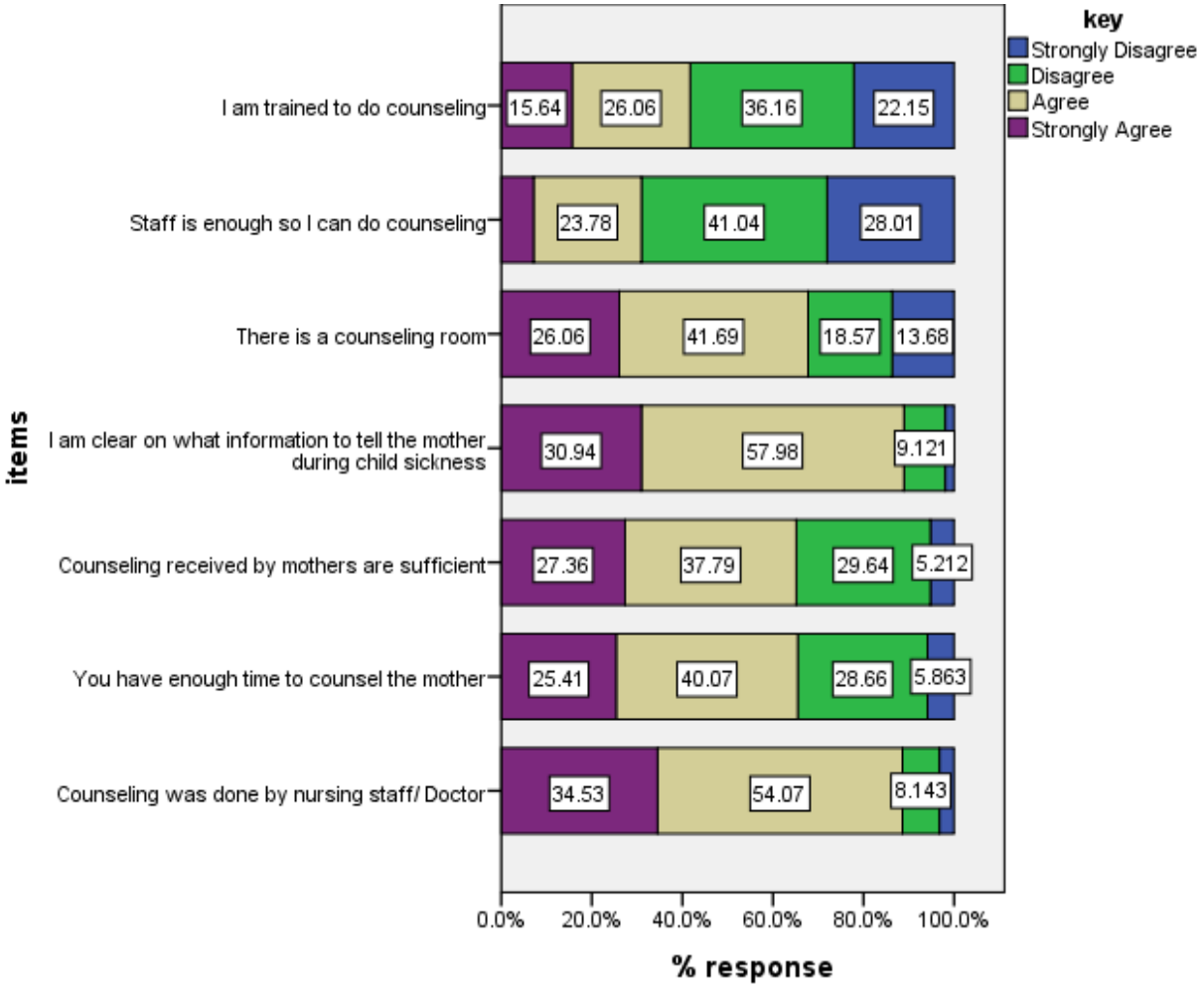

Figure 4.4: Graph summarising item responses on the counseling of mothers

4.4 Coping strategies for mothers during child sickness

Table 4.9 presents the means and standard deviations for proxy questions designed to gather participants' views on mothers' coping strategies during child sickness. Overall, participants disagreed with the view that mothers felt better when separated from their child during the child's sickness period. Participants also disagreed that staff frustrated mothers during child sickness (mean = 1.93, SD = 0.899). Also, the survey participants disagreed with regard to whether or not during child sickness, mothers felt better when; avoiding talking to them about their child's sickness (mean = 2.03, SD = 0.785), do

destructive behaviour (mean = 2.07, SD = 0.842) or when they do not talk about the child (mean = 2.09, SD = 0.815).

The results below also show that survey participants agreed that support from friends (mean = 3.01, SD = 0.737), church (mean = 3.13, SD = 0.646), staff (mean = 3.09, SD = 0.556), talking to mothers about child's sickness (mean = 3.05, SD = 0.731), the need for mothers to stay with the child during sickness period (mean = 3.45, SD = 0.691) as well as the need for nurses to fully attend to the needs of mothers (mean = 3.49, SD = 0.633) constituted what made mothers feel better during child sickness. The participants strongly agreed with respect to the role of family support in making mothers feel better during child sickness (mean = 3.50). However, the reliability test for internal consistency of the 13 proxy items used to gather information on coping strategies of mothers during child sickness showed the Cronabach Alpha value = 0.57.

Table 4.9: Means and standard deviations showing coping strategies' items mean responses and their dispersion around the means

Variables	N	Mean	Std. Deviation
What made mothers feel better during child sickness support by staff	307	3.48	0.556
What made mothers feel better during child sickness is family support	307	3.50	0.618
What made mothers feel better during child sickness is church support	307	3.13	0.646
What made mothers feel better during child sickness support by friends	307	3.01	0.737
During child sickness mothers felt better when talking about the child sickness	307	3.05	0.731
During child sickness mothers felt better when they do not talk about the child	307	2.09	0.815
During child sickness mothers felt better when avoiding talking about the child	307	2.03	0.785
During child sickness mothers felt better when doing destructive behaviour	307	2.07	0.842
During child sickness mothers felt better when they stay with the child	307	3.45	0.691
During child sickness mothers felt better when they are separated from the child	307	1.81	0.850

Variables	N	Mean	Std. Deviation
During child sickness mothers felt better when given information about the child	307	3.46	0.677
The staff frustrate mothers during child sickness	307	1.93	0.899
Mother feel better when needs are attended to by the staff?	307	3.49	0.633

The figure below (Figure 4.5) presents summary results for responses obtained from survey participants regarding their views on coping strategies for mothers during child sickness. The results show higher levels of agreement with respect to the importance of attending to the needs of mothers during child sickness, the need to constantly update mothers on the state of the condition of their child and the need for mothers to stay close to their children when sick. In addition, participants also acknowledge the role of support from family, church, friends, staff as well as the need to talk about the sickness of their child. However, as one would expect, the participants disagreed that the staff frustrated mothers during child sickness. As clearly shown in the figure below, participants disagreed that mothers feel better when they are separated from their children during sickness.

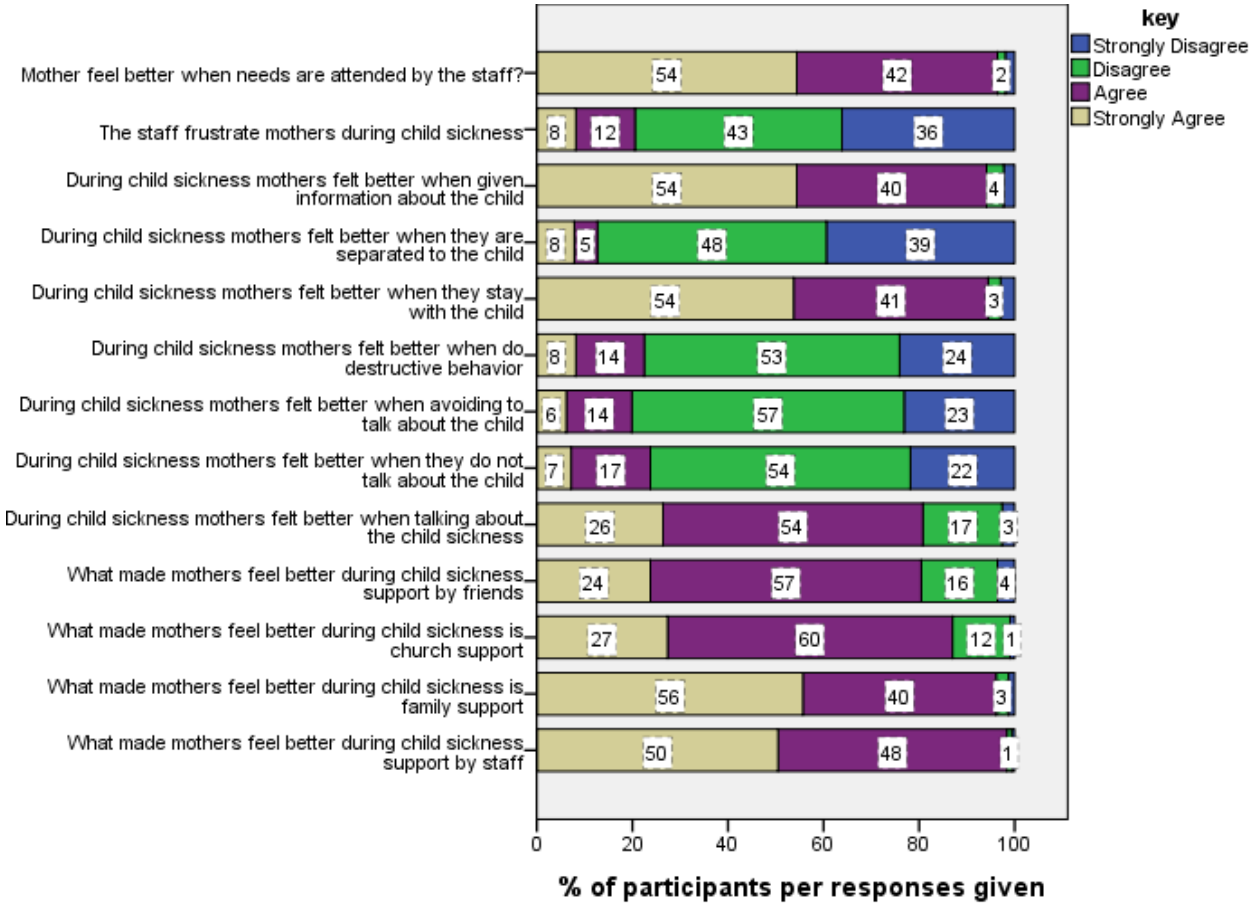

Figure 4.5: Distribution of participants' responses to proxy questions related to coping strategies of mothers during child sickness

4.4.1 Support during child sickness

What made mothers feel better during child sickness is support from health care staff.

The majority of participants (98%) admitted that mothers felt well when they are supported by staff during the child's sickness (47.9% agree and 50.5% strongly agree) whilst the remaining 2% disagreed with the claim (0.7% strongly disagree and 1.0% disagree) (see Figure 4.5). Hence, all participants agreed that mothers feel better when they are supported by staff. Table 4.9 reports the mean response of 3.48 and standard deviation of 0.556 which implies that, on average, health professionals agreed that

mothers are made to feel better during child sickness when they receive support from them.

What made mothers feel better during child sickness is family support.

Figure 4.5 above shows that the majority of participants (96%) admitted that mothers felt better when they are supported by their families during the child's sickness (agree (40.4%) and strongly agree (55.7%)) whilst the remaining 4% believed otherwise (strongly disagree (1.3%), disagree (2.6%)). Thus, nearly all participants agreed that mothers feel better when they are supported by family. Table 4.9 reports the mean response of 3.50 and a standard deviation of 0.618. This means that, on average, health professionals agreed that mothers feel better when they are supported by their families during times when the child is sick.

What made mothers feel better during child sickness is church support.

Figure 4.5 shows that the majority of participants (87%) agreed that mothers felt better when they are supported by the church during child's sickness (agree (59.6%) and strongly agree (27.4%)) whilst the remaining 13% believed otherwise (strongly disagree (1.0%), disagree (12.1%),). Thus, nearly 9 in every 10 agreed that mothers feel better when they are supported by the church whereas 1 in every 10 was in disagreement. Mean response of 3.13 and standard deviation of 0.646 is reported in Table 4.9. Hence, on average, health professionals agreed that mothers feel better when they are supported by the church during times when the child is sick.

What made mothers feel better during child sickness was support from friends.

Figure 4.5 clearly shows that the majority of participants (80%) agreed that mothers felt better when they are supported by friends during child's sickness (agree (56.7%) and strongly agree (23.8%)) whilst the remaining 20% believed otherwise (strongly disagree (3.6%), disagree (16.0%)). Therefore, 8 in every 10 participants agreed that mothers feel better when they are supported by friends whereas 2 in every 10 were in disagreement. The mean response of 3.01 and standard deviation of 0.737, as shown in

Table 4.9 means that, on average, health professionals agreed that mothers feel better when they are supported by their friends during a child's sickness.

4.4.2 Talking during child sickness

During the child's sickness mothers felt better when talking about the child's sickness.

Figure 4.5 shows that the majority of participants (81%) agreed that mothers felt better when they talked about the child's sickness (agree (54.4%) and strongly agree (26.4%)) whilst the remaining 19% believed otherwise (strongly disagree (2.6%), disagree (16.6%)). Therefore, nearly 8 in every 10 participants agreed that mothers feel better when they talk about the child's sickness whereas 2 in every 10 were in disagreement. The mean response of 3.05 and standard deviation of 0.731, as reported in Table 4.9, means that survey participants agreed, on an overall basis, that mothers felt better when they talk about the child's sickness.

During a child's sickness mothers felt better when they do not talk about the child.

Figure 4.5 shows that the majority of participants (76%) disagreed that mothers felt better when they do not talk about the child's sickness (strongly disagree (21.8%), disagree (54.4%)) whilst the remaining 19% believed otherwise (agree (16.6%) and strongly agree (7.2%)). Therefore, nearly 8 in every 10 participants disagreed that mothers feel better when they do not talk about the child's sickness whereas 2 in every 10 were in agreement. Table 4.9 reports the mean response and standard deviation of 2.09 and 0.815 respectively. Hence, on average, survey participants disagreed that mothers felt better they do not talk about the child's sickness.

During child, sickness mothers felt better when avoiding talking about the child.

Figure 4.5 shows that the majority of participants (80%) disagreed that mothers felt better when they avoid talking about the child's sickness (strongly disagree (23.1%), disagree (57.0%)) whilst the remaining 20% believed otherwise (agree (13.7%) and strongly agree (6.2%)). Therefore, nearly 8 in every 10 participants disagreed that mothers feel better when they avoid talking about the child's sickness whereas 2 in

every 10 were in agreement. Table 4.9 reports the mean response and standard deviation of 2.03 and 0.785 respectively. This means that, on average, survey participants disagreed that mothers felt better they avoid talking about the child's sickness.

4.4.3 Destructive behavior

During the child's sickness mothers felt better when they do destructive behavior.

Figure 4.5 shows that the majority of participants (78%) disagreed that mothers felt better when they do destructive behaviours (strongly disagree (24.1%), disagree (53.4%)) whilst the remaining 22% believed otherwise (agree (14.3%) and strongly agree (8.1%)). Therefore, nearly 8 in every 10 participants disagreed that mothers feel better when they do destructive behaviours whereas 2 in every 10 were in agreement. The mean response of 2.07 and standard deviation of 0.842 as reported in Table 4.9 implies that, on average, survey participants disagreed that mothers felt better when they do destructive behaviours.

4.4.4 Staying with the child

During the child's sickness mothers felt better when they stayed with the child.

Figure 4.5 shows that the majority of participants (94%) agreed that mothers felt better when they stay with the child (agree (40.7%) and strongly agree (53.7%)) whilst the remaining 6% believed otherwise (strongly disagree (2.9%), disagree (2.6%)). Therefore, nearly 9 in every 10 participants agreed that mothers feel better when they stay with the child whereas 1 in every 10 was in disagreement. The mean response of 3.45 and standard deviation of 0.691 as reported in Table 4.9 means that, on average, survey participants agreed that during child sickness mothers feel better when they stay with the child.

During the child's sickness mothers felt better when they were separated from the child.

Figure 4.5 shows that the majority of participants (87%) disagreed with the view that mothers feel better when they are separated from the child (strongly disagree (39.4%), disagree (47.9%) whilst the remaining 13% believed otherwise (agree (4.9%) and strongly agree (7.8%). Therefore, nearly 9 in every 10 participants disagreed that mothers feel better when they are separated from the child whereas 1 in every 10 was in agreement. Table 4.9 reports a mean response of 1.81 and a standard deviation of 0.850. Hence, on average, survey participants disagreed that during child sickness mothers felt better they are separated from the child.

4.4.5 Information on child sickness

During child sickness mothers felt better when given information about the child.

Figure 4.5 shows the majority of participants (94%) agreed that mothers felt better when given information about the child (agree (39.7%) and strongly agree (54.4%)) whilst the remaining 6% believed otherwise (strongly disagree (2.3%), disagree (3.6%)). Therefore, nearly 9 in every 10 participants agreed that mothers feel better when given information about the child whereas 1 in every 10 was in disagreement. Table 4.9 reports the mean response and standard deviation of 3.46 and 0.677 respectively. Hence, on average, survey participants agreed that during child sickness mothers feel better when given information about the child.

The staff frustrates mothers during child sickness.

Figure 4.5 shows the majority of participants (80%) disagreed that the staff frustrates mothers during child sickness (strongly disagree (36.2%), disagree (43.3%)) whilst the remaining 6% believed otherwise (agree (12.4%) and strongly agree (8.1%)). Therefore, nearly 8 in every 10 participants disagreed that the staff frustrates mothers during child sickness whereas 2 in every 10 were in agreement. The mean response of 1.93 and standard deviation of 0.899 as reported in Table 4.9 means that, on average, survey participants disagreed that the hospital staff frustrates mothers during child sickness.

Mothers feel better when their needs are attended to by the staff.

Figure 4.5 shows that the majority of participants (96%) agreed that mothers feel better when needs are attended by the staff (agree (42.0%) and strongly agree (54.4%)) whilst the remaining 4% believed otherwise (strongly disagree (2.0%), disagree (1.6%)). Therefore, nearly all participants agreed that mothers feel better when needs are attended to by the staff. The mean response of 3.49 and standard deviation of 0.633 as reported in Table 4.9 means that, on average, survey participants agreed that mothers feel better when needs are attended to by the staff.

4.5 Experiences Versus Participant-related variables

Chi-Squared Tests for Association

In this section, results obtained from performing Chi-Squared tests for association between the dependent (experience-related variables) variables and "participants-related" independent variables (institution, occupation and duration of service) are presented. Chi-Squared results are presented in the tables below. Of particular interest are the following statistical discoveries:

Physical effects of child sickness versus Occupation

A weak but statistically significant relationship was found between variables; "child sickness affects mothers physically" and "occupation" (Chi-Square = 8.795, df = 3, $p < 0.05$, Cramer's V = 0.151, $p < 0.05$). This result shows that the occupation of survey respondents influenced their views on how the child's sickness affected the mothers physically, that is, participants' views on the physical effects of child sickness on mothers depend on whether participants' occupation was a nurse, doctor, social worker or a psychologist. In particular, more doctors disagreed than any of the nurses, social workers or psychologists that child sickness affects the physical well-being of mothers (see Table 4.10 below).

Table 4.10: Cross-tabulation results for child sickness affects mothers physically Versus Occupation

Child sickness affects mothers physically.		Occupation				Total
		Nurse	Doctor	Social work	Psychologist	
Disagree	Count	47	9	1	1	58
	% within Occupation	17.4%	42.9%	16.7%	10.0%	18.9%
Agree	Count	223	12	5	9	249
	% within Occupation	82.6%	57.1%	83.3%	90.0%	81.1%
Total	Count	270	21	6	10	307
	% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%

Referral for counseling by social workers versus Occupation

A weak but statistically significant relationship was revealed between variables; “During child sickness mothers are referred for counseling by social work” and “occupation” (Chi-Square = 11.204, df = 3, $p < 0.05$, Cramer's V = 0.133, $p = 0.061$). More nurses and doctors disagreed than they agreed that mothers were referred for counseling by the social worker during child sickness. Conversely, more social workers and psychologists agreed they disagreed that mothers were referred for counseling by the social worker during child sickness. This result implies that it can be used to organise awareness campaigns within hospitals to ensure that an understanding of the role of social workers is raised, even if nurses, doctors, and psychologists provide counseling services (see Table 4.11 below).

Table 4.11: Cross-tabulation results for "Referral for counseling by social workers" Versus "Occupation"

During child sickness mothers are referred for counseling by social work		Occupation				Total
		Nurse	Doctor	Social work	Psychologist	
Disagree	Count	87	14	1	3	105
	% within Occupation	32.2%	66.7%	16.7%	30.0%	34.2%
Agree	Count	183	7	5	7	202
	% within Occupation	67.8%	33.3%	83.3%	70.0%	65.8%
Total	Count	270	21	6	10	307
	% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%

Further statistical investigations revealed the existence of a statistically significant relationship between "During child sickness mothers are referred to Psychologist" and "occupation" for Tshilidzini Hospital (Chi-square = 14.708, df = 6, $p < 0.05$, Cramer's V = 0.314, $p < 0.1$). Comparatively, the occupation "doctor" has a high proportion of respondents who disagreed that mothers were referred for counseling by a social worker than all other occupational categories (see table 10 below).

Table 4.12: Cross-tabulation results for "During child sickness mothers are referred for counseling by social worker" versus "Occupation" for Tshilidzini Hospital

Institution				Occupation				Total
				Nurse	Doctor	Social work	Psychologist	
Tshilidzini	During child sickness mothers are referred for counseling by social work	Disagree	Count	22	6	0	0	28
			% within Occupation	34.4%	75.0%	0.0%	0.0%	36.8%
		Agree	Count	42	2	2	2	48
			% within Occupation	65.6%	25.0%	100.0%	100.0%	63.2%
	Total		Count	64	8	2	2	76
			% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%

Referral for counseling to a psychologist Versus Institution

Chi-Square test for association revealed the existence of a statistically significant relationship between "During child sickness mothers are referred to Psychologist" and institution (Chi-square = 14.708, df = 6, $p < 0.05$) and occupation (Chi-square = 9.971, df = 3, $p < 0.05$). Therefore, this means that the referral of mothers to a psychologist is institution and occupation-specific. In other words, the referral of mothers to a psychologist during a child's sickness is dependent upon the institution where the mother would have been admitted.

- The chi-Squared test for associations also reveals the existence of a statistically significant between “referral of mothers to a social worker during child sickness” and institution (Chi-Square = 77.180, df = 6, p< 0.05). Thus, the extent to which mothers are referred to social workers during a child’s sickness depends upon the institution where the child is admitted.
- Association tests also revealed that “mothers' referral to a psychiatrist during child’s sickness” and institution were significantly associated (Chi-Squared = 15.625, df = 6, p < 0.05). This implies that whether a mother with an admitted sick child will be referred to a psychiatrist closely depends on the institution where admission occurs.
- A statistically significant relationship is also reported between “receiving counseling from a nursing staff or doctor” and occupation (Chi-Square = 12.155, df = 3, p < 0.05). Hence, the extent to which participants thought counseling was done by nursing staff or doctors depends on whether participants’ occupation was a nurse, doctor, social worker, or psychologist.
- Tests for association also show the existence of a statistically significant relationship between “having enough time to counsel the mothers” and institution (Chi-Square =23.781, df = 6, p < 0.05) and occupation (Chi-Square = 10.156, df = 3, p < 0.05). Hence, having enough time to counsel mothers is closely linked to the institution where the mother is admitted. Also, the occupation of an individual plays a crucial role in determining the availability of adequate time for counseling mothers with admitted sick children
- Chi-Squared tests were also employed to show that there is a statistically significant relationship between “sufficiency of counseling received by mothers” and institution (Chi-Square = 13.405, df = 6, p < 0.05) and occupation (Chi-Square = 10.435, df = 3, p < 0.05). This implies that the institution where the mother is admitted and the occupation of participants play a crucial role in determining whether or not counseling received by mothers is sufficient.
- A statistically significant relationship is also found between “child’s looking depressed when sick” and occupation (Chi-Squared = 10.151, df = 3, p < 0.05). An association between these two variables means that whether the sick child

looks depressed depends on the occupation of the care provider (nurse, doctor, social worker, and psychologist).

- A statistically significant relationship is also shown between “child’s looking angry when sick” and occupation (Chi-Squared = 15.099, df = 3, $p < 0.05$). This means that whether or not the sick child looks angry depends on the occupation of the care provider (nurse, doctor, social worker, and psychologist)
- The association tests also revealed the existence of a statistically significant relationship between “availability of room for counseling” and institution (Chi-Square = 41.872, df = 6, $p < 0.05$). Therefore, the availability of room for counseling depends on the institution which in turn means that
- A statistically significant relationship is also reported between “staff is enough so I can do counseling” and institution (Chi-Square = 22.566, df = 6, $p < 0.05$) and occupation (Chi-Square = 23.695, df = 3, $p < 0.05$). Hence, the extent to which staff is enough to allow care providers to offer counseling depends on the institution where the care provider is stationed. In addition, the extent to which staff is enough to allow care providers to offer counseling depends on the occupation of care providers.
- Last but not least, the Chi-Squared test for association also revealed the existence of a statistically significant relationship between “being trained to do counseling” and occupation (Chi-Square = 30.998, df = 3, $p < 0.05$). Thus, the extent to which participants were trained to do counseling depended upon their type of occupation (nurse, doctor, social worker or psychologist).

For a complete list of all the experience-related variables that are significantly associated with one or more participant-related variables, refer to Table 4.13 below.

Table 4.13: Chi-Square results showing independent variables that significantly influence experience-related dependent variables

Pearson Chi-Square Tests									
	Institution			Occupation			Duration of service		
Variables	Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.
Child sickness affects mothers physically	4.648	6	0.590	8.795	3	**0.032**	4.297	3	0.231
Child sickness affects mothers psychologically	7.497	6	0.277	0.276	3	0.965	5.524	3	0.137
Child sickness affects mothers socially	3.652	6	0.724	4.472	3	0.215	5.682	3	0.128
Child sickness affects mothers financially	6.235	6	0.397	0.966	3	0.809	4.128	3	0.248
During child sickness mothers are referred for counseling by social work	3.735	6	0.712	11.204	3	**0.011**	0.929	3	0.818
During child sickness mothers are referred to a psychologist	14.708	6	**0.023**	9.971	3	**0.019**	0.667	3	0.881
During child sickness mothers are referred to a social worker	77.180	6	**0.000**	1.508	3	0.680	2.603	3	0.457

Pearson Chi-Square Tests									
Variables	Institution			Occupation			Duration of service		
	Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.
During child sickness mothers are referred to a psychiatrist	15.625	6	**0.016**	0.110	3	0.991	4.128	3	0.248
Counseling was done by nursing staff/ doctor	3.204	6	0.783	12.155	3	**0.007**	2.348	3	0.503
You have enough time to counsel the mother	23.781	6	**0.001**	10.156	3	**0.017**	.664	3	0.882
Counseling received by mothers are sufficient	13.405	6	**0.037**	10.435	3	**0.015**	4.957	3	0.175
I am clear on what information to tell the mother during child sickness	7.289	6	0.295	2.209	3	0.530	5.390	3	0.145
When the child is sick looks frustrated	7.275	6	0.296	2.010	3	0.570	4.721	3	0.193
When the child is sick looks depressed	8.741	6	0.189	10.151	3	**0.017**	7.097	3	0.069
When the child is sick looks angry	6.150	6	0.407	15.099	3	**0.002**	2.705	3	0.439
When the child is sick looks hopeless	6.307	6	0.390	4.996	3	0.172	5.706	3	0.127

Pearson Chi-Square Tests									
	Institution			Occupation			Duration of service		
Variables	Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.
When the child is sick looks lonely	10.566	6	0.103	3.188	3	0.364	2.928	3	0.403
There is a counseling room	41.872	6	**0.000**	7.712	3	0.052	1.427	3	0.699
Staff is enough so I can do counseling	22.566	6	**0.001**	23.695	3	**0.000**	2.529	3	0.470
I am trained to do counseling	9.759	6	0.135	30.998	3	**0.000**	3.979	3	0.264

4.6 Coping strategies versus participants-related variables

In this section, the researcher presents results obtained after performing Chi-Squared tests for association between the dependent (**coping strategies-related variables**) variables and "participants-related" independent variables (institution, occupation and duration of service). As such, the following variables were found to be significantly associated with one of the participants-related variables:

- What made mothers feel better during child sickness, support from friends and the institution (Chi-Square = 39.661, df = 18, $p < 0.05$, Cramer's V = 0.208, $p < 0.05$). Therefore, the extent to which mothers are made to feel better through support from friends depends strongly on the name of the institution where the mother is admitted. For instance, participants from Donald Fraser, Elim Hospital, Lebowakgomo and Tshilidzini Hospitals agreed more than they disagreed with the proposition that what made mothers feel better during child sickness was support from their friends. On the other hand, participants from Mankweng and Siloam hospital disagreed more than they agreed with the proposition that what made mothers feel better during child sickness was support from their friends.
- Mothers feel better when their needs are attended to by the staff and occupation (Chi-Square = 30.401, df = 9, $p < 0.05$). Specifically, we observe that nurses and doctors agreed more than they disagreed with the view that mothers felt better when their needs were attended to by the staff. On the converse, social workers and psychologists disagreed more than they agreed that mothers felt better when their needs were attended to by the staff. Participants were doctors, nurses, psychologists and social workers. Doctors and nurses spend more time with participants unlike psychologists and social workers and that is why doctors and nurses had the same understanding. On the other hand, in the qualitative results, the views of mothers are the same as those of the doctors and nurses.
- During child sickness, mothers felt better when doing destructive behavior and duration of service (Chi-Square = 9.747, df = 3, $p < 0.05$). This implies that the extent to which participants thought that mothers felt better when doing destructive behaviour during child sickness depends on the number of years

participants had post-getting employment. Thus, participants whose duration of service ranged from 6-15 years generally agreed more than they disagreed that mothers felt better when they engaged in some forms of destructive behaviours during child sickness. On the other hand, participants whose duration of service ranged between 1 and 5 years and more than 15 years disagreed more than they agreed to the view that mothers felt better when they engage in some forms of destructive behaviours during child sickness. However, the question needed to know if it does happen that mothers do destructive behaviours during child sickness. The quantitative results agree with the qualitative findings that mothers do destructive behaviours.

For a complete list of all coping strategy-related variables that are significantly associated with one or more participant-related variables, refer to Table 4.14 below.

Table 4.14: Chi-Square results showing independent variables that significantly influence coping strategy-related dependent variables

Pearson Chi-Square Tests									
	Institution			Occupation			Duration of service		
Variables	Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.
What made mothers feel better during child sickness support by staff	7.303	6	0.294	0.697	3	0.874	0.479	3	0.924
What made mothers feel better during child sickness is family support	7.110	6	0.311	1.711	3	0.634	0.993	3	0.803
What made mothers feel better during child sickness is church support	2.443	6	0.875	1.904	3	0.593	3.844	3	0.279
What made mothers feel better during child sickness support by friends	23.384	6	**0.001**	5.872	3	0.118	4.782	3	0.188
During child sickness mothers felt better when talking about the child sickness	7.409	6	0.285	3.179	3	0.365	2.327	3	0.507
During child sickness mothers felt better when they do not talk about the child	5.481	6	0.484	4.040	3	0.257	3.958	3	0.266

Pearson Chi-Square Tests									
Variables	Institution			Occupation			Duration of service		
	Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.
During child sickness mothers felt better when avoiding talking about the child	2.830	6	0.830	5.487	3	0.139	9.747	3	**0.021**
During child sickness mothers felt better when doing destructive behaviour	9.409	6	0.152	6.242	3	0.100	3.951	3	0.267
During child sickness mothers felt better when they stay with the child	12.290	6	0.056	4.074	3	0.254	1.004	3	0.800
During child sickness mothers felt better when they are separated from the child	3.912	6	0.689	4.782	3	0.189	4.612	3	0.202
During child sickness mothers felt better when given information about the child	6.139	6	0.408	1.508	3	0.680	5.986	3	0.112
The staff frustrates mothers during child sickness	3.749	6	0.711	2.301	3	0.512	3.342	3	0.342
Mothers feel better when their needs are attended to by the staff.	9.226	6	0.161	11.855	3	**0.008**	1.403	3	0.705

4.7 Summary

The results of this chapter revealed that in both the qualitative and quantitative strands, during child sickness, mothers face different problems and challenges and as a result, most of them fail to cope with the situation. Furthermore, this study revealed that the support that mothers receive from health professionals and families is insufficient.

Theme 1 outlined paradoxical stories of mothers' experiences during child sickness. Mothers explained their experience during child sickness and hospitalisation as both good and bad.

In Theme 2, the effects of child sickness on mothers during admission to hospitals affected mothers negatively on multiple levels. Mothers were affected physically, psychologically, socially, and financially.

Theme 3 focussed on the challenges experienced by mothers of sick children during their stay in hospitals. Leaving children at home whilst attending to the sick child in the hospital was raised as challenging to mothers. Unbearable treatment was received from health workers. Inadequate versus adequate support was also demonstrated. Lack of update on the progress of the child impacted negatively on the performance of mothers during child sickness. Mothers displayed a feeling of fear of uncertainty. Fear of death of the child was shown in almost every participant.

In Theme 4, mothers explained that the support needed by mothers from the health care professionals during admission of the children in the hospital was not as expected. Hence different strategies and several activities were used to adjust to the situation. A spiritual intervention was welcomed by mothers as they were in a desperate situation. Counseling by a health professional was used to assist mothers.

Health professionals agreed that mothers' experiences during child sickness support that mothers were affected by child sickness. 81.1% were affected physically, 99.3% psychologically, 97% socially, 90% financially. In addition, 96% were frustrated, 94% depressed, 82% angry, 83% hopeless and 74% lonely. The results support that mothers experience stress.

Health professionals agreed that 65.8% were referred to social workers, 65.1% to psychology and 82.7% disagreed that mothers were referred to psychiatry. This shows that there are mothers who are not attended to during the time of adversity.

Fifty eight percent of health professionals are trained for counseling, 89% are not clear on the information to tell the mother during child sickness, 65% showed that counseling received by mothers is sufficient whereas 66% showed that they do not have enough time to do counseling. Sixty nine percent indicated that staff is not enough to do counseling and 68% showed there is no room to do counseling. These results show that mothers are not assisted enough to cope with the stressful situation of child sickness

Different strategies were used by mothers to cope, both positive and negative. Positive strategies that assisted mothers were to be supported by health professionals, family, church, friends and sharing information by staff and peers. Negative strategies were found to be avoidance, destructive and suicidal behaviours. Developed strategies may assist mothers to cope during child sickness.

CHAPTER 5: DEVELOPMENT OF COPING STRATEGIES

5.1 Introduction

The previous chapter, Chapter 4, covered both qualitative and quantitative data analysis, presentation, and discussion of data. This chapter deals with the development of strategies for mothers to cope with child sickness in the hospitals of LP, SA. The aim of developing these strategies is to promote and assist mothers to cope with child sickness and hospitalisation in the paediatric units of the LP.

This chapter developed coping strategies using Neuman's theory, wherein, the researcher identified the failure of mothers to cope during child sickness. During this study the researcher assessed the coping status of the mother and found that mothers were failing to cope, in turn, mothers described the support that they needed for them to cope with the stressful situation of the child's sickness. Thereafter, the researcher planned the interventions that can assist mothers to cope with the stress of child sickness, following what mothers said to be of assistance in Chapter 4. This was followed by the evaluation of the planned interventions.

The researcher developed strategies for mothers to cope during child sickness based on Neuman's theory that outlines a person's relationship to stress, response and reconstitution factors that are progressive in nature. This study is concerned with the mother's relationship to stress, assisting mothers to respond positively and to cope with the stress associated with child sickness.

In addition, the researcher used Neuman's theory because it concentrates on the human being's system's response to actual or potential environmental stressors. It also maintains the human being's system's stability through primary, secondary and tertiary nursing to promote interventions that can reduce stressors. The hospital environment and child sickness were the main stressors to mothers; therefore, mothers needed to be assisted by health professionals to cope.

In this study, health professionals were part of the participants and they supported the fact that mothers experienced distress during child sickness. Some of the stress that mothers experienced was said to have been caused by health professionals in the process of childcare. Health professionals also explained why mothers were stressed and the assistance thereof. The strategies developed are to be implemented in the hospital environment when mothers are admitted to the hospitals of Limpopo Province, SA. Health professionals form part of people who were said to cause mothers to fail to cope due to their actions towards mothers, whilst on the other hand, they are needed to assist mothers to cope.

Neuman identified and described the major concepts and sub-concepts that are relevant to this study. Below is an explanation of those concepts as related to this study which is human being, environment, health and nursing.

Neuman's System theory comprises several major health sciences meta-paradigm concepts and sub-concepts. Regarding the concepts, this study concentrated on human beings, the environment, health and nursing (Brink *et al*., 2018: 20).

5.1.1 Application of major concepts of Neuman's Systems theory in the study

Human being

The human being is referred to as an open system that interacts with internal and external environmental forces or stressors. Human is constantly changing, moving toward a dynamic state of system stability or coping of varying degrees (Ahmadi & Sadeghi, 2017: 14). In this study, a human being is a mother of a sick child who is hospitalised in a paediatric ward.

Environment

The environment is a vital arena that is suitable for the system and its functions. The environment may be viewed as all factors that affect and are affected by the system. Neuman's Systems Model identifies three relevant environments that are internal, external, and created environments.

- The internal environment exists within the mothers' system. All forces and interactive influences that are solely within the mother system's boundaries make up this environment.
- The external environment exists outside the mother system.
- The created environment is unconsciously developed and is used by the mothers to support protective coping (Hannoodee & Dhamoon, 2017: 7).

In this study, the environment is the hospital's paediatric unit where the child is admitted and the mother is staying with the child.

Health

In Neuman's Nursing theory, health is defined as the condition or degree of system stability and is viewed as a continuum from wellness to illness. When the system needs of mothers are met, optimal wellness exists. When the needs of mothers are not satisfied, failure to cope with the stress of child sickness exists. When the energy needed to support mothers to cope is not available, mothers suffer a lot of stress (Ahmadi & Sadeghi, 2017: 12).

Nursing

Nursing education and practice have a significant impact on the knowledge and competencies of nursing personnel and other health professionals. The competencies of health professionals enable them to meet the various needs of both the mother and the child. The primary concern is to develop coping strategies that are appropriate to assist mothers to cope in situations of child sickness that are stressful or situations concerning possible reactions of the mother to stressors. Nursing interventions aim to help the system adapt or adjust and retain, restore or maintain some degree of stability between the mother system variables and environmental stressors, focusing on conserving energy (Fawaza, Hamdan-Mansourb & Tassia, 2018: 106).

In Neuman's theory, there are several sub-concepts such as stressors, stability, degree of reaction, entropy, negentropy, input and output, reconstitution and prevention as an intervention (Lawson, 2021: 231). In this study, the researcher focused on stressors

Stressors

According to Neuman's theory, a stressor is any phenomenon that might penetrate both the flexible and normal lines of defense, resulting in either a positive or negative outcome. In this study, the stressors are child sickness and hospitalisation that may affect the mother to cope or failure to cope. The stressors consisted of three types, namely, intrapersonal, interpersonal and extra-personal stressors. Intrapersonal stressors are those that occur within the mothers system's boundary and correlate with the internal environment. Whereas interpersonal stressors occur outside the mother's system's boundary, are proximal to the system and impact the system. While extra-personal stressors also occur outside the mothers' system's boundaries but are at a greater distance from the system than interpersonal stressors (Lawson, 2021: 234). Therefore, the effects of child sickness are discussed below.

5.2 Major research findings

Major research findings included experiences (the good and the bad), effects of child sickness on mothers' health, positive effects of child sickness on mothers' health, negative effects of child sickness effects on mothers' health (intrapersonal stressors, interpersonal and extra personal), service provisions (poor versus good) and unbearable effects due to child sickness and hospitalisation including the effects on family finances.

Based on the major findings of the research study, the researcher identified what caused the stress in mothers, why they failed to cope and how they can be assisted to cope during child sickness. Below are the major findings that were identified as the sources of stress in mothers causing failure to cope during child sickness. In this study, the health professionals (in qualitative findings) confirmed that mothers were observed to be failing to cope during child sickness.

5.2.1 Experiences (the good and the bad)

Nursing care and knowledge is a caring profession that meets the interests and needs of the profession by making a great impact on patients and society. Unfortunately, mothers experience poor service levels when they bring children to hospitals. This is not supposed to happen in a health facility, as indicated below. It is important that when a child is sick and hospitalised, the coping status of the mother is assessed.

5.2.1.1 Assessment (identification of stressors)

The researcher assessed and identified the stressors to mothers during child sickness. Positive and negative effects on mothers' health were found and are outlined in the following sections.

5.2.1.1.1 Positive effects on mothers' health

The qualitative and quantitative studies revealed that during child sickness and hospitalisation, mothers had both good and bad experiences. Good experiences were experienced regarding some of the health professionals and some of the family members. Mothers expressed that they felt good when they received support from both the health practitioners and the families. Some of the health professionals were said to be supportive by being there when they were needed. The friendliness and kindness that were displayed, were said to reduce the mothers' stress. The provision of quality patient care was accepted by mothers. Some mothers were visited by family members and friends while in the hospital for support and received calls for updates. These experiences were said to reduce the stress that mothers had during child sickness. Some of the health professionals were said to be helpful when mothers called for assistance.

5.2.1.1.2 Negative effects on mothers' health

Painfully, the worst experiences were explained as being caused by some of the health professionals and aggravated the stressful situation for mothers. Mothers reported that

the quality of care their children received was substandard. They reported that they did not receive support and counseling from health practitioners and if they did, it was inadequate. The negative attitude displayed by health professionals towards the mothers was unbearable. Poor communication and lack of updates about the progress of the child's condition further added to the already stressful situation for the mothers.

This study revealed that mothers were of less concern in the healthcare process during child sickness, although they interacted with internal and external environmental stressors and had stress as caregivers of the sick child. Neuman believes that human beings need to be treated with a holistic approach of which in this study, mothers were least attended to. Mothers experienced stressful situations but little or nothing was done to assist them or address their painful situation.

During this study, mothers explained their experiences that were identified as stressors in the intrapersonal, interpersonal and extra-personal areas and how mothers attempted to resolve the stressors during child sickness.

5.2.2 Intrapersonal stressors

Neuman's theory views a human being holistically and confirms that individuals are subjected to intrapersonal, interpersonal and extra-personal stressors. Intrapersonal stressors are those stressors that act within the individual and occur between you and yourself such as emotions (fear, frustration, anxiety) and variations of the organic system. Intrapersonal stressors refer to psychological, physiological, developmental, sociocultural and spiritual distress. Extra personal stressors refer to effects outside the individual (Hannoodee & Dhamoon, 2017: 9).

5.2.2.1 The psychological stressors

In this study, mothers expressed their feelings about child sickness and on observation looked depressed and anxious. Most mothers explained that they were fearful of the outcomes of child sickness. Expressions of hopelessness, frustration and anger were outlined by mothers. These were confirmed by more than 80% of respondents in the

quantitative study who agreed with the expressions made by mothers. Negative attitudes of health professionals were considered intrapersonal factors that contributed to the stress experienced by mothers during the hospitalisation of the child.

The overall response of health professionals indicated that 99.3% of mothers experience psychological stressors. Therefore, there is a need to support mothers during child sickness. According to Neuman's Systems theory, the assessment of mothers can serve as the primary prevention of psychological stressors.

5.2.2.2 The physical stressors

Physical stressors include neurological, gastrointestinal, respiratory, genitourinary and dermatological system dysfunctions (Akhlaghi *et al*., 2020: 4). This study showed that during child sickness, mothers were affected physically. In this study, physical stressors experienced and explained by mothers in the neurological system were elevated blood pressure, not sleeping well, weakness and headache. Gastrointestinal dysfunctions of this system that were expressed by mothers included mostly loss of appetite. Respiratory, genitourinary and dermatological system dysfunctions were not raised in this study. 81% of health practitioners, in the current study, confirmed that mothers were physically affected during child sickness. According to Neuman's Systems theory, the assessment of mothers can serve as the primary prevention of physical stressors.

5.2.2.3 Socio-cultural stressors

Social stressors refer to behaviors and situations that are social in nature. Social stressors are related to physical and psychological strain. Socio-cultural involves the social and cultural aspects and knowing about the people around you and their family backgrounds. Therefore, health practitioners should know the cultures of mothers that come to hospitals and understand their fear of situations in which mothers may be judged negatively (Hannoodee & Dhamoon, 2017: 9). In this study, social stressors expressed by mothers were verbal aggression that was demonstrated by health practitioners towards mothers with sick children. Furthermore, mothers were negatively accused and blamed for child sickness. Some health practitioners used language that

mothers did not understand which led to more stress for them. The response of health professionals in this study indicated that 97% of mothers experienced social stressors.

5.2.2.4 Spiritual stressors

In this study, mothers believed in God and prayed during child sickness. Some expressed that they pray together whilst in the hospital. Praying and believing in God was a weapon used by mothers to reduce their stress. Mothers expressed that nurses encouraged them to pray and believe in God for the healing of sick children. Demirbag and Ozkan (2019: 18) support that strengthening the emotional health of mothers, through spirituality, will increase their hopes.

5.2.3 Interpersonal stressors

Interpersonal stressors are stressors that occur between individuals for example role expectations. Every mother is unique and has unique ways of understanding the world around them and ways of perceiving things. What seems like a threat to one mother's well-being may be perceived as a challenge to another (Ahmadi & Sadeghi, 2017: 7). In this study, mothers experienced a challenge in the bad interaction with health professionals and as a result, stress levels of mothers were elevated.

5.2.4 Extra personal stressors

5.2.4.1 Effects on family finances

Extra personal stressors involve all interactions that happen outside the individual, including financial situations. According to Neuman, the environment is all the internal and external forces surrounding the individual, influencing and being influenced by the individual at any point in time (Gondim de Almeida *et al*., 2018: 7). This study revealed that 76% of mothers were unemployed and they experienced financial constraints during child sickness. Mothers explained that they needed financial assistance as child sickness comes unexpectedly.

The qualitative findings of this study revealed that child sickness and hospitalisation adversely affected family finances. This finding concurred with the quantitative findings which showed that 90% of health professionals believed that child sickness affected mothers financially. Qualitative findings showed that the evidence of the financial impact was worse among the unemployed, self-employed and unmarried mothers whose period of hospitalisation directly translated to their period of economic downtime. If a child is admitted for ten days, then self-employed and unmarried mothers will lose the equivalent of 10 days of productive time as downtime costs. This, in turn, impacts their family finances because while they were staying in the hospital with the child, they stopped working and there was no income to support the entire family. The remaining 10% referred to mothers who are formally employed and hence entitled to paid leave during the period of hospitalisation and mothers who are supported by their families and husbands. The financial constraints experienced by mothers are supported by Mumford *et al*. (2018: 987) who indicate that 69.4% of mothers with admitted children had financial constraints.

5.2.4.2 Service provisions (poor versus good)

When mothers were admitted with sick children, they expected to find a place where health professionals would assist them to cope with child sickness while the child was being attended. Mothers were shocked, stressed, hopeless, frustrated, depressed and angered when they were not attended to. During this study, many of the participants considered the hospital to be a place where sick people get assisted in a friendly and welcoming environment, but it was revealed that mothers were shocked to find out how many people were failing to cope as a result of poor service. The researcher used the weaknesses of health practitioners to develop strategies for mothers to cope with child sickness.

5.2.4.3 Unbearable effects due to child sickness and hospitalisation

The qualitative findings of this study showed that some of the experiences that mothers went through during a child's sickness were horrible and unbearable. Mothers developed extreme feelings of destructive behaviours, for example, suicidal thoughts,

thoughts to self-discharge as well as other forms of unacceptable behaviour towards healthcare professionals.

Besides, the qualitative results revealed that mothers were uncertain about issues regarding the occurrence of unfortunate events (for example, death) should they happen to materialise. These issues constitute some of the things that contribute to the visible effects of child sickness on mothers' physical, social and psychological well-being including various manifestations thereof such as frustration, depression, anger, hopelessness and loneliness as established by quantitative results. According to Basnet (2019: 61), among 90 mothers, 42 (46.7%) showed extremely severe stress and 19 (21.1%) severe stress because of child sickness. This shows that there is a need to support mothers and develop coping strategies for mothers during child sickness.

5.3 Nursing goals

To assist mothers to cope during child sickness the goals set or the expected outcomes should be SMART; that is being specific, measurable, attainable, realistic and time-bound. Specific health professionals should be trained on exactly what they should do to assist mothers to cope. The objectives should be measured during the mothers' stay in the hospital when mothers can be observed coping and adjusting to the stressful situation. The objectives should be attainable for the participants within a scheduled time and specified conditions. Assistance provided by health professionals should be relevant to the needs of the mothers in the hospital. Whatever is done to assist mothers should be time-framed and achievable (Ogbeiwi, 2017: 5).

5.4 Expected outcomes

The expected outcome is that mothers will be able to cope with the stress of child sickness. Mothers will have a change in behavioral responses in dealing with the actual or potential variances in the wellness of the mother.

5.5 Planned interventions

The planned interventions are specific actions of the mothers and assistance by health professionals and families to achieve the expected outcomes.

The intrapersonal, interpersonal and extra-personal stressors discussed above showed that mothers experienced distress during child sickness and hospitalisation. Hence the researcher sought to develop coping strategies for mothers during child sickness. The expected outcome is a desirable change in behavioral responses to deal with the stresses experienced during child sickness.

5.5.1 Primary prevention

Primary prevention is the process that occurs before the body system reacts to a stressor, strengthening the individual to be able to better deal with stressors. Health promotion and maintenance are of paramount importance. In this study, the primary prevention is when the health professionals do an assessment of mothers on the admission of the child and identify the coping level and plan to assist mothers according to the need (Akhlaghi *et al*., 2020: 7).

5.5.2 Secondary prevention

Secondary prevention is the process that happens after the system reacts to stressors; it is provided based on the existing system. It strengthens the internal lines of resistance and removes the stressor to prevent damage to the central core. In this study, health professionals detect how mothers reacted to child sickness and provide care and support to the mother based on the level of reaction to the stressor (Gonzalo, 2021: 3).

5.5.3 Tertiary prevention

Tertiary prevention occurs after the system has been treated through secondary prevention strategies. Mothers are given support to cope and maintain system stability. It is the adjustment processes that take place as reconstitution begins and maintenance

factors move them back in a cycle toward primary prevention. Mothers are in a dynamic, constant energy exchange with the environment. The well-being of the mother is affected by the sickness of the child (Akhlaghi *et al*., 2020: 7).

5.6 Development of coping strategies for mothers during child sickness in the hospitals of Limpopo Province, South Africa

Qualitative and quantitative results showed that mothers are failing to cope during child sickness in the pediatric units of the hospitals in LP, SA. Coping strategies were formulated based on the major findings in Chapter 4 of this study. Findings included experiences (the good and the bad), effects on mothers' health including positive and negative effects on mothers' health (intrapersonal, interpersonal and extra personal stressors), service provisions (poor versus good) and unbearable effects due to child sickness and hospitalisation including the effects on family finances.

The subjective information that was received from the mothers, objective data that was found by the researcher during the study and the assessments made during the study were used in the planning, implementation and evaluation of the developed strategies. These strategies are based on the person's relationship to stress, response and reconstitution factors that are progressive in nature.

The topic of developing coping strategies for mothers during child sickness was carefully selected. The strategies were developed based on the goals set. The goals set were SMART (Ogbeiwi, 2019: 327). The objective to attain purpose of the study was to develop coping strategies to assist mothers during child sickness in the hospitals of LP, SA.

The development of strategies was done under the supervision of two experienced supervisors and the statistician. Developed strategies were based on the information gained from mothers who were admitted with sick children as well as health professionals who were working in the paediatric units for one year and more, who were said to be helpful to mothers.

This study developed the coping strategies for mothers during child sickness following the steps of Neuman's nursing process. These steps include nursing diagnosis, nursing goals, planned interventions and nursing outcomes (Gonzalo, 2021: 7). The developed strategies will be implemented by health professionals who were working in the paediatric units of LP, and SA and they will be reviewed for effectiveness after three years.

The specific goals to achieve the objective of the study were formulated based on the major findings of the study and are outlined below with goals, objectives and strategies:

Goal 1: To support mothers during child sickness
Goal 2: Provision of quality care
Goal 3: Provision of counselling
Goal 4: To train health professionals in customer care
Goal 5: To equip health professionals with communication skills

The outline of each goal is discussed below:

Goal 1: To support mothers during child sickness

Strategic objective: Improve quality support to mothers during child sickness

Strategy: To provide quality support needed by mothers

Table 5.1: Support needed for mothers during child sickness

When the child is sick and hospitalised, health professionals should assess the health status and the coping state of the mother with critically ill children. Assessment should be done to identify psychological, physical, sociocultural, spiritual and emotional stressors.				
Type of mothers' stressors	**Nursing diagnoses**	**Aim**	**Intervention**	**Responsible person**
Psychological	Stress and anxiety associated with child sickness	To support mothers during child sickness	- Provide mothers with counseling sessions - Engage mothers in several activities - Introduce an exercise programme for mothers in the hospital - Create and allocate time for watching television - Refer to psychologist	Health professionals
	Anxiety related to separation from the sick child during sleeping time	To help mothers to reduce and control anxiety and stress	- Provide mothers with recliner chairs to sleep next to the sick child - Assist the mothers to identify family members to take care of children who are left at home. - Provide a phone to call a family member who is	Health professionals

	Stress-related to leaving children home unattended		taking care of children at home - Involve the social worker	
	Loneliness	Engage mothers in the social environment to prevent loneliness	-Assist mothers to participate in social activity - Promote peer relationship - Provide magazine for reading	Health professionals
	Feelings of guilt, blame, frustration and anger	Assist the mother to address guilt in a productive way	Identify the source of guilt - Open up for help - Accept if the sickness occurred because of your fault - Calm down	Health professionals
	Destructive behaviour	Promote positive thinking towards stressful situations	- Provide mother with counseling sessions	Health professionals

Physiological	Inadequate sleep	To promote sleep	- Create time for daily exercise for mothers - Bath with warm water before going to bed - Promote a noise-free environment - Switch off lights - Assist mothers with relaxation of mind - Allocate activities to allow time for mothers to have enough sleep	Health professionals
	Loss of appetite	Improve mothers' appetites	- Provide mothers with desired and appetising food - Provide mothers with a conducive environment for eating	Health professionals
	Elevated blood pressure and headache	Reduce elevated blood pressure and headaches	- Create an environment to monitor blood pressure and headaches - Give extra fluids - Promote exercise	Health professionals
	Feeling of weakness	Gain strength	- Reassure the mother about the child's condition	Health professionals

Socio-cultural	Use of language that was not understood by mothers	Communicate using the language best understood by the dads	- Ask the mother the preferred language - Communicate using the language best understood by the dads - Respect the cultural beliefs of the mothers	Health professionals
Spiritual	Need for spiritual intervention	Attend to the mothers' spiritual needs	-Engage mothers in spiritual interventions of their choice - Allow mothers to pray to God - Allow support from the church	Health professionals

Goal 2: To train health professionals in quality care

Objective: Improve the provision of quality care

Strategy: Provide the platform for health professionals to attain knowledge, skills, and competency in quality care

Table 5.2: Provision of quality care

When the child is sick and hospitalised, health professionals should provide quality patient care				
Problem identified	**Nursing diagnoses**	**Aim**	**Intervention**	**Responsible person**
Service delivery	Provision of poor-quality care	Improve the provision of quality care	In-service training	Managers
	Inadequate health professionals allocated to provide care	Provide adequate health professionals to provide care	Allocate adequate health professionals as per need	Managers
	Lack of supervision	Supervise service delivery	Supervise service delivery	Managers
	Inadequate equipment available	Provide adequate equipment	Ensure the availability of equipment	Managers
	Inadequate medication available	Provide adequate medication	Ensure the availability of medication	Managers
Environment	Inadequate and unconducive	Provide a conducive	Ensure that mothers have an adequate	Managers

	environment for mothers to rest	environment for mothers to rest	place to sleep and rest	
	Poor environmental hygiene	Maintain a clean environment at all times	Allocate adequate cleaners for the wards and mother lodger rooms	Managers

Goal 3: To develop and train health professionals in counseling

Objective: Improve counseling skills to a high level of expertise

Strategy: Provide an environment for health professionals to attain knowledge, skills and competency in counseling

Table 5.3: Provision of counseling

Problem identified	**Nursing diagnoses**	**Aim**	**Intervention**	**Responsible person**
Counseling	Poor or lack of counseling	- Provide health professionals to do counseling to mothers - Train and develop counseling skills for health professionals	Provide an opportunity to attend in-service training on counseling	Human Resource Managers
	Inadequate health	Provide adequate health	Delegate adequate	Nursing

	professionals	professionals for counseling	health professional	Managers
	Unmanageable workload	Allocate manageable workload to the health professionals	Ensure delegation of manageable workload to every health professional	Ward managers

Goal 4: To train health professionals in customer care

Strategic Objective: Improve coping strategy for mothers by improving customer care service

Strategy: To improve customer care service for health professionals

Table 5.4: Health professionals training on customer care

Type of stressors	**Nursing diagnoses**	**Aim**	**Intervention**	**Responsible person**
Customer care	Poor customer care	Equip health professionals with customer care skills Equip health professionals to know and understand what mothers expect from them Promote positive expectations	Attend in-service training and workshop on good customer care service	Quality assurance Managers and HRD managers

Goal 5: To equip health professionals with communication skills

Objective: Improve effective communication between health practitioners and mothers

Strategy: Strengthen proper communication between health professionals and mothers

Table 5.5: Health professionals on communication skills

Type of stressors	**Nursing diagnoses**	**Aim**	**Intervention**	**Responsible person**
Communication skills	Poor communication	Training health workers on effective communication skills	Attend in-service training and workshop for equipping health professionals with effective communication skills	Health professionals
			Recognise types of crises that mothers experience and manage them best through effective communication	
			Explore the function of persuasive communication in cultivating influence on mothers to cope with child sickness	

			Communicate clearly, concisely, concretely, correctly, coherently, completely and courteously	

Directions relating to the coping strategies

Strategies to be followed by health professionals to assist mothers to cope and directions for coping strategies for the mothers are listed in the following two tables.

In table 5.6 below, the researcher presents the strategies for health professionals to assist mothers to cope. As such, the following coping strategies were developed and found to be significant to assist mothers to cope during child sickness.

Table 5.6: Strategies for health professionals to assist mothers to cope

Health professionals should be able to:
Always introduce themselves to mothers
Call mothers by their names and give them respect at all times
Always make the mother and child feel welcome with a friendly face
Assess and identify the levels of how mothers cope with the illness of a child on admission and during the process of childcare
Reassure the mother of the condition of the child
Provide support to the mother based on the identified level of coping

Build a mutual relationship with the mother
Provide and supervise quality patient care to the child
Provide good customer care and know what the mother and child need as customers
Attend workshops and in-service training on customer service
Communicate effectively with the mother
Update the mother on the progress of the child at all times
Communicate with mothers using mothers' preferred language
Refer mothers to the appropriate discipline as per need
Display a sense of responsibility and competence toward service delivery
Empathise with the mother
Create ward activities for mothers to diverge their thought to positive things
Provide opportunities for spiritual assistance
Provide time for family visits
Assist mothers to attend to challenges of children left at home unattended
Provide mothers with access to a TV
Provide a conducive environment to promote rest and sleep
Switch off lights and avoid noise at all times
Introduce mother to other mothers
Create enough time for mothers to be with the child
Engage and encourage family members to support the mother

Create an opportunity for mothers to express feelings about the child

Table 5.7 below presents the directions on coping strategies for mothers. The strategies below were found to be significantly associated with assisting mothers to cope during child sickness.

Table 5.7: Directions on coping strategies for the mothers

Mothers with sick children should be able to:
Associate with the health professionals who are providing care to the child
Know health professionals who are providing care to the child
Think positively about the child's sickness
Identify and deal with their deficits in coping positively
Avoid destructive thinking
Engage in sharing experiences with other mothers
Engage in social activities in the ward
Participate in the care of the child and be part of decision making concerning the child's sickness
Mothers should open up for any assistance they need
Communicate with family members
Associate with peers going through the same challenge
Engage in spiritual activities of their choice
Disclose health status to health professionals for assistance

Update family members of hospital stay
Be open to sharing challenges other than the sick child
Start programmed exercises with other mothers
Start support groups in the unit for mothers to assist each other

5.7 Summary of the chapter

Figure 5.1 below summarises the framework for managing the effects of child sickness on mothers' psychological, physical, social, spiritual and financial well-being. The graph also summarises the coping strategies for mothers during child sickness. The coping strategies are support from hospital staff, friends, church, and family, talking about the child and full sharing of information on child sickness and conditions. The graph also summarises the factors that influence the achievement of health professionals' goals of stabilising and coping with the mothers' system through offering continuous attention, care and support by meeting the needs of mothers during hospitalisation.

To ensure consistency in the provision of quality healthcare services, hospital management should work to ensure the effective management and provision of all resources required to effectively provide optimal health outcomes to both mothers and children. One major contribution of this study is that it seeks to extend Neumann's Systems theory of wholism to include the entirety of the mothers, the child and hospital infrastructure. Hospital infrastructure is essential because it provides the foundation upon which health professionals provide services with minimal external interference. For instance, the availability of hospital infrastructure such as counseling facilities helps reduce the possibility of achieving poor health outcomes by health professionals.

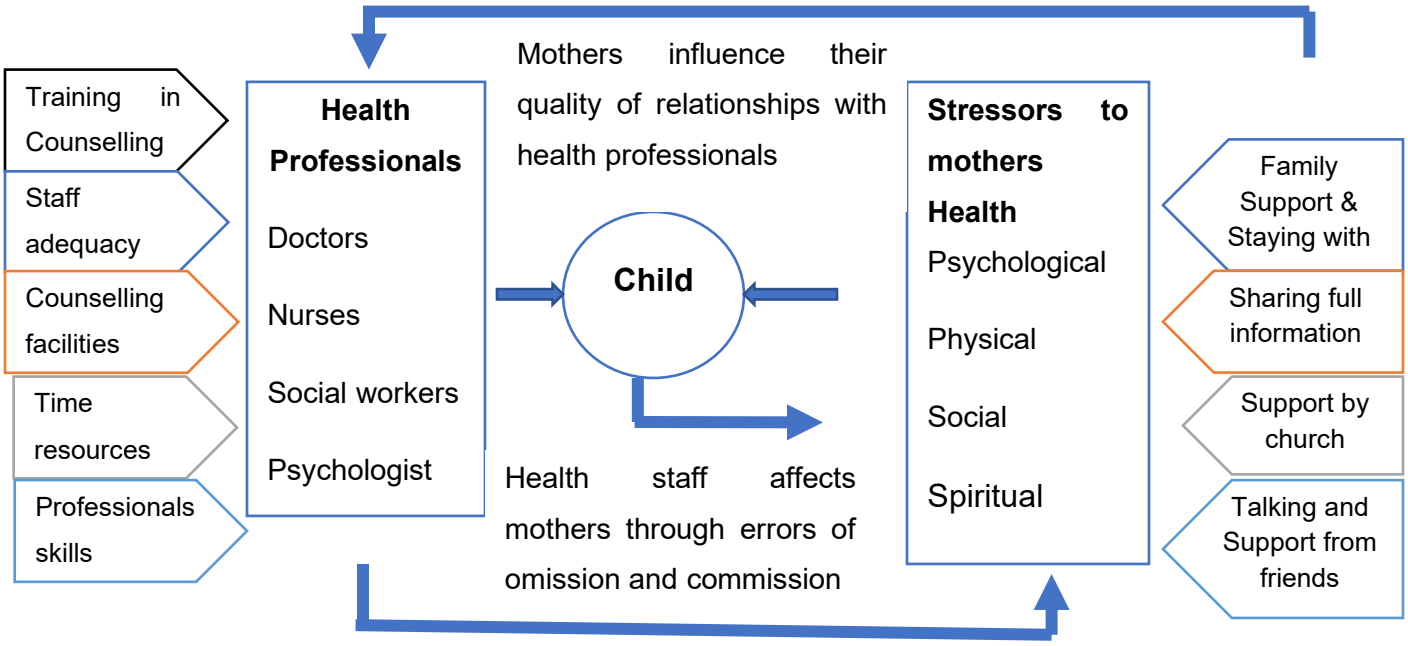

Figure 5.1: Framework for coping strategies to assist mothers during child sickness

CHAPTER 6: Validation, summary, limitations, recommendations and conclusions of the study

6.1 Introduction

The previous chapters addressed the already-known information through the literature review. Furthermore, the methodology of the study was outlined and the findings of the study were presented. Coping strategies for mothers during child sickness were developed using the findings of the study. This chapter evaluates if the objectives of the study were met. Validation was done to assess the quality of the developed strategies, to ensure whether it would assist mothers to cope during child sickness. This chapter presents the validation, limitations, recommendations, and conclusions of the study.

6.2 Validation of the developed strategies

Validation is an action of checking or proving the validity and accuracy of the strategies developed (Chinn, Kramer & Sitzman, 2021: 230). The strategies developed were evaluated, and guided by Neuman's theory.

6.2.1 Purpose and objectives of validating developed strategies

The purpose of validation is to ensure that each phase of the chosen research methodology rigorously adheres to the highest standards of quality.

The objectives of validating developed strategies are to establish credibility. Validation measures the level of quality in planning, executing and evaluating research.

6.2.2 Methodology for validating the developed strategies

The study not only validates an instrument in two populations but also offers insight into the things that made mothers stressed, frustrated and hopeless during child sickness.

Most of the problems that made mothers not cope during child sickness emanating from the finding of this study should be explored carefully.

Validation

The developed strategies were validated for feasibility and to make sure it is well understood by mothers and health professionals; whether the strategies are clear, simple, accessible and generalisable. A non-experimental design was used to describe, explore and make judgments about the findings of this study (Brink *et al*., 2018: 96). Two groups of participants were used to evaluate the effectiveness of the strategies formulated and the developed strategies were validated by the health professionals and mothers who were not part of the study. Health professionals were given strategies to evaluate them and strategies were explained to mothers and were said to be doable

Feasibility

The strategies were checked for practicality and possibility which means capable of being done or carried out successfully Chinn, Kramer. and Sitzman (2021: 230). In this study, participants indicated that the strategies were practical and possible to do by the intended population.

Clarity

Strategies were validated for being clear and free from ambiguity. Strategies were also checked for transparency and quality of being understood (Chinn *et al*., 2021: 230). Participants who were not part of the study were involved in checking the effectiveness and applicability of the strategies. Participants were able to explain the strategies clearly.

Simplicity

Simplicity referred to checking that the strategies were not complicated and easy to understand (Chinn *et al*., 2021: 230). Participants showed that the strategies were simple and easy to follow.

Generalisation

Generalisation is the act of making a conclusion based on only a small number of people. The study was conducted in the paediatric units of hospitals in Limpopo Province, SA. The different groups included in the study found that the strategies were clear, simple, feasible, accessible and easily understood.

Accessibility

The developed strategies would be available in the hospitals where the study was conducted and will be accessible to all participants.

Importance

Out of the seven hospitals where the study was conducted, not one hospital assessed the coping level of the mother on the admission of the child. The developed strategies are important because mothers will be supported and will be assisted to cope during child sickness and hospitalisation. Health professionals will be able to assist mothers as instructed by the coping strategies.

6.3 Summary of the findings

The objective in Phase 1(a) as indicated in Chapter 1, to explore and describe the experiences of mothers during child sickness in the hospitals of LP, SA, was met by this study.

Participants explained that good experiences when dealing with health professionals made mothers have less stress during child sickness but on the other side, bad experiences contributed much to making mothers feel depressed, stressed, frustrated, and hopeless and even lead to destructive behaviours. Substandard care and lack or poor updates on the child's progress to mothers were a concern and the unbearable effects of lack and poor communication by health professionals were unacceptable.

Mothers were psychologically, physically, socially, and spiritually affected during child sickness.

The important and most valuable information from the findings regarding developing strategies for mothers during child sickness was addressed by mothers during the study. This study revealed that mothers used different coping strategies during child sickness.

Phase 1(a): Qualitative

The objective in Phase 1(a) was:

- To explore and describe experiences of mothers during child sickness in the hospitals of Limpopo Province, SA.

Phase 1(b): Quantitative

The objective in Phase 1(b) was:

- To identify the views of health professionals regarding the coping strategies for mothers during child sickness in the hospitals of Limpopo Province, SA.

The objectives in Phase 1(a) and Phase 1(b) were explored and out of the information that was given, four major findings emerged. Major research findings included experiences (the good and the bad), positive and negative effects of child sickness on mothers' health (intrapersonal, interpersonal and extra personal stressors), service provisions (poor versus good) and unbearable effects due to child sickness and hospitalisation including effects on family finances.

Phase 2

The objective in Phase 2 was:

- To develop coping strategies to assist mothers during child sickness in the hospitals of LP, SA.

The conclusion was reached on how mothers need to be assisted to cope during child sickness and hospitalisation. The strategies were arranged taking into consideration the most important to the least important.

This study indicated that mothers cope well if health professionals:

- Provide quality care to their children;
- Are equipped with knowledge for counseling and communication skills;
- Are available and provided for the mothers;
- Are quick to attend to the problems of the child;
- Provide effective communication to mothers;
- Update mothers on the care and progress of the child at all times;
- Provide counseling to mothers with sick children;
- Allow for spiritual intervention that is needed by mothers;
- Are adequate to provide services and
- Establish a conducive environment for both the child and the mother.

Phase 3

The objective in Phase 3 was:

- To validate the coping strategies developed in Phase 2 for mothers during child sickness in the hospitals of Limpopo Province, SA.

6.4 Contribution of the study

This study contributes to the development of coping strategies for mothers during child sickness. In this respect, the development of coping strategies for mothers during child sickness is a reliable source that can assist mothers' adaptive conceptions in their process to adjust and cope with child sickness. Nevertheless, for future studies, it would be interesting to enrich health professionals with knowledge and skills to assist mothers to cope with the stressful situation of child sickness. More research should be conducted to interpret the results of this study. Future research related to this study can make important contributions in assisting mothers to cope during child sickness.

The study developed strategies that will assist mothers to cope with the sickness of the child. The study will equip health professionals with scientific knowledge and skills to assist mothers to cope with the sickness of the child. The coping strategies could also be utilised by mothers to assist peers. Health professionals who work in paediatric

wards will benefit from the study as they will assist mothers to cope because they will be knowledgeable and informed. The coping strategies developed may benefit researchers in terms of conceptualising coping strategies that are based on identified needs of mothers. The findings of this study will be published in journals and books and will be presented at international and national conferences and seminars.

6.5 Limitations of research findings

The findings of this study are not without their limitations which some of them relate to the following:

Study setting − the findings of this research are premised on data collected from seven hospitals in Limpopo Province in South Africa. Consequently, the results may be difficult, if not impossible, to generalise to other study settings. For example, Limpopo Province is regarded as one of the poorest provinces in South Africa which may have contributed to the high patient-to-nurse ratios due to the lack of financial resources normally associated with poor provinces. This is especially probable considering the findings showed that hospital staff was inadequate and the majority of staff were not trained to do counseling which contributes to the realisation of poorly optimised health outcomes arising from lack or insufficient attention, care and support services by healthcare professionals.

Methods − This study applied a mixed-method approach that combined qualitative and quantitative techniques. For qualitative analysis, Tesch's eight-step method was used to summarise responses into themes and sub-themes while for the quantitative analysis, descriptive statistics and Chi-square tests for association were used. Tesch's method is limited in that the steps are predefined and hence, it leaves the researcher with insufficient room for innovation and creativity.

6.6 Recommendations based on research findings

The coping status of mothers should be assessed during the admission of the child. Health professionals must be trained in customer care. Some of the experiences that

mothers revealed pointed to the urgent need for customer care programmes for educating health professionals. These programmes are key to ensuring that health professionals are equipped with the right knowledge regarding their position and roles in the healthcare delivery system. For instance, the child and mother are customers while health professionals are service providers. This will teach health professionals how they should treat children and their mothers. This realisation will enable health professionals to stay focused on achieving the ultimate aim as healthcare providers towards the mothers of sick children, that is, children receive proper health care and to stabilise and assist mothers to cope through the provision of maximal attention, care and support of healthcare beneficiaries.

In the paediatric unit, health professionals attend to both the mother and the child. Therefore, the government must ensure that the health professionals to patient ratio is optimised to minimise the stress levels of healthcare professionals that end up affecting mothers. Excessive workloads play a role in determining stress levels endured by health professionals, especially nurses which leads them to pass on their work fatigue to the mothers whom they are supposed to help. Hence, it is recommended that the government must continuously assess health professionals to patients ratios and immediately attend to issues that may compromise the efficient delivery of healthcare services.

Communication is important as poor communication causes more frustration, disappointment and stress among affected mothers. Health professionals must always be encouraged to communicate effectively with mothers even when they are not in any position to properly assist them. Mothers need to be provided with information on the progress of the child and this can only happen if they receive information through a language medium that they understand. This enables mothers to follow and appreciate the recovery of their children. Hence, health professionals ought to be encouraged to always use a language that mothers understand.

Mothers must be viewed as customers whose stay in the hospital is important for the speedy recovery of the child and to assist with the child's health care provision. Health professionals need to appreciate that mothers find themselves in hospitals because of

the circumstances that befall their children otherwise they would be attending to the demands of their personal lives at home. Consequently, health professionals should not present attitudinal problems to mothers who will be trying to find sympathy and comfort through social media. It is therefore recommended that health professionals should always communicate with mothers and both parties should agree to avoid the use of cellphones until routine hospital examinations are done to avoid chances of offending one another. Mothers use their cell phones to relieve stress because health professionals are not available to comfort them. In other words, cooperation must be increased between mothers and health professionals to ensure an enjoyable hospital stay that reduces stress and frustration levels among mothers during child sickness.

The language barrier has been singled out as an issue of utmost importance in that it hinders effective communication between health professionals and mothers. This issue may sound easy to resolve because it may be convenient to transfer the burden of learning to the professionals per the conventional wisdom: “the customer is always right”. However, the solution is not that straightforward as health personnel is professionals who are in high demand. Consequently, the researcher recommends that hospitals must look for answers from the world of information technology to resolve language barrier issues. Hospitals should consider using language translation systems to ease the burden imposed on mothers due to ineffective communication resulting from a lack of multilingual skills by health professionals.

It is recommended that health professionals update mothers on the progress of the child at all times. Mothers should be informed of all information that concerns their children.

6.7 Suggested areas for future research

Based on the findings of this study, the researcher identified the following areas to be ripe for future research:

- The current study considered data that was collected through the use of in-depth interviews and questionnaires. An opportunity exists for future researchers to consider replicating the same study while adding focus group discussions as an

alternative way of gathering rich survey data on mothers' experiences in hospitals during child sickness. The focus groups may seek the participation of both mothers and health professionals.

- Quantitative studies are also recommended for quantifying emotions, experiences, and barriers to healthcare service provision to mothers. A very good approach would involve first identifying some of the possible outcomes of experiences during child sickness and then relating it with quantifiable healthcare professionals' conduct-related explanatory variables.
- Multi-disciplinary research is also suggested owing to the multifaceted nature of the problems that mothers are faced with during child sickness. Customer service and administrative experts, social scientists and health scientists must collaborate to ensure that the experiences that mothers encounter during child sickness are addressed using collective action approaches. For instance, customer care experts can bring vast contributions from the customer perspective while social scientists may bring knowledge on mental issues which contribute to crafting more robust solutions.

6.8 Conclusion

This work contributes directly to the attainment of SDG 4 which is aimed at ensuring healthy lives and promoting well-being for all ages. Ascertaining the experiences of mothers with health professionals is an important ingredient to creating a strategy for encouraging hospitals to maximise "good" while minimising "bad" experiences. In this study, a framework that summarises the interaction between children, mothers and health professionals has been proposed. Areas that hospitals need to critically manage if they are to achieve optimal health outcomes on the challenges faced by mothers with child sickness have been outlined. In particular, the afro-centric view of this study on Neuman's systems theory, in which the limited availability of resources in Africa as a whole is highlighted, adds another dimension to the initial definition of wholism as first propounded by Neuman. Consequently, the researcher proposes that healthcare delivery should be seen as a system consisting of a triad interaction of the patient, the health professionals and the health infrastructure.

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ANNEXURE A: ETHICAL CLEARANCE CERTIFICATE

RESEARCH AND INNOVATION
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:
Mrs RN Mundalamo

Student No:
11638749

PROJECT TITLE: **Coping strategies for mothers during child sickness in hospitals of Limpopo Province, South Africa.**

PROJECT NO: **SHS/19/PDC/01/2802**

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr NJ Ramaliyela	University of Venda	Promoter
Dr TR Tshifhumo	University of Venda	Co - Promotor
Mrs RN Mundalamo	University of Venda	Investigator – Student

ISSUED BY:
UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE

Date Considered: March 2019
Decision by Ethical Clearance Committee Granted
Signature of Chairperson of the Committee: .....
Name of the Chairperson of the Committee: Senior Prof. G.E. Ekosse

UNIVERSITY OF VENDA
DIRECTOR
RESEARCH AND INNOVATION
2019-03- 12
Private Bag X5050
Thohoyandou 0950

University of Venda
PRIVATE BAG X5050, THOHOYANDOU, 0950 LIMPOPO PROVINCE SOUTH AFRICA
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"A quality driven financially sustainable, rural-based Comprehensive University"

ANNEXURE B: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM THE UNIVERSITY OF VENDA

UNIVERSITY OF VENDA

OFFICE OF THE DEPUTY VICE-CHANCELLOR: ACADEMIC

TO : MR/MS R N MUNDALAMO

SCHOOL OF HEALTH SCIENCES

FROM: SENIOR PROF L B KHOZA

ACTING DEPUTY VICE-CHANCELLOR ACADEMIC

DATE : 27 NOVEMBER 2018

DECISIONS TAKEN BY UHDC OF 27TH NOVEMBER 2018

Application for approval of Thesis research proposal in Health Sciences: **R.N Mundalamo [11538749]**

Topic: "Coping Strategies for Mothers during Child Sickness in Hospital of Limpopo Province, South Africa."

Promoter	UNIVEN	Dr. N.J Ramakuela
Co-promoter	UNIVEN	Dr. T.R Luhalima

UHDC approved Thesis proposal

SENIOR PROF L.B KHOZA
ACTING DEPUTY VICE-CHANCELLOR: ACADEMIC

ANNEXURE C: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM THE DEPARTMENT OF HEALTH LIMPOPO PROVINCE

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

I am requesting permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore, the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw

from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N (Student number: 11638749).

ANNEXURE D: PERMISSION TO CONDUCT RESEARCH FROM THE DEPARTMENT OF HEALTH LIMPOPO PROVINCE

LIMPOPO
PROVINCIAL GOVERNMENT

Ref: LP_201903_016
Enquiries: Mandiwa SS
Tel: 015 293 6051
Email: research.limdoh@gmail.com

MUNDALAMO RN
University of Venda
Private Bag x 5050
Thohoyandou
0950

Greetings,

RE: COPING STRATEGIES FOR MOTHERS DURING SICKNESS IN HOSPITALS OF LIMPOPO PROVINCE SOUTH AFRICA

Permission to conduct the above mentioned study is hereby granted.

1. Kindly be informed that:-
   - Research must be loaded on the NHRD site (http://nhrd.hst.org.za) by the researcher.
   - Further arrangement should be made with the targeted institutions, after consultation with the District Executive Manager.
   - In the course of your study there should be no action that disrupts the services or incur any cost to the Department.
   - After completion of the study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
   - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   - The above approval is valid for a 1 year period.
   - If the proposal has been amended, a new approval should be sought from the Department of Health
   - Kindly note, that the Department can withdraw this approval at any time.

Your cooperation will be highly appreciated.

Head of Department

Date

Private Bag X9302 Polokwane
Fidel Castro Ruz House, 18 Hospital Street, Polokwane 0700. Tel: 015 293 6000/12, Fax: 015 293 6211.

ANNEXURE E: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM VHEMBE DISTRICT

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

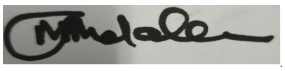
I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749).

ANNEXURE F: PERMISSION TO CONDUCT RESEARCH FROM VHEMBE DISTRICT

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OFHEALTH
VHEMBE DISTRICT

Ref: 85/6
Enq: Muvari MME
Date: 13May 2019

Dear Sir/ Madam :Mundalamo R.N

PERMISSION TO CONDUCT RESEARCH IN: Coping strategies for mothers during sickness of the child in the hospitals of Limpopo

1. The above mutter bears reference
2. Your letter received on the 13/05/2019requesting for permission to conduct research in our facilities is hereby acknowledged
3. The District has no objection to your request.
4. Permission is therefore granted for the request to be conducted within Vhembe District.
5. You are however advised to make the necessary arrangements with the facilities concerned.
6. Wishing you success in your research in the Vhembe health facilities.

DISTRICT CHIEF DIRECTOR DATE

Private Bag X5009 THOHOYANDOU 0950
OLD pol lamentary Building Tel (015) 962 1000 (Health) (015) 962 4058 (Social Dev) Fax (015) 962 2274/4623
Old Parliamentary Building Tel: (015) 962 1848, (015) 962 1852, (015) 962 1861, (015) 962 1001/2/3/4/5/6 Fax (015) 962 2378, (015) 962 229

The heartland of Southern Africa – development is about people

ANNEXURE G: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM CAPRICORN DISTRICT

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

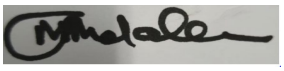
The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from

the study at any time without being threatened. Confidentiality will be maintained throughout the study.

I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE H: PERMISSION TO CONDUCT RESEARCH FROM CAPRICORN DISTRICT

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH –CAPRICORN DISTRICT

REF: 8/3/3

ENQ: Tleane M.M

Contact: 015 290 9268 /076 557 1647

Date: 21-05-2019

TO: Capricorn District Hospitals (CEO's)

SUBJECT: PERMISSION TO CONDUCT RESEARCH AT DISTRICT HOSPITALS- MUNDALAMO R.N

The basis of this communiqué serves as permission from the District Executive Manager to allow Ms. Mundalamo R.N to conduct research study in Pediatric Unit in our District Hospitals. She is studying with the University of Venda and as prerequisite for the completion of her studies of Doctors of Nursing, an opportunity to effect the research must be granted by Health institutions to effect the requirement. It is for this reason that based on our internal processes she be provided with necessary support by our Institutions.

The topic of the research is "coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa."

The office of the Chief Executive Manager (CEO) should serve as the functional and Support Centre where the processes of the research study must be guided on the basis of interacting with our patients and or personnel. It should further be noted that the study should be conducted to patients who will be voluntarily be prepared to accept the interaction, and confidentiality must be maintained at all times.

Most regards

Letshokgohla M.F

DISTRICT EXECUTIVE MANAGER

ANNEXURE I: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM LOUIS TRICHART HOSPITAL

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

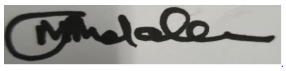
I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

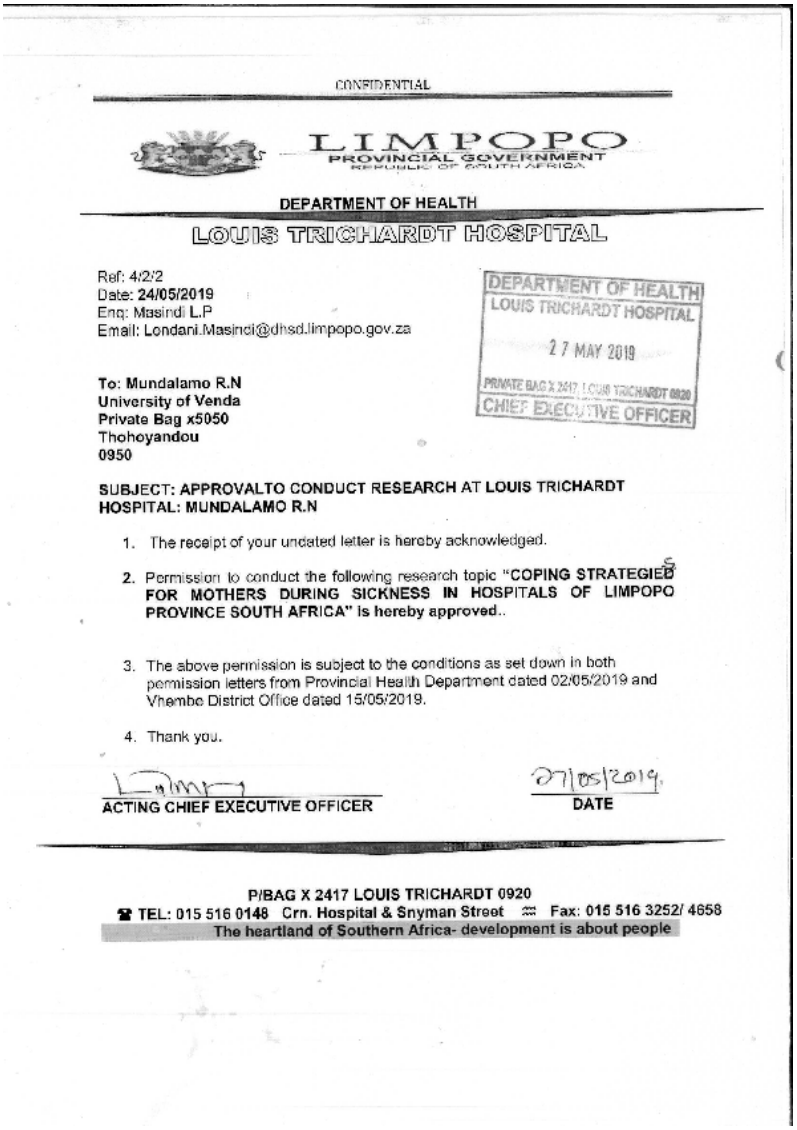
I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE J: PERMISSION TO CONDUCT RESEARCH FROM LOUIS TRICHADT HOSPITAL



CONFIDENTIAL

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

LOUIS TRICHARDT HOSPITAL

Ref: 4/2/2
Date: 24/05/2019
Enq: Masindi L.P
Email: Londani.Masindi@dhsd.limpopo.gov.za

DEPARTMENT OF HEALTH
LOUIS TRICHARDT HOSPITAL
27 MAY 2019
PRIVATE BAG X 2417, LOUIS TRICHARDT 0920
CHIEF EXECUTIVE OFFICER

To: Mundalamo R.N
University of Venda
Private Bag x5050
Thohoyandou
0950

SUBJECT: APPROVALTO CONDUCT RESEARCH AT LOUIS TRICHARDT HOSPITAL: MUNDALAMO R.N

1. The receipt of your undated letter is hereby acknowledged.
2. Permission to conduct the following research topic "COPING STRATEGIES FOR MOTHERS DURING SICKNESS IN HOSPITALS OF LIMPOPO PROVINCE SOUTH AFRICA" is hereby approved..
3. The above permission is subject to the conditions as set down in both permission letters from Provincial Health Department dated 02/05/2019 and Vhembe District Office dated 15/05/2019.
4. Thank you.

ACTING CHIEF EXECUTIVE OFFICER

27/05/2019
DATE

P/BAG X 2417 LOUIS TRICHARDT 0920
☎ TEL: 015 516 0148 Crn. Hospital & Snyman Street Fax: 015 516 3252/ 4658
The heartland of Southern Africa- development is about people

ANNEXURE K: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM TSHILIDZINI HOSPITAL

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

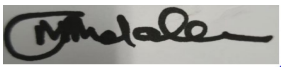
The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from

the study at any time without being threatened. Confidentiality will be maintained throughout the study.

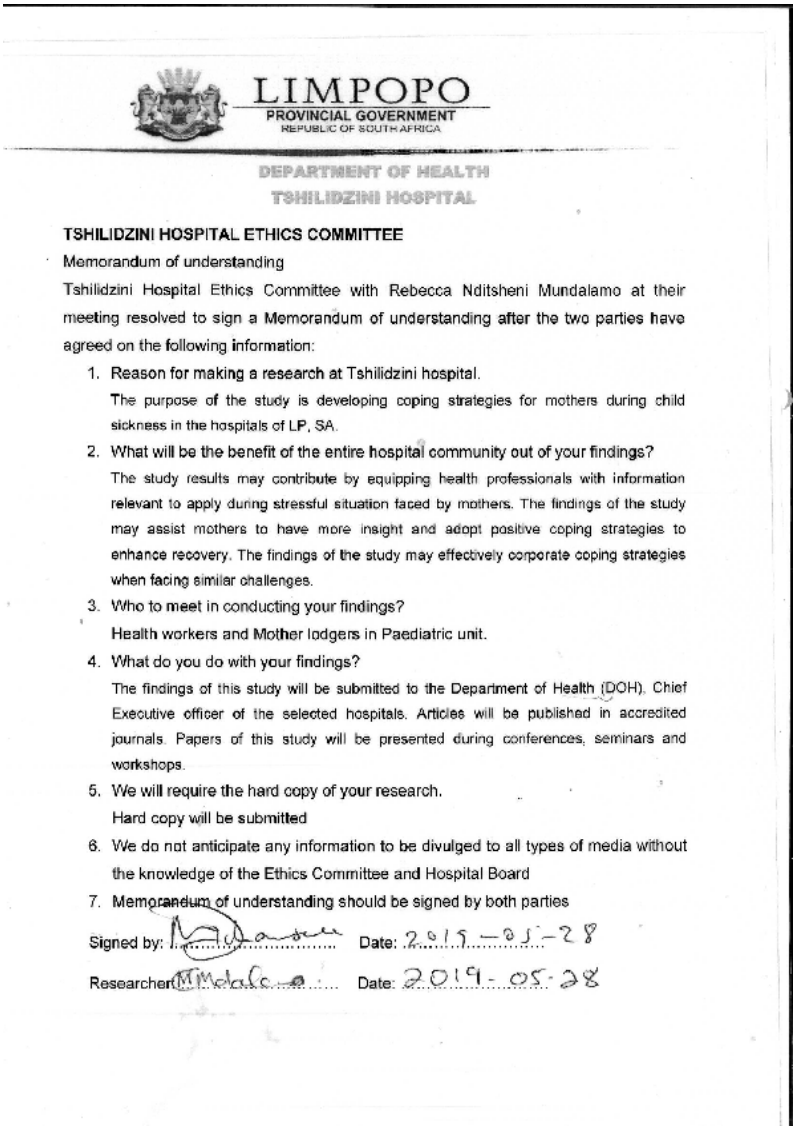
I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE L: PERMISSION TO CONDUCT RESEARCH FROM TSHILIDZI HOSPITAL



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
TSHILIDZINI HOSPITAL

TSHILIDZINI HOSPITAL ETHICS COMMITTEE

Memorandum of understanding

Tshilidzini Hospital Ethics Committee with Rebecca Nditsheni Mundalamo at their meeting resolved to sign a Memorandum of understanding after the two parties have agreed on the following information:

1. Reason for making a research at Tshilidzini hospital.
   The purpose of the study is developing coping strategies for mothers during child sickness in the hospitals of LP, SA.
2. What will be the benefit of the entire hospital community out of your findings?
   The study results may contribute by equipping health professionals with information relevant to apply during stressful situation faced by mothers. The findings of the study may assist mothers to have more insight and adopt positive coping strategies to enhance recovery. The findings of the study may effectively corporate coping strategies when facing similar challenges.
3. Who to meet in conducting your findings?
   Health workers and Mother lodgers in Paediatric unit.
4. What do you do with your findings?
   The findings of this study will be submitted to the Department of Health (DOH), Chief Executive officer of the selected hospitals. Articles will be published in accredited journals. Papers of this study will be presented during conferences, seminars and workshops.
5. We will require the hard copy of your research.
   Hard copy will be submitted
6. We do not anticipate any information to be divulged to all types of media without the knowledge of the Ethics Committee and Hospital Board
7. Memorandum of understanding should be signed by both parties

Signed by: ..... Date: 2019-05-28

Researcher: ..... Date: 2019-05-28

ANNEXURE M: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM DONALD FRASER HOSPITAL

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

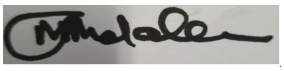
I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

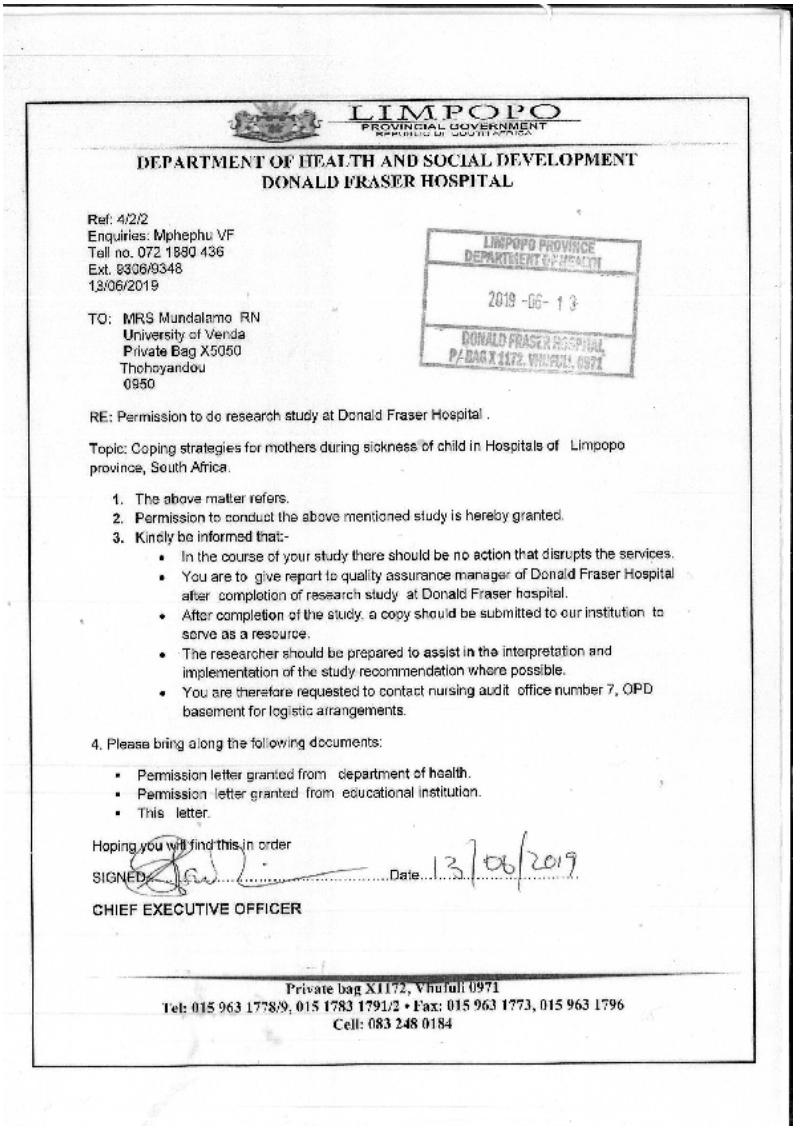
I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE N: PERMISSION TO CONDUCT RESEARCH FROM DONALD FRASER HOSPITAL



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH AND SOCIAL DEVELOPMENT
DONALD FRASER HOSPITAL

Ref: 4/2/2
Enquiries: Mphephu VF
Tell no. 072 1880 436
Ext. 9306/9348
13/06/2019

LIMPOPO PROVINCE
DEPARTMENT OF HEALTH
2019 -06- 13
DONALD FRASER HOSPITAL
P/BAG X 1172, VHUFULI, 0971

TO: MRS Mundalamo RN
University of Venda
Private Bag X5050
Thohoyandou
0950

RE: Permission to do research study at Donald Fraser Hospital .

Topic: Coping strategies for mothers during sickness of child in Hospitals of Limpopo province, South Africa.

1. The above matter refers.
2. Permission to conduct the above mentioned study is hereby granted.
3. Kindly be informed that:-
   - In the course of your study there should be no action that disrupts the services.
   - You are to give report to quality assurance manager of Donald Fraser Hospital after completion of research study at Donald Fraser hospital.
   - After completion of the study, a copy should be submitted to our institution to serve as a resource.
   - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   - You are therefore requested to contact nursing audit office number 7, OPD basement for logistic arrangements.

4. Please bring along the following documents:
   - Permission letter granted from department of health.
   - Permission letter granted from educational institution.
   - This letter.

Hoping you will find this in order

SIGNED..... Date..13/06/2019

CHIEF EXECUTIVE OFFICER

Private bag X1172, Vhufuli 0971
Tel: 015 963 1778/9, 015 1783 1791/2 • Fax: 015 963 1773, 015 963 1796
Cell: 083 248 0184

ANNEXURE O: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM SILOAM HOSPITAL

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

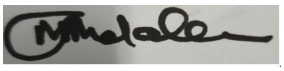
I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

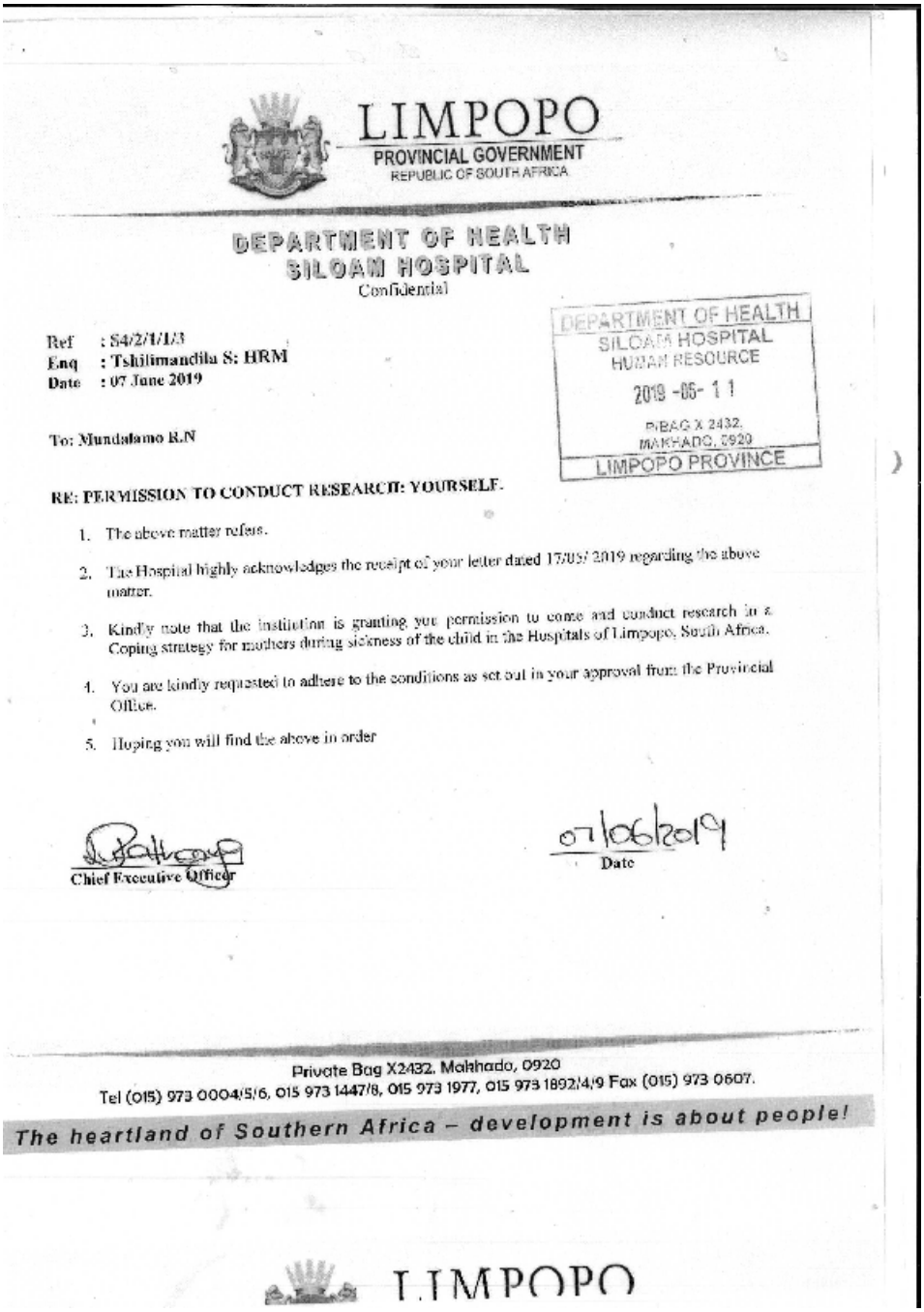
I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE P: PERMISSION TO CONDUCT RESEARCH FROM SILOAM HOSPITAL



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
SILOAM HOSPITAL
Confidential

DEPARTMENT OF HEALTH
SILOAM HOSPITAL
HUMAN RESOURCE
2019 -06- 11
P/BAG X 2432,
MAKHADO, 0920
LIMPOPO PROVINCE

Ref : 84/2/1/1/3
Enq : Tshilimanclila S: HRM
Date : 07 June 2019

To: Mundalamo R.N

RE: PERMISSION TO CONDUCT RESEARCH: YOURSELF.

1. The above matter refers.
2. The Hospital highly acknowledges the receipt of your letter dated 17/05/ 2019 regarding the above matter.
3. Kindly note that the institution is granting you permission to come and conduct research in a Coping strategy for mothers during sickness of the child in the Hospitals of Limpopo, South Africa.
4. You are kindly requested to adhere to the conditions as set out in your approval from the Provincial Office.
5. Hoping you will find the above in order

Chief Executive Officer

07/06/2019
Date

Private Bag X2432, Makhado, 0920
Tel (015) 973 0004/5/6, 015 973 1447/8, 015 973 1977, 015 973 1892/4/9 Fax (015) 973 0607.
The heartland of Southern Africa – development is about people!

LIMPOPO

ANNEXURE Q: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM MALAMULELE HOSPITAL

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

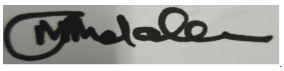
I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

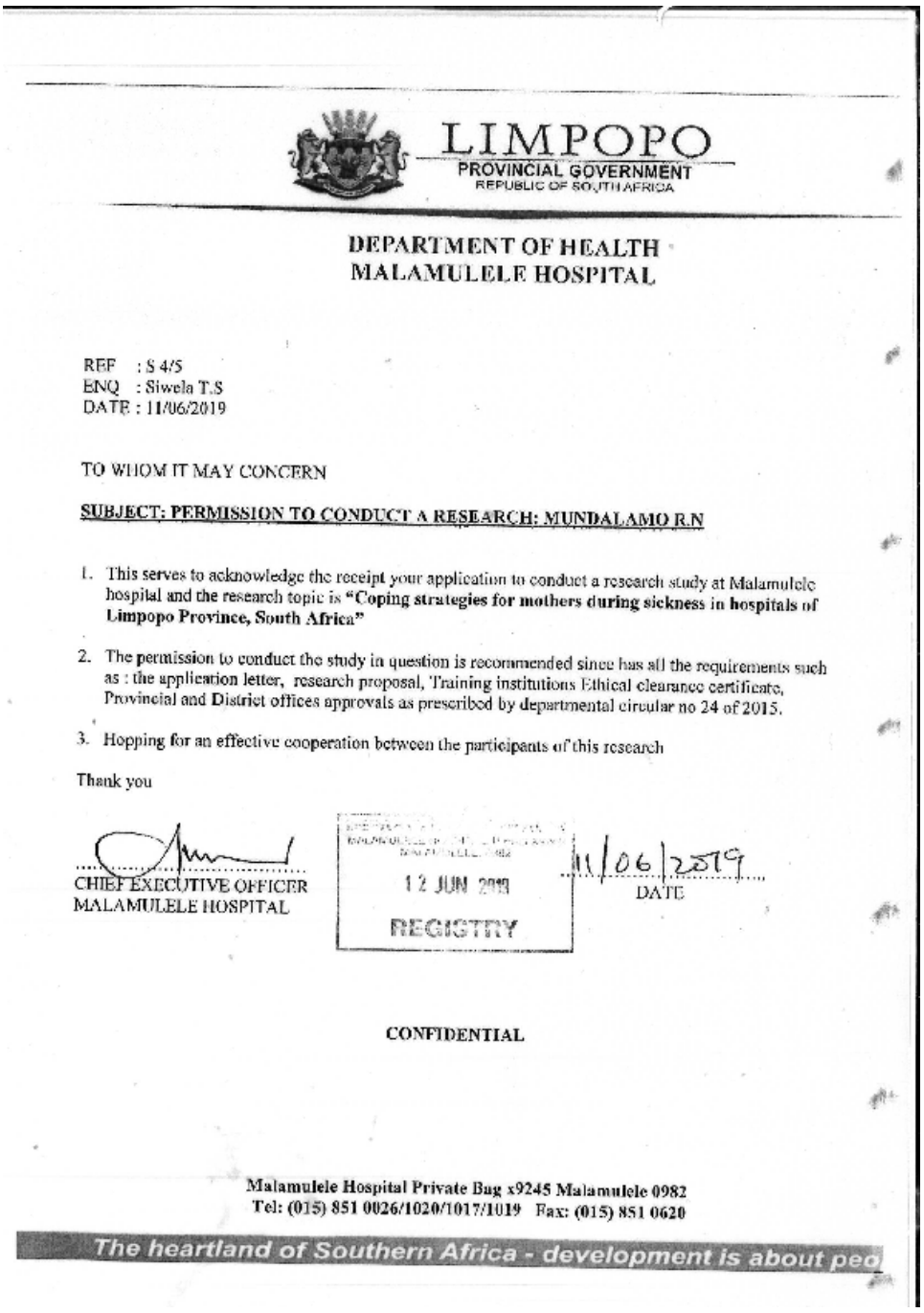
I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE R:PERMISSION TO CONDUCT RESEARCH FROM MALAMULELE HOSPITAL



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
MALAMULELE HOSPITAL

REF : S 4/5
ENQ : Siwela T.S
DATE : 11/06/2019

TO WHOM IT MAY CONCERN

SUBJECT: PERMISSION TO CONDUCT A RESEARCH: MUNDALAMO R.N

1. This serves to acknowledge the receipt your application to conduct a research study at Malamulele hospital and the research topic is **"Coping strategies for mothers during sickness in hospitals of Limpopo Province, South Africa"**
2. The permission to conduct the study in question is recommended since has all the requirements such as : the application letter, research proposal, Training institutions Ethical clearance certificate, Provincial and District offices approvals as prescribed by departmental circular no 24 of 2015.
3. Hopping for an effective cooperation between the participants of this research

Thank you

CHIEF EXECUTIVE OFFICER
MALAMULELE HOSPITAL

12 JUN 2019
REGISTRY

11/06/2019
DATE

CONFIDENTIAL

Malamulele Hospital Private Bag x9245 Malamulele 0982
Tel: (015) 851 0026/1020/1017/1019 Fax: (015) 851 0620

The heartland of Southern Africa - development is about peo

ANNEXURE S: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM ELIM HOSPITAL

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

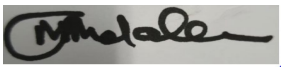
I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore, the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

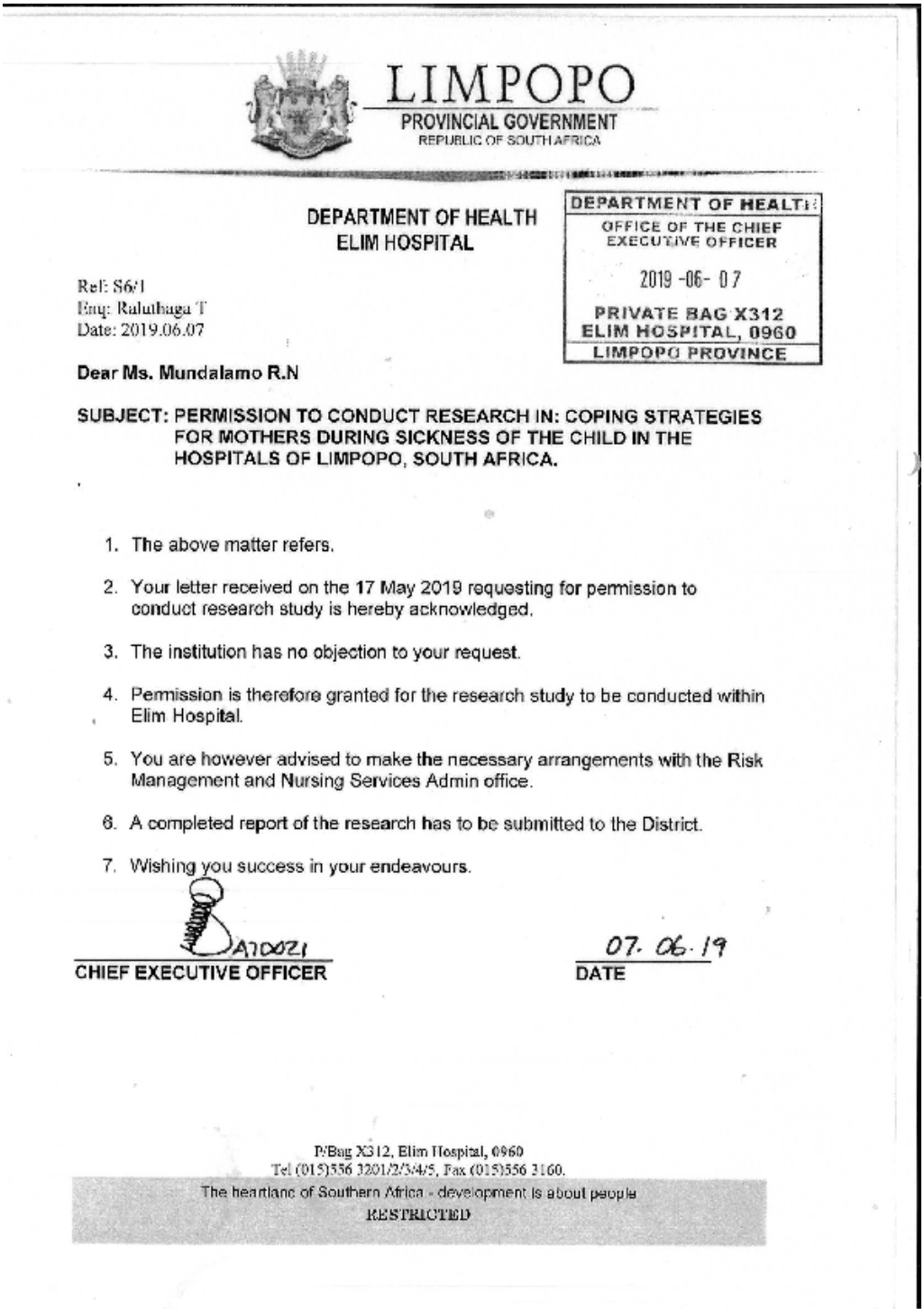
I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE T: PERMISSION TO CONDUCT RESEARCH FROM ELIM HOSPITAL



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
ELIM HOSPITAL

DEPARTMENT OF HEALTH
OFFICE OF THE CHIEF EXECUTIVE OFFICER
2019 -06- 07
PRIVATE BAG X312
ELIM HOSPITAL, 0960
LIMPOPO PROVINCE

Ref: S6/1
Enq: Ralulhaga T
Date: 2019.06.07

Dear Ms. Mundalamo R.N

SUBJECT: PERMISSION TO CONDUCT RESEARCH IN: COPING STRATEGIES FOR MOTHERS DURING SICKNESS OF THE CHILD IN THE HOSPITALS OF LIMPOPO, SOUTH AFRICA.

1. The above matter refers.
2. Your letter received on the 17 May 2019 requesting for permission to conduct research study is hereby acknowledged.
3. The institution has no objection to your request.
4. Permission is therefore granted for the research study to be conducted within Elim Hospital.
5. You are however advised to make the necessary arrangements with the Risk Management and Nursing Services Admin office.
6. A completed report of the research has to be submitted to the District.
7. Wishing you success in your endeavours.

A70021
CHIEF EXECUTIVE OFFICER

07. 06. 19
DATE

P/Bag X312, Elim Hospital, 0960
Tel (015)556 3201/2/3/4/5, Fax (015)556 3160.
The heartland of Southern Africa - development is about people
RESTRICTED

ANNEXURE U: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM MANKWENG HOSPITAL

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

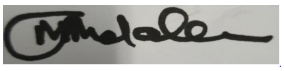
I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore, the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

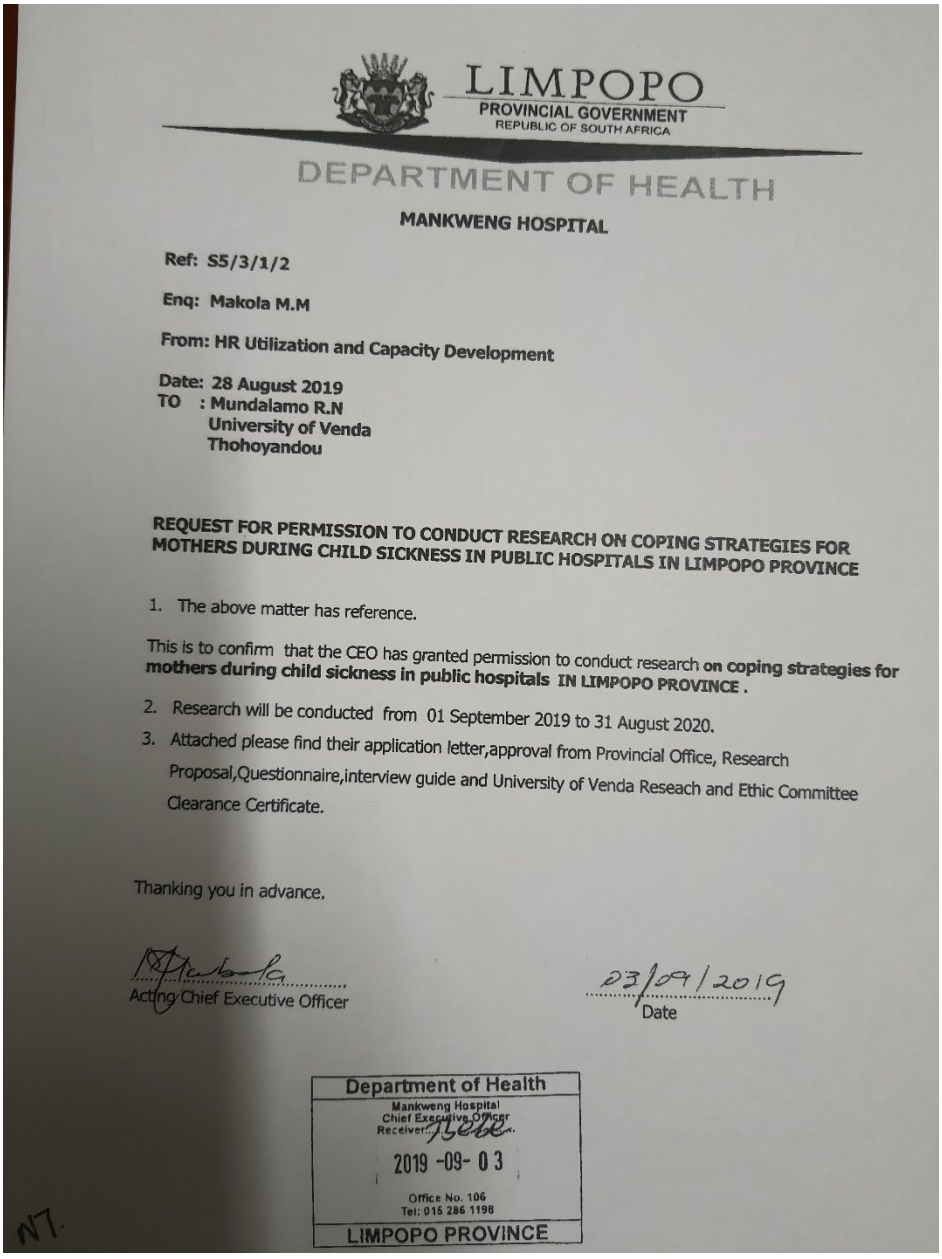
I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE V: PERMISSION TO CONDUCT RESEARCH FROM MANKWENG HOSPITAL



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

MANKWENG HOSPITAL

Ref: S5/3/1/2

Enq: Makola M.M

From: HR Utilization and Capacity Development

Date: 28 August 2019
TO : Mundalamo R.N
University of Venda
Thohoyandou

REQUEST FOR PERMISSION TO CONDUCT RESEARCH ON COPING STRATEGIES FOR MOTHERS DURING CHILD SICKNESS IN PUBLIC HOSPITALS IN LIMPOPO PROVINCE

1. The above matter has reference.

This is to confirm that the CEO has granted permission to conduct research **on coping strategies for mothers during child sickness in public hospitals IN LIMPOPO PROVINCE .**

2. Research will be conducted from 01 September 2019 to 31 August 2020.
3. Attached please find their application letter,approval from Provincial Office, Research Proposal,Questionnaire,interview guide and University of Venda Reseach and Ethic Committee Clearance Certificate.

Thanking you in advance.

Acting Chief Executive Officer

23/09/2019
Date

Department of Health
Mankweng Hospital
Chief Executive Officer
Receiver:
2019 -09- 03
Office No. 106
Tel: 015 286 1198
LIMPOPO PROVINCE

ANNEXURE W: REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM LEBOWAKGOMO HOSPITAL

P.O Box 821

Thohoyandou

0950

Enquiries: Mundalamo R.N

Cell number: 082 741 6553

The Chief Executive Officer (CEO)

Name of the hospital

_____

_____

Dear sir/ Madam

Request for permission to conduct a research study

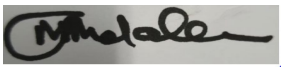
I am requesting the permission to conduct a research study in the Paediatric unit of your hospital. The study is conducted to fulfill the requirements of Doctor of Nursing with the University of Venda in the School of Health Sciences.

The topic of my research study is “Coping strategies for mothers during sickness of the child in the hospitals of Limpopo Province, South Africa”.

The research findings may assist in improving care of the mothers during hospitalization and after death of the child. Furthermore, the study will be conducted to participants who will be voluntarily willing to give consent. Participants will be allowed to withdraw from the study at any time without being threatened. Confidentiality will be maintained throughout the study.

I will be glad if my application is taken into consideration.

Yours faithfully

Mundalamo R.N 

(Student number: 11638749)

ANNEXURE X: PERMISSION TO CONDUCT RESEARCH FROM LEBOWAKGOMO HOSPITAL

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA
DEPARTMENT OF HEALTH

Private Bag X 14
Chuenespoort
0745

Tel.: 015 633 1800
Fax: 015 632 6711

LEBOWAKGOMO HOSPITAL

RESEARCH, ETHICS AND ADVERSE EVENTS COMMITTEE

Enquiries: Ms Tladi K.M
Tel: 015 633 1800 Ext 4317
Date: 20/09/2019

To: Ms Mundalamo Rebecca Nditsheni

RE: Coping Strategies for Mothers during Child Sickness in Hospitals of Limpopo Province, South Africa.

The above matter refers,

1. Permission to conduct the above mentioned study is hereby granted.
2. Kindly be informed that:-
   - In the course of your study there should be no action that disrupts the services or incur any cost on the department.
   - After completion of the study it is mandatory that the findings should be submitted to the institution to serve as a resource.
   - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   - The above approval is valid for a 3 year period.
   - If the proposal has been changed, a new approval should be sought from the institution
   - Kindly note, that the institution can withdraw the approval at any time.
   - Please inform us of your presence in the institution when you start with you research.

Dr Tladi M.C
Chairperson

20/9/2019
Date

Dr L.M. Ramokgopa
Acting CEO
Lebowakgomo Hospital
23 SEP 2019
Signature

Acting CEO

Date

1

ANNEXURE Y: LETTER OF INFORMATION

Developing Coping Strategy for Mothers during Child Sickness and Death in Hospitals of Limpopo Province, South Africa

Principal Investigator/s/ researcher : Mundalamo R.N

Co-Investigator/s/supervisor/s : Doctor N.J Ramakuela, Doctor T.R Luhalima

Introduction

Sickness is an event that occurs to everyone irrespective of age, colour, creed, religion or culture and how individuals respond differ. It becomes more devastating if it occurs to a child. It seems mothers have challenges to cope during sickness of a child (Sands, 2013:7). Sickness might be anticipated or unanticipated. It seems no one expect sickness to occur within the family members, especially to children. Mothers become deeply affected, devastated, frustrated, stressed and hopeless during the period child sickness. Therefore mothers need to cope with both physical limitations and psychological effects during child sickness (Davis, Bailey, Heatman, John, Price and Rolfe, 2015: 2).

Purpose of the Study:

The purpose of the study is developing coping strategies for mothers during child sickness in the hospitals of LP, SA.

Outline of the Procedures

All participants will be expected to sign a consent form before interview commence. A special place will be arranged by the researcher prior the interview session. The place where the interview will be conducted will be free of interruptions. The environment will be conducive for both the researcher and participants. The environment will be free from any threats or harm. All interview sessions will be held after necessary arrangements have been made with participants. Participants who are in the unit, face

to face arrangements will be made. Participants will relax and have more time to explain experiences, views and opinions. Participants' experiences and opinions will be respected. Data collection will be conducted in English, Xitsonga, Sepedi and Tshivenda. Mothers who will be comfortable to express themselves in English will be allowed to do so. Audio tape will be used during interview and participants will be made aware that audio tape is used. The researcher will transcribe data verbatim from the audio tape. The researcher will also take field notes. Facial expression and any other behaviors observed which cannot be recorded by audio tape will be written down by the researcher. Data will be collected by the researcher for two to three months.

Risks or Discomforts to the Participant:

Participants may be emotionally affected as the study may remind the participants of stressful experience. No any other harm

Benefits

Participants may be able to cope during child sickness and other stressful experience.

Reason/s why the Participant May Be Withdrawn from the Study:

Participants voluntarily choose to participate to the study, and are also allowed to withdraw from continuing with the study without threats or penalties. Participants are also allowed to withhold information that they don't want to disclose.

Remuneration:

None

Costs of the Study

Participants will not be expected to cover any costs towards the study.

Confidentiality

Confidentiality will be maintained at all times. Participants will be reassured on their privacy and that no information will be shared without participants' knowledge.

Research-related Injury

If participants may be emotionally affected during the study process, the researcher is a psychiatric nurse who will be able to do counseling.

In the event of any problems or queries contact the researcher on 082 741 6553 or the University Research Ethics Committee Secretariat on 015 962 9058. Complaints can be reported to the Director: Research and Innovation, Prof GE Ekosse on 015 962 8313 or Georges Ivo.Ekosse@univen.ac.za

ANNEXURE Z: CONSENT

Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, Rebecca Nditsheni Mundalamo, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: ……

- I have also received, read and understood the above written information (*Participant Letter of Information*) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant Date Time Signature

I, …… …… ……
……..

Rebecca Nditsheni Mundalamo herewith confirms that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher

…… Date……

Signature……

Full Name of Witness (If applicable)

…… Date ……

Signature……..

Full Name of Legal Guardian (If applicable)

…… Date……

Signature……

ANNEXURE AA: INTERVIEW GUIDE

SECTION A: DEMOGRAPHIC DATA

1.1 Name of the institution: ……

1.2 Where do you stay: ……. ……

1.3 Age of the child: ……..….

1.4 Sex: ……..…….

1.5 Age of the mother: ……

1.6 Date of admission: ……..……..……

1.7 What is the child's diagnosis? ……

1.8 Marital Status:

1. Married	2. Unmarried	3. Divorced	4. Widow

1.9 Educational level:

1. Primary	2. Secondary	3. Tertiary

1.10 Employment Status:

1. Employed	2. Unemployed

1.11 Duration of sickness:

1. < 24 hours	1- 7 days	8- 15 days	> 1 month

SECTION B: EFFECTS OF CHILD SICKNESS TO THE MOTHER

2.1 Can you tell me your experiences during child sickness?

2.2 Was the current admission your first experience?

2.2.1 How did you cope during the last experience?

2.3 How did the child sickness affect you as the mother?

SECTION C: COPING STRATEGIES FOR MOTHERS DURING CHILD SICKNESS

2.4 What did you do to make your situation better?

2.5 How are you coping with this experience?

2.6 How did the staff assist you to cope during child sickness in the hospital?

2.7 Can you tell me coping strategies that assisted you the most during child sickness in the hospital?

2.8 How was staff/patient/ mother relationship?

2.9 How did the staff relationship affect you?

2.10 What do think can be done to make a difference or what do you think can improve the situation?

2.11 How did your child sickness affect your physical, psychological, social and financial wellbeing?

2.12 What was the support offered during sickness of the child in the hospital?

2.13 Where you referred to the Psychologist, Social work or Psychiatrist?

2.14. How often did the staff talk about the child's sickness?

2.15 How satisfied where you with the information given to you about your child sickness?

ANNEXURE BB: QUESTIONNAIRE

SECTION A:

1. DEMOGRAPHIC DATA

1.1 Institution: ……

1.2 Ward: ……..

1.3 Occupation:

Nurse	Doctor	Social work	Psychologist

1.4 If you are a nurse, are you:

RPN	RSN	RAN

1.5 Duration of service:

1- 5 years	6- 10 years	11- 15 years	More than 15 years

SECTION B:

2. EXPERIENCE OF MOTHERS DURING CHILD SICKNESS

State the extent of which you agree with the given sentences using Likert scale by putting a tick to your most answer

No	Questions	Agree	Strongly Agree	Disagree	Strongly Disagree
1.	Child sickness affects mothers physically.				
2.	Child sickness affects mothers psychologically.				
3.	Child sickness affects mothers socially.				
4.	Child sickness affects mothers financially.				
5.	During child sickness mothers are referred for counseling by social work				
6.	During child sickness mothers are referred to Psychologist				
No	**Questions**	**Agree**	**Strongly Agree**	**Disagree**	**Strongly Disagree**
8.	During child sickness mothers are referred to Psychiatrist				
9.	Counseling was done by nursing staff/ Doctor				
10	You have enough time to counsel the mother				
11.	Counseling received by mothers are sufficient				
12.	I am clear on what information to tell the mother during child sickness				
13.	When the child is sick mothers looks frustrated				
14	When the child is sick mothers looks				

	depressed				
15.	When the child is sick mothers looks angry				
16.	When the child is sick mothers looks hopeless				
17.	When the child is sick mothers looks lonely				
18.	There is a counseling room				
19.	Staff is enough so I can do counseling				
20.	I am trained to do counseling				

What do you think can be done to assist mothers to cope with child sickness in the hospital?

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What makes it difficult for you not to assist mothers during child sickness in the hospital?

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SECTION C:

3. **COPING STRATEGIES FOR MOTHERS DURING CHILD SICKNESS**

No	Questions	Agree	Strongly Agree	Disagree	Strongly Disagree
1.	What made mothers feel better during child sickness is support by staff				
2.	What made mothers feel better during child sickness is family support				
3.	What made mothers feel better during child sickness is church support				
4.	What made mothers feel better during child sickness is support by friends				
5.	During child sickness mothers felt better when talking about the child sickness				
6.	During child sickness mothers felt better when they do not talk about the child				
7.	During child sickness mothers felt better when avoiding to talk about the child				
8.	During child sickness mothers felt better when do destructive behavior				
9.	During child sickness mothers felt better when they stay with the child				
10.	During child sickness mothers felt better when they are separated to the child				

11.	During child sickness mothers felt better when given information about the child				
12.	The staff frustrate mothers during child sickness				
13.	Mother feel better when needs are attended by the staff				

9. What can be done in the ward to make mothers cope during child sickness?

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Thank you for your participation.

ANNEXURE CC: LETTER OF INFORMATION

Developing Coping Strategy for Mothers during Child Sickness and Death in Hospitals of Limpopo Province, South Africa

Principal Investigator/s/ researcher : Mundalamo R.N

Co-Investigator/s/supervisor/s : Doctor N.J Ramakuela, Doctor T.R Luhalima

Introduction

Sickness is an event that occurs to everyone irrespective of age, colour, creed, religion or culture and how individuals respond differ. It becomes more devastating if it occurs to a child. It seems mothers have challenges to cope during sickness of a child (Sands, 2013:7). Sickness might be anticipated or unanticipated. It seems no one expect sickness to occur within the family members, especially to children. Mothers become deeply affected, devastated, frustrated, stressed and hopeless during the period child sickness. Therefore mothers need to cope with both physical limitations and psychological effects during child sickness (Davis, Bailey, Heatman, John, Price and Rolfe, 2015: 2).

Purpose of the Study:

The purpose of the study is developing coping strategies for mothers during child sickness in the hospitals of LP, SA.

Outline of the Procedures

All participants will be expected to sign a consent form before interview commence. A special place will be arranged by the researcher prior the interview session. The place where the interview will be conducted will be free of interruptions. The environment will be conducive for both the researcher and participants. The environment will be free from any threats or harm. All interview sessions will be held after necessary arrangements have been made with participants. Participants who are in the unit, face

to face arrangements will be made. Participants will relax and have more time to explain experiences, views and opinions. Participants' experiences and opinions will be respected. Data collection will be conducted in English, Xitsonga, Sepedi and Tshivenda. Mothers who will be comfortable to express themselves in English will be allowed to do so. Audio tape will be used during interview and participants will be made aware that audio tape is used. The researcher will transcribe data verbatim from the audio tape. The researcher will also take field notes. Facial expression and any other behaviors observed which cannot be recorded by audio tape will be written down by the researcher. Data will be collected by the researcher for two to three months.

Risks or Discomforts to the Participant:

Participants may be emotionally affected as the study may remind the participants of stressful experience. No any other harm

Benefits

Participants may be able to cope during child sickness and other stressful experience.

Reason/s why the Participant May Be Withdrawn from the Study:

Participants voluntarily choose to participate to the study, and are also allowed to withdraw from continuing with the study without threats or penalties. Participants are also allowed to withhold information that they don't want to disclose.

Remuneration:

None

Costs of the Study

Participants will not be expected to cover any costs towards the study.

Confidentiality

Confidentiality will be maintained at all times. Participants will be reassured on their privacy and that no information will be shared without participants' knowledge.

Research-related Injury

If participants may be emotionally affected during the study process, the researcher is a psychiatric nurse who will be able to do counseling. In the event of any problems or queries contact the researcher on 082 741 6553 or the University Research Ethics Committee Secretariat on 015 962 9058. Complaints can be reported to the Director: Research and Innovation, Prof GE Ekosse on 015 962 8313 or Georges Ivo.Ekosse@univen.ac.za

ANNEXURE DD: CONSENT

Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, Rebecca Nditsheni Mundalamo, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: ……

- I have also received, read and understood the above written information (*Participant Letter of Information*) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant Date Time Signature

I, …… …… ……
……..

Rebecca Nditsheni Mundalamo herewith confirms that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher
…….. Date**……**
Signature**……**

Full Name of Witness (If applicable)

…… Date ……

Signature……..

Full Name of Legal Guardian (If applicable)

…… Date……

Signature……

ANNEXURE EE: INTERVIEW GUIDE

SECTION A: DEMOGRAPHIC DATA

1.1 Name of the institution: ……

1.2 Where do you stay: ……. ……

1.3 Age of the child: ……..….

1.4 Sex: ……..…….

1.5 Age of the mother: ……

1.6 Date of admission: ……..……..……

1.7 What is the child's diagnosis? ……

1.8 Marital Status:

5. Married	6. Unmarried	7. Divorced	8. Widow

1.9 Educational level:

4. Primary	5. Secondary	6. Tertiary

1.10 Employment Status:

3. Employed	4. Unemployed

1.11 Duration of sickness:

1. < 24 hours	1- 7 days	8- 15 days	> 1 month

SECTION B: EFFECTS OF CHILD SICKNESS TO THE MOTHER

2.1 Can you tell me your experiences during child sickness?

2.2 Was the current admission your first experience?

2.2.1 How did you cope during the last experience?

2.3 How did the child sickness affect you as the mother?

SECTION C: COPING STRATEGIES FOR MOTHERS DURING CHILD SICKNESS

2.4 What did you do to make your situation better?

2.5 How are you coping with this experience?

2.6 How did the staff assist you to cope during child sickness in the hospital?

2.7 Can you tell me coping strategies that assisted you the most during child sickness in the hospital?

2.8 How was staff/patient/ mother relationship?

2.9 How did the staff relationship affect you?

2.10 What do think can be done to make a difference or what do you think can improve the situation?

2.11 How did your child sickness affect your physical, psychological, social and financial wellbeing?

2.12 What was the support offered during sickness of the child in the hospital?

2.13 Where you referred to the Psychologist, Social work or Psychiatrist?

2.14. How often did the staff talk about the child's sickness?

2.15 How satisfied where you with the information given to you about your child sickness?

ANNEXURE FF: QUESTIONNAIRE

SECTION A:

4. DEMOGRAPHIC DATA

1.1 Institution: ……

1.2 Ward: ……..

1.4 Occupation:

Nurse	Doctor	Social work	Psychologist

1.4 If you are a nurse, are you:

RPN	RSN	RAN

1.5 Duration of service:

1- 5 years	6- 10 years	11- 15 years	More than 15 years

SECTION B:

5. EXPERIENCE OF MOTHERS DURING CHILD SICKNESS

State the extent of which you agree with the given sentences using Likert scale by putting a tick to your most answer

No	Questions	Agree	Strongly Agree	Disagree	Strongly Disagree
1.	Child sickness affects mothers physically.				
2.	Child sickness affects mothers psychologically.				
3.	Child sickness affects mothers socially.				
4.	Child sickness affects mothers financially.				
5.	During child sickness mothers are referred for counseling by social work				
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No	**Questions**	**Agree**	**Strongly Agree**	**Disagree**	**Strongly Disagree**
8.	During child sickness mothers are referred to Psychiatrist				
9.	Counseling was done by nursing staff/ Doctor				
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13.	When the child is sick mothers looks frustrated				

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15.	When the child is sick mothers looks angry				
16.	When the child is sick mothers looks hopeless				
17.	When the child is sick mothers looks lonely				
18.	There is a counseling room				
19.	Staff is enough so I can do counseling				
20.	I am trained to do counseling				

What do you think can be done to assist mothers to cope with child sickness in the hospital?

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What makes it difficult for you not to assist mothers during child sickness in the hospital?

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SECTION C:

6. **COPING STRATEGIES FOR MOTHERS DURING CHILD SICKNESS**

No	Questions	Agree	Strongly Agree	Disagree	Strongly Disagree
1.	What made mothers feel better during child sickness is support by staff				
2.	What made mothers feel better during child sickness is family support				
3.	What made mothers feel better during child sickness is church support				
4.	What made mothers feel better during child sickness is support by friends				
5.	During child sickness mothers felt better when talking about the child sickness				
6.	During child sickness mothers felt better when they do not talk about the child				
7.	During child sickness mothers felt better when avoiding to talk about the child				
8.	During child sickness mothers felt better when do destructive behavior				
9.	During child sickness mothers felt better when they stay with the child				
10.	During child sickness mothers felt better				

	when they are separated to the child				
11.	During child sickness mothers felt better when given information about the child				
12.	The staff frustrate mothers during child sickness				
13.	Mother feel better when needs are attended by the staff				

9. What can be done in the ward to make mothers cope during child sickness?

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Thank you for your participation.

ANNEXURE GG: EDITING CERTIFICATE

Louise du Plessis
8 Taute Street,
Sand Bay, 7200
Tel: 0810135651
louise@umoya-editing.co.za
www.umoya-editing.co.za

DECLARATION OF REVIEW AND EDITING

This is to certify that I, Louise du Plessis, performed a language edit on the PhD thesis:

COPING STRATEGIES FOR MOTHERS DURING CHILD SICKNESS IN HOSPITALS OF LIMPOPO PROVINCE, SOUTH AFRICA

by

Rebecca Nditsheni Mundalamo

Louise du Plessis

13 March 2022 (technical rework 31/10/2022)

Disclaimer

The text was reviewed and edited using 'change tracking'. As such, the document that I submit is fully editable, and the author is entitled to accept, reject or modify my changes and suggestions. The final version of the document, submitted for assessment or publication by the author, may differ from that suggested by me.

ANNEXURE HH: CODING CERTIFICATE

Qualitative data analysis

PhD in Nursing Science

Ms RN Mundalamo

THIS IS TO CERTIFY THAT:

Professor Tebogo M. Mothiba has co-coded the following qualitative data:

Unstructured one-to-one interviews

For the study:

COPING STRATEGIES FOR MOTHERS DURING CHILD SICKNESS IN HOSPITALS OF LIMPOPO PROVINCE, SOUTH AFRICA

I declare that the candidate and I have reached consensus on the major themes reflected by the data. I further declare that adequate data saturation was achieved as evidenced by repeating themes.

Prof TM Mothiba

MARCH 2020

TM Mothiba (PhD)