

SCHOOL OF NURSING AND MIDWIFERY

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA, LEGON



**EXPLORING SUPPORT FOR MOTHERS WITH HOSPITALIZED NEWBORNS WITH
JAUNDICE: A QUALITATIVE STUDY AT THE GREATER ACCRA REGIONAL
HOSPITAL**

**BY
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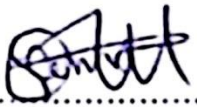
**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER
OF PHILOSOPHY DEGREE IN PAEDIATRIC NURSING.**

DECEMBER, 2025

DECLARATION

I, **Benedicta Karley Quarshie-Odo**, do hereby declare that, this is my original work submitted towards the award of a Master of Philosophy Degree in Paediatric Nursing at the School of Nursing and Midwifery, University of Ghana. All references from other studies and authors have been duly acknowledged. This thesis has not been submitted in whole or part to any institution for any degree.

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ABSTRACT

Neonatal Jaundice cases are on the ascendency. Neonatal Jaundice is the yellowish discolouration of the sclera and mucous membranes within the first week of life when serum bilirubin levels exceed normal ranges. Neonatal jaundice is one of the major causes of neonatal readmission after delivery. Neonatal admissions, irrespective of severity, can cause significant distress to mothers and the family as a whole. The study explored the support that exists in Ghana for mothers who have their babies hospitalized within the first few days of life owing to neonatal jaundice. This was an exploratory descriptive study in the Greater Accra Regional Hospital. Sixteen mothers were sampled using the purposive sampling technique. A semi-structured interview guide was used to obtain data on the support mothers received during this vulnerable time of their lives. Interviews were carried out until data saturation was achieved. The study was guided by the Socioecological model of health. Thematic content analysis served as the methodological approach for data analysis, facilitating the organization of the data into coherent themes and subthemes. Four main themes were generated with thirteen subthemes. The findings of the study highlighted maternal support at the individual, interpersonal, community, institutional levels during neonatal admissions. Support utilised under intrapersonal level: mother's age, gender, income, educational level, parity and previous neonatal admission; Interpersonal level: spousal, grandmothers, siblings and friend support; Institutional level: Hospital infrastructure and logistics and medical staff support; Community level: culture, social groups, neighbours and neighbourhood support. The study emphasizes the need for enhanced family-centred care, policy-making targeted at maternal support systems and future research. The study identified the gaps in support resources and advocated for improvement in support resources for mothers.

Keywords: Maternal. Support, Hospitalised, Newborns, Jaundice.

DEDICATION

I dedicate this work to my husband, my amazing kids and my entire family, for their immense love and support throughout my study.



ACKNOWLEDGMENT

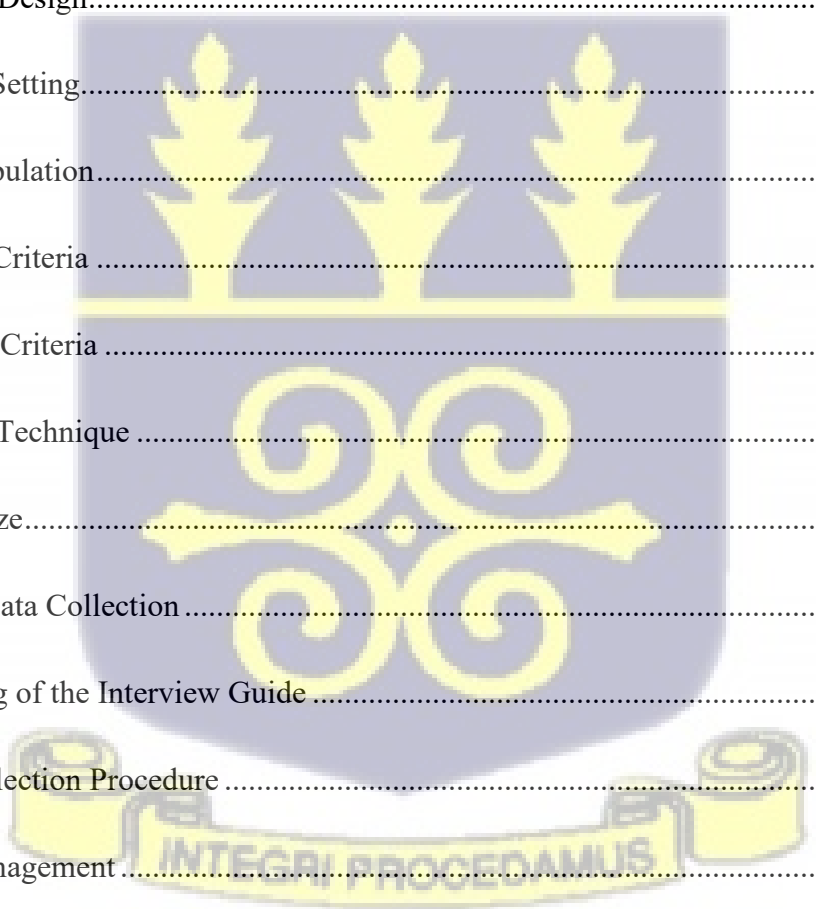
My gratitude goes to the Almighty God for granting me good health, strength and ability to complete this study successfully. I extend my appreciation to my supervisors Dr Emma Annan and Dr. Mary Ani-Amponsah for their wise counsel, encouragement and guidance throughout the study. I cannot thank them enough. I again thank my family for supporting me in this journey and lending me a helping hand at each stage. I also thank my course mates for their support. My heartfelt appreciation to all the participants who volunteered to be part of this study and shared their stories for the purposes of this research. I am grateful to every member of Maternal and Child Health Department of the School of Nursing and Midwifery for the great support.



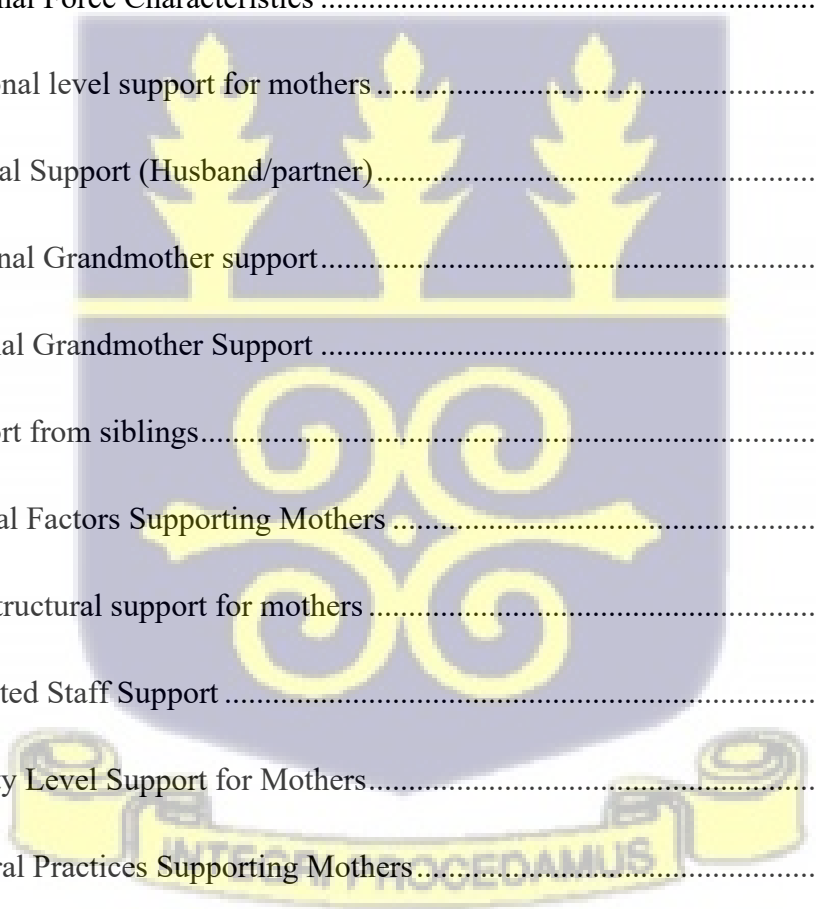
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CHAPTER ONE

INTRODUCTION

The background of the study, problem statement, purpose of the study, research objectives, research questions, significance of the study and operational definitions were discussed in this chapter.

1.1 Background Of the Study

Globally, an estimated 130 million newborns are born every year (WHO, 2018). The neonatal period, which is the first 28 days following delivery, is the most crucial time for the survival of babies. Parents, especially expectant mothers usually anticipate the delivery of a healthy newborn (Kestler-Peleg et al., 2022). Sadly, this is not always the case as many neonates are hospitalised each year, and death may even result. The global rate of neonatal deaths is 17 per 1,000 live births in 2022 (UNICEF, 2020). According to studies from Sub-Saharan Africa, jaundice is one of the leading causes of neonatal admissions and deaths. Jaundice accounts for 24.46% of hospital readmissions in newborns (Bante et al., 2024). Neonatal mortalities recorded in 2022 worldwide was 2.3 million, accounting for approximately 6,300 neonatal deaths every day (UNICEF, 2020). Neonatal jaundice is implicated as one of the major causes of neonatal deaths. (Barua, Nath, & Hossain, 2021).

Neonatal jaundice is a common condition occurring in newborns within the first week of life. It necessitates prompt diagnosis and appropriate treatment. If not managed with careful attention, neonatal jaundice can lead to life-threatening complications or serious long-term consequences (Seneadza et al., 2022). Jaundice occurs in about 60-80% of preterm and term neonates. The increased prevalence is associated with a relatively higher bilirubin level in neonates than in adults

due to the shorter life span of erythrocytes (Asefa et al., 2020). The global burden of jaundice is estimated to affect approximately 1.1 million neonates annually: This condition poses a significant risk of developing encephalopathy, although not all affected infants will necessarily progress to this severe complication (Dinatha et al., 2022).

Regions such as Sub-Saharan Africa and South Asia bear the greatest burden of this condition (Dinatha et al., 2022). Low-income African countries report incidence rates of severe Jaundice that are significantly higher than those observed in developed countries (Gamber, et al., 2021a). Ethiopia is among the top ten countries with jaundice-related neonatal mortality. Cultural and traditional practices, such as the use of herbal medicines, clinical conditions such as prematurity, glucose-6-phosphate dehydrogenase (G6PD) deficiency, infections, and low birth weight are risk factors for developing neonatal jaundice. Additionally, the application of dusting powders has been noted as a contributing factor in some regions (Asefa et al., 2020).

Neonatal jaundice often necessitates readmission to the hospital after initial discharge. The choice of treatment modalities depends on the underlying cause of the jaundice. Common clinical interventions include phototherapy, exchange transfusion, and, in some cases, pharmacotherapy (Gamber et al., 2021). These treatments frequently require the infant's temporary separation from the parents, which can be crucial in disrupting the bonding process. Maternal-infant bonding during this early period is essential for the child's emotional and psychological development (Kestler-Peleg et al., 2022). In well-resourced facilities, mothers can still bond with their newborns as bili blankets or cocoons are used which allows the infant to be held without discontinuing the treatment (Donel, 2019). However, in Ghana, such resources are scarce (Kumah, 2025). Mothers are then left with the choice of complying with the temporary separation to facilitate treatment. Mothers, being the primary caregivers of newborns who are hospitalized, can have emotions of

hopelessness, and helplessness (Kestler-Peleg et al., 2022). They tend to be more stressed and susceptible to depression (Garfield et al., 2021).

Boadu et al. (2025) highlighted the importance of a multidisciplinary support system for families who have their newborns admitted at the neonatal intensive care unit in a Ghanaian setting. The study identified three fields of support families require such as healthcare worker support, social support, and financial support systems. A good support system should beyond medical care, involve support from families (through the ‘Child and Family Centred Care (CFCC)’ approaches), philanthropic groups, friends and emotional care to help parents, in this case, mothers, cope better during the challenging times of neonatal admissions (Boadu et al., 2025). In Ghana, policies like the Free Maternal Health Care Policy and National Health Insurance Scheme are notable in reducing out of pocket payments and assisting mothers financially even though their coverage may not be comprehensive (Adawudu et al., 2024). Collectively, the aforementioned support resources have potential of reducing maternal stress and enhancing coping. The current study sought to explore the avenues of maternal support and the extent/coverage of that support during the hospitalisation of their newborns for the treatment of jaundice.

1.2 Problem statement

Neonatal jaundice is a common condition among neonates in Ghana (Dzantor et al., 2023). There was an increase in the number of cases reported nationwide from 2015 to 2019. The cases reported were 3,031, 4,251, 5,338, 7,175 and 9,273 respectively (Ghana Health Service, 2019), accounting for a giant leap of approximately three times the number in 2019 from 2015. The Emergency Unit of the Department of Child Health at the Korle-Bu Teaching Hospital (KBTH), reported that neonatal jaundice accounted for 30.2% of the 1154 neonatal admissions to the emergency room. Among these admissions, 8.0% resulted in fatalities (Amegan-Aho et al., 2019). Likewise,

Adzitey, Mogre and Abdul-Mumin (2024), reported that neonatal sepsis, prematurity, birth asphyxia, Low birth weight and neonatal jaundice accounted for most neonatal admissions and deaths in the Tamale Teaching Hospital Neonatal Intensive Care Unit.

Neonatal Jaundice may have different treatment approaches depending on the cause of the disorder and the severity of presentation, some requiring intensive care admissions. All neonatal admissions cause one distress or the other no matter the severity of the disease (Kestler-Peleg et al., 2022). Mothers may experience physical and emotional stressors causing them to be anxious, depressed, fatigued, and have altered sleep patterns (Bry & Wigert, 2019; Busse et al., 2013). Kestler-Peleg et al. (2022) observed that expectant mothers typically anticipate the birth of a healthy baby. However, the reality of seeing their newborns appearing fragile, connected to various medical equipment, and being separated from them can be distressing. This situation, where the mother's ability to care for her child is significantly limited and the infant's health seems precarious, often leads to considerable psychological distress. Such distress may manifest as symptoms of depression, anxiety, and post-traumatic stress disorder (Greene et al., 2015; Kestler-Peleg et al., 2022).

Many mothers often internalize feelings of guilt, believing they are responsible for their newborns' illnesses. This sentiment is particularly prevalent in the context of perceived breastmilk insufficiency during the early neonatal phase. Piccolo et al. (2022) conducted a study in Malawi where healthcare workers reported that the concerns expressed by mothers regarding inadequate breastmilk supply are frequently perceived rather than based on actual insufficiency. Furthermore, these mothers are sometimes told that they are not making sufficient efforts to breastfeed, contributing to conditions such as breastfeeding jaundice. Research conducted by Kent, Gardner, and Geddes (2016) revealed that approximately 66.6% of women produce less than the minimum

daily requirement of 440 mL of breastmilk for their neonates during the first 14 days postpartum. By the fourth week, 33.3% of mothers continue to produce insufficient milk, a critical concern as the neonate's nutritional needs may exceed 440 mL per day by this stage. This initial period, crucial for establishing adequate milk production, provides a window during which neonates are at increased risk of developing breastfeeding jaundice.

Rafferty et al. (2019) reported that parental depression can have enduring effects on child development and overall health. This evidence highlights the importance of addressing parental mental health to support optimal outcomes for children. Golfenstein et al. (2017) stated that early identification and interventions can lead to immediate and long-term stress relief. While both mothers and fathers of hospitalized neonates can experience depressive states, the prevalence is significantly higher in mothers, with rates ranging from 28% to 40%, compared to 5% to 13% in fathers (Garfield et al., 2021). A Ghanaian study by Pellegrino et al. (2025) reported that there is a presence of moderate postpartum depression and high levels postpartum stress among mothers with hospitalized newborns at the NICU. The disparity between mothers and fathers underscores the critical need to examine and enhance the support available to this particularly vulnerable group of mothers by exploring the support they receive during the admission of their jaundiced neonates. In Ghana, there is a paucity in literature on how mothers are supported during neonatal admissions. Free maternal and child health policy initiated at the national level, serves as a form of financial support for mothers to access healthcare (Adawudu et al. 2024), especially for neonates through to the third month of life under the National Health Insurance Scheme (NHIS). However, a gap in literature exists on the overall support received, during the hospitalisation of their newborns. This study is aimed at bridging that gap in literature by exploring support for mothers during the

hospitalisation of their jaundiced newborns and informing future research for improving support for mothers.

1.3 Purpose of The Study

The study aimed to explore maternal support during the hospitalisation of their jaundiced newborns at the Greater Accra Regional Hospital in Ghana.

1.4 Objectives of the study

The study was guided by the following objectives. It aimed to:

1. Examine individual-level influences on maternal support during neonatal hospitalization at Greater Accra Regional Hospital (GARH).
2. Identify interpersonal factors that influence maternal support during neonatal hospitalization at GARH.
3. Examine institutional-level factors that influence support for mothers during neonatal hospitalization at GARH.
4. Describe community-level factors that affect maternal support during neonatal hospitalization at GARH.

1.5 Research Questions

The study was guided by the research questions stated below.

1. How do individual characteristics support mothers during neonatal hospitalisation?
2. What interpersonal factors influence maternal support during neonatal hospitalization?
3. What institutional-level factors influence support for mothers during neonatal hospitalization at GARH?
4. How do community-level factors affect maternal support during neonatal hospitalization?

1.6 Significance of study

Aligned with Sustainable Development Goals (SDG) 3.1 and 3.2, which aim to reduce the global maternal mortality ratio to less than 70 per 100,000 live births and newborn mortality to at least 12 deaths per 1,000 live births by 2030, this study's findings hold significant promise for enhancing maternal and newborn health outcomes. The research outcomes are poised to contribute to improving the quality of healthcare provided by professionals and guiding policymakers in structuring effective healthcare interventions.

The study findings will also provide valuable insights into the existing support within healthcare institutions, identifying gaps and resources that need strengthening. This knowledge will empower stakeholders to implement targeted measures to support mothers and newborns effectively within healthcare settings, thereby advancing overall healthcare quality and achieving SDG targets.

1.7 Operational Definition of Terms

The following terms are clarified below for the purpose of this study, distinguishing their specific usage from that in other studies and related literature.

1. **Maternal** – the biological/birth mother of the hospitalised neonate
2. **Neonatal jaundice** - jaundice occurring in newborns less than 28 days of life
3. **Newborn** - a child just delivered who is under the age of 28 days
4. **Support** - Resources available to mothers within the period of hospitalisation to help them cope with stressors

1.8 Organization of the Study

The study is organised into six chapters. Chapter one covered background, aim, purpose, objectives, problem statement and significance of the study. In chapter two, the researcher

highlighted the model or framework which guided the formulation of the study and the organisation of the data collected in subsequent chapters. Chapter two also featured literature in the area of the support resources mothers utilise during the hospitalisation of their jaundiced newborns. In chapter three, the methods used in the study, the study setting, sample size, and ethical considerations were discussed into detail. Chapter four composed of the transcribed data from the field organized according to the framework chosen for this study to bring out the meaning of the data collected. In chapter five the researcher discussed the findings from chapter four, comparing it to existing literature. Chapter six featured a summary of the whole study, implications, limitation and recommendations deduced from the results of this research.



CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

To achieve the aim of this study, it is vital to map out the theoretical framework and understand the existing body of literature in relation to the proposed research questions. This will aid in the proper formulation of the primary research questions in accordance with evidence on the subject. This chapter discussed the theoretical framework reviewing the relevant empirical literature in the area of study. The theoretical framework helped in discussing the theory and phenomenon relevant to the study. Sections 2.1 and 2.2 will discuss the theoretical framework and literature review comprehensively.

2.1 Search for Theoretical Framework

In the attempt to find a theoretical framework ideal for this study, a few models were considered including the grounded theory, the socioecological model and the salutogenic model of health. Most of the literature was based on the grounded theory and socioecological model. A few were done based on the salutogenic model which is an emerging model propounded by Antonovsky in the late 1970s.

de la Espriella and Gómez Restrepo (2020), described the grounded theory as a qualitative approach that fosters the emergence of new theories or models from data. This method is highly adaptable and has found application across various health research domains, including public health, clinical settings, and education. Grounded theory is characterized by its systematic and rigorous approach, originally developed by sociologists Barney Glaser and Anselm Strauss in 1965 during their study on Awareness of Dying in a hospital setting. The process provides insights into behaviour through induction and discovery. Grounded theory methodology begins with inductive

reasoning based on existing data, incorporating simultaneous data collection, analysis, and theory construction. The approach employs constant comparison, memo writing, and theoretical sampling, where researchers may initially use convenience or purposive sampling methods, transitioning to theoretical sampling until saturation is achieved, that is, when additional data no longer yield new insights. At this stage, a grounded theory is developed (Rieger, 2019).

However, grounded theory was not selected for the present study, as its primary focus is on generating new theories from data. Instead, this research examines existing support systems, aligning more closely with the salutogenic and socioecological models. Consequently, a combined approach utilizing both models was employed to more effectively describe and understand the support systems under investigation.

The Salutogenic Model of Health was also considered. This is a framework for understanding or predicting a phenomenon by defining constructs and proposing relationships among them (Kerlinger et al., 2000). It provides a basis for examining the relationship between systems and maternal/neonatal health outcomes (Kivunja, 2018). The Salutogenic model of health, formulated by Aaron Antonovsky in his 1979 book "Health, Stress and Coping," describes an individual's capability to mobilize and utilize resources effectively in managing stress and tension. This ability enables individuals to navigate the health ease/dis-ease continuum with confidence, anticipating favourable outcomes (Antonovsky, 1979, p. 123). Unlike traditional approaches that focus primarily on disease and pathology, this model emphasizes health promotion by evaluating all available resources. It aims to achieve a balance between stressors and resources (Loizidan et al., 2022).

Ontario Agency for Health Protection and Promotion (2024), defines the salutogenic model as a model that focuses on the origins of health (factors that support health and wellbeing) rather than the factors than the causes of diseases (pathogenesis). The framework has four key concepts namely: the health continuum, generalized and specific resistance resources, sense of coherence and self-identity.

Key Concepts of the Salutogenic Model of Health

The model focuses on four key concepts: the health continuum, resources, sense of coherence, and self-identify. Each of these concepts is discussed below.

Health Continuum

This concept of the salutogenic model defines health as a continuous move along a continuum of health ease and dis-ease. In this model, health is not seen as an absence of disease or the opposite of each other (Antonovsky, 1996). This is to say that an individual can be healthy and sick at the same time depending on the balance of the stressors and resources available to cope. Stressors push us down towards dis-ease, but the resources at our disposal can mitigate how far stressors move us (Perez et al., 2021)

Generalized And Specific Resistance Resources

Resources in salutogenesis refer to the factors available to the individual that assure them that things will work out as positively as reasonably can be. This helps people see life as structured and consistent and not messed up (Lindström & Eriksson, 2005; PHO, 2024). Resources may fall under generalised or specific. Generalised resistance resources that are associated with the individual herself such as housing and income, cultural or social resources. These resources give

the individual assurance that things will work out and that they are on track. Specific resistant resources are the resources that come into play in particular situations like calling the emergency line for an ambulance, getting vaccination for your child, utilising social support or having dedicated nurses attend to you during hospitalisation (Ontario Agency for Health Protection and Promotion. 2024),

Sense Of Coherence

This is an orientation peculiar to one's personality that enables her to cope with stressful circumstances. This kind of orientation makes one think life is manageable, understandable, and meaningful. Manageability is the ability to handle and solve problems. Problems are seen as challenges that need to be overcome and worth investing time to solve them. Understandability is the orientation to perceive problems as rational occurrences. Meaningfulness is how we interpret or perceive our lives in the face of adversity. For example, when a mother has family support and trust, she may feel helped and not lonely, such as perceived family support and trust, can mediate the relationship one has. When one doesn't have this orientation, they are moved down the continuum into dis-ease, anxiety and burnout (Ontario Agency for Health Protection and Promotion. 2024),

Self-Identity

Self-identity refers to how we perceive ourselves and our worth in playing a part in society. Self-identity is a crucial resource. In salutogenesis, it helps mothers cope better when they know they are useful and part of the care being offered to their neonates, increasing a strong sense of coherence.

2.2 Theoretical Framework

Established theories provide foundational frameworks that are widely adopted and endorsed by researchers, serving as essential blueprints that guide and structure research endeavours (Kivunja, 2018). In this study, the socioecological model of health was selected for its focus on how resources, particularly support, contribute to improving maternal and child health outcomes. Additionally, the socioecological model was incorporated for its comprehensive approach to understanding the influence of factors across various levels on individual health. This theoretical framework informed the study's objectives and guided the literature review.

2.2.1 The Socio-Ecological Model (SEM)

The socio-ecological model is a conceptual framework introduced by Urie Bronfenbrenner in the 1970s. It is a model for understanding human development. The individual is placed at the centre of a network of systems that interact with the individual to influence health (Kilanowski, 2017). The model describes five levels or constructs namely the individual, interpersonal, organizational/institutional, community, and policy factors that shape the health of individuals (Olaniyan, Isiguzo, & Hawk, 2021).

KEY CONCEPTS OF THE SOCIO-ECOLOGICAL MODEL

The Individual Level

The individual level has the strongest influence. The individual level consists of interactions and relationships with one's immediate surroundings (Kilanowski, 2017). The individual level consists of individuals' characteristics, including knowledge, attitudes, and behaviours. These characteristics come into play as support during hospitalisation when mothers are able to be self-motivated to continue taking care of their babies (Olaniyan, Isiguzo, & Hawk, 2021).

The Interpersonal Level

The interpersonal level of the SEM describes individuals' familial and social networks that may influence healthcare practices and contribute to various experiences. Strong interpersonal dynamics in these relationships are thought to significantly affect an individual's physical and mental health and health decision-making. Studies have shown that social influence from interpersonal relationships significantly affects health behaviours, including health-seeking behaviour, breastfeeding practices, and uptake of family planning methods (Olaniyan, Isiguzo, & Hawk, 2021)

The Institutional Level

The institutional level describes the attributes and operations of social institutions, including health facilities and their health workers. These play a vital role in shaping healthcare decision-making. (Olaniyan, Isiguzo, & Hawk, 2021)

The community level

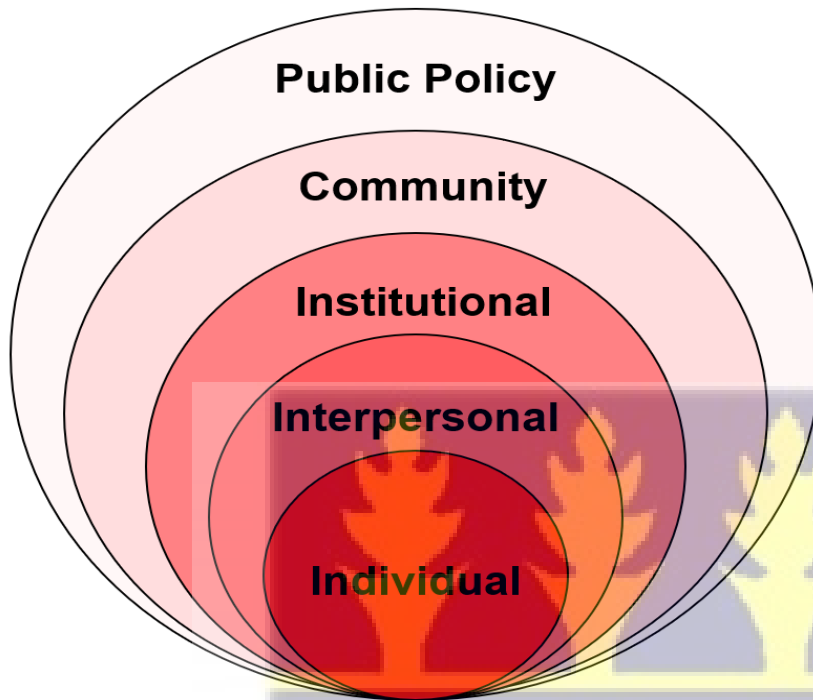
The community and social networks may exert both negative and positive interactive forces on the individual (Kilanowski, 2017). The community include the social and physical environment. These factors may influence the actions of community groups (eg. church) and community-based health workers. Social dynamics within a community may contribute negatively or positively to maternal support (Olaniyan, Isiguzo, & Hawk, 2021).

The Public Policy Level

This level is also known as the policy and political influence level. It is the outermost level of the SEM. The policy level encompasses local, state, and national laws and policies that impact health and practice (Olaniyan, Isiguzo, & Hawk, 2021). In Ghana, there is a free maternal and child health

policy initiated at the national level, under the National Health Insurance Policy that supports mothers financially during neonatal hospitalisation (Adawudu et al., 2024).

Figure 1: Socio-Ecological Model



2.2.2 Application of The Socio-Ecological Model of Health

Neonatal hospitalization imposes physical, financial, and psychological stress on parents, with mothers generally more affected according to the literature (Siva et al., 2024; Shetty et al., 2024; Joshi et al., 2024). Mothers are basically the primary caretakers of newborns and, thus, the caregivers of neonates during hospitalization. In this study's context, the researcher posits that mothers, who already have to go through post-delivery recovery, need support to be able to cope with the additional stress imposed by neonatal admissions of their jaundiced newborns. The employment of the socioecological model in this research is to help explore and categorize the support that mothers are offered during neonatal hospitalization of their jaundiced newborns. The

socioecological model of health has been applied in most research to aid in the identification of factors that influence health at different levels. The model as applied in this study looks at support in terms of the resources at all levels of the individual, interpersonal, institutional, community and public policy that interact to positively support mothers with hospitalized newborns with jaundice. This model was particularly chosen as it explains the relevance of the interplay of different systems that interact to support mothers. The levels described in the model defined the objectives of the study.

The individual, in this case, the mother, may possess some particular characteristics that serve as strength or support for her to cope during the hospitalization of her neonate. The first objective of the study is to find out these factors that the mother of the jaundiced neonate possesses that allow her to manage the stress of the hospital environment. This level of the model describes individual personal characteristics like biological factors, leadership and life skills, knowledge, awareness, attitudes, beliefs, coping skills and stress response. Mothers taking care of their neonates will utilize all these internal characteristics to support themselves.

As individuals, interpersonal relationships are key support systems. This includes spousal, family and friend support. Spousal support is one of the most utilized maternal supports during hospitalization. Social support is the belief by an individual that they are worthy of care and love, and are part of a mutual network. It consists of many forms of assistance including financial, emotional, instrumental and informational support from one's relationships with significant others. Interpersonal support is a predictor of mothers' psychological state in a stressful and challenging phase like the hospitalization of the neonate with jaundice. Interpersonal support serves as a significant resource that influences an individual's capacity to effectively cope with various stressors (Kestler-Peleg et al., 2022).

Institutional or organizational level support as applied in this study describes the formal systems of support. It describes the characteristics of the institution of hospitalization that forms a support for mothers. Institutional-level support is offered by the medical staff and available institutional facilities. This form of support is offered through family-centered care models practiced in the facility which improves maternal psychological states. Involving the family in the care process and keeping them informed throughout the hospital stay and good health worker-parent relationship have a positive impact on maternal health. Uncertainty often diminishes maternal motivation to continue treatment. The belief or acceptance that life events are comprehensible, manageable, and meaningful, and with adequate support, outcomes can be positive to the best possible extent. The lack of necessary support at this level can cause maternal distress. When mothers experience uncertainty about future outcomes, their resilience is consequently diminished.

Community-level factors focus on the individual's social, cultural, and physical environments. This includes where the individual lives, works and socializes. In applying this level to the study, factors that will be included at this level will be groups the mother belongs to, for example, church or community groups which can offer the mother support during neonatal hospitalizations. In a Ghanaian traditional setting where the infant is considered as belonging to his community, some form of help can be expected during hospitalization.

The policy-level influences on maternal support are primarily embedded in the structural, political, and economic systems. Some laws, regulations, public policies, and social and economic factors that are geared toward maternal and child health can positively impact maternal support during neonatal hospitalization. This level of the construct will however not be included in the study because mothers may not have the requisite knowledge on the available support resources for them at the policy level.

Available support at all levels improves maternal positive self-identity and overall health, such that, they are observed to actively participate in the care of their hospitalized neonates. This self-identity is closely tied to the mother's sense of being essential in her child's care. Feeling this responsibility motivates mothers to engage actively in their infant's life during hospitalization, thereby alleviating feelings of hopelessness. This underscores the importance of providing support to anxious mothers by offering honest, timely, and comprehensive information.

2.3 Literature Review

PubMed, ScienceDirect, Research Gate, Scopus, Sage and PLoS One databases were searched for relevant literature on the subject of study. Additionally, the Google search engine was utilized to identify grey literature. The literature search utilized the following keywords: "neonatal jaundice" OR "newborn hyperbilirubinemia", "social support", "maternal support systems" OR "hospitalized neonates". Additional keywords included: "maternal support systems for hospitalized newborn" OR "support systems for mothers with hospitalized jaundiced newborns", "formal and informal support for mothers during hospitalization" OR "institutional support for mothers during hospitalization", "maternal stressors during neonatal hospitalization", "parental stressors during hospitalization", "model for support systems", "maternal support models", "behaviour of nurses and midwives towards newborn resuscitation", "practice of newborn care", and "prevalence of neonatal jaundice" OR "burden of neonatal jaundice".

The literature was organized around neonatal jaundice and aligned with the study's objectives, which were to: identify maternal stressors triggering psychosocial distress, assess support systems (resources) available to mothers during neonatal hospitalization, explore institutional and medical staff support for mothers practicing Family-Centered Care (FCC) with their hospitalized newborns, and investigate practices that enhance self-identity for mothers caring for jaundiced

newborns in hospital settings. The research focused exclusively on human studies published in the English language.

2.3.1 Overview of Neonatal Jaundice and Hospitalization

Neonatal jaundice, as defined by Ansong-Assoku et al. (2024), refers to the accumulation of bilirubin in an infant's skin and mucous membranes due to elevated bilirubin levels in the blood. It typically manifests with yellowish discoloration of the skin, mucous membranes, and sclera. In most cases, neonatal jaundice is mild, transient, and self-limiting (physiological) with appropriate care. Pathological jaundice represents a more severe form, distinguishable from physiological jaundice, and includes subtypes such as conjugated and unconjugated hyperbilirubinemia. Pathological jaundice may result from underlying medical or surgical conditions. If untreated or improperly managed, it can lead to complications such as encephalopathy and neurological issues. Determining the cause of neonatal hyperbilirubinemia is crucial for guiding treatment modalities. This involves assessing bilirubin levels using transcutaneous measurement devices or blood samples to evaluate serum bilirubin levels for unconjugated hyperbilirubinemia. Conjugated hyperbilirubinemia is diagnosed through laboratory studies, including serum aminotransferase levels, urine cultures, and prothrombin time measurements.

According to Diala et al. (2023), a review of 84 articles representing global data on neonatal jaundice admissions revealed that 14.26% of neonates in these studies had Severe Neonatal Jaundice (SNJ). The prevalence of jaundice-related admissions ranged from 0.73% to 3.34%, with the highest rates observed in African and South-East Asian regions. Jaundice-related deaths varied from 0% to 1.49%, with the highest percentages noted in African and Eastern Mediterranean regions. Among neonates with jaundice, the prevalence of Severe Neonatal Jaundice ranged from 8.31% to 31.49%, with the highest rates found in the African region. Jaundice-related deaths were

reported at 13.02%, 7.52%, 2.01%, and 0.07% in the Eastern Mediterranean, African, Southeast Asian, and European regions respectively, with no reported deaths in the Americas. The global burden of SNJ in hospitalized neonates remains significant, contributing to preventable morbidity and mortality, particularly in low- and middle-income countries (Diala et al., 2023).

Phototherapy and exchange transfusion are the primary treatments for unconjugated hyperbilirubinemia, with some patients potentially benefiting from intravenous immunoglobulin therapy. However, managing conjugated hyperbilirubinemia is more complex and contingent upon identifying its underlying cause. Therefore, demonstrating proficiency in timely identification, implementing effective interventions, and fostering interprofessional team collaboration for coordinated care is crucial. These efforts are essential for improving neonatal health outcomes and reducing morbidity, as emphasized by Ansong-Assoku et al. (2024).

Diala et al. (2023) reported that Neonatal jaundice accounted for 21.99% of all neonatal admissions across WHO regions. Among these admissions, 8.31–31.49% had clinical evidence of severe disease. Severe Neonatal Jaundice ranks among the top 5–10 causes of neonatal deaths in countries with the highest number of neonatal deaths as recorded by the Global Burden of Disease. Africa records most of the admissions, morbidities and mortalities relative to other regions. In Ghana, the Emergency Unit of the Department of Child Health at KBTH (excluding the NICU) reported that neonatal jaundice accounted for 30.2% of the 1154 neonatal admissions to the emergency room, according to morbidity and mortality data. Among these admissions, 8.0% resulted in fatalities (Amegan-Aho et al., 2019).

Regardless of the severity or duration of neonatal admissions, parents experience significant distress. Mothers, in particular, face physical and emotional stressors that can lead to anxiety, depression, fatigue, and disrupted sleep patterns (Busse et al., 2013; Bry & Wigert, 2019).

Expecting a healthy infant, mothers are often unprepared for the challenges of hospitalization (Kestler-Peleg et al., 2022). The separation from their babies and the transfer of caregiving responsibilities to medical professionals expose mothers to the fragility of their newborns, who are often connected to various medical devices, heightening their sense of vulnerability. The uncertainty surrounding their infants' conditions exacerbates psychological distress, manifesting in symptoms such as depression, anxiety, and post-traumatic stress (Greene et al., 2015; Kestler-Peleg et al., 2022).

Mothers often experience guilt, feeling responsible for their newborns' illnesses. For instance, perceptions of breastmilk insufficiency in the early neonatal phase, as reported by mothers, are often subjective rather than actual, according to a study by Piccolo et al. (2022) in Malawi, based on interviews with health workers. Mothers may be erroneously informed that inadequate breastfeeding efforts lead to conditions like breastfeeding jaundice. Research by Kent, Gardner, and Geddes (2016) indicated that nearly 66.6% of women produce less milk than the recommended minimum daily requirement of 440ml for their neonates during the first 14 days of life. By the fourth week, 33.3% continued to produce below this threshold, potentially contributing to breastfeeding jaundice during the critical period of establishing milk production.

Furthermore, some mothers face challenges due to insufficient glandular tissue, which prevents them from producing adequate breast milk. These mothers may benefit from early intervention by lactation consultants during prenatal care to diagnose issues and create plans to support infant nutrition post-delivery. Separation from their neonates during treatment exacerbates stress and anxiety, further complicating lactation. Parents may also blame themselves for conditions like breastmilk jaundice, genetic factors causing hemolytic jaundice, ABO and Rh incompatibility, and sepsis in their newborns. Depressive states affect both mothers and fathers of hospitalized

neonates, but the prevalence is significantly higher among mothers, ranging from 28% to 40%, compared to 5% to 13% among fathers (Garfield et al., 2021). This disparity underscores the urgent need to study and enhance the support systems available to this particularly vulnerable group.

Rafferty et al. (2019), presented compelling evidence that parental depression can profoundly and persistently affect child development and overall health. This highlights the critical importance of addressing parental mental health to promote optimal child outcomes. Golfenstein et al. (2017) emphasized that early identification and intervention for parental distress can provide both immediate and long-term relief. They argued that interventions should be tailored to the specific needs of each family, considering the format, timing, and setting to maximize effectiveness. Applying the Socioecological model of health, which focuses on factors that support human health and well-being rather than factors that cause disease, allows us to examine the informal and formal social support systems available to mothers with hospitalized infants (Kestler-Peleg et al., 2022). This model helps us understand how these support systems can be leveraged to promote maternal resilience and well-being during such challenging times.

2.3.2 Individual/Intrapersonal-level factors that influence maternal support

Ong et al. (2022) described the nature of NICU admissions as a frightening experience which has the ability to impact the quality of life of mothers, considering the fact that they are now recovering after delivery which is a critical phase. Mothers are pushed to find a balance between dealing with their body changes, family role changes, new responsibilities, financial burden and need for support. The individual/intrapersonal level consists of individuals' characteristics, including knowledge, attitudes, perception, beliefs and behaviours. These characteristics come into play as support during hospitalisation when mothers are able to be self-motivated to continue taking care of their babies.

Bronfenbrenner (1970) outlined three individual-level traits that influence an individual's development: demand, resources, and force. He explained this demand as the role that the individual has to perform, in this case, the mother's role as a caretaker of the jaundiced neonate determined by her age and gender. Resources were explained as those characteristics such as the skills, intelligence, abilities, income, education and experience. He also described force as psychological factors such as motivation and emotion which are unique to the individual. Educational level or knowledge was found to influence the kind of need an individual would utilise. Highly educated individuals prioritised safety, accessibility and environmental connection while lower-educated people placed importance on interaction and group participation (Zhang et al., 2023),

Alshowkan et al. (2023) found that women who had other children and older than 40 use more emotional-focused coping compared to those between 21 to 40. This may be because they may have had to go through admissions of their other children and are more able to adapt than new mothers who are going through this distress for the first time. This serves as a strength or coping mechanism for those experienced mothers to better manage themselves and be efficient at taking care of their neonates with jaundice.

Walker et al. (2024) outlined some postpartum coping measures such as self-regulation, self-care, education and employment. These attributes were reported as being some maternal factors that come in handy to combat stress and serve as support. Individual-level barriers such as lack of motivation and misperceptions can be implicated in non-adherence and poor health outcomes (Reyes et al., 2023).

2.3.3. The Interpersonal Level Support for Mothers

The individual does not exist in isolation, but rather within many relationships and contexts. Kestler-Peleg et al. (2022) provided an in-depth analysis of the social support systems available to mothers, categorizing them into formal and informal support networks. According to their study, informal social support comprises assistance provided by spouses, family members, and friends. These forms of support are crucial in offering emotional and practical help during challenging times and can be utilised at the interpersonal level.

Spousal support is the major source of support during hospitalization. Mothers rely greatly on their spouses for support which is usually the infant's father. These fathers are also in some cases in shock of their child's condition. However, working together hand in hand to achieve optimal health for the neonate is the priority and so mothers derive support from their spouses (Kestler-Peleg et al., 2020). Spousal support decreases maternal postpartum depression risk.

Mothers who have support from family have decreased depressive symptoms compared to those who do not have this kind of support. Although the extended family also have to cope with the stress of the condition of the neonate, their support for the parents has an increased influence on their psychological and physical well-being (Zafirir Priel et al., 2022). In Ghana, Mothers, mothers-in-law and siblings can take turns caring for the hospitalized neonate while the mother rests for a while. This help transcends to post-discharge help which serves as support for the mother (Adama, Sundin & Bayes, 2021). As family support increases there is a decrease in the anxiety level of mothers.

The extended family including grandparents, aunties and uncles, form a formidable source of emotional, financial and caretaker support for mothers who have their newborns hospitalized. Their role cannot be overlooked as the child is the responsibility of the whole family in the

Ghanaian context. They are trusted with even the primary care of the newborn as help for the new mother. Mothers or mothers-in-law and maternal siblings are the most implicated in this regard (Adama, Sundin & Bayes, 2021).

2.3.4 Institutional Support for Mothers with Hospitalized Neonates

The institutional level consists of the geographical and financial access to health facilities, health facilities attributes, staff coverage, and healthcare worker attributes (Adama et al., 2022). At the 37 military hospital in Ghana for instance, study findings showed that mothers of hospitalized newborns receive logistical support (sleeping room, mattresses, bathrooms and toilets), psychosocial support services (counselling, peer support, kangaroo mother care) and health education from various health professionals although these support services were not adequate (Apedani et al., 2021).

In low- to middle-income countries (LMICs), where healthcare resources are often limited and the ratio of medical staff to patients is high, mothers frequently assume the responsibility of providing both primary and specialized care to their sick children. This situation arises despite receiving inadequate information and support on how to perform these tasks effectively. In contrast, in more developed and resource-rich settings, mothers are typically limited to providing basic care, such as diaper changes, with the more specialized aspects of care being handled by medical professionals. This discrepancy in care roles can leave mothers in LMICs feeling powerless and anxious about their ability to care for their babies post-discharge (Oluoch et al., 2023).

There is substantial evidence indicating that parental involvement in the care of their hospitalized newborns yields significant benefits for both the infants and their parents, fostering better health outcomes and enhancing parental confidence and bonding. More attention is needed in strategizing plans to reduce maternal stress. Ong et al. (2022) advocated for special nursing interventions which

needed to be implemented immediately from the onset of neonatal admission. The strategies are geared towards maternal needs for information, communication and support. Zolkefli (2022), also proposed early education and emotional support to be given to mothers as a means of support.

The study by Oluoch et al. (2023) reveals significant variations in maternal participation in the care of neonates, influenced largely by the hospital's structure, economic status, and social context. The research, which was conducted in Kenya, a lower-income country, identified that in poorly resourced government hospitals, there is often an immediate, informal, and unplanned delegation of neonatal care responsibilities to mothers. This delegation occurs without sufficient training or support, reflecting the urgent need to fill gaps in care due to limited resources. In contrast, faith-based facilities in the same region adopt a more structured approach where neonates are initially separated from their mothers. Tasks such as bathing and diaper changing are introduced gradually and under strict supervision. However, both systems of care—whether in government or faith-based settings—were found to lack adequate support for breastfeeding. Additionally, the study noted that the specific needs of mothers, such as psychological and emotional support, were frequently overlooked in these environments.

Recent evidence suggests that while effective clinical management is crucial for the survival of neonates, it is not the sole determinant of positive health outcomes. Social factors and the active involvement of caregivers are equally vital (Johnson, 2013; Oluoch et al., 2023). Recognizing this, the World Health Organization (WHO) outlined in their 2020 guidelines, "Standards for Improving the Quality of Care for Small and Sick Newborns in Health Facilities," the necessity of incorporating counselling and education on the infant's illness and treatments for all caregivers. These guidelines underscore the importance of treating parents as integral partners in the care process. The WHO (2020), mandates that newborns should have access to standardized and

adequate healthcare. This standardization ensures that caregivers, particularly mothers, are well-informed and supported, which in turn alleviates their psychological distress. By fostering an environment where mothers are recognized as crucial participants in the care of their babies, there is a promotion of positive self-identity and a movement towards health ease. This empowerment helps mothers believe in their competence and significance in their infants' care, thereby enhancing their ability to manage their babies' health challenges effectively (Hill, Knafel & Santacroce, 2018).

Mothers experience a gap between expected and actual support provided by health care staff. The health care staff believe mothers need support. However, that was not their primary focus, stating workload as a barrier (Negarandeh et al., 2021). Training Healthcare professionals in communication skills, counselling and adopting a family-centred is a way to support mothers to strengthen their resilience (Eduku, Annan, & Ani-Amponsah, 2024). Also, there must be adequate facility resources to ensure seamless care delivery, as lack of experienced human resources, lack of accountability of staff, unrealistic expectations, and lack of physical space or supplies can negatively impact health (Reyes et al., 2023)

2.3.5 Community Level Support for Mothers

The Community level refers to the physical environment and social networks of the mother which has the ability to serve as support during neonatal admission. In the Ghanaian traditional context, the child is believed to be the responsibility of the community and thus, they may offer help in various forms. A study conducted by Adama, Sundin and Bayes (2021), found that neighbours and community members offer various kinds of help to new mothers including physical and informational help.

Peer support, which comprises a group of people with similar characteristics, for example, a group of mothers with jaundiced newborns, is one community group that can form support for mothers.

When asked how peer support has been of help to them, parents reported that it decreased feelings of isolation, increased their hope and resilience and getting practical “parent” information. Sharing stories amongst themselves helped parents trust that it was possible to adapt and thrive, decreased negative emotions and empowered them in their parental role (Dahan et al., 2022). Peer support meetings are a unique and useful means to support parents and improve clinical outcomes. Mothers are disadvantaged where there is a lack of community support and appropriate resources (Reyes et al., 2023).

In Ghana, there is a saying “It takes a village to raise a child”. This saying is deeply rooted in the Ghanaian citizens. Extended families and the community at large play a crucial role in nurturing and guiding children, often stepping in to provide support that goes beyond the nuclear family structure. Friends and neighbors contribute and provide physical and financial support for mothers, helping them feel a sense of belonging mothers (Adama, Sundin & Bayes, 2021). They also offer caregiving opportunities, advice and mentorship. This communal approach fosters cultural values such as respect for elders and the importance of community, while also providing financial and emotional stability in times of need. It is imperative that health workers know that social networks (community and extended family members) have a great influence on the care of infants. This will foster good working relationships with them and collaborative support for mothers (Adama, Sundin & Bayes, 2021).

2.4 Summary of Literature Review

This chapter provided an overview of the theoretical framework which guided the research. The socio-ecological model was chosen because of its relevance to the topic and its aim of exploring the support resources, available to mothers of hospitalized jaundiced newborns. The socio-ecological model helped to organize the support systems under individual, interpersonal,

institutional and community levels. The chapter also provided a comprehensive account of the methodology employed in the literature review. The review focused on several key topics, including neonatal jaundice, neonatal admissions, individual-level influences on maternal support, interpersonal and institutional-level support for mothers, and community and policy influences on maternal support. Ghana, a sub-Saharan African nation classified as a lower-middle-income country, serves as the geographical and socio-economic context for this review. The literature indicates that the burden of neonatal jaundice—encompassing severe cases, admissions, complications, and mortality—is particularly significant in such regions. The review further reveals that maternal stressors are especially prevalent in these settings. Despite the evident need, the social support systems available to mothers are inadequately structured. Communication with and involvement of parents in the care of hospitalized neonates is limited. In contexts where mothers are included in the caregiving process, the support provided is often neither well-informed nor well-coordinated, exacerbating maternal distress and feelings of inadequacy regarding the care of their infants.

The literature review identified several strategies to assist mothers in enhancing their psychological well-being and overall quality of life. These strategies primarily revolved around the provision of social support, which was delineated into formal and informal categories. Formal support encompasses institutional support provided by hospital systems and staff, as well as public policies that facilitate the integration of caregivers into the care process of their infants. This includes structured programs and protocols aimed at fostering greater involvement and support for mothers within the healthcare setting. Informal support pertains to the assistance provided by spouses, family members, and friends. This form of support is crucial in offering emotional and practical aid that complements the formal mechanisms available in healthcare environments.

The purpose of the literature review was to underscore the necessity of further investigations on the current structure of maternal support during neonatal admissions within Ghana's healthcare system. This study aims to address this gap by exploring the topic in the Greater Accra region, the capital of Ghana. Through this investigation, the study seeks to provide insights into how maternal support can be effectively structured and enhanced during neonatal care. The findings of this research are expected to contribute significantly to the enhancement of both formal and informal support systems for mothers and caregivers in the Greater Accra region and, more broadly, across Ghana. By illuminating the current practices and identifying gaps in the support provided during neonatal admissions, this study will provide a foundation for future research in the fields of neonatal and maternal health. Moreover, the insights gained will be instrumental in shaping clinical practices and informing policy-making aimed at restructuring the support systems within healthcare settings to better address the needs of mothers and neonates.

This chapter has established the analytical framework for the study, drawing on themes from similar research to guide the empirical investigation. These themes, derived from a thorough review of the literature, will serve as a foundation for the detailed analysis and discussions presented in subsequent chapters. The exploration of these themes in the context of neonatal care in Ghana will be pivotal in understanding and proposing effective strategies to improve the quality of life for both mothers and their infants during and after neonatal admissions.



CHAPTER THREE

RESEARCH METHODOLOGY

This chapter was dedicated to discussing the entire research process, including the description of the research design, study setting, study population, sampling techniques, sample size determination and participant recruitment, data collection, and data analysis. A narrative of methodological rigour and ethical considerations were highlighted. Polit and Beck (2020) defined research methodology as a systematic approach to solving problems and as a science of understanding how to conduct research. Research methodology offers a structured framework for investigating phenomena. It necessitates that the researcher elucidates, describes, and forecasts their subject of interest in a manner that adheres to scientifically rigorous standards. Research methodology primarily encompasses two main types: quantitative and qualitative research. Qualitative research focuses on exploring and comprehending the experiences and perspectives of participants concerning the specific topic under investigation. This approach facilitates a profound understanding of the context and nuances of the situation (Creswell & Miller, 2000; Lincoln, 1995; Polit & Beck, 2020).

3.1 Research Paradigm

The researcher adopted a constructivist paradigm during this study, assuming that knowledge is constructed through lived individual experiences and social interactions. In exploring support for mothers during the admission of their jaundiced newborns, the researcher examined how mothers construct meaning and understanding of their experiences. The researcher uncovered the subjective contextual nature of maternal support through in-depth interviews and thematic analysis. The constructivist paradigm allowed a deep understanding of the support mothers received during the hospitalisation of their jaundiced newborns, highlighting the importance of

self-optimization, meaningful relationships, social support and institutional support. This paradigm employed in this study, informs targeted interventions to address the individualised nature of their experiences.

3. 2 Research Design

This was a qualitative study using an explorative descriptive design. Tenny, Brannan, and Brannan (2024) defined qualitative research as an approach that explores and provides deeper insights into real-world problems. Qualitative research prioritizes understanding participants' perceptions, behaviours, and experiences regarding a phenomenon, rather than focusing on numerical data, as is typical in quantitative research. Descriptive design is a qualitative research design that is flexible and explorative in nature. The design can be used for rigorous studies due to its adaptability to suit research into areas where little is known by borrowing from other methods. This flexibility provides the researcher the opportunity to choose which methods best suit a practice-based research purpose. This method will help the researcher probe more into the phenomena of interest and guide the interview process (Hunter, McCallum, & Howes, 2018).

Sandelowski (2000) and Stebbins (2001) who propounded the descriptive and explorative research designs, posited that the design is best suited for research where the phenomenon is vague or has little to no literature. The justification for choosing this approach is that exploratory descriptive design utilises literature that is closely related to the area of study to demonstrate how the unexplored aspects of the phenomena can be investigated (Hunter, McCallum, & Howes, 2018). The area under study, which is maternal support during hospitalisation of their jaundiced newborns, has not been directly investigated in the Ghanaian context, hence the choice of the explorative descriptive approach.

3.3 Research Setting

A critical aspect of any research is the selection of an appropriate setting, which ensures access to individuals with the requisite knowledge, information, or experience relevant to the study's focus. For this research, the Greater Accra Regional Hospital (GARH) in the Greater Accra Region of Ghana was chosen as the study setting. Located in North Ridge within the Osu-Klottey Sub-Metro of the Accra Metropolitan Area, GARH spans approximately 15.65 acres. As the regional hospital for the Greater Accra region, GARH caters to an estimated population of over 4,671,363 people. Its extensive catchment area encompasses several key suburbs, including Ridge, Nima, Maamobi, Kanda, Accra New Town, Kotobabi, Osu, La, Adabraka, Achimota, Airport Residential Area, and Central Accra.

GARH has a rich history, having been established in 1928 initially as a hospital for European expatriates. Following Ghana's independence in 1957, it transitioned to a District Hospital, and in 1997, it was designated as Ridge Regional Hospital. In recent years, GARH has undergone significant transformation into a modern facility with a 420-bed capacity, offering specialized services that meet the needs of the rapidly growing capital city. The hospital is licensed by the Health Facilities Regulatory Agency (HeFRA) as a tertiary hospital, underscoring its role in providing advanced healthcare services.

Due to its comprehensive service coverage, and the diverse population it serves, the facility promised a dense number of the target population for this study. This location was selected for its accessibility to a diverse population of stakeholders who are well-versed and experienced in the subject matter under investigation. The hospital serves as a referral point for many other sub-hospitals, offering a target population with diverse backgrounds for this study. The hospital

provides a conducive environment for gathering data that aligns with the objectives of the research, ensuring that the insights collected are both relevant and robust.

The hospital's broad catchment area and its history of evolution from a local to a regional healthcare provider made it a rich source of data and insights relevant to the study's objectives.

The modern facilities and the variety of specialist services available at GARH further enhance its suitability as a research setting, ensuring access to a wide range of patients with varied experiences and perspectives.

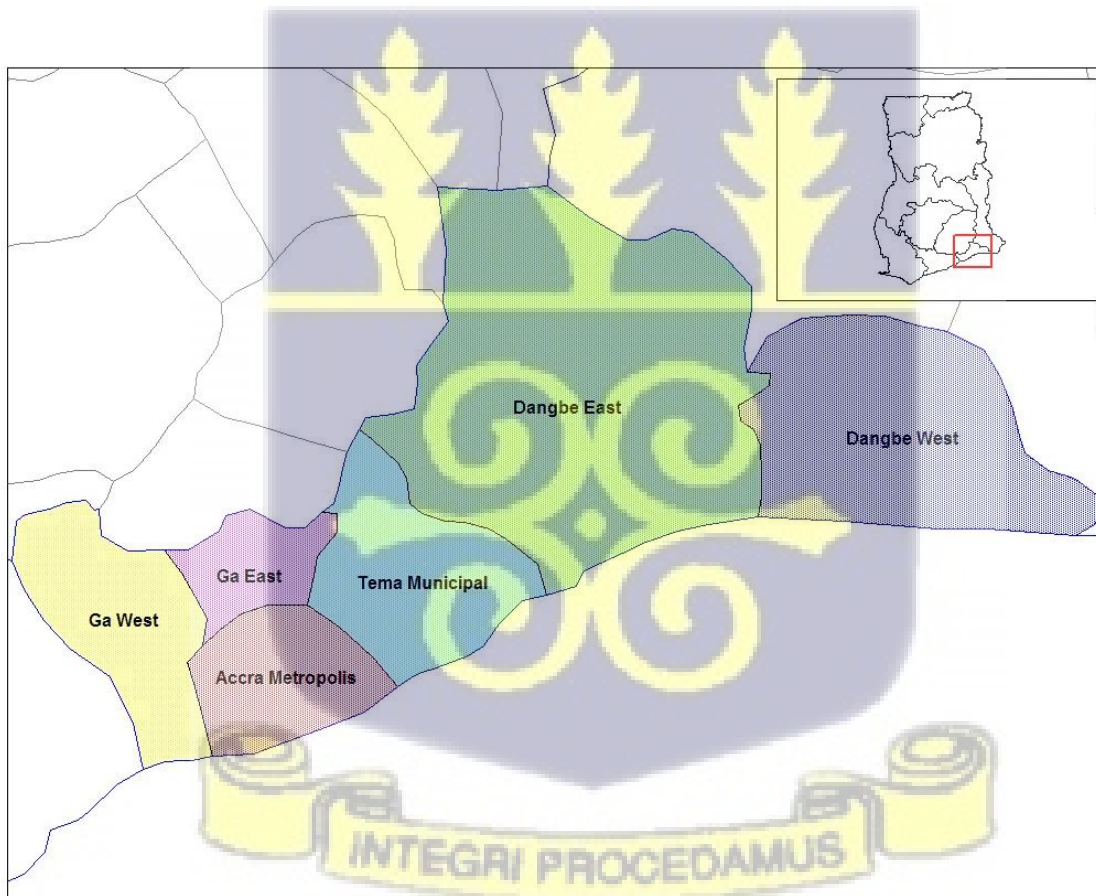


Figure 2: Map of the Greater Accra Region

3.4 Target Population

The target population for this study were mothers whose jaundiced newborns were hospitalized in the neonatal units (NICU and Babies Unit) at the Greater Accra Regional Hospital during the data collection period.

3.5 Inclusion Criteria

Inclusion criteria specify the distinct characteristics individuals must possess to be eligible for participation in a study, ensuring the integrity and relevance of the research findings (Whitehead & Lopez, 2013). Careful selection of participants enhances the quality of data by focusing on obtaining rich, detailed information rather than simply increasing the sample size.

The inclusion criteria for this study were as follows:

1. Mothers of hospitalized newborns diagnosed with jaundice who were willing and able to provide informed consent to participate in the study.
2. Mothers who were physically present at Greater Accra Regional Hospital on the day of data collection effective data collection and accurate responses.
3. Participants who could communicate fluently in English, Ga or Twi to ensure effective data collection.

Individuals who met these criteria were invited to participate in the data collection which aligned with the study's objectives and provided meaningful insights into maternal support during hospitalisation of their jaundiced newborns.

3.6 Exclusion Criteria

The exclusion criteria for this study were as follows:

1. Mothers experiencing significant emotional distress that impairs their ability to objectively discuss their child's condition.
2. Mothers of hospitalized newborns with jaundice who were unavailable at the time of data collection.

3.7 Sampling Technique

The study utilized a purposive sampling technique, a nonprobability method that involves selecting participants based on specific attributes that best align with the study's objective (Nyimbili & Nyimbili, 2024). Mothers of the neonates, who directly experienced the support systems under investigation, participated in the study. Purposive sampling technique was used because the number of mothers available for interview were limited. The mothers had so much on their hands with commuting, strict visiting times and feeding. Mothers could have been discharged prior to interview should any other sampling method be used because the length of hospital stay was between two to eight days which would have caused sample attrition.

3.8 Sample Size

In qualitative studies, the sample size is primarily concerned with the researcher's ability to gather comprehensive data relevant to the study's focus rather than the sheer number of participants involved (Whitehead & Lopez, 2013). Accordingly, the researcher interviewed mothers with jaundiced neonates who met the inclusion criteria for the study. Interviews continued until data saturation was achieved (Hennink & Kaiser, 2022) at the sixteenth (16th) participant. Data saturation means that no new information was recorded upon further interviews. The sample size was based on the depth and duration of interviews, the richness of the data, and saturation.

3.9 Tool for Data Collection

Various methods exist for collecting data in qualitative studies, with interviews being the most commonly used approach. In interviews, researchers interact with participants to gather data through narratives or conversations, either individually or in group settings. Interviews can be categorized into three main types: structured, semi-structured, and unstructured (Polit & Beck, 2020). Structured interviews strictly follow a predetermined set of questions outlined in an interview guide. Semi-structured interviews allow for flexibility, including follow-up questions and probe to deepen understanding of the participants' perspectives. Unstructured interviews are more conversational and do not adhere to a specific set of questions (Sanchez, 2023).

This study utilized a semi-structured, open-ended interview guide to explore participants' experiences, particularly mothers' perspectives on the support they receive during neonatal hospitalization of their jaundiced babies. The interview guide was designed based on the study objectives, insights from the literature review, and input from the supervisors to ensure methodological rigour. The interview guide had 3 sections. Section A covered background information on participants, Section B covered neonatal admissions and maternal challenges and Section C covered support systems for mothers during neonatal hospitalization under each level of the socioecological model. For data collection, the researcher used an audio-recording device as the primary tool for recording interviews, supplemented by a mobile phone recorder for backup. These devices were selected because they facilitate accurate transcription and allow for replay during analysis, which is crucial in qualitative research.

3.10 Pretesting of the Interview Guide

The interview guide underwent pretesting at the paediatric unit of the Greater Accra Regional Hospital. This pilot study aimed to gather feedback, identify unclear or complex questions, and

refine the interview guide in preparation for the main research phase. Two mothers were interviewed during this phase. The pretesting provided valuable insights into the perspectives of mothers regarding the existing support at the facility. It helped restructure some of the questions and aided in formulating probes. This ensured the credibility and trustworthiness of the interview guide. It also informed necessary adaptations before conducting the actual interviews.

3.11 Data Collection Procedure

Ethical clearance for this study was obtained from the Ghana Health Service Ethics Committee and the local institutional review board of the Greater Accra Regional Hospital, supported by an introductory letter from the School of Nursing and Midwifery, University of Ghana, Legon. A Personnel from the local review board of GARH was assigned to the researcher to the Head of department of the paediatric unit. From there, the researcher was taken to the Medical Officer in-charge of the paediatric unit and the Nurse in charge at the babies' unit where the data was to be collected. The researcher was introduced to the mothers who were on admission with their jaundiced newborns at the time. The researcher was introduced as a student of the University of Ghana undertaking research which would require their cooperation. The researcher was allowed some time to talk to the mothers about the research and its importance in contributing to knowledge. Mothers who were interested in participating in the research were noted. Suitable times and places for the interviews were sought and interviews were carried out at the convenient time and place for the participants. Prior to participating in the face-to-face interviews, all potential participants received an information sheet detailing the study's objectives and procedures. The rationale for the study was explained, participants were given information sheet detailing the scope of the study including risks and compensation. Participants were required to sign consent forms indicating their willingness to participate. Confidentiality was strictly maintained throughout the

research process. Participants were assured of their right to withdraw from the study at any time without consequences.

The study utilized a semi-structured interview format with participants who voluntarily agreed to take part. Each participant received a consent form, which was thoroughly explained and signed before the interview. Participants had the autonomy to choose the location, time, and day for their interviews, all of which took place within the hospital premises. They were informed that the interviews were being audio-recorded. Confidentiality and anonymity were strictly maintained to address any concerns about privacy and ensure that participants felt secured in sharing their perspectives.

Each interview lasted approximately 30-45 minutes. The researcher also observed nonverbal cues such as body language and tone of voice, fieldnote were taken during the interaction. Interviews continued until data saturation was achieved. No new information or insights emerge from further interviews. The principal investigator retained ownership of the data collected. To protect participant identities, pseudonyms rather than personal identifiers were used.

3.12 Data Management

Encrypted soft copies of transcripts were stored exclusively on the researcher's laptop, ensuring that only the researcher and supervisor had access to the interview data. The physical recorder, transcription documents, and field notes were securely stored under lock and key in the researcher's home to prevent unauthorized access. To protect participant identities, each participant was assigned pseudonyms for easy identification in the study. These measures aligned with Section 24, subsection 3 of the Republic of Ghana's Data Protection Act, 2012, which mandates safeguarding stored data from unauthorized access. All data collected, including field diaries, were stored on a

computer with dual-verification password protection, ensuring access is restricted to the researcher and supervisors only. Transcripts and other research documents were securely stored under lock and key at the researcher's home to prevent unauthorized access.

3.13 Data Analysis

During this phase, data collected from the research field were interpreted (Lincoln, 1995). Thematic content analysis served as the methodological approach for data analysis, facilitating the organization of collected data into coherent themes (Kim et al., 2017; Willis et al., 2016). This systematic method allowed for a structured approach to the data analysis and interpretation.

Thematic analysis is a method of analysing qualitative data through pattern identification, pattern reporting from the data set and interpretation of inherent meaning (Braun & Clarke, 2006). Braun and Clarke (2006) described six steps involved in the thematic data analysis process; the process starts by the researcher familiarising with the data. At this stage, the researcher went through the data collected to get acquainted with it. The researcher transcribed audio recorded on the field and went over the transcripts repeatedly. This afforded the opportunity to identify patterns and note down peculiar features of the data. Next, the researcher systematically identified and labelled the parts of the data that spoke to the research questions. The labels were used as codes which helped to organize and categorize the data. The theme generation phase was done by clustering the codes into broader patterns called themes. Themes were constructed based on the researcher's interpretation of the codes generated. Next, the researcher reviewed the themes. Initial themes were evaluated against the coded data and the entire field data in this phase. This was done to ensure that themes were representative of the original field data, and were accurate and comprehensive. Themes were reviewed or discarded in this phase and new ones generated. The researcher then, refined, defined, and named the themes. The themes were refined in this phase to capture its scope

and boundaries. This made each theme distinct, conveying meaning to the reader. Finally, the writeup stage. This final stage of the process was where the researcher weaved together the various themes to present a coherent narrative and interpretation of the data in an insightful manner to answer the research questions and connect findings to existing literature. These six staged analysis processes were employed in the data analysis phase to aid in a concise representation of the field data under the supervision of the supervisor.

3.14 Methodological Rigor (Trustworthiness)

Marquart (2017) described methodological rigor as how sound and precise a study is in terms of planning, data collection, analysis, and reporting. This section addressed the criteria of credibility, transferability, dependability, and confirmability of the study. The researcher upheld the rigor of the research process to meet acceptable standards of quality.

Credibility was ensured by accurately representing participants' responses and maintaining alignment between their perspectives and the researcher's interpretations. The interview guide was pre-tested to validate its suitability for the study. Verbal transcriptions were promptly completed after each interview, while audio recordings and a field diary documented the entire process to secure and trace data. An audit trail further logged events and documentation to ensure dependability. To enhance transferability, the researcher provided a comprehensive description of the research setting, study design, sample size, detailed description of sampling technique, data collection methods, inclusion and exclusion criteria, as well as details on the duration and timeframe of data collection. Confirmability, which encompasses credibility, transferability, and dependability, were achieved through meticulous adherence to these steps throughout the study.

3.15 Ethical Consideration

Ethical clearance for this study was obtained from the Ghana Health Service Ethics Committee (GHS-ERC:039/01/25) to adhere to international ethical standards. Permission was sought from the local institutional review boards of the Greater Accra Regional Hospital, supported by an introductory letter from the School of Nursing and Midwifery, University of Ghana, Legon. The research design, procedures, and ethical safeguards were clearly outlined in the approval application. Informed consent was obtained from all mothers involved in the study. Participants were provided with comprehensive information about the study and its purpose, procedures, potential risks, and benefits. It was clearly communicated that participation was voluntary, and they can withdraw at any stage without facing adverse consequences. The researcher respected the dignity, privacy, and autonomy of the individuals involved in the research, ensuring that their rights and well-being were protected. Anonymity was ensured by assigning pseudonyms to the participants. Pseudonyms were determined by the participant number and ward of admission. Example, 001BU means the first participant to be interviewed was from the babies' unit

Data collection (interviews) commenced in April 2025. Prior to participating in face-to-face interviews, all potential participants received an information sheet detailing the study's objectives and procedures. The rationale for the study was explained, and participants were required to sign consent forms indicating their willingness to participate. Confidentiality was strictly maintained throughout the research process. Participants were assured of their right to withdraw from the study at any time without consequences, and they had full autonomy in choosing the interview date, time, and location. Participants received a snack package after the interviews as compensation for their time spent and participation.

CHAPTER FOUR

STUDY FINDINGS

The findings of the study were summarized in this chapter. The researcher interviewed sixteen mothers at the Greater Accra Regional Hospital, whose newborns had been hospitalized on account of neonatal jaundice. The Socioecological model provided the framework for organizing the data collected. The theory's constructs and the objectives of the study informed the formation of themes and subthemes. The researcher categorized the data into four themes and thirteen subthemes.

The four themes are intrapersonal support (three subthemes), interpersonal support (five subthemes), institutional support (two subthemes) and community level support (three subthemes). All four constructs identified were in synch with the socioecological model which served as the framework for the study. Comments and quotes from participants are explained further in subsequent sections of this chapter with respect to the objectives and constructs of the study's framework including demographic characteristic of participants.

4.1 Demographic Characteristics

The researcher interviewed sixteen (16) mothers. These mothers were of different age groups; youngest being fifteen (15) years and the oldest being 40years with mean age of 29 years. There were two teenage mothers (15 and 17 years). The mothers were of varying educational levels from Junior high school to a master's holder. Their professions included two (2) students, three (3) seamstresses, one (1) trader, two (2) caterers, one (1) real estate agent, one (1) salesperson, two (2) accountants, two (2) nurses, a midwife and a teacher. Fifteen mothers had one baby each on admission while the sixteenth(16th) participant had twins, making seventeen (17) babies in all with mean age of five days (5) days. Participants were either recruited from the paediatric unit (PU)

neonatal room or the Babies unit (BU). All participants were mothers who had their babies admitted within the first week of life on account of neonatal jaundice. All babies were on admission and undergoing phototherapy at the time of the mother's interview. Babies whose mothers were interviewed were within two (2) to eight (8) days old following delivery. The nationality included thirteen (13) Ghanaians, two (2) Nigerians and one (1) Gabonese. All participants were Christians. The researcher could not get participants with other religious affiliations during the period of data collection. Twelve (12) participants were from the Babies' Unit while four (4) participants were from the paediatric unit's neonatal room. This is important to note because the babies' unit is quite different from the paediatric unit in terms of operation. At the paediatric unit, there is a four (4) bedder neonatal room where mothers can be on admission with their newborns who are undergoing phototherapy. The Babies' Unit however, does not have beds for mothers. It is purely baby suited and mothers are made to come in 6am, 9am, 12pm, 3pm and 6pm to feed and change diapers. Each feeding and changing session lasting an hour. Mothers see and feed their babies for the last time from 6pm to 7pm and leave for the night, returning the following day to start the routine over.

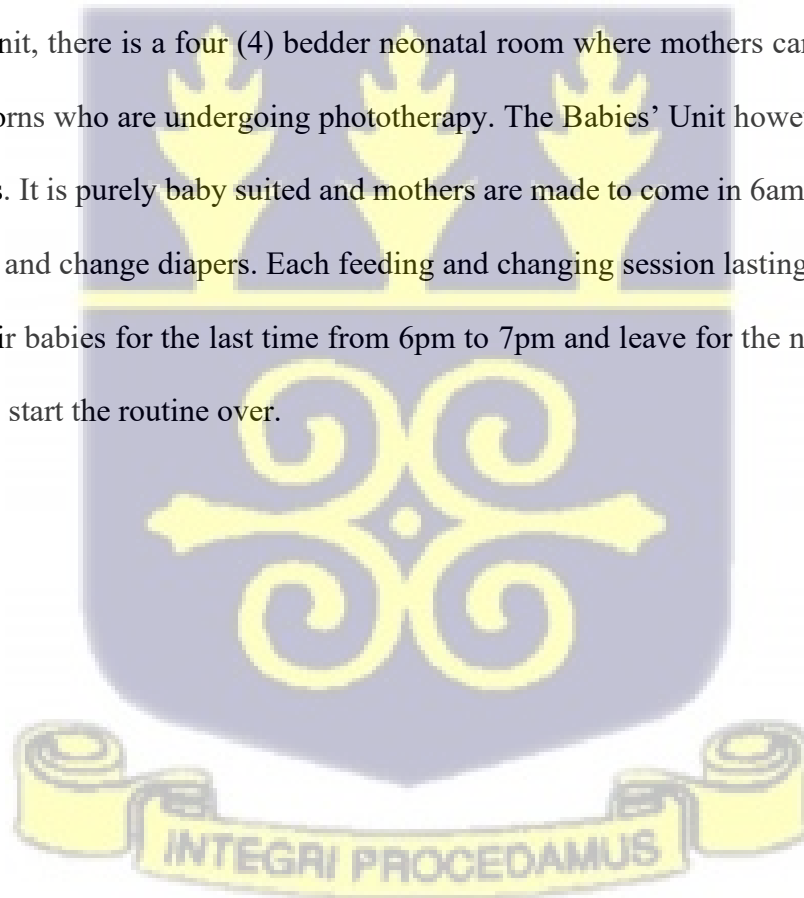
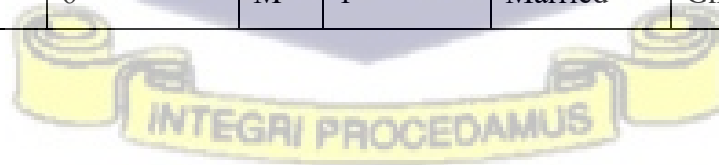


Table 1: Participant Socio-Demographic Data

Participant No	Age/ years	No of current children	Baby's Age (Days)	Sex	Days on Admission	Marital Status	Nationality	Educational level	Profession
001BU	29	1	3	F	1	Married	Ghanaian	Tertiary	Seamstress
002PU	28	2	7	F	3	Married	Gabonese	Tertiary	Accountant
003PU	28	2	5	F	2	Married	Ghanaian	SHS	Seamstress
004PU	15	1	5	M	2	Single	Ghanaian	JHS	Student
005PU	28	2	4	M	2	Married	Ghanaian	Tertiary	Nurse
006BU	36	2	8	F	3	Married	Ghanaian	Tertiary	Salesperson
007BU	37	1	4	F	1	Married	Ghanaian	JHS	Seamstress
008BU	27	2	5	F	2	Married	Ghanaian	SHS	Caterer
009BU	34	2	4	M	1	Married	Nigerian	Tertiary	Real estate
010BU	17	1	8	M	4	Cohabiting	Nigerian	SHS	Student
011BU	29	4	5	M	1	Married	Ghanaian	JHS	Trader
012BU	31	2	4	M	3	Married	Ghanaian	Tertiary	Nurse
013BU	26	2	5	M	3	Married	Ghanaian	JHS	Caterer
014BU	27	2	6	F	3	Married	Ghanaian	Tertiary	Teaching
015BU	40	3	3	M	1	Married	Ghanaian	Masters	Accountant
016BU	37	2/3	6	M	1	Married	Ghanaian	Tertiary	Midwife



4.2 Themes and Subthemes

The socioecological model was used to organize the data into four (4) themes and thirteen (13) subthemes. Representative quotations from participants highlighting these themes were discussed in this chapter. Below are the themes and subthemes as they were generated from the data collected.

Table 2: Themes and Subthemes from Data Collected

	Themes	Subthemes
1	Intrapersonal level characteristics supporting mothers	<ul style="list-style-type: none"> a) Demand characteristics of mother b) Maternal Resource characteristics c) Maternal Force characteristics
2	Interpersonal level support for mothers	<ul style="list-style-type: none"> a) Spousal support b) Maternal Grandmother support c) Paternal grandmother support d) Support from siblings e) Support from friends
3	Institutional factors supporting mothers	<ul style="list-style-type: none"> a) Infrastructural support b) Expected staff support c) Medical staff support for mothers
4	Community level support for mothers	<ul style="list-style-type: none"> a) Cultural practices supporting mothers b) Maternal Social groups' support c) Neighbors/neighborhood support for mothers

4.3. Intrapersonal Level characteristics Supporting Mothers

Intrapersonal level support as identified in this study, has three subthemes which explains individual level characteristics. These sub themes are demand characteristics, resources characteristics and force characteristics. Demand talks about biological factors as age and gender which the individual has no control over. Resources may be but are not limited to the individual's acquired skills and possession that helps her in times of need. Force characteristics are the personal drive and personality traits, that an individual might have built such as self-motivation that helps them manage situations. The researcher identified some coping strategies mothers utilize on the individual level that serve as a support for them during the hospitalization of their newborns.

4.3.1. Demand characteristics of mother

Demand as explained earlier refers to biological factors such as age and gender which serve as support for mothers. Below are the submissions from mothers on how these characteristics support them.

Age

From the data gathered, some mothers see age as coming along with life experiences which are necessary for coping. Other mothers think that age may not necessarily be a support for them and explained that some teenagers may cope better with stress. One participant puts it this way:

“Truthfully, I don't know because as they say every Pregnancy is different. Every baby is different so truthfully. As for my age I think it's normal. If I were younger it would have been more stressful. My current age is favorable to manage 9 months of pregnancy and Childbirth and this admission.” (002PU, 28 years, Accountant)

One teenage mum thought her age was not a support for her and viewed it as an advantage when it came to physical health. She thought since she was younger, she will heal faster:

“Erh I think I am doing just fine. The advantage with my age is getting well faster”

(010BU, 17 years, SHS Student)

The second teenage interviewee also had this to say:

Right now, it is my mum who does everything for me. so my age is not a support because I am young and the delivery was hard. I am very stressed” (004PU, 15, JHS Student)

Age was seen by some mothers as a support and for others it was not a support. The mothers gave their reasons for their stance as illustrated above.

Gender

Most mothers agreed that being female was not a support for them in anyway because in the African culture and in Ghana to be precise, being female comes with cumbersome responsibilities. They compared the recent times to the past where women were only tasked with child rearing. In modern times, women have added work to their responsibilities which is putting a strain on their health. Some of the interviewees wished they had been born males instead. They don't see being female as a support. They explained that males have to only work but females work and also have the responsibility of nurturing. Two of the mothers who thought this way were recorded as saying:

“Hmm, about the gender, I should have been born a male. Yes. because back in the olden days, they say women should be in the house and men should work. But now, we women

are doing everything. In the house and at work. We are doing double.” (014BU, 27 years, Teacher)

“I was born a female. Hmm I told my husband, next time when I am coming, I will come as a male next time. The work we do, the pregnancy, delivery..... But erm, we are content with whatever God gives us.” (015BU, 40 years, Accountant)

Another mother described her opinion this way

“Society demands a lot from you as a woman. So that one is rather stressful. However, I know I’m the best person to care for the baby in terms of breastfeeding and motherly care. In that regard, I expect my husband to support me by going and coming and bringing us everything we may need here so that me as the mother can concentrate on caring for the baby and not be worried about any other thing. He is not supposed to leave me here because it’s my responsibility as the female to take care of the baby on admission. I need that kind of support. Right now, I’m not able to walk properly because of the delivery. I am having waist pain. I need to be home being cared for, sitting in warm water and massaging but I am stuck here with the baby. My husband has to really support me.” (003PU, 28 years, Seamstress).

None of the mothers thought being female was a support for them. The thought of knowing the wellbeing of the baby was their responsibility felt draining and stressful.

4.3.2 Maternal Resource Characteristics

Resource characteristics are the acquired skills and possessions that mothers used as cushions to combat challenges. These resources include income, skills, experiences (parity, previous admissions) and educational level.

Skills

Participants described themselves as being cautious, observant, self-aware, having professional skills (nurses and midwife), knowledgeable and self-manageability. These skills were seen as useful in these situations cited below:

“So my skills are helping me, yes. Like I mentioned earlier, I am a nurse so I have a bit of an experience with caring for children. I am also very observant so I saw the signs early. I am also very cautious and take minor details into consideration. I think that is helping me because during one of the reviews, the case they were reading about me was for another baby with meningitis and I said “oh no, that is not my baby”. We reported with jaundice please. Everyone laughed but I mean it could have resulted in something different if it were someone who didn’t know.” (005PU, 28 years, Nurse)

“Oh yes yes. You know at the postnatal, the doctor who saw me told me the eyes were okay. But me being a nurse and knowing how it starts, and what jaundice is all about, cos I work in the NICU. I told them I wanted to be on the safer side. Lets do a test an if the results and range are okay, and lo and behold they did the test and it was high. So if I had just taken it and not known anything about jaundice, we would have been discharged and gone home. And he told us to go and hang around in the sun. so my knowledge really helped” (012BU, 31 years, Nurse)

Those who described their knowledge as being a support for them had this to say about their skills:

“Like skills? It help in so many ways... Okay because I have given birth before, I didn’t sit for it to escalate before bringing him to the hospital. I also know of jaundice. So the fear of jaundice was a bit limited. And also being able to read too is helping. So I am not

panicking. Some mother will come home and not know what the Doctor even said or did. They don't ask questions too. But I ask questions.” (015BU, 40 years, Accountant)

“And oh I am just going with the flow but very cautious. I am very critical about the main reason why I am here. I am very observant too..... Just like I knew my baby was not immunized and kept shielding her and covering her. And apparently, when we got to the admission, we were just mixed with a child who had tuberculosis. So I am just imagining me not covering and covering and covering this baby. I will just be exposing these two days old baby to all of that infection. So I am very cautious about where I am and everything going on around me” (001BU, 29 years, Seamstress)

There were those also who spoke about self-awareness and regulation being a skill which serves as a support for them.

“I am not from that big family where you have everything. So I am used to these things. I am used to this kind of condition. I have had a hard life.. Yes so its not new.” (014BU, 27 years, Teacher)

“I am just eating well and resting. Because if you don't eat well you will not be in good shape to take care of the baby. So I am doing my best. I am eating well taking my medication and relaxing” (006BU, 36 years, Salesperson)

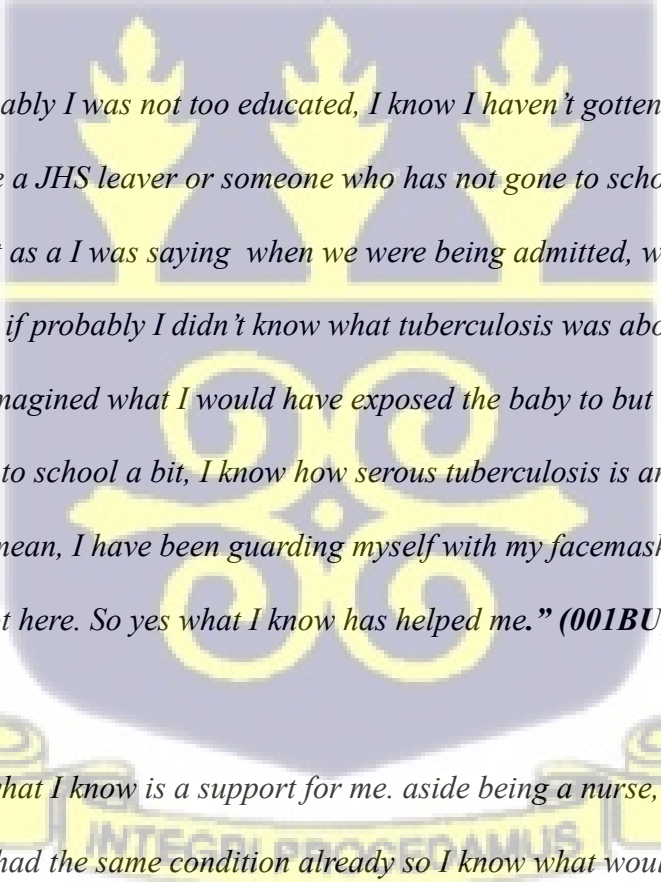
Another participant who thought self-awareness and regulation is a strong suit for her puts her response this way:

“oh okay. When I'm stressed mostly or angry I'll usually withdraw myself from people. I have to work on myself first before addressing some people. Because sometimes I have

bad reactions towards people. To prevent that, I withdraw.” (002PU, 28 years, Accountant)

Educational Level

When asked how their educational level was a support for them, interviewees had varying stands, however majority described education as a source of support since they could understand what was being told them by their clinicians, helps manage challenges and solve problems. They also expressed that being able to read can help you relax since you become more aware of the condition and how to manage it. This was how they reported their agreement with education being a help for them:



“I think if probably I was not too educated, I know I haven’t gotten to where I want to be but if I was like a JHS leaver or someone who has not gone to school at all, like the emergency unit as a I was saying when we were being admitted, we being mixed with a TB patient and if probably I didn’t know what tuberculosis was about or what it could do, I would have imagined what I would have exposed the baby to but because I know a bit and have gone to school a bit, I know how serious tuberculosis is and how it can easily be transmitted. I mean, I have been guarding myself with my facemask all along since we came till we got here. So yes what I know has helped me.” (001BU, 29 years, Seamstress)

“I would say what I know is a support for me. aside being a nurse, I have also had one child who has had the same condition already so I know what would be done. And although that does not completely put me at rest, I know that baby will be fine in the long

run. But then any admission would stress any mother so yeah I am still stressed but with knowledge. haha” (005PU, 28 years, Nurse)

One mother explained that education and awareness could help correct some simple mistakes which could be detrimental to your baby’s health. So she is very aware and sees that as a support for her during her baby’s admission:

“I would say that education is good waaaa. The higher the better. But at least knowing how to read and write is very supportive. Because as we are here, one of the staff can make a mistake but you should be able to see and ask for clarification and correct the person. For example my baby is 5days today. But before I knew it one of the staff wrote 3days. What if they write a medication for her that would worry her? So as I sit here, I watch everything and read everything. So sometimes knowing basic things especially reading and writing is important” (003PU, 28 years, Seamstress).

Maternal educational level was accepted by all participants as being very valuable during the admission. They feel supported when they are able to understand what is being told them, read about it and get more insight into how to help their babies recover.

Income

Another maternal resource characteristic is their income. Most participants expressed their income as playing a major support role for them during the hospitalization of their newborns. One mother described it as a support during emergencies. Another mother described her income as a determinant of good health decision making. Physical and psychological comfort on her part. Their submissions are quoted below respectively:

“I had braised myself knowing that childbirth comes with a lot of expenses, responsibilities and emergencies like this one. We were thinking we were going home yesterday and we rather ended up in another hospital and we are doing another 24 or maybe more than 48 hours again in the hospital. My partner has been very helpful and me being prepared a bit too has been helpful.” (001BU, 29 years, Seamstress)

The participant who thought money enables her make better decisions had this to say:

“Mm so it is a support for me. I don’t really think about it when it comes to the monetary aspect. Cos they discharged me and If there was no money I would have been discharged and gone home, they would have said that we have discharged you, you have paid your bills so go home. Like they discharged me 3 days ago. But I told them that even if they add up to the bills I don’t mind because of the baby so that I can stay and take care of him. Because I would not be able to go home and be coming here every day to do this work. So I must say that my income and money is really a support for me.” (012BU, 31 years, Nurse)

The two teenage interviewees aged fifteen and seventeen years were Junior high and senior high school students who were not earning any income. They described their situation this way:

“I don’t earn a living so that is not a support for me. My mum takes care of me and my partner (16years old) sometimes comes here to give us money” (004PU, 15 years, JHS Student)

Oh, I am not working at all. My boyfriend takes care of everything. (010BU, 17 years, SHS Student)

There was one caterer and a seamstress who were incapacitated by their pregnancies and were not working or earning any income at the time of their interview and so described their situation as not having support from their income:

“I am not really working currently. When I got pregnant, I was still getting orders till about one week to delivery. I stopped working. It was when I was getting closer to my delivery time. Like a week to my delivery date, my blood pressure went up. it was just one week to my delivery date.” (013BU, 26 years, Caterer)

“Oh if I have the strength to work dierr ah, it is okay because I will get something but since I delivered I haven't been working and even a few weeks before the delivery I couldn't work” (007BU, 37 years, Seamstress)

Most of the interviewees mentioned financial support from their spouses although they had their own income. They use their income for other necessities that supports them. Others said although their income wasn't enough for them, it gave them a sense of security. They put it this way

“My husband takes care of most of the bills here. Yeah but my income gives me security. knowing fully well that we have something to fall on when we run out, puts my mind at rest.....” (005PU, 28 years, Nurse)

“Its not good but better than zero. But in the end you know that you will definitely get something at the end of the month, although it is not enough....” (014BU, 27 years, Teacher)

“My income is really helping. If it were my husband alone. We would not be able to rely on his income but when it is the both of us, we can manage. Currently the economy is vet

hard so having two streams of income for the family is helping me. We are supporting each other” (003PU, 28 years, Seamstress)

One mother spoke of her income as using it for other things while her private health insurance caters for her hospital bills:

“Oh my income doesn't really help because we are on insurance, yes private insurance so I am not paying directly. I am not paying out of pocket. But aside the hospital bills my income helps take care of other expenses” (006BU, 36 years, Salesperson)

Income during this study was a strong support for mothers. Those who had enough to meet their needs felt greatly supported and felt they could make the best decisions for their babies while those who had little income felt a bit constrained. Those who had no income were distressed and felt dependent on their significant others for support.

Parity And Previous Paediatric Admissions

Parity and previous paediatric admissions can offer a mother great experience base for caring for the neonates in subsequent admissions. When mothers were asked how their experiences with previous admissions and their parity has supported them, this what they had to say:

“The first baby was easier because after delivery we went home and everything was fine. But this one we went home and came back and came to stay in the Hospital for a period of time. My first born has helped me because my understanding of motherhood. Because before then, I didn't have any at all. Patience was something I didn't have. But I now understand being patient with a child. I think yes it has helped my. I've learnt patience because it is not easy at all.” (002PU, 28 years, Accountant)

Participant three puts her submission this way:

“I’ll say, having one child already has helped me because I’m not new to motherhood. I kept long in delivering the first baby so this one was a bit easier and labour was shorter. Mm, like I said earlier, I’ve had one child, although he was not brought here, we have been on admission for other reasons so the experiences form there is helping here to be more relaxed than I would have been, relatively speaking.” (003PU, 28 years, Seamstress)

One mother who had her first child admitted because of neonatal jaundice described her experience as:

“This is my second child. My first child too we came here. So having a child on admission is not a new thing to me..... This is not my first time. So I was able to detect it. When I saw that the eyes were yellow, I already knew it was jaundice. Yes so my experiences with my first child taught me strength and some coping mechanisms so I am not as stressed as I was during the first child’s admission. I am taking it cool” (006BU, 36 years, Salesperson)

Another participant who had her first child admitted as a result of neonatal jaundice also gave her answer as:

“It has given me experience in taking care of babies. Not feeding baby anyhow. Taking care of the baby in a way to prevent them from getting sick. And as its happening now, I know that the first baby got better so this one too will get better” (016BU, 37 years, Midwife)

One mother who had not had any of her older children admitted because of neonatal jaundice but rather, other conditions described how her ordeal with her older child with asthma had given her the experience and skill to take care of all her children. Her submission is reported below:

“Yes. my first born is asthmatic so the hospital is not a strange or scary place for me. you know we have to go to the hospital often and anytime it comes, it can be at any moment, anytime, you know how when it comes it is serious and all that. He had asthma at the age of 2. Yes, so going to the hospital and the panic when we have to be in the hospital. Sometimes he will even go off. They have to do a whole lot to resuscitate him. In fact, It has strengthened me and when any of my friends kids are sick, i care for them. I don't fear much.” (015BU, 40 years, Accountant)

There were a few mothers who thought that although they may have experience with their other children, the difference in condition or treatment could still be a stressful process for them:

“I already have one child but its stressful. It doesn't make the process less stressful. I didn't experience this with my first child.” (008BU, 27 years, Caterer)

“My first daughter was jaundiced too. Within the first 24 hours. She was also jaundiced but we didn't do this. We were told to do the sunbathe and breastfeed more. And it got better.” (016BU, 37 years, Midwife)

First time mothers expressed their situation as stressful:

“Yeah this is my first time. It is stressful and I don't have anybody helping me at all. It is just me and my husband.... So I have to go home on my own” (007BU, 37 years, Seamstress)

“Oh I don’t think if I had other children it would have made this one less stressful because I know what I have passed through with this child. So it is very stressful and I don’t know if the stress would have reduced if I wasn’t a first-time mom. I cried a lot. I am always crying” (010BU, 17 years, SHS Student)

Parity and previous neonatal admissions were strong resource characteristics. Mothers who had more than one child and have had their babies hospitalized before because of jaundice or other conditions were less stressed and had hope of better outcomes.

4.3.3 Maternal Force Characteristics

Personal motivation

Participants were asked whether they had any personal-motivation that keeps them going in caring for their babies. Some saw motherhood as a personal responsibility. It is their duty to care for the baby and ensure their safety. Some mother saw motherhood as something to be admired and be proud of so they took pride in the fact that they were also mothers and can talk among their peers when the conversation came up. These reasons kept them moving on and gave them a strong sense of support to endure the stress and be present for the newborns. Some even staying up all night or sitting at the reception of the unit knowing fully well they could not go in and will only be allowed into the ward the following morning. One mother described herself as enduring:

“I am a nurse so I trust in my judgment. I know a few things that can help my baby. I am able to endure for the sake of my child no matter the circumstances” (005PU, 28 years, Nurse)

One participant was an older woman who had lost her first child. She mentioned her happiness when her daughter was born finally making her a mother of a live born only to be admitted and

not able to take her home to experience all the joys of motherhood. This was how she reiterated her story:

“Mm well. You know. Because of my age, hmm you know I am grown, When I gave birth to her the way I was happy. Because I lost my first baby. I miscarried. So I was very happy. We went home very happy. Only to return a few days later and be admitted. So yes I am motivated to take care of her, because the one I miscarried is no more but at least this one is alive and I am told if the jaundice is treated well it won't be a problem and she will be fine. So I am motivated to take care of her. Me too I have a child. They said it is because of my blood group. I am O- and the baby is positive like my husband. So they said it is because of that.” (007BU, 37 years, Seamstress)

Another mother said she feels motivated when she plays with her child and also being able to talk about her experiences when others are talking about motherhood:

“Sometimes, when you play with your child it motivates you and when people talk, you can also say something. Like me too I have a child. People are talking about their children you too you talk about your child” (014BU, 27 years, Teacher)

The quotes below spell out some qualities like patience, decisiveness, endurance, passionate, reliable, responsible, observant, resourceful and adaptable. These were some of the qualities that motivated mothers to care for the babies through thick and thin:

“I know my baby is not well but once I know I am doing everything within my power to help her get better, I am okay with that. So me, wherever you put me, I can function there. That is why I am not happy with this night people because we are trying very hard so if

they would have been helping one way or the other, like carrying the babies for us to even stretch a little or something, it would have been very helpful” (003PU, 26. seamstress)

Another participant puts it this way:

“I don’t know how to explain this but as a mother, normally you have to care for your child. You have to show passion for your baby. You just don’t have to be there, Show care. If you don’t, then meaning, you never wanted your child but if you did, when the child is going through something you should be feeling the suffering. And focus on him. Initially I didn’t want him to be admitted but I already had the experience with the first child so I thought to treat it rather fast so that we both go home”

(009BU, 34 years, Real Estate Agent)

One participant thought she was very patient unlike her husband who was always anxious:

“I am very patient. I am not moved. I am comparing myself to my husband. He is always anxious. “eei what is happening again? What else? what are we going to do? Why are they keeping baby? Can’t we go home?” And then I go like relax. Everything will be alright. Yeah because I know the worst can happen when you don’t provide prompt care to a jaundiced baby at a particular time. So yes” (012BU, 31 years, Nurse)

one participant who described herself as observant said this:

“When we went home from the other facility, I was able to identify that one of the babies had rapid breathing, respiration was very high and all of a sudden, the whole body became jaundiced and had high temperature as well.. both of them. So I rushed them here.” (016BU, 37 years, Midwife)

Psychological attributes

Psychological attributes determine how well people are able to deal with the challenges they face and manage themselves. When mothers were asked how they manage their emotions, they cited self-awareness, self-management and regulation, self-soothing, venting, withdrawal, positivity mindset and prayer as some of the ways they cope with stress.

The self-soothers are those who would cry as an outlet for all the stress and pain they feel. These mechanisms as the researcher found out was the most used method of coping among the mothers.

These were some of their statements:

“Well, it has been rough so when I come in here to express milk and I am by myself, I can break down here, cry and then go outside and look fine. Uhuh, I am not the type who would cry in a crowd or something, so when I am emotional, I get a place where I can isolate myself and then have my alone time and then go back and face the world.”

(001BU, 29 years, Seamstress)

Another participant described how she self-soothes this way:

“I don't know if what I do works but usually I would cry and let the pain out and then pick myself up again because I usually don't talk about my issues. So yes I do that here”

(006BU, 36 years, Salesperson)”

Other participants said:

“When I feel like crying I cry. You feel somehow but you let it out. Instead of keeping it”

(014BU, 27 years, Teacher)

“I cry. I cry and let everything out.” (010BU, 17 years, SHS Student)

There were some mothers who also told themselves that everything will be alright, psyche themselves and then add prayer.

“I always try to be positive even when things are not looking good. I don't like to get too much worked up. You will by all means get worried though and that is normal but you don't let it affect you too much or affect your caregiving. And I pray too so I know that baby will be fine” (006BU, 36 years, Salesperson)

One participant gave an in-depth description of how things happen at her end:

“I am someone who when is emotionally, erm, what should I say, when I am not feeling well emotionally, what happens is that I smile a lot. So if you are far away you will think that ah this woman is she correct? My husband too goes like oh so this one too you are laughing. But I feel like the more I smile it takes away my stress and my pain and gives me hope. As I am laughing you think I am not thinking about the problem but I am actually thinking about the solution. So before you realise as you are thinking and having problems, I would have come up with a solution. So I encourage myself wit the word of God . that is why I said at times I laugh because when the things happen, you have nothing to do, you cant change it, you cant take away sickness, you are not a doctor, so just look to the one who brought the child to you can do something” (015BU, 40 years, Accountant)

Another participant had this to say:

well, its not easy but we are already here so you just have to psychic/ tune your mind and to manage both of them” (016BU, 37 years, Midwife)

There are mothers who withdraw from everyone and try to regulate themselves first before interacting with others:

“oh okay. When I'm stressed mostly or angry I'll usually withdraw myself from people. I have to work on myself first before addressing some people. Because sometimes I have bad reactions towards people. To prevent that, I withdraw” (002PU, 28 years, Accountant)

There were those who said they felt much better after talking to someone else like their own mothers:

“Mm I share everything with my mom. Everything with my mum. I share everything. I bring everything out. Unless I realize, she is also stack at that particular moment because we are best of friends. I am the only girl so looks like she is my best friends. So if I realise that it is going to drain her, then I don't tell her and I become the stronger one. Yeah. But in everything I tell her.” (012BU, 31 years, Nurse)

One mother highlighted that it does her no good to cry. She doesn't have to worry so much because that would increase her blood pressure:

“Me, I do not have to do that because me, I am hypertensive. I'm on drugs so I do not have to stress myself or worry so much. Else my blood pressure will go up.” (008BU, 27 years, Caterer)

The final part of the force at the intrapersonal level support, Mothers described their personality as helping them be adaptable:

“Yes. I am not moved by certain things. Let’s say for instance, they moved me from a four in a room to a two in a room because I am a staff. Just yesterday they had an emergency where somebody I think was in eclampsia or so and they said they wanted my room because it was closer to the nurses station so that they can monitor her. And I was like okay. So I moved to the four in a room again. And one of the nurses was amazed and like eei you are willing to move. And I am like yeah I am willing to move. It is about human life. So I think my personality is really a support for me. I am very adaptable. I don’t let things move me so much by being treated specially because I am a staff. Provided they are doing the right thing, I am fine” (012BU, 31 years, Nurse).

Another participant shared how her experiences over the years has shaped her personality, making her more adaptable and coping better with stress.

“It has taken years to build this personality and I must say that it helps me cope better with stress because it was with much difficulty that I have come this far.” (014BU, 27 years, Teacher)

Intrapersonal level support as reported by the mothers, were the various forms mothers motivated their own selves to be optimal and functional in taking care of their own babies. These characteristics, although varied from one mother to the other, can be used as strengths in planning individualized care for better outcomes at the neonatal units.

4.4. Interpersonal level support for mothers

Interpersonal level support as described by the mothers were their immediate relationships, which may include their immediate nuclear family(spouse), maternal family (grandparents and siblings), in-law support and support from friends. During the interview, the most frequently mentioned

individuals who offered support to the mothers were spouses, maternal grandmother, paternal grandmothers, siblings and friends

4.4.1 Spousal Support (Husband/partner)

Spousal support is one of the most utilized forms of support during neonatal admissions. Fifteen out of the sixteen participants had full spousal support. Spouses were said to be offering financial support, paying the bills and accompanying expenses. For those who had other children, husbands were said to support the siblings of the hospitalized neonates with or without the help of maternal family. They were seen to be providing emotional support to the mothers by physically being there, calling them on phone or facetimeing. Some spouses bring their wives in the morning before going to work and come for them in the evening after their final feed. These supports are categorized into financial, emotional, physical and sibling support:

“Financially he is there and emotionally too he is there for me. He takes care of almost everything. And he is always ready to encourage me.... he has taken leave because of baby and he is here. So he is with us 24/7. When he sees that I am not well...like through labour and everything was there, he witnessed everything and so he soothes me when I need it.” (001BU, 29 years, Seamstress)

Participant two described how her husband supports her emotionally, financially and taking care of their other child:

“Oh he has been very supportive. House chores and everything. I mean as I'm on admission here he's taking care of the other child at home. He makes sure that I Have everything I need before he leaves to go home. Physical help, he said when we are finally

discharged and I come home he will give me a good massage. He's always telling me I'm strong, we did it and it shall be well. He encourages me.” (002PU, 28 years, Accountant)

Another participant puts it:

“Oh my husband is very supportive. He comes here every morning and evening because he has to go to work. He has to go to work early in the morning and then be home early enough to receive our first born or pick him up from school. Then visit me in the evenings. He is at work every day but I know his mind is with us here. He pays most of our bills. And as I am away from home, he takes care of the older child, sends him to schools and goes for him or receives him from school. He is very supportive. He brings me whatever I need. Our bills and everything he helps with those things. You see how they came to say that my baby's jaundice is very high, yes. He was comforting me and telling me the baby will be fine and everything will be fine. He reminded me that children fall sick and we take them to the hospital to be healed so once the baby is in the hospital, she in good hands. So he encourages me. he is also taking care of our first born since I am here with the new baby. He takes him to school in the morning. The he picks him up. He has to close work early to be able to do that. Then in the evening he comes here. That is why he is not able to be here fully to help with the up and down movements but I know he is doing what he can.” (003PU, 28 years, Seamstress)

One participant whose husband works from home described how her husband supports her:

“So as we are here he is also helping with the other child so that I am able to concentrate on caring for her. So I leave them for the hospital early in the morning while they are asleep. When the older child is awake and he is asking of me and all that, he also takes

care of that situation. Although he goes to school, they are currently on vacation so he is home. My husband is self-employed so he is at home with him and taking care of him. He has been very supportive. He brings me here in the mornings and goes back home to take care of our boy then in the evenings he comes to see the baby and picks me up so we go home. If there is something we have to get for the baby too, He tries to provide for our every need.” (006BU, 36 years, Salesperson)

Another mother described how her husband has taken on domestic chores to help her while the baby is on admission so that she can concentrate her energy into taking care of the baby. Her husband makes sure she returns home every day to a good meal to regain their strength expended during the day before returning the next morning to visit, breastfeed, change diapers and bond with their babies:

“My husband is helping me with work. He cooks and washes. When he is around or off shift, I call him to bring me food or any other thing that I might be need. Since I am here too he makes sure there is food at home for me when I go home from here. Financially too he is helping me. he is doing his best financially but it is not enough. It is not enough at all to cover everything that we are doing here. It is not easy. The emotional part and encouragement from him is okay. Yesterday kraa, when they asked us to leave, I was crying. He was the one who was encouraging me to stop crying and that everything will be alright. Throughout the night I was just crying.” (007BU, 37 years, Seamstress)

Two participants mentioned they had some sort of support.

“My partner is 16years old. He is doing his part by sending us money to feed. He comes here every morning with his sisters and gives us money. However, he hasn't been around

a lot. He only started coming here when we were admitted. He wasn't here during they delivery and all that. It was my mum who was there” (004PU, 15 years, JHS Student)

“My husband would love to help but he does not have money. If he gets some fine but I cannot say he helps me financially especially with this admission. It is my mother and I only. He does not offer me emotional support. But I would say he is taking care of my children at home because I am not home. Aside that he doesn't offer me any other support” (011BU, 29 years, Trader).

As was observed during this study, spousal or partner support was an important support for mothers. When they felt supported by their partners, they drew strength to carry on with the care of the baby, knowing they are not alone.

4.4.2 Maternal Grandmother support

The maternal family support is most implicated in this study. The mother, in this case the grandmother of the hospitalized newborn has a great influence on the care of the baby. they have responsibilities like taking care of the new mother, physical care of the baby, emotional support for the mother, advice, sibling support, taking charge of home affairs and sometimes financial support. All participants in this study except one, expressed deep level of support and involvement of their mothers in the care of their newborns on admission:

“My mum helps me emotionally. Physically too yeah. She does most of the rounds for me here and outside the hospital. She brings me food and picks up our clothes to go and then wash them and bring us a change of clothes.... When we were at the other hospital she was coming morning, afternoon and evening to check up on us because it was allowed. She was helping me take care of the baby. But here it is not around so she only comes and

sees her and then ask if I need anything and then does it.” (001BU, 29 years, Seamstress)

“My mum helps financially. Not all the time but most of the time. She's always there to support me emotionally if I have any challenges or problems in my life. She's always there. But she's not in this country to help me with my physical needs” (002PU, 28 years, Accountant)

Participant three thought her mother supports her in ways that her the medicals staff do not:

“Well my mum calls to check up on us, she cooks for us and all of that. Where we are, everyone knows it will require money so she supports me financially as well, it is not only my husband who supports financially. When they call, they ask what plan of treatment is and if we are to buy medicines or do some labs and then she gives what she has to support me. My mother also comes around to clean the baby. And make sure her cord is cared for because the nurses do not do that for us here. She holds her so I can relax and maybe go and bath.”(003PU, 28 years, Seamstress)

One participant described how her superwoman mother even sneaks in to see her and the baby and does the following to support her:

“My mother is a mother oo. She is a super woman ooo. She tries. She doesn't sleep. If I don't sleep she doesn't sleep. Sometimes she will sneak her way into the ward just to see us. she is always here to check up on me and baby. Even everybody knows my mom here because of how she has been coming to check up on me. Yes she helps with money too. I really appreciate her. She helps me cry. We cry together. She was with me throughout the labour. My first child was born in Nigeria and they induced me with a higher dose drug.

But this one the medicine was not that strong. The enemy came but God stood by me. Because during labour the baby just bridged and the induction didn't really work for me. That was why the CS came in. but my mum was there throughout. I was afraid of the CS initially but she was there for me and helped me through” (009BU, 34 years, Real Estate Agent)

Another mother described how her mother has taken up responsibility in her matrimonial home to cater for her older child and husband, and still comes to the hospital to take care of her. This was how she put it:

“Mm mummy is taking care of the home now as I am away. She is taking care of my first child who is 3 years old. Taking care of their food and everything. At the same time, She comes here in the morning with them and goes back to prepare her for school and cleaning up and come back here again. She helps me with finances too when need be. Even today was my daughters “our day” and I called her to ask how they are doing and she is like she has taken care of it, she has done everything already so I shouldn't worry.... She does so well. When she sees that I am emotionally hurt, I don't talk a lot so she watches and sees my mood and knows that there is something wrong she tells me don't worry. Everything will be fine.” (012BU, 31 years, Nurse)

The younger of the teenage participants mentioned her mother gives her total self-care assistance:

“My mum buys me everything I need. She also does everything I need to do. Like she bathes me and the baby. she was with me in the delivery room and holding my hand.

Because of the CS I can't bend or do anything but my mother does everything for me. She cooks my meals and everything" (004PU, 15 years, JHS Student)

Some mothers could not give financial and physical support because of their age. In such instances, they support their daughters emotionally and give directives as their main support.

"My mom is a bit aged but during pregnancy she will give you directives. Don't eat plenty, don't do this or that. She taught me a lot. Don't drink cold water; do more exercises. Take good care of yourself, sit on hot water. Don't do sweets, you know those kinds of teachings to keep yourself fit. So far I am strong. She taught me the position to be sleeping in so that I have a safe delivery and not have my baby's cord wound around his neck. My mother has no money but she is always there. I would rather give her. She is aged." (015BU, 40 years, Accountant)

"I support them because they are aged. She and my father support me emotionally but financially I support them" (016BU, 37 years, Midwife)

There was one mother who expressed no support from her mother with reasons being that they didn't have that relationship from the very onset as she didn't stay with her growing up.

"I didn't stay with my mum so I don't have that motherly love from her. I am not in touch with her" (007BU, 37 years, Seamstress)

With regards to the data gathered, maternal grandmother support may be in the same league, if not higher or second to spousal support. Grandmothers were seen as a key support system for the mothers who were on admission at the time of the interview.

4.4.3 Paternal Grandmother Support

Another area of interpersonal support is from mothers-in-law (paternal grandmother). The degree of support offered by mothers-in-law as confirmed from the participants was largely dependent on the kind relation of relationship that existed between the mother whose baby is on admission and her mother in-law. The relationship can be as strong as a mother-daughter relationship where the mother in-law performs the roles of a mother and can be very toxic like people who are unrelated or have a feud with each other. Those fortunate to have the mother-daughter bond are very well supported. Some areas of support include financial, emotional, physical and sibling support:

“My mother in-law. For her, she helps me. Like I always say I thank God because I met a family where you being an outsider causes a lot of issues. But she's not like that, she has accepted me. She takes care of me. She mostly feeds me and bathes the baby morning, afternoon and evening. She takes care of my older girl. Sometimes when she goes to school every morning, she helps her to go to school and gives her money. Even when she's hungry she takes care of it. She has been there more like a mother than a mother-in-law. She helps us financially too.” (002PU, 28 years, Accountant)

One mother in-law is said to have moved in from Nigeria to Ghana to stay with the family and help them:

“Mm my mother in-law is good. She is supportive. My mother-in-law is here in Ghana with us and she is supportive. She has actually been with us since last year. She is old so not financially but with other things. She is taking care of the other baby. yes she helps emotionally as well. But mostly physical help. Yes, she sees me as a daughter so yes. So she is supportive and good.” (009BU, 34 years, Real Estate Agent)

Those who are not around call in to check up on mother and baby:

“My husband’s mother is not around as well but she calls to check up. So far it is just me and my husband. But she sends us money when she has and also always calls to find out how things are going. She knows about the admission so she checks up often” (008BU, 27 years, Caterer)

Then there are those who do not have that kind of relationship. They receive no help whatsoever from their mothers-in-law:

“Well. my mother-in-law is around but hmm, I don’t know how to describe this. You know for her she’s not.... Mm ... Even the first born she has not seen her before. It has been two years now, can you imagine? She is in Ghana too, eastern region to be precise. She hasn’t come to see her. This one too she knows I have given birth, she hasn’t come to see the baby, she hasn’t called to check up on us. Even the son I even pressured him to be talking to her, they are not of good relationship. I had to do something. I didn’t want to have to....you know, my mother bond is very strong. I don’t mind. So some people when they see that they are not getting that kind of relationship and love like you are getting then they become jealous of yours thinking that maybe you are giving out information about your marriage. I didn’t want him to feel insufficient, so I did my best to bring that bond back. It hasn’t been easy but I like how it is going. Even though she is not cool with me, I don’t know her reasons but the fact that she has bonded with her son is okay for me. So right now their bond is there. But she is not asking about the children yet.” (012BU, 31 years, Nurse)

One participant simply puts it this way:

“My mother-in-law, we are not really close because she is at a different place. She calls. Yes but We are not very close. She doesn't support me in anyway” (016BU, 37 years, Midwife)

Some mothers-in-law were reported to have passed on and others lived very far or out of the country. However, there were those who were around their daughters in-law but would not help because of the relationship that existed between them at the time of the interview.

4.4.4 Support from siblings

Another area of interest of maternal support is support from siblings. Siblings from both, maternal and paternal sides can be implicated in neonatal admissions although maternal family does more. Some key areas of support is financial, emotional, physical, spiritual support and caring for the sibling of the admitted neonate who has been left behind. Some quotes to support these include:

“So they have also been in the known. So they call to check up on us. Since we came yesterday, they have been calling trying to follow up on everything and find out what we need. So emotionally too they have been there. They are not allowed into the ward so they haven't seen her yet.” (001BU, 29 years, Seamstress)

“My siblings are abroad. They are two. My immediate elder sister lives at Gbawe. She visits me sometimes. She brings me food and sends me money. My partners sister also comes here with him to visit me and they give me money.” (004PU, 15 years, JHS Student)

Some siblings are physically present and do everything to help as participant thirteen puts it:

“My siblings are doing very well. They help. Its was my elderly sister who accompanied me the day I came here. She left because she also has a small baby. Yes, she calls and

talks to me. She encourages me. She helps me sometimes with money. She is doing well. When I left the baby here and was upset, she helped me through that phase” (013BU, 26 years, Caterer)

Some siblings help take care of their nieces and nephews just like participant fifteen reiterated:

“My siblings are currently helping with the children. Feeding them, washing, cooking etc. Even buy drugs when we don’t get them here. i told you, We pray a lot as Christian so my sibling support in prayers. And with taking care of other children at a time like this. They call to check up. After delivery they come to support me for the first one or two weeks. That is how it has been. They do this until you recover enough to handle yourself. Financially I am the elderly one so I rather give them money” (015BU, 40 years, Accountant)

“My sister. She supports in finances, emotional all. in many other ways. She helps me with the baby. she even stays out with me here sometimes. We all don’t go home. She is really helping.” (014BU, 27 years, Teacher)

One participant who did not have help from siblings at all said:

“My mother side I am the first born and my father’s side I am the last born. I have many siblings but I don’t get support from any of them. But I have many siblings paa” (007BU, 37 years, Seamstress)

Another participant also expressed minimal help saying:

“They most of the time call to ask about us and how we are doing. They encourage me. What they do not do is send money. That one dierr you will not get. Forget about it kraa. You will not get.” (011BU, 29 years, Trader)

Most siblings were seen helping their sisters through cash and kind. They were presently there offering their support although not all the mothers interviewed had this kind of support.

4.4.5. Friends’ Support

Mothers were asked about the kind of support they receive from their friends. Some mothers described relationships that were similar to sibling support. Other mothers described acquaintance and the last category are those who do not have friends at all. Those who had sibling-like friends shared experiences of financial, emotional and physical support. Even though participant two had only one friend she expressed how this friend helps her saying:

“Oh. I have only one friend here in Ghana. I came from Congo with. We're school friends. I have only one friend here in Ghana. Just one. She helps in every way. Since we came here, she's been there for me financially, emotionally, supporting. She's been visiting. Even now she's waiting for me to be discharged so that she comes home. She was coming here and I told her we might be discharged so she should hold on. So she's been there in every way since I met her. She comes here to visit us. She always helps me when I call upon her in any way possible” (002PU, 28 years, Accountant)

One other participant narrated how helpful her friends have been to her to the point of donating blood for her during her delivery and supporting her financially and emotionally:

“I have really supportive friends. One even donated blood for me during my delivery. They're there for me in all ways. They support me with money and lighten my mood with

their presence. They have been calling me to check up and visit as well.” (005PU, 28 years, Nurse)

One of the seamstresses interviewed also shared how she is supported by her friends:

“Oh when I need money I call on them and maybe they can borrow me hundred or two hundred cedis then I use it. When I get it then I give it to them. They encourage me. As you might have noticed I like crying but they are there for me and encourage me. They also call to check up.” (007BU, 37 years, Seamstress)

Participant nine expressed how her friends help her manage her emotions and support her financially:

“Yes I have a few friends that I can call at any time and they are ready to help. I tell them what I am going through and they go through it with me. Financially too. Yes. They don't turn their backs on me.” (009BU, 34 years, Real Estate Agent)

Those who were just acquainted had this to say:

“Yeah my friends are very supportive. Eei should I say friends. I will say colleagues and acquaintances. I don't really do friends. We do hi and hello. Those at church too call (chuckles).. I don't like friends and interferences. When they call I get frustrated. So far I should think my department knows I have put to birth although it hasn't been announced but because I told my in-charge maybe they know.” (012BU, 31 years, Nurse)

There were a few mothers who did not do friends at all:

“I don't have friends” (008BU, 27 years, Caterer)

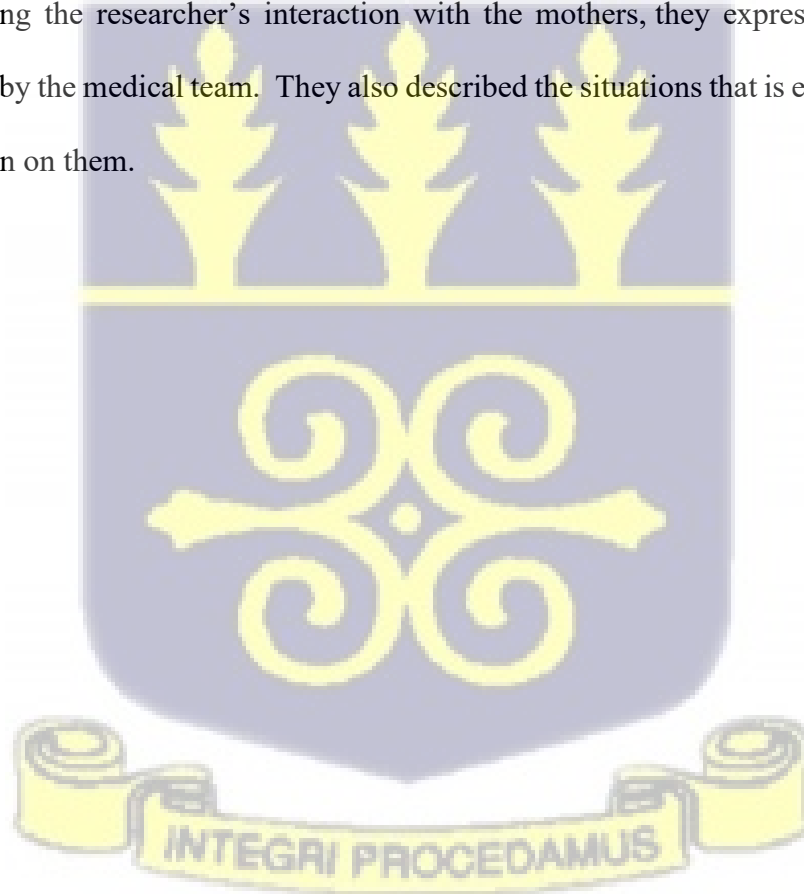
“At my age I don't do friends. I don't have friends.” (011BU, 29 years, Trader)

“No. I haven’t allowed friends into my space yet. My circle is mostly very small. I mean not many people know I have delivered. I have a few people who I have told I have put to birth but I haven’t allowed them to come here. I have not told them we are on admission. My circle is mostly my family” (002PU, 28 years, Accountant)

For the mothers who had friend’s support, they described the help like sibling support. Friends mostly supported the mothers as their own siblings would.

4.5 Institutional Factors Supporting Mothers

In this level of support, hospital infrastructure and support from the human resource were identified. During the researcher’s interaction with the mothers, they expressed how they are being supported by the medical team. They also described the situations that is either helping them or putting a strain on them.



4.5.1 Infrastructural support for mothers

The mothers interviewed from the paediatric Neonatal room expressed feeling supported by the fact that they get to stay with their babies throughout the admission. The unit has a 4 bedded room where the mothers can room in with their babies undergoing phototherapy. The mothers also mentioned that the equipment needed for the treatment are available and that gives them a sense of support:

“I wasn't made aware of any such resources. But I'm glad they have the machine(firefly) needed for the treatment. And I got a bed close to my baby. I asked for hot water the last time they said their kettle is not working. The bed and bathroom is okay. There is no kitchen you can use. So basically it's the infrastructure.” (002PU, 28 years, Accountant)

Health insurance was another element of content for the mothers in helping them cut the cost of treatment:

“This place they take health insurance unlike some other places that do not do that, this helps me cut some of the cost. Also I have a bed beside my baby. I have heard of the babies' unit where I have to go home and leave my baby. I will not be at peace because I will not know what they are doing to my baby. So this environment is helping me a lot.” (003PU, 28 years, Seamstress)

“Well the health insurance they use here is good. It covers most of my bills. Also I get to stay with the baby and know he is alright. That is comforting for me.” (004PU, 15 years, JHS Student)

The mothers at the babies' unit had a different story. They were deeply stressed by having to leave their babies at the hospital and go home. When they were asked what resources they were made aware they could use, these were some of their answers:

"Mmm I was not made aware of any support resources I can use. Its not easy. I was on admission when I saw this and reported it. You know I delivered here and they discharged us. My worry is that they should have admitted the baby whiles I was still on admission myself so that we go home together. But I was discharged and have to be going home and coming back to see the baby here and all that. That is my issue.." **(006BU, 36 years, Salesperson)**

"Hmm. I wasn't made aware of any resources I can use. They are taking care of my baby but....(stopped talking)." **(008BU, 27 years, Caterer)**

The lack of accommodation or mothers' hostel close to the hospital seemed like a big challenge for the mothers as one mother narrated how she is now having edematous feet from sitting for prolonged hours throughout the night because her house was far, yet she could not bear the thought of leaving her twins behind. She complained in this way:

"So far maybe the NHIS, I haven't paid anything yet. But nothing was said about resources I can use..... The prolonged sitting has made my feet swollen because when I was coming it wasn't like that. They should have a mothers' hostel for us to stay and take care of the children but no. if you don't go home like me then it means you sit around like I am sitting." **(016U, 37 years, Midwife)**

Five mothers were not aware of any hospital resources they could utilize. Six mothers expressed their thankfulness for the hospital's acceptance of the National health insurance scheme. And three

others expressed how the staff Support them. Staff support will be discussed in detail subsequently.

4.5.2 Expected Staff Support

Mothers were asked about their expectations with staff Support. Some were satisfied with the support they are receiving and others were not at all pleased with their experiences.

“Yes, so when I came in yesterday, at a point, I didn't know what was going on. One of them asked me, ”Do I know why my baby is in this machine?”” like the blue light, and she explained it to me. So she picked me this morning and did a general tuition for us and then I also did a follow up on my baby's doctor, the one attending to her and then I asked her questions as to how things were. She was receptive.... They've been caring for my baby since I left her and so they're doing well. I pump milk and then they'll feed her with it. I don't know how the night is when I'm away but I believe she is in good hands because I come back to meet her better than I left her.” (001BU, 29 years, Seamstress)

One mother who was satisfied with the care she had received so far at the time of the interview had this to say:

“Oh they're assisting us. Anytime we ask them a question about the baby they're ready to answer. Even when you have a concern which is not related but health concern in another specific area, they're always there. If you need help cleaning your baby's cord they're there to help or direct you. If you have concerns you can ask them..... Some people don't really talk about their emotions but if you have questions about something in that regard they'll sit with you and talk to you. Personally, I haven't spoken to them about my emotions.” (002PU, 28 years, Accountant)

One other mother puts her statement this way:

“Oh they are doing well. when I don't understand something, I ask. And they take care of the children when they are crying. They feed them. They also teach how to know when the baby is hot. They explain to me that sometimes its because of the light. For emotional support I can't tell but knowing that they pick the babies up when they cry gives me peace of mind. That can be reassuring and helps me relax a bit.” (013BU, 26 years, Caterer)

Some mothers described their expectations of the care they would have liked to receive. One narrated the details of her story about misinformation:

“Hmm some are okay. Yeah. Some will encourage you. but most of them don't do anything or say anything. They don't tell you anything. Even this afternoon they came to frighten me. they came to change this light thing(phototherapy machine) that the baby is lying inside. So I asked them why they were changing it. And the one who came said that the new one they were bringing was faster than the one the baby is currently lying in. she added that my baby's condition is very severe and they should have changed it yesterday but they didn't have the time. So I was very frustrated because that means my baby is not getting better. So I asked her the condition of the baby and she said she was going to ask the doctor and come. I very much think she is a student nurse. I am not sure. She came back to tell me that the doctor said the jaundice is increasing and that if they don't change the machine fast the baby could die. So I was like eei!! Then there is something very wrong with my baby and then I began to cry. Does what this nurse is saying mean that my baby will die? Oh, this afternoon I really cried. Can't you see my eyes are swollen. I just finished crying then you came. It was another student who came to console me and tell me everything will be alright. She explained a few things to me and then went

to call in the staff nurses who also came to console. They said the person shouldn't have said that to me. after that they all left. They don't give me information about the baby. Sometimes I have to ask them directly before they say something. Other times when I ask, they tell me to wait for the doctor. That does not help me in any way. They say my baby is very nice and beautiful because of her colour so during those times they are playing with her that perhaps if I asked a question, they tell me something. If I don't ask questions. I don't get any information from them. I would not say they offer me emotional support considering what just happened with the light machine.” (003PU, 28 years, Seamstress)

Two other mothers who were also deeply concerned about the lack of information on the part of the medical team had this to say:

“The medical staff are okay. But I have my reservations. I came here on Friday and we did some labs one came but the other is not in and we have been chasing it since. They said they are waiting for that lab to review and discharge us if that lab is fine. The baby has been under the light for two days now. It is quite frustrating that the labs are not ready. Also I would have liked that they talk to me about the baby and his condition. Like they should communicate because if you don't ask they don't say anything. Mostly it is students who come here often to check vitals. You don't hear anything. So for me I ask questions. When the doctors come around. I mean I am a nurse so I know one or two things but I am a mother as well and at this very point I am a worried mother who needs to be told her child is getting better and can go home.” (005PU, 28 years, Nurse)

“Mm, personally my concern is the information. I think that is the best they can do. They should inform us on the condition and how the baby is progressing on admission and what the condition is. They should be updating us regularly. Me that is what is worrying.

So that we are also aware of whatever is going on and their plans and what to do on all that. Instead of us just being here and talking to ourselves. As I said I feel the baby is weak. She doesn't feed well. I have complained about it but there is no one to explain or tell me that oh this is the issue or to explain it to me. get this medication or do this thing to help. I mean nothing. No information at all. You see? And even with this questions that I am asking I had to chase them and being on their necks. You see one doctor came to me straight to talk to me when we came inn? Yes. I have been chasing them to get updates. So yesterday they came around and I went to talk to her about the baby. I learnt she is a surgeon so I approached her and told her my issue because I wasn't getting answers from anyone and all that. Even with her at first her response was not good. But later she came around and all that. So that is my issue with them. Aside that I'm okay. They don't offer any emotional support whatsoever please. As for caring for the baby yes. Because I go home and I come to meet her. So they feed her and change her. So physical support. Yes. The nurses support with the physical care and all that." (006BU, 36 years, Salesperson)

Among the expected support are informational and emotional support. When it came to physical support, it varied depending on which ward the neonate has been hospitalized. The paediatric ward offered less physical help while the babies unit offered full physical help because the mothers are not with the babies. The nurses assume full responsibility for self-care needs of the baby. Mothers are only allowed to breastfeed and when necessary, change diapers. Mothers at the babies' unit were mostly satisfied with the daily physical care of their babies but they wished they were either rooming in with the babies or had a mothers' hostel close to the hospital where they could go and relax and return on subsequent days to continue caring for their babies.

“They should have a place for the mothers as well. Even if its not by the child, there should be a place, like a mother’s hostel. Yes, because when i came i just delivered 3 days and i couldn’t sleep. Had to be sitting here. Also, they don’t tell you about your child. Unless I ask before they explain. They just come and go. If i don’t ask any question, they won’t say anything. You know we started from that side (pointing the position of the baby at the far end) and have been moving till we got here. I ask what happened. At least I should be informed about why this is happening. But nothing. The physical support is them taking care of the baby so mm.. they just come and go. There is no connection or relationship. For support for me, its zero.” (014BU, 27 years, Teacher)

There were a few mothers who were okay with the support they were receiving:

“Oh they are doing well. When I don’t understand something, I ask. And they take care of the children when they are crying. They feed them. They also teach how to know when the baby is hot. They explain to me that sometimes its because of the light. For emotional support I can’t tell but knowing that they pick the babies up when they cry gives me peace of mind. That can be reassuring and helps me relax a bit.” (013BU, 26 years, Caterer)

“Oh you know it was through emergency that I came. But when I came, anything I needed to know they assisted me with it, They explain things to you and you also ask questions or when you need something you also ask. It always like give and take.” (015BU, 40 years, Accountant)

In a nut shell, mothers were receiving some level of support from staff, however their expected staff support were not always met and that made them less likely to appreciate the other forms of support being offered them.

4.5.3 Medical Staff Support for mothers

Mothers reiterated the Support they are receiving from the staff. The support described were mainly physical and diminished with informational and emotional support respectively.

“They've been amazing. Initially after seeing the paediatrician, I met one or two nurses who kept telling me to calm down because I kept crying unknowingly. Erh I have not seen this kind of condition before but they're like ahh don't worry, everything will be fine. She's in good hands. I'll say they've been supporting me” (001BU, 29 years, Seamstress)

“Well they're helpful, kind. For what I've seen I'll say they're....oh they have patience. They have patience because everyone have their problems but they put their own problems aside and help. It's fine.” (002PU, 28 years, Accountant)

Participant eleven (011BU) felt supported because whenever she came back from the house to meet her baby in the morning, he was doing well. She had this to say:

“Oh they are doing well. They are taking care of him well. When I go home and come back, I realize he is alright so I would say they are taking care of him just fine. They are patient too when I ask my many questions” (011BU, 29 years, Trader)

One mother thought that the staff behaved in a professional way and were well mannered. She also thought the staff are taking some of their burdens away by taking care of the babies whiles they go home and come back:

“it was an emergency but they assisted in everything I did when I came, they talk to us. That time he was a 2 days old baby and they tried to get her blood but they didn't get. It wasn't easy but they were patient. Others will shout at you, but they didn't. They are doing very well. They do, taking care of the children and feeding them.... our burden was

shifted to them. I will give them. 80%. They are doing very well. They are doing what they can, we leave the babies to go and sleep at our homes so they are sharing the burden of caring for the baby. When they cry they carry them and feed them. Our stress has been passed onto them. They are doing well. At times taking people's responsibilities even though you are being paid is not easy. Checking their temperature and giving them their medication.” (015BU, 40 years, Accountant)

There were a few mothers who expressed not feeling supported by the medical theme

“Hmm. (Laughs hysterically). They are taking care of the baby. That is what I can say. The work they are doing here I can give them ten out of hundred. Unless I ask them questions they don't give you information about the baby. It is only the baby they care for. I the mother is none of their concern. I am not part of the care they give. They are supporting the baby not me” (008BU, 27 years, Caterer)

“The kind of support they give is average. That is the best way I can describe it. Aside vital signs they don't really do much for the baby. They don't check on them too. They only come around to put the baby in the machine during the admission and tell you to feed every two hours and they leave. The students come to take the vital signs and that is all. But it is okay. Yeah.” (005PU, 28 years, Nurse)

One interviewee thought that some of the staff are supportive while others are not. However, generally, they were not doing too well as a team in her opinion:

“They don't really offer any support like that. I bath the baby myself. Even because of this light thing, I only clean her. Or my mother also helps. The cord too we take care of it ourselves. For emotional support I will rate them at 20% because they do not tell you

things that would encourage you. informational support will stand at 10%. For the doctors, they are different different, some are encouraging and very good. It was one of them who came to discharge all these other babies today. For physical help I won't even go there. They don't do anything for me or the baby. It is the pulse they have been coming to check" (003PU, 28 years, Seamstress)

One participant went as far as rating the services provided as:

"Well so with the doctors I will give them 10%. I am just being honest. And with the nurses maybe 50% or 60%" (006BU, 36 years, Salesperson)

Although all participants expressed being supported in one way or the other by the medical team, the level of support as experienced by the mothers varied on different levels. Some felt well supported, others averagely supported and some least supported. Majority of interviewees expressed need for informational support and monitoring of the babies. Emotional support was the least mentioned while physical support was the most mentioned from the babies' unit. Mothers expressed that they are pleased with the fact that equipment for treatment are readily available but displeased with the lack of a hostel close for those whose babies are at the babies' unit and cannot room in with them. One participant expressed her frustrations as:

"It is not easy at all. Yesterday when I was told to go home. I couldn't sleep. I was hearing the baby crying in my head. I couldn't sleep the whole night. I felt like I have just left her and it was a painful feeling. It was not easy. The first two days too my breastmilk wasn't coming and we were feeding her formulae. And now it is just flowing but she is not with me to feed. It has not been easy. Here they give us time to come and breastfeed so if it is not time you can't come." (007BU, 37 years, Seamstress)

“Haaa hmm. I was feeling bad. How I even got to the house I don’t know but I was crying. My boyfriend was even calling me back. But at least I feel they are helping me. because my mom is not here to take care of the baby for me so if I am getting help from the professionals, I think it is okay. They are taking care of the baby so that he will be fine” (010BU, 17 years, SHS Student)

Some mothers who could not bring themselves to leaving their children behind had this to say:

“It was painful the first day, they asked us to leave. I even cried. I didn’t know I could leave the baby. So I didn’t go home. I slept outside. They explained to me why I am leaving her here but it didn’t change my feelings towards it. I think emotionally they support me because they carry the baby when he cries. This gives me comfort because someone will not mind the baby.” (013BU, 26 years, Caterer)

“its very bad. Upon going through everything for almost 10 months and finally God delivers you and you are like i have my baby then the next day, your baby is somewhere else and you another place. Especially in the night, You hear your baby crying but you can't help comfort her or come close to her.” (014BU, 27 years, Teacher)

Medical staff support was mainly physical support for the baby which my mothers felt was most important because it was their babies who were sick after all. They however expressed need for emotional and informational support which they felt was lacking.

4.6 Community Level Support for Mothers

Mothers described community level support such as their culture, social groups and neighbors. Below are the ways by which these identified factors serve as support for the mothers during the admission of their jaundiced newborns.

4.6.1 Cultural Practices Supporting Mothers

When participants were asked about any cultural practices that support them, they had a few interesting ones which they said were helpful for them. Some of their comments are recorded below:

“I am a Ga Adangme. I was taught postpartum practices like sitting in warm water, massaging with warm towel and staying indoors with your baby for at least a week. This is really helpful and it helps you to recover very fast. My first child was a CS so I did not sit in warm water but I massaged with warm towels. And I must say it really helps you feel better. But because of this admission I am unable to do all that. Now I am having back pains and aches. My whole body hurts. So at least if the nurses were helping us small small that would have been nice. Carrying our baby for us small small. Staying indoors with the baby also is good. people do not get the chance to spread diseases to us” (003PU, 28 years, Seamstress)

Another mother shared how the one week isolation is helping her minimize interruptions and rest while on the admission:

“I don't know much about the cultural practices. But usually when a woman delivers, they would let she and the child stay indoors for a week without visit. We are still within that one week so I am not being bothered by a lot of calls and visits. I believe that that is helping me because I don't need to explain the situation to many people. I am just concentrating to the baby getting better.” (005PU, 28 years, Nurse)

“I think the one week no visit is a good thing. Now I don't have to deal with so many people or explain myself to so many people. I also do the warm sitz bath and massages. It

helps a lot. They do some herbal medicines too and you take it. It really helps a lot.”

(008BU, 27 years, Caterer)

One mother mentioned the traditional way of bathing oneself after birth and traditional baby bathe methods and massages help a lot:

“Hot water for bathing. I bath hot water. Even the baby too. I massage some part of the baby. You must know how to bathe. Yes, to me it was helpful. You know sometimes the hospital will tell you otherwise but the ones I just mentioned are helpful” (015BU, 40 years, Accountant)

The two Nigerian mothers also mention a few traditional practices they are doing that help them. This is what they had this to say about their culture:

“We do have some practices. I used hot water to massage the waist, ribs and back to help in healing. They help to relax your body. Some people do herbal mixtures and stuff to help the body but I don't really do that. The one week in doors. No, not necessary. It's okay when your baby has not taken BCG. But when they do, you can move with the baby. If the baby has not taken BCG, you have to stay far from people because of infection.”
(009BU, 34 years, Real Estate Agent)

“We have some practices but mostly your mother has to do it for you but me my mother is not here. Otherwise like my mother will cook for me. They call it white soup that will help your stomach to go flat. They press you with warm water and massage you. so that you get your strength back. Give you some tea, herbal tea. They do a lot of things. But my mum is not here so I do it myself.” (010BU, 17 years, SHS Student)

Some mothers were also not aware of the cultural practices. They said:

“No. None that I know of. I do my things normal.” (016BU, 37 years, Midwife)

“You know I'm new to all this. I don't know any cultural practices I'm supposed to be practicing as a new mother. We came here straight from the hospital I delivered”

(001BU, 29 years, Seamstress)

When it came to cultural practices, others spoke about what works for them and how helpful it was. Educational level of mothers did not matter as long as they felt the practices would help them, they practiced it. Mostly, warm baths and sitz, week of isolation and massages were the ones mothers mostly practiced. A few mothers also mentioned they did not know or did not engage in any of such cultural practices.

4.6.2 Social Groups

Social groups are groups of people with similar interests. Social groups can vary in membership depending on the purpose of these groups. Most mothers who participated in this study did not belong to any other social groups aside church. The few who belonged to the social groups had this to say:

“I belong to some welfare groups both in the church and in the community but like I said. I have not told them yet. We are trying to manage this one by ourselves.” (003PU, 28 years, Seamstress)

“Yeah we do have a group like my country have the Gabonese group here in Ghana. But even though those groups are there I'm not actively involved with them. So I don't receive help from them. I didn't even tell my people back home about the pregnancy or the delivery so there's no support coming from that area.” (002PU, 28 years, Accountant)

“Oh I was once in one of those community welfare groups but they weren’t helping me. I was along standing member who has contributed to many people in the community but I am not seeing how they are helping me so I have stopped” (011BU, 29 years, Trader)

The church was seen as providing spiritual, financial and emotional help to mothers during the hospitalization of their newborns. Below are some of their submissions:

“Church group and Work are doing really well. They help with the emotional part. Sometimes financial. They call and check on me. They come here and would be like, “Should I buy something for you?” (015BU, 40 years, Accountant)

One mother described how her pastor and wife even supported her through delivery and this admission. She mentioned she didn’t expect financial assistance but spiritual and emotional support:

“My pastor is always calling. During the second stage of labor, he was calling in. Even this morning his wife called to ask how we were doing. As for finances I don’t think I will send my issues there oo. I am okay financially So mainly they offer me emotional and spiritual support. And my pastor’s wife is a midwife so for her she is very particular about the health of the baby. When you’re pregnant she finds out what you are doing and the medications you are taking.” (012BU, 31 years, Nurse)

Another mother described the help offered her by a church member who was also a staff:

“I have told the leader about it. I met the leader when I was going to deliver. And when the baby was in NICU, She always goes there to check on her. She is a nurse here. When I need something that is around the hospital she helps” (014BU, 27 years, Teacher)

The younger teenage mum discussed her support from a church member. She reiterated saying;

“One chorister also took interest in me when I got pregnant so she was taking me to a private clinic where she pays for everything for them to attend to me. So, she supports me very well. But the church itself has not given me anything yet.” (004BU, 15 years, JHS Student)

The rest of the mothers belonged to a church group but have not told the church or asked for help at the time of the interview. They explained:

“My church erh. Nobody knows because it has been long that I’ve gone to church so nobody knows. But they help people who need assistance. I haven’t received any help from them though. But once in a while people dash my daughter money after complimenting her that she’s cute. But not officially giving me help. Maybe for others they receive help but not me. I don’t really know.” (001BU, 29 years, Seamstress)

“Oh my church people show concern for us. They call and pray for us and encourage us. But about this admission I have not told them because I don’t see it as something very big to report. But they know I have given birth so they call me to check up on me.” (002PU, 28 years, Accountant)

“Well my church supports mothers spiritually and financially if they need that kind of assistance but I have personally not requested for financial help. So they call to pray with me and to encourage me. That is my pastor and wife. Yeah.. they have really been helpful. And one or two elders and deaconess in our church sent us money although we haven’t mentioned that the child is unwell. So yeah they are supportive. They encourage and pray with us.” (005PU, 28 years, Nurse)

Basically, the church in this case functioning as social group support for these mothers offer financial, emotional and spiritual support. Only one participant mentioned she was a member of a community welfare group but quit after years of contributing without seeing results

4.6.3 Neighbors and Neighborhood Support

Some mothers lived in closely knit together neighborhoods that offer support during times of need. There were those who discussed various ways their neighbors are of help to them. When asked how their neighbors support them during their admissions, mothers had this to say

“So I mentioned I had only one friend, yeah. She happens to be my neighbor too. She helps in all areas. She knows about my condition. When I need something she goes to get it for me.” (014BU, 27 years, Teacher)

One mother spoke about the eagerness of her landlord and cotenants in wanting to show her how much they wanted to be there for there for her. She was recorded as saying:

“Well they are worried I have given birth but I am not coming home with the baby. So they check up on me. Even this morning my landlord called that they were coming here but I told them that they wouldn't even be allowed to go in to see the baby so they should not come. They all wanted to come so that I can know they are there for me. But they insisted so they are on their way here. I will meet them outside because here in particular dieer they will not be allowed” (013BU, 26 years, Caterer)

Participant fifteen described her cordial relationship with her neighbors and how well they support her in checking up on her and buying her groceries. She puts her response this way:

“Oh they are good. Even at home sometimes if they do not see you they call out to you and i will respond from my room, I’m fine ooo. Sometimes they go to market and bring you stuffs.....but that depends on how you are with the person. Me I’m sociable so..”

(015BU, 40 years, Accountant)

One mother described physical and financial support she receives from her neighbors. This was what she said:

“Oh my neighbors are supporting me very well. Oh one of my neighbors even helped me bath the baby. And when my boyfriend is not around and I need something, they mostly help then I pay back when he comes home.” ***(010BU, 17 years, SHS Student)***

Other mothers thought that by relating with their neighbors, they will be allowing them to pry into their private affairs.

“They call to check up on us but generally don’t like interactions with them because they like to pry too much into your issues. Even someone asked me if I gave birth vaginally or CS. So these days I don’t even want to pick her calls. She makes me angry. She’s elderly like my mum’s age. But the rest of the younger neighbors we only greet each other hi and hello” ***(012BU, 31 years, Nurse)***

“Oh I am not free with my neighbors like that for them to be of any help to me. We don’t really meddle in each other’s business” ***(011BU, 29 years, Trader)***

“Oh my neighbors like minding other people's business so I'm not that close to them. Just good morning good morning. That is me. I don't like mingling with people. So I just say the more you mingle with people the more they have the opportunity to say anything they

like about you. I don't like that part and in my compound they like doing it too much. It's a tenant house so. Yeah.” (002PU, 28 years, Accountant)

Some mothers lived in areas where they were disconnected from their neighbors. These were places like the gated-communities and estates where although people lived close to together, they are not in touch with each other and do not even know some faces and names. One such mother described her situation as:

“My place is an estate so we don't really know the people around. Alright we see them and we know oh this person lives next door and so and so but we are not in this kind of relationship that will make them support you. like its just a good morning, good afternoon relationship. You see each other and know them by face or by their car. Hehehe.” (006BU, 36 years, Salesperson)

Two others shared their experiences of how poorly the relationship between people were, in such communities:

“I am in a private area, so I don't interact with neighbors.” (016BU, 37 years, Midwife)

“Currently I live in one of the gated communities. But you see everyone is in their rooms. So we don't get to be close. They are on their own and I am on my own. Although my immediate neighbor is very helpful. She helps emotionally and checks up on us. She is the only one I have told so far about my delivery. The rest of the neighbors we just greet each other. Some of them i don't even know them at all. Others I know them by their cars. haha” (005PU, 28 years, Nurse)

The contributions of the mothers suggest that neighbors play key roles financially, physically and emotionally depending on the kind of relationship that the mothers have with them. Minimal or no

interactions with neighbors meant isolation, however those who are in close relationship with neighbors are helped in various forms.

4.7 Summary of study findings

In summary, it was evident that mothers may receive support from various avenues during the admission of their jaundiced newborns. Among these supports are the mothers themselves, meaningful relationships with their spouse, family and friends, the institution of hospitalization and the community in which they live. At the individual level, the mothers' biological attributes, acquired knowledge and skill, and personality attributes like self-regulation may serve as shield against the depressing nature of the hospitalization. The mother's family is also another support discussed under interpersonal level support where persons like the spouse, maternal and paternal grandparents, siblings and some extended family members show support for the mother. Friends are another source of support at the interpersonal level. These persons offer various kinds of support including financial, physical care, emotional support, care of siblings of the hospitalized newborn, and spiritual support. The institutional level support highlighted mainly staff support. Mothers may feel supported when their needs are met by the staff in the institution of hospitalization. The needs required were mainly informational (communication), physical/instrumental care and emotional support. It was evident that staff were mostly caught up in the provision of instrumental/physical care of the jaundiced newborn and rarely contributed to the other forms of support mothers needed. The community level support as the mothers described came from some cultural practices, their social groups and their neighbors. Cultural practices included one week isolation for mother and baby, which mothers described was very helpful for them to keep away from visitors and recover, massages and some herbal soups and mixtures aimed at speeding up the healing process from delivery. Social groups like the church described under

this heading provided spiritual, financial and emotional support for mothers during the hospitalization of their jaundiced newborns. Depending on the relationship that existed between mothers and their neighbors at the time of these interviews, mothers described various levels of support received from their neighbors, encompassing financial, physical, emotional, sharing of foodstuff and medication and care of the sibling of the jaundiced newborn. These were the findings from the study deduced from the research questions and organized according to the generated themes.



CHAPTER FIVE

DISCUSSION OF STUDY FINDINGS

In this chapter, the study's findings were discussed by comparing contextually, the study findings with existing literature to identify patterns and generate ideas for future research in the support mothers utilize during the hospitalization of their jaundiced newborns.

5.1 Intrapersonal Level Characteristics Supporting Mothers

The Socioecological theory adopted in this study views the individual at the center of systems, relationships and contexts. Meaning, many factors come into play to influence the health and behavior of the individual (Ochs et al., 2024). At the intrapersonal level, personal attributes of the individual such as biological and personal history factors are considered (Ochs et al., 2024). These include, age and gender, income, education, emotional learning and life skills. These characteristics are further classified into three domains namely the demand characteristics, resources and force characteristics. These domains are discussed subsequently as the mothers interviewed in this study reiterated.

5.1.1 Demand characteristics of mothers

Age and gender were the main concepts discussed at this level during this study. Many mothers expressed age as a support because it comes with experience, maturity or readiness for overcoming challenges. This is consistent with the findings from a similar study by Ike et al. (2019) who concluded that “The younger the mother, the greater the extent of the psychosocial problems.” Their findings posited that older mothers had greater adaptation ability to stress compared to younger mothers. Mothers expressed that older age supports the ability to carry pregnancy to term, supports physical labor demands and postpartum stressors like neonatal admissions as they were faced with. A study by Younge et al. (2023) in the United States found older maternal age was

related to lower levels of stress experienced by mothers whose babies were admitted in the neonatal intensive care unit. .

Younger mothers (teenagers) who were interviewed during this study admitted that they were disadvantaged because of their ages, requiring close to total support from their parents. This is in line with a study done in the United Kingdom by Goisis (2023) which showed that younger mothers are more likely to receive parental support with areas like contact with the mother (physical care), care for the newborn and money to buy essentials. The findings of this study align with Giosis (2023) as the teenage mothers expressed their daily selfcare needs are taken care of by their mothers and significant others because they are limited in resources and experience. They did not have a source of income and are totally dependent on their caregivers for the survival of their neonates and themselves.

The mothers in this study, although they were content with caring for their babies, did not consider the female gender in an African setting as a support during the admission of their newborns because they were primarily the ones taking care of the babies on hospitalization and older children even after going through hard labor as well as taking care of their homes. A study in South Africa by Erzse et al. (2021), women still had the role of work, housework and childcare, giving them multiple roles in African settings. The mothers in the current study felt they were doing double the work comparing themselves to their male counterparts. Many of them even wished they had been born males to ease the burden they are faced with as females.

5.1.2. Maternal Resource characteristics

Among the resources discussed during the current study regarding maternal resource characteristics that support them during the hospitalization of their newborn included income.

Daliri et al. (2024) noted that one of the main causes of maternal distress during neonatal hospitalization is finances. Their study found out that maternal distress was exacerbated by the inability to pay bills, buy medications or other essential items needed to care for the baby. Twijukye et al. (2025) who reported that, parents experience emotional stress from fears regarding their financial obligations and meeting the unexpected expenses during hospitalisation of the newborn. During this present study, mothers who had high income went as far as paying to stay in the Hospital and care for their babies even though they were discharged, while others because of financial constraints had to go home and still face challenges of having to board vehicles to and fro to see their babies. As such, mothers with higher incomes felt supported by their finances and those who were not working, did not feel they had that support. There were others who thought their income was less and could not take care of everything they needed but they also felt it was better than having nothing at all. Majority of the mothers viewed their income as a support for them. Their income aided with good health decision making, taking care of bills, food and other essentials like transporting themselves to and fro to see and care for their babies. This aligns with Janaki and Prabakar (2025) who argued that socioeconomic status can influence maternal health seeking behaviours. The current study also agrees with a study in Nigeria by Adamu and Ango (2024) who found a relationship between poor health seeking behaviours associated low income among other factors.

Another maternal characteristic that supports them is their parity and experiences with previous admissions. In the present study, 75% of the mothers interviewed had more than one child. They expressed their experiences and having to take care of their older children as having thought them patience, better understanding of motherhood and experience with caring for a baby on admission with admission, taking responsibility and care of a child, endurance, strength, early detection of

abnormalities, enhancing coping mechanism, avoid complications. manage subsequent situations and hope for better outcomes.

Adappa and Barr (2023), investigated the social determinants of health and the neonate admitted in the Neonatal Intensive Care Unit. They found one of the key determinants as mothers' educational level which enables them to make informed health choices. In the current studies, mothers felt their education helped them to be aware of their surroundings, solve problem, reduce stress, be more self-aware, ask for clarification, correct mistakes and overcome challenges. A study in Ghana using dataset from the Ghana Demographic and Health Survey (DHS) between the period of 1988 to 2014, by Amoah and Asamoah (2022) on the role of a mother's education on child survival suggested that maternal educational level is a strong determinant of child survival, thus supporting the current study findings where mother confirmed that their education is a support for them during hospitalization of their newborns with jaundice. Earlier studies in Palestine and India (Abuqamar, et al., 2011; Mehta et al., 2014) have shown that educated mothers are more likely to perform key essential newborn care practices that promote newborn survival. The study also supports the notion that educated mothers or mothers with higher educational attainment promote quality care for their neonate (Yu, 2023).

5.1.3. Maternal Force characteristics

Force characteristics refer to the individual's personality, drive and motivation. The mothers in this study were motivated by the mere responsibility of motherhood. Some saw motherhood as a personal responsibility. It is their duty to care for the baby and ensure their safety. they saw motherhood as something to be admired and be proud of so they took pride in the fact that they were also mothers and can talk among their peers when the conversation came up. These reasons kept them moving on and gave them a strong sense of support to endure the stress and be present

for the newborns. They endure staying up all night or sitting at the reception of the unit knowing very well they would not go in and will only be allowed into the ward the following morning.

Mothers promoted their self-efficacy during their newborn admission by adopting personal coping mechanisms such as self-awareness, self-regulation, self-soothing, resilience, withdrawal (isolation), venting (expressing coping), seeking information, positivity and prayer. Ramos, Enumo and Paula (2017) found some of these coping methods to be the mechanisms adopted by mothers during the hospitalization of their babies in Brazil. They found positivity (wishful thinking), self-regulation (self-reliance), isolation, venting (support seeking), seeking information and prayer (religious practices) as components of their major twelve families of coping strategies by mothers who have their babies hospitalized. Sih, Bimerew, and Modesta (2019) agrees with prayer as a coping mechanism mothers adopt in their study of maternal coping strategies during preterm hospitalization. Manageability and self-regulation were among the coping strategies mentioned by Adu-Assiamah (2022) in her Concept analysis on maternal coping with newborn admission. The current study findings also align with Kudu et al. (2025) from Ghana, who reported maternal adaptation to stressors through emotional regulation, spiritual coping and faith-based practices to increase their strength and hope.

Muthiah and Halim (2024) in their study of mother's personality trait and maternal role adaptation of first-time mothers in Indonesia, found out that mothers' personality influences their maternal role adaptation. This may support the findings from this present study where mothers mentioned their personality as a support for them in influencing how they manage, adapt and cope with the stressors they are faced with on admission.

5.2. Interpersonal level support for mothers

Interpersonal level support is conceptualized in this study as the support received by mothers of hospitalized newborns with jaundice, through their transactions with significant others and their relationships that they perceive to be helpful in reducing their stress coping better with their situation. Among the individuals mentioned to be providing such support include spouses, maternal mother, mother in-law, siblings and friends. The support from these relationships run through the interviews and they were found to be providing varying degrees of help. Ahmadpour et al. (2023), agreed that spousal and family support are major predictors of maternal functioning and competence since spousal and family support were major determinants of maternal mental health in Iran. Garti et al. (2021) indicated that mothers receive financial and social support from their spouses, family and friends in a Ghanaian setting. These individuals have been separated in this study and their role in supporting mothers have been highlighted in the subsequent paragraphs.

5.2.1 Spousal Support

Spousal support was the main support utilized at the interpersonal level support for mothers during this study. Close to hundred percent of participants were receiving full support from their partners with only two mothers who said her husband only looks after their older children but does not offer her any other support and one teenage partner who only offered financial support. Spousal support in this study came in the form of financial, physical, emotional, house chores and sibling support.

Most spouses were said to be taking care of the bills and covering hospital expenses, food, accommodation and other essentials for the baby. Eduku, Annan and Ani-Amponsah (2024), found a similar result where mothers confirmed that their primary financial support came from their partners, contributing to their resilience in caring for their infants. Mothers praised their spouses for their immense support during the admission. Ahmadpour et al. (2023) conducted a study in

Iran which confirmed that financial support from spouses can increase maternal competence and maternal mental health. Literature review in Africa, Asia and Latin America by Aibel (2021) also noted that men provide financial assistance as a major supporting role, particularly during newborn illnesses which agrees with the present study findings.

Some spouses were physically present and had taken leave to be with the newborn and mother throughout the hospitalization although most of them were coming in the morning and going because of their work. They were physically present most of the time and usually in the mornings and evenings.

Most of the mothers shared how their spouses were there for them emotionally, encouraging them and telling them everything will be fine. A study in Israel by Kestler-Peleg (2022) found that mothers psychological stress levels reduced when they feel supported by their spouses. This finding supported the present findings of the study where mothers expressed, they feel less stressed when their husbands encourage them and help them through the admission. Spousal support was found to be a strong determinant of maternal psychological state. Ahmadpour et al. (2023) in Iran, stated that emotional support from spouses can increase maternal mental health. Abeasi and Emelife (2020) in Nigeria found that mothers who do not feel emotionally supported by their spouses feel challenged in managing the admission situation. Al-Mutawtah et al. (2023), also reported that women felt supported when their spouses paid attention to them, allowed them space to share their concern and offered them supportive words. This is in line with the current study findings where the fathers took leave to be present and offering a shoulder to rely on for their wives, and hospitalized baby. This is supported by Akua and Afutu (2022), who reported that husbands have integral roles in the healing of mothers with hospitalised neonates from stress.

Other partners were supporting their older children who were home and missing the presence of their mothers for those who had more than one child. This agrees with the study in Ghana by Garti et al. (2021), who found husbands taking care of other children apart from the one hospitalized, so that the mother can concentrate on the newborn. Mothers in the study by Ahmadpour et al. (2023) in Iran stated that spousal help with infant care is a strong support for them and increases their competence and mental health.

Male partners again were found to be engaging in house duties and chores to support their wives during this study. Garti et al. (2021) mentioned that, even though the Ghanaian culture does not endorse male participation in household duties, men were found to be doing household chores to support their wives during the admission of their newborns so that the mothers can concentrate on taking care of the one on admission. This finding was seen also in the current study where mothers narrated how their husbands take up house chores like, cleaning, cooking, bathing their other children and taking them to school, with or without the help of other family members like maternal family support. Al-Mutawtah et al. (2023), reported a similar finding where mothers felt supported when helped with chores by their spouses and significant others. They again found out that when men took the initiative to take responsibility of the chores their wives used to do like hard labour chores and food preparations, it helped mothers cope better (Al-Mutawtah et al., 2023).

5.2.2 Maternal Grandmother Support

Buchanan and Rotkirch (2018) reported that grandmothers are more involved in the care of their children now than any point in time. This is seen in the present study as all mothers except one participant, who did not grow up with her birth-mother, expressed deep support from their mothers. Mothers offered physical, financial, emotional support and taking care of older children during the hospitalization of their new sibling. Mothers were observed going up and down, running errands,

bringing food, and offering emotional support to their daughters during this study. Al-Mutawtah et al. (2023) reported a similar finding where mothers felt supported when helped with chores by their spouses, mothers and significant others. Their roles are explained below.

Participants in the study by Al-Mutawtah et al. (2023) expressed emotional support from significant women like their mothers, grandmothers, mothers in-law, sisters and sisters in-law. Most mothers in the present study mostly resorted to talking to their mothers when they were hard pressed. They spoke about how their mothers encouraged, advised and offered them a shoulder to cry/lean on. They reported psychological support from their mothers as they saw them as the epitome of wisdom in the Ghanaian context (Aubel, 2021). Riem et al. (2021) in China, reported that, grandparental support was related to better maternal mental health and adequate caregiving practices. A further study by Riem et al. (2023) confirmed that maternal grandmothers are implicated in maternal emotional states and mental health

Some maternal mothers, had to move into their daughters' homes to take care of the hard labour chores and sibling support. Al-Mutawtah et al. (2023) reported a similar finding where mothers felt supported when helped with chores by their family, among which, mothers were mentioned.

Aubel (2021) reviewed the role of grandparents as authoritative caregivers and advisors of neonatal health. She reviewed literature from non-western cultures: Africa, Asia and Latin America. Grandmothers provided newborn care and advise to young mothers in Africa (Ethiopia; Ghana, Nigeria, etc); from Asia (India, Pakistan, Nepal, etc) and from Latin America (Brazil, Mexico, etc) (Aubel, 2021). This was in line with the present study where maternal mothers were said to be giving advice and also caring for mother and the hospitalized newborn.

Another area of support from maternal grandmothers was also seen in their care of the siblings of the hospitalized newborn which is in agreement with the study done by Buchanan and Rotkirch (2018), suggesting that grandparents were more involved now in the care of their grandchildren than any other point in time. Riem and van der Straaten (2024) noted that the quality of maternal grandmother support can have mental health benefits for the mother.

5.2.3 Paternal Grandmother support

Mother in-law support was one of the support mothers utilized during this study. Although some mothers-in-law were not alive and others were absent, not offering any help or keeping in touch, 50% or more of Mothers-in-law were found to be offering various forms of support during this study. Mothers-in-law offered help like maternal mothers, although some maternal mothers were said to be more involved than mothers-in-law. Mothers-in-law assisted with finances, emotional support, childcare, sibling support and house chores.

Participants in the study by Al-Mutawtah et al. (2023) found that mothers-in-law also offered emotional support. They spoke about how their mothers-in-law encouraged and advised them.

Some mothers-in-law also moved into their sons' homes to help the daughters-in-law with chores and sibling support. Al-Mutawtah et al. (2023) reported a similar finding where mothers felt supported when helped with chores by their family, among which, mothers-in-law were mentioned.

Aubel (2021) report that grandparents are authoritative caregivers and advisors of neonatal health in her literature from non-western cultures: Africa, Asia and Latin America. This was in line with the present study where Paternal mothers (mothers In-law), were said to be giving advice and also caring for mother and the hospitalized newborn.

Conclusively, mothers-in-law performed similar roles as maternal mothers. However, mothers of the newborn felt more comfortable with their own mothers than with their mothers-in-law. This is supported by Fox et al. (2023) who studied maternal cortisol levels of mothers receiving support from paternal versus maternal grandmothers. They found that the maternal grandmothers were more pronounced. There was also a concern about the relationship that existed between the mother and the paternal grandmother, which determines the kind and level of help they receive from their mothers in-law.

5.2.4 Support from siblings

Maternal siblings and siblings-in-law were also mentioned in this study as offering their help during the hospitalization of the jaundiced newborn. Siblings are very instrumental in influencing maternal stress levels (Varma et al., 2019). Siblings were seen visiting, at the hospital, running errands, offering financial and physical support like bringing food to the mothers and taking their clothes home to be washed. Female siblings may also move into their sisters' homes to help with chores and take care of the other children born to the mother (Al-Mutawtah et al., 2023).

5.2.5 Support from friends

Al-Mutawtah et al. (2023), Kestler-Peleg (2022) in Israel and Garti et al. (2021) in Ghana, recorded help offered to mothers by friends. In the current study, friends offered diverse support based on the maternal relationship with them. Among this support is emotional, financial and physical or practical support. Another study by Murthy et al. (2021) in India highlighted friends as one of the sources of financial and/or emotional support for mothers during neonatal admissions. Friends are very instrumental in influencing maternal stress levels by offering various forms of support (Varma et al., 2019).

A study by Wuni et al. (2022) on stress and coping mechanisms of mothers with hospitalised infants at the Tamale Teaching Hospital, Ghana, identified 93.3% of mothers depended on friends and family as an integral part of their coping mechanism with stress. They reported seeing mothers with their friends during the admission offering a shoulder to cry on and share their worries and also give physical help. This is in line with this present study as mothers found at the Greater Accra Regional hospital also mentioned they confided in their friends and have them help with many activities similar to the kind of help offered them by their siblings.

5.3 Institutional factors supporting mothers

Institutional level support umbrellas the services and hospital resources need in the wholistic care of the patient(neonate) and their carers(mothers). Institutional support for mothers in this study encompasses, infrastructural support, medical staff support and hospital logistics and policies like the acceptance of insurance coverage. These resources are discussed below.

5.3.1. Infrastructural Support

Infrastructural support is contextualized in this study as hospital amenities like accommodation and paediatric equipment like the firefly necessary for the treatment of neonatal jaundice. Mothers were satisfied with the availability of this equipment which were used to treat their neonates. They felt supported that everything their babies needed to recover were readily available. Another area mothers felt supported was the National Health insurance that was accepted at the regional hospital. They felt the cost of the treatment of their babies had been subsidized because of the policy. However, accommodation was one of the major challenges mothers in this study did not anticipate. Some mothers who were living far away were travelling to and from home everyday to see their babies, returning tired and having to return the following day to continue. This challenge was felt by those whose babies were in the babies' unit unlike those in the paediatric neonatal

room. This was in line with the study conducted by Apedani et al. (2021), in a NICU of a mission hospital in Ghana, who found that mothers received some logistical support (sleeping room, mattresses, bath rooms and toilets). They noted that mothers also utilized services (counselling, peer groups,) and health education from various health professionals. However, these support services were not adequately available to meet their needs (Apedani et al., 2021). Mothers in this study were not made aware of any such groups as the peer groups and counselling units. Logistical support was also limited to a 4 bedded neonatal room, rendering the rest (12/16) helpless in that regard.

5.3.2. Expected staff support

Expected staff support is contextualized in this study as the services mothers anticipate would be ideal, supportive or helpful versus the support they actually receive during their admission period. The findings of this study suggests that there is a disconnect between the support mothers anticipate from the support they receive. This is supported by Negarandeh et al. (2021) in Iran, who found a gap between expected and actual support given by their healthcare providers and that although mothers needed their support, that concern was not their main priority considering their workload. Adama et al. (2022) also reported that mothers with hospitalized neonates have informational needs, require emotionally intelligent staff, hands-on support, emotional and practical needs. This supports the current findings were mothers said they were okay with how the staff took care of the babies, however they had close to no personal support from the staff. Some gaps in support were in the areas of physical care for the mothers who were in the paediatric neonatal room, informational support, emotional support and infrastructural support for mothers who were at the babies' unit.

Mothers in the neonatal room at the paediatric unit who were rooming in with their babies expressed their tiredness from having to totally care for their babies with minimal assistance from the nurses even though they had just gone through a hard labor and needed rest to heal. The disappointment was huge because the mothers had the responsibility of physical care of the newborn throughout the hospitalization. Negarandeh et al. (2021) found a similar problem when they found the mothers complaining about lack of rest and tiredness from inadequate accompanying of care from the staff.

Another area in this study where most mothers expressed needing support was information about the condition of their babies. In an Iranian hospital, mothers thought that staff did not spend adequate time to share clinical information or answering questions in regards to their concerns about their babies with them (Negarandeh et al., 2021). A study done by Boateng and Amadu (2022), at the Tamale Central Hospital found out that when the mothers of hospitalized newborns at the NICU were provided with information on how to care and do caring activities for their babies, their confidence in taking care of their preterm babies were heightened as do many of the mothers in this current study. Krestler-Peleg et al. (2022) agreed that mothers craved honest, timely and comprehensive information regarding the condition of their infants and the potential outcomes. Akua and Afutu (2022), reported that when negative relation exists between staff and the mother, it causes severe stress, recounting an incidence where a mother thought she had lost her baby when she met an empty cot after her baby's cot was changed without consent or information. This exact incident was reported in this study by a mother who described that her baby had been moved cot by cot from one corner of the Unit to another without any information given her. Another mother reported wrong information from a student who told her, her babies condition was so severe and pass away necessitating the change of the firefly machine. This caused her great pain. This proves

that prompt, timely, accurate and comprehensive information is needed at every change or progress to mother.

5.3.3. Medical staff support for mothers

Staff support as reported by participants in this study were the ways they received support from the medical team including nurses and doctors. Mothers reported they received some level of physical, informational and emotional support which was the least experienced support. Similar studies by Twijukye (2025) and Namusoke et al. (2021) noted that interpersonal relations variability existed between health care providers and parents ranging from respectful, supportive care to disrespectful and harsh treatment of parents.

Seventy-five percent (75%) of mothers were recruited from the babies' unit. They reported comprehensive physical care from the staff since they left their babies in the care of the staff and had to go home for the night. The rest of the 25% of mothers recruited from the neonatal room of the paediatric unit expressed less physical care from staff. Generally, mothers appreciated the physical care rendered by the nurses and doctors.

Informational support as mothers described it refers to information about the condition of the baby, the treatment modalities, communication of laboratory findings and the way forward in treatment options. Mothers reported they had some level of information. however more than half of participants expressed inadequate information and communication from staff. This finding is in line with Adama et al. (2022) and Eduku, Annan and Ani-Amponsah (2024) from Ghana. These studies recognized that mothers had a need for honest, timely and detailed information from health care staff.

Emotional support was the least forms of support mentioned by the mothers. They only feel supported emotionally when they see better changes in the condition of their newborns. They reported that their babies are getting treated alright but they themselves received close to no support from the medical team. This is supported by a study which noted communication gaps where healthcare providers seemed to ignore parents (Namusoke et al., 2021). Their focus was mainly getting the baby to optimal health while neglecting the mother in the process.

5.4 Community level support for mothers

In the Ghanaian community, the infant is the responsibility of the whole community and not just the responsibility of the parents (Adama, Sundin and Bayes, 2020). Community members contribute to and influence the care of the infant by providing social and informational support. These sociocultural practices have been there since precolonial days (Adama, Sundin and Bayes, 2020). In the present study, mothers shared how their community (culture, community social groups and neighbors assist them during the hospitalization of their neonates.

5.4.1. Cultural practices supporting mothers

Mothers in this study provided a series of practices in their culture which served as support for them during the hospitalization of their newborns. This is in line with some cultural practices recorded by Aubele (2021), who noted some cultural practices such as massages; cord care, breastfeeding and milk stimulation; and spiritual protection in Nigeria, Ghana and across most African cultures. Mothers in the present study supported these practices as helping them during the admission of their babies. Example, they mostly spoke about massages which help their bodies recover faster and helps them to relax. There is also the practice of bathing and sitting in warm water. Aubele (2021) noted the influence of maternal grandmothers in recognizing problems with the newborn and giving treatment options. This was in line with submissions from the mothers in

the current study who held advise from their mothers and senior female members in the family and community in high esteem in the care of the newborn including newborn massage and bathing practices.

Herbal teas and mixtures for recovery, healing and flattening the abdomen were also mentioned. Although some of the mothers said they did not take the teas and mixtures, they were aware of the practices. Particular soups were also prepared to stimulate breastmilk production which the mothers found helpful. This is in line with Aibel (2021) who found the use of prolactas in many African, Asian and Latin American countries.

Staying indoors with the neonate for one week (seven days) was associated with reducing infection and transmission of communicable diseases. In this study the mothers (Ghanaian and Nigerian backgrounds) reported that this practice enabled them have some peace and quiet to concentrate during the admission of the newborn and not obliged to be talking to a lot of people. This was also documented by Aibel (2021) in many cultural settings where initial newborn care, protection and feeding is done by secluding infants and mothers, for varying lengths of time. In Karnataka, 40 days of confinement, Nepal 6 days of chhatiyar and in Senegal, 7 days. Grandmothers and senior females in the family supervised and were mostly in charge of teaching and helping the mothers with these practices as reported by Aibel (2021). Other places where this is practiced is Indonesia, Niger, Burkina Faso, India and Amazonia.

5.4.2. Maternal Social groups' support

Mothers mostly fell on the church as a social group. The church was found to be providing financial, emotional and spiritual support for the mothers on admission. This is in line with the study by Murthy et al. (2021) who mentioned religion as offering emotional and/or financial

support to mothers with hospitalized infants. 99.4% of mothers interviewed by Wuni, A. et al. (2022), at the Tamale Teaching Hospital with hospitalised newborns left their cares in the hands of God as they believed will be best. This proved the reliance of mothers in this current study on the church and their church leaders for emotional and spiritual support. An earlier study by Heidari, Hasanpour, and Fooladi (2017) in Iran, also stressed that mothers relied on spiritual support to cope with the stresses of the NICU environment. Pastors offer prayers and encourage mothers, which goes a long way to help them emotionally. This is support by Akua and Afutu (2022), who reported that religious leaders help mothers from stress induced by the hospital admission experience.

Less than 10 percent of mothers belonged to any other social groups like a community welfare group. There was no significant support reported from these groups and one mother even had left the group because it was redundant.

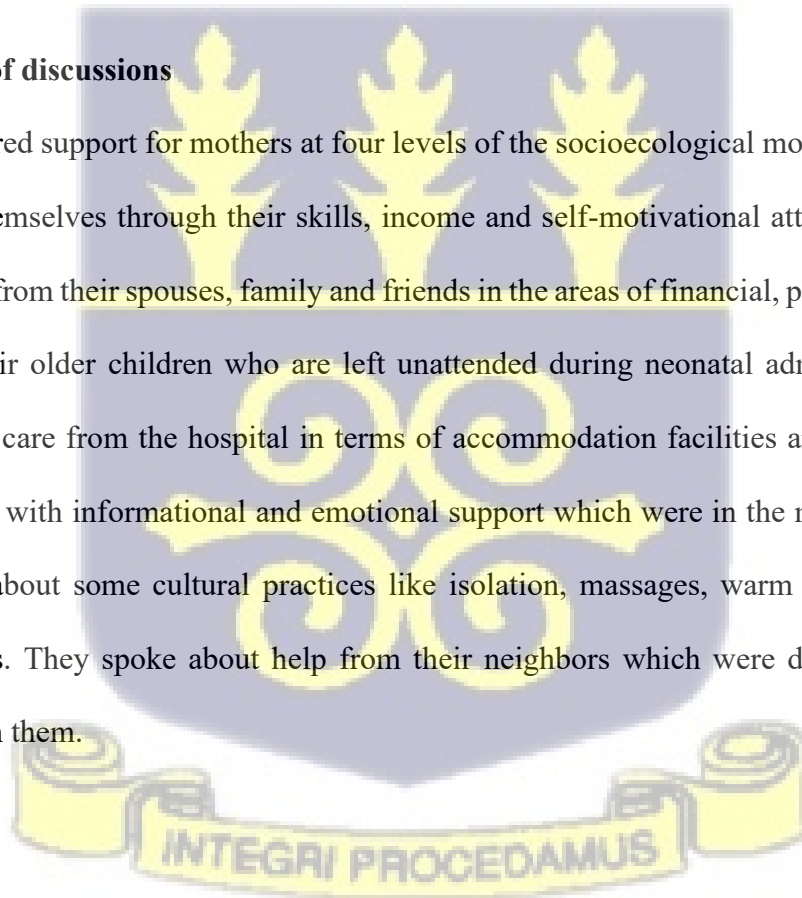
5.4.3. Neighbors/neighborhood support for mothers

The infant in the Ghanaian community is the responsibility of the community as a whole and not just the responsibility of the parents (Adama, Sundin and Bayes, 2020). Community members, in this case neighbors, as Adama, Sundin and Bayes (2020) found, contributed to and influence the care of the infant by providing social and informational support. Neighbors are very instrumental in influencing maternal stress levels (Varma et al., 2019). Some neighbors not only offered these but shared various assets they may have that they think might help the mother. Example was recorded as sharing of medicine by Adama, Sundin and Bayes (2020) and groceries by this current study. Neighbors were said to be going grocery shopping for mothers and checking up on the welfare of the newborn

Al-Mutawtah et al. (2023), also recorded neighbors to be offering emotional support to mothers which agreed with the current studies. Some landlords and tenants were calling in and visiting the mothers during the course of the study. Although some mothers reported no contact with neighbors for fear of prying into their business unnecessarily, those who had a good relationship had help in different forms. The seventeen-year-old teenager reiterated how the neighbors cared for the baby by bathing him and giving her money when her partner was not around so that she can pay back when he comes home. Akua and Afutu (2022), during their study on the women's experience of the Neonatal Intensive Care Unit in greater Accra, reported that neighbours were an integral part of the healing process for women who have their babies hospitalised.

5.5. Summary of discussions

The study explored support for mothers at four levels of the socioecological model. Mothers were a support for themselves through their skills, income and self-motivational attributes. They also utilized support from their spouses, family and friends in the areas of financial, physical, emotional and care for their older children who are left unattended during neonatal admissions. Mothers spoke about the care from the hospital in terms of accommodation facilities and physical. They were unsatisfied with informational and emotional support which were in the minimum. Finally, mothers spoke about some cultural practices like isolation, massages, warm sitz and bath and traditional soups. They spoke about help from their neighbors which were dependent on their relationship with them.



CHAPTER SIX

SUMMARY OF THE STUDY, IMPLICATIONS OF THE FINDINGS, LIMITATIONS, CONCLUSION AND RECOMMENDATION

The key findings of the study were summarized in this chapter. The implications, limitations, recommendation and conclusion are also factored. The study provided an exploration into the support mothers receive during the hospitalization of their jaundiced newborns at the Greater Accra Regional Hospital in Ghana. A tailored recommendation to the support for mothers to the Ministry of Health (MOH), Ghana Health Service (GHS) and all stakeholders who provide maternal support during neonatal hospitalization are duly stated.

6.1 Summary of the Study

Mothers of hospitalized infants as Shetty et al. (2024) found, are at risk of anxiety 51%:26%, depression 31%:12% and stress 41%:22% compared to fathers. Mothers require support for their mental and physical wellbeing. This support comes in many forms. Thus, the aim of this study was to explore the support systems mothers use during the hospitalization of their newborns at the Greater Accra Regional Hospital, using the socioecological model of health. The study recruited sixteen mothers who had their newborns hospitalized due to neonatal jaundice and were undergoing phototherapy at the time of their interviews. Participants had Ghanaian and Nigerian backgrounds. All mothers were Christians with seventy-five percent having more than one child. Mothers were engaged in a thirty to forty-five minutes interview where they were interviewed using a semi-structured interview guide. The data collected was transcribed and analyzed using deductive thematic analysis. Four main themes were found with thirteen subthemes.

The first theme was individual characteristics that support mothers during the hospitalization of their newborns who had jaundice. Under this heading, there were three subthemes: demand characteristics, resources and force characteristics. Demand characteristics spoke about the mothers age and gender. Older mothers in this study agreed that their ages may be a support for them because their age came with experience and growth necessary for pregnancy, labour and child rearing including challenges like neonatal admissions. They however did not see being female as a support for them since females in the Ghanaian setting had more responsibilities which makes it difficult and stressful when coupled with neonatal admissions. Notably, they had just gone through labor and have to be on admission because of the newborn. Mothers found their income, skills and education under maternal resource characteristics to be a helpful support for them in making good health decisions, managing themselves and understanding the babies condition. Force characteristics as mothers stated like personal motivation and their personality, mother spoke about self-reliance, awareness and self-regulation, adaptability and resilience which helps them cope with the stress of neonatal admissions.

Under interpersonal support, mother spoke about their relationships with their spouses, family and friends which serve as support for them during the hospitalization. Spousal support was the most utilized social support in this study. All mothers were supported one way or the other by their spouses. Grandmothers were the next batch of support after Spousal support, especially the maternal grandmother who was mostly mentioned by the mothers as being very supportive. Grandmothers essentially offered the same kinds of support: physical, emotional, financial, sibling support and advice on new born care. Paternal grandmother support however was dependent on the relationship with the daughter-in-law. Those who did not have good relationship with their mothers-in-law did not receive any form of support from them. Maternal siblings and siblings in-

law were also mentioned but like the grandmothers, maternal siblings were more implicated. They are involved in taking care of the siblings of the hospitalized newborn, cooking and washing for the new mother and running errands. Some supported financially as well. Friends were not left out of the equation, mothers with meaningful friendships had different forms of support from their friends; physical, emotional, and financial support. There were mothers who did not have friends and so did not have any form of support from that angle.

The next form of support utilized by mothers were at the institutional level. The Greater Accra regional hospital which was the setting for the setting had a babies' unit and a neonatal room at the paediatric unit where jaundiced newborns were admitted to receive treatment. Mothers at the neonatal room of the paediatric unit had infrastructural support like accommodation and accommodation amenities. They felt supported because they could room-in with their babies but complained of lack of physical care and support from the staff. Mothers at the babies unit who could not room in with their babies had full physical support for the baby but not supported in the area of accommodation. They were satisfied with the acceptance of the National Health Insurance which subsidized their bills and helped financially. Mothers expressed need for informational and emotional support.

At the community level, mothers spoke about some cultural practices that helps them amongst which were massages, warm bathes, traditional soups, sitz baths and isolation periods. These were practices recognized by Aubel (2021) across many other countries in the Africa, Asia and Latin American countries. Mothers mentioned these practices helped them heal faster, relax and feel rested. The isolation periods also offered them some peace and quiet during the admission so that they are not obliged to answer so many questions from visitors.

6.2 Implications of Study Findings

The findings of the study had implications for paediatric nursing practice, maternal and child health, nursing education and research

6.2.1 Implications for Paediatric Nursing Practice

Nurses should receive targeted training in neonatal jaundice, including evidenced based breastfeeding techniques, instrumental care and infection prevention at home. Wholistic and individualized care planning should be implemented to target specific needs of mothers during neonatal admissions. Nurses and midwives working the neonatal units should receive refresher courses on family centered care modules. Antenatal care services should include triaging mothers who have had a previous baby with neonatal jaundice because they are at risk of having another jaundiced neonate.

6.2.2 Implications for Continuous Nursing Education

Nurses and Nurse-trainees should receive targeted in-service training in neonatal jaundice, including evidenced based breastfeeding techniques, instrumental care and infection prevention at home. Competency based education should include modules on the diagnosis, early detection and care of the jaundiced neonate incorporating family centered care modules. Nursing students should be taught effective communication skills to support mothers and their families during stressful situations. Nursing education should emphasize the importance of interdisciplinary collaboration and teamwork in providing comprehensive care.

6.2.3 Implications for Nursing Research

Future studies should be targeted at Muslim communities where there may be peculiar cultures practiced in support of mothers who have their jaundiced newborns hospitalized. Further research

could explore the effectiveness of various support systems for mothers during neonatal admissions, such as peer support groups or counselling. Research could investigate cultural differences in support systems and neonatal care, highlighting the need for culturally sensitive care.

6.2.4 Implications for Policy

Policy makers should target support policies to address the specific needs and concerns of mothers who have their newborns hospitalized. Formulate healthcare provider training policies which will be implemented, focusing on supportive care and empathy. Improve hospital policies and procedures to ensure mothers receive adequate support and care. Policies should target resource allocation and interventions effectively. The research could aid policymakers with the required evidence on the support needs of mothers, ensuring access to lactation consultants and breastfeeding support, invest in upgrading neonatal care units and facilities, and develop programs and services to support maternal mental health, such as counselling and peer support groups.

6.3 Strengths of the Study

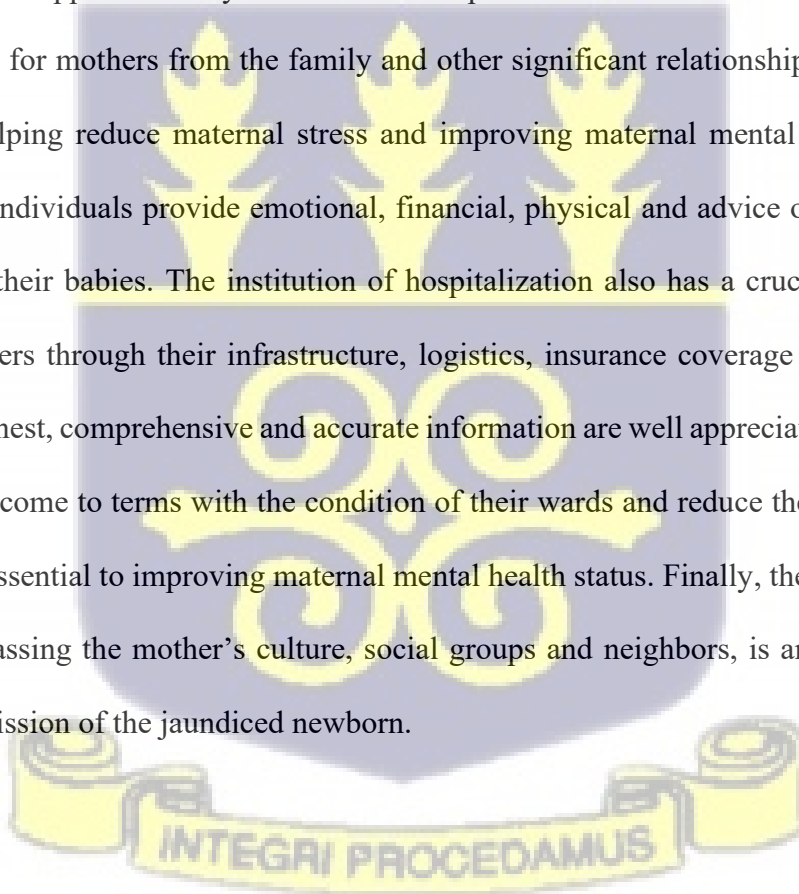
1. The study findings will inform the development of targeted interventions and support tailored to specific needs of mothers.
2. The findings will help healthcare providers and policy makers to design more effective and responsive policies, support systems and facilities.
3. The socioecological model used in this study, captured various factors influencing maternal experiences of support, starting from the individual level to broader community and societal factors.

6.4 Limitations of the Study

1. The study was conducted at a single facility which may inhibit generalization of the study findings.
2. Two teenage mothers were recruited in the study. This sample size may not be sufficient to generalize their findings with regards to their age, thus limiting generalizability.

6.5. Conclusion

The findings from this research and supporting literature suggest that, maternal support comes at various levels starting from the mother herself who has the responsibility of optimizing herself to be able to care and support her baby who has been hospitalized for the treatment of jaundice. Other forms of support for mothers from the family and other significant relationships like friends, are invaluable in helping reduce maternal stress and improving maternal mental health and infant survival. These individuals provide emotional, financial, physical and advice on how to care for themselves and their babies. The institution of hospitalization also has a crucial role to play in supporting mothers through their infrastructure, logistics, insurance coverage and support from staff. Timely, honest, comprehensive and accurate information are well appreciated by all mothers. This helps them come to terms with the condition of their wards and reduce their stress. Medical staff support is essential to improving maternal mental health status. Finally, the community level support encompassing the mother's culture, social groups and neighbors, is another area that is vital during admission of the jaundiced newborn.



6.6. Recommendations

6.6.1 Ministry of Health (MOH)

1. Formulate and implement maternal and child health policies that target support for mothers with hospitalized newborns such as accommodation facilities close to hospital of admission and rooming-in facilities for mothers.
2. Ensure the availability and affordability of essential neonatal care equipment (eg. firefly) at various levels to ease overcrowding and dependence on referral facilities.
3. Develop and implement support programs for mothers during neonatal admissions, including counseling and peer support groups.
4. Allocate additional funding to support neonatal care and maternal support services, including staffing and infrastructure.
5. Establish a system to monitor and evaluate the effectiveness of support systems and services for mothers during neonatal admissions.

6.6.2 Ghana Health Service (GHS)

1. Institutionalize compulsory triaging of mothers who have had previous newborns with jaundice and plan individualized care for at risk mothers
2. Strengthen the capacity of frontline healthcare workers to provide comprehensive physical, emotional and informational support for mothers with hospitalized jaundiced newborns
3. Culturally sensitive maternal and neonatal health education campaigns should be designed and rolled out to improve early detection and diagnosis of neonatal jaundice and curb misconceptions and stigma

6.6.3 Paediatric Society of Ghana

1. Partner with district, regional and teaching hospitals to establish peer-led support groups for mothers with jaundiced newborns
2. Organize workshops aimed at sensitizing stakeholders (families and healthcare professionals) on the needs of mothers with hospitalized newborns to bridge the gap between expected and actual support offered
3. Advocate for the adoption of family centered care (FCC) approaches to sensitize stakeholders on the importance of such practices.

6.6.3 Greater Accra Regional Hospital

1. Partner with other organizations to put up adequate hostel facilities in close proximity for mothers who cannot room-in with their hospitalized newborns
2. Organize workshops on family centered care approaches to equip staff to integrate maternal support personnel in the care of the newborn to facilitate maternal mental health.
3. Organize refresher courses on effective communication to equip staff to sufficiently and efficiently handle informational needs of mothers since that was one of their major stressors
4. Facilitate seamless distribution of information among staff, and from staff to mothers about the condition and progress of their wards during neonatal admissions.
5. Educate staff on how to meet the emotional needs of mothers through healthy working relationships to facilitate maternal mental health

6.6.4 Nursing and Midwifery Council

1. Incorporate family-centered care and maternal support into nursing and midwifery education and training programs.

2. Develop standards for nursing and midwifery practice in neonatal care, including support for mothers and families.
3. Provide opportunities for continuing education and professional development for nurses and midwives on supporting mothers during neonatal admissions.
4. Promote evidence-based practice in neonatal care, including the use of research findings to inform support services for mothers.
5. Ensure that nurses and midwives are held accountable for providing high-quality, family-centered care and support to mothers during neonatal admissions.



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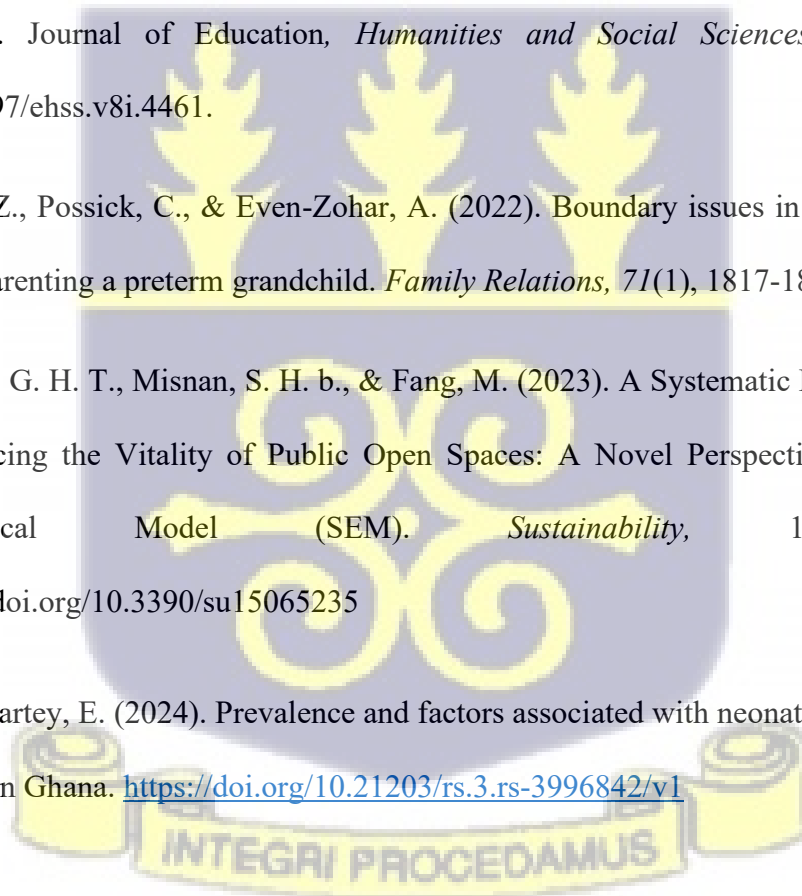
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APPENDICES

Appendix A: Interview Guide

INTERVIEW GUIDE

EXPLORING SUPPORT FOR MOTHERS WITH HOSPITALIZED NEWBORNS WITH
JAUNDICE: A QUALITATIVE STUDY AT THE GREATER ACCRA REGIONAL HOSPITAL

Section A: Background Information on Participant

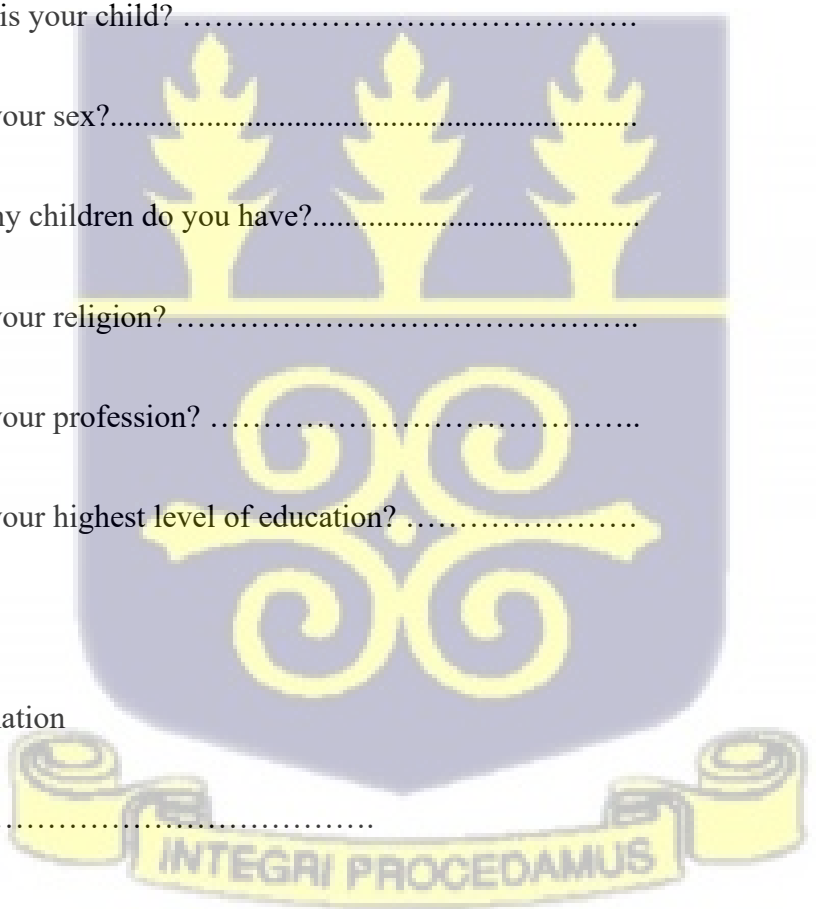
1. What is your age?
2. How old is your child?
3. What is your sex?.....
4. How many children do you have?.....
5. What is your religion?
6. What is your profession?
7. What is your highest level of education?

Interview information

Pseudonym;

Date;

Time;



Duration;

Section B: Neonatal Admissions and Maternal Distress

1. Can you share with me why your child is on admission?
2. How long has your child been hospitalized?
3. How would you describe your experiences during this hospitalization?

Section C: Support for Mothers During Neonatal Hospitalization

1. Intrapersonal Support
 - A. Tell me how your age and gender serve as support during this time of admission
 - a. Age (teenager/matured female/above 35years)
 - b. Sex (demand on the female gender in child rearing)
 - B. Resources (skills, intelligence, abilities, income, education and experience).
 - a. Tell me about the skills you possess which help you to overcome the challenges you face on admission?
 - b. How has what you know, been of help during this admission (Level of education)
 - c. Tell me about your income and how that has been of support (Financial stability/work)
 - d. How has your experiences been of help to you (parity and previous admissions)

C. Force

- a. Tell me your personal qualities that serve as motivation in caring for your child?
- b. Share with me how you manage your emotions (psychological attributes) ?
- c. How does your personality affect your coping mechanism?

2. Interpersonal support

A. Share with me the ways through which your immediate family help you during this admission?

B. In what ways does your husband/spouse support you?

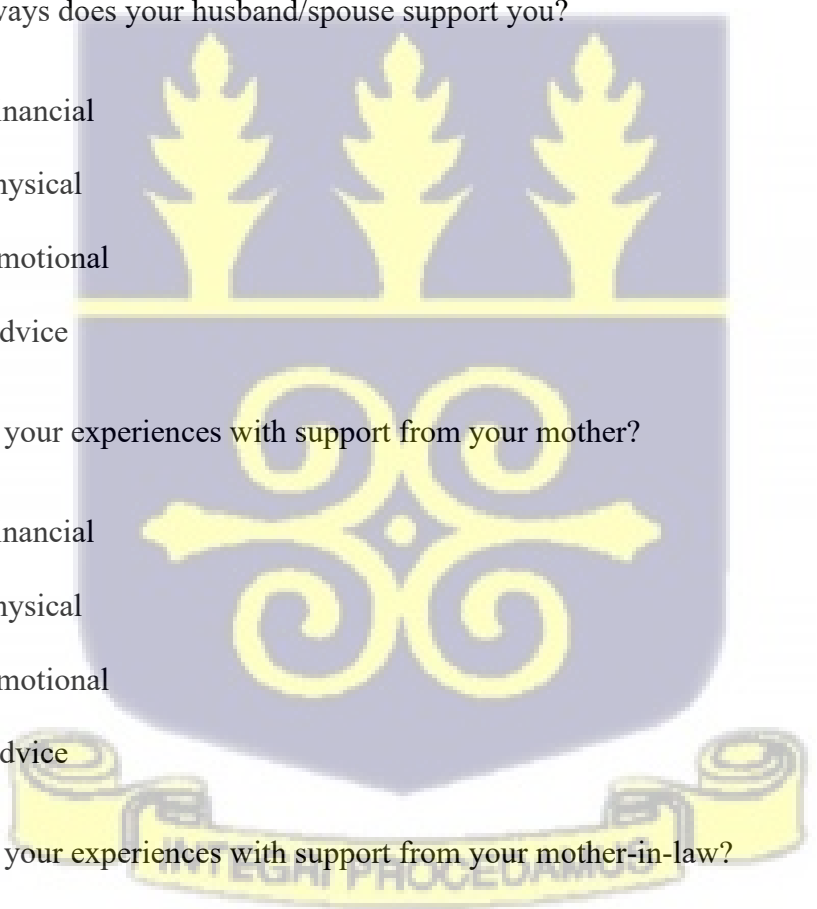
- a. Financial
- b. physical
- c. Emotional
- d. Advice

C. What are your experiences with support from your mother?

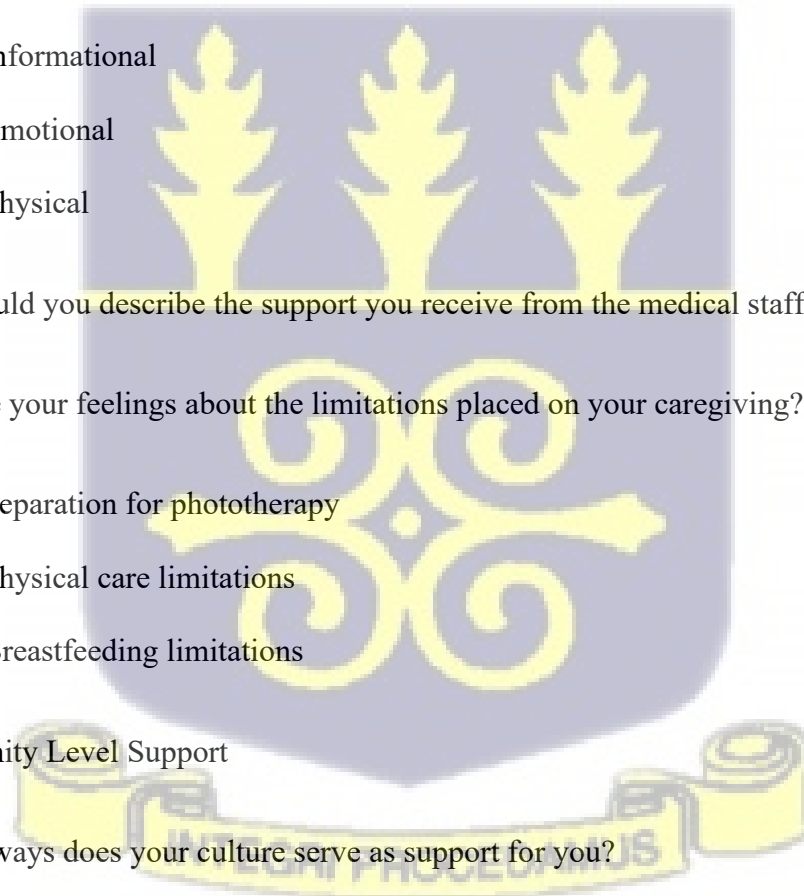
- a. Financial
- b. physical
- c. Emotional
- d. Advice

D. What are your experiences with support from your mother-in-law?

- a. Financial
- b. physical



- c. Emotional
 - d. Advice
 - E. Share with me how your siblings support you?
 - F. How has help from friends supported you so far?
- 3. Institutional and Medical Staff Support for Mothers.
 - A. What support resources were you informed about that you can utilize during your stay?
 - B. How would you like to be assisted by the medical staff?
 - a. Informational
 - b. Emotional
 - c. Physical
 - C. How would you describe the support you receive from the medical staff?
 - D. What are your feelings about the limitations placed on your caregiving?
 - a. Separation for phototherapy
 - b. Physical care limitations
 - c. Breastfeeding limitations
- 4. Community Level Support
 - A. In what ways does your culture serve as support for you?
 - a. Cultural practices
 - b. Are there some particular norms that support mothers?



B. Tell me about the social groups you belong to?

- a. Church groups
- b. Social groups/welfare groups

C. What are your experiences regarding the kind of support your social groups provide during this admission? Can you explain further with examples.....?

D. Can you share some ways your neighbours help you during this admission?

E. Is there any other question you would want to ask or any other thing you would want to share with me?



Appendix B: Ethical Clearance



**GHANA
HEALTH
SERVICE
ETHICS REVIEW COMMITTEE**

**Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra.
Digital Address: GA-050-3303**

Quote this number and date on all correspondence

My Ref. No: GHS/ 251133

Your Ref. No: _____

Date: 26th March 2025

Benedicta Karley Quarshie-Odoe
P. O. Box OC 526
Odorkor - Accra

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	GHS-ERC: 039/01/25
Study Title	Exploring Support for Mothers with Hospitalized Newborns with Jaundice: A Qualitative Study at the Greater Accra Regional Hospital
Approval Date	26 th March 2025
Expiry Date	25 th March 2026
GHS-ERC Decision	Approved

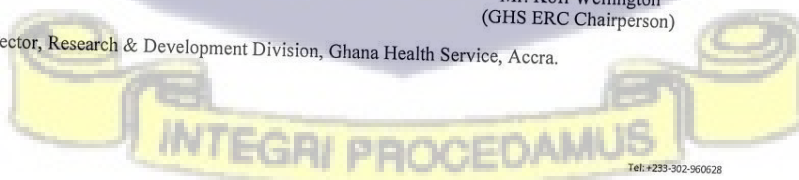
This approval requires the following from the Principal Investigator

- Submission of a yearly progress report of the study to the Ghana Health Service Ethics Review Committee (GHS ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the GHS ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing GHS ERC if study cannot be implemented or is discontinued and reasons why
- Informing the GHS ERC and your sponsor (where applicable) before any publication of the research findings.
- Please note that any modification of the study without GHS ERC approval of the amendment is invalid.
- The GHS ERC may observe or cause to be observed procedures and records of the study during and after implementation.
- Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol
- **Please note that in the event where samples will be shipped outside Ghana, a signed Material Transfer Agreement should be submitted to the GHS ERC for approval.**
- **Please note that future use of biological samples will require GHS ERC approval and the samples cannot be used for commercial purposes.**

SIGNED.....

Mr. Kofi Wellington
(GHS ERC Chairperson)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra.



Tel: +233-302-960628

Mob: +233-50-3539896

Email: ethics.research@ghs.gov.gh

Website: www.ghs.gov.gh

Appendix C: Consent Form

Study Title: Exploring Support for Mothers with Hospitalised Newborns with Jaundice at the Greater Accra Regional Hospital.

Participants' Statement:

I acknowledge that I have read or have had the purpose and contents of the Participants' Information Sheet read and all questions were satisfactorily explained to me in a language I understand. I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed this form.

I voluntarily agree to be part of this research.

I agree to be interviewed for the purposes of this study. Yes No

Name of Participant.....

Participants' SignatureOR Thumb Print.....

Date:.....

Contact Details

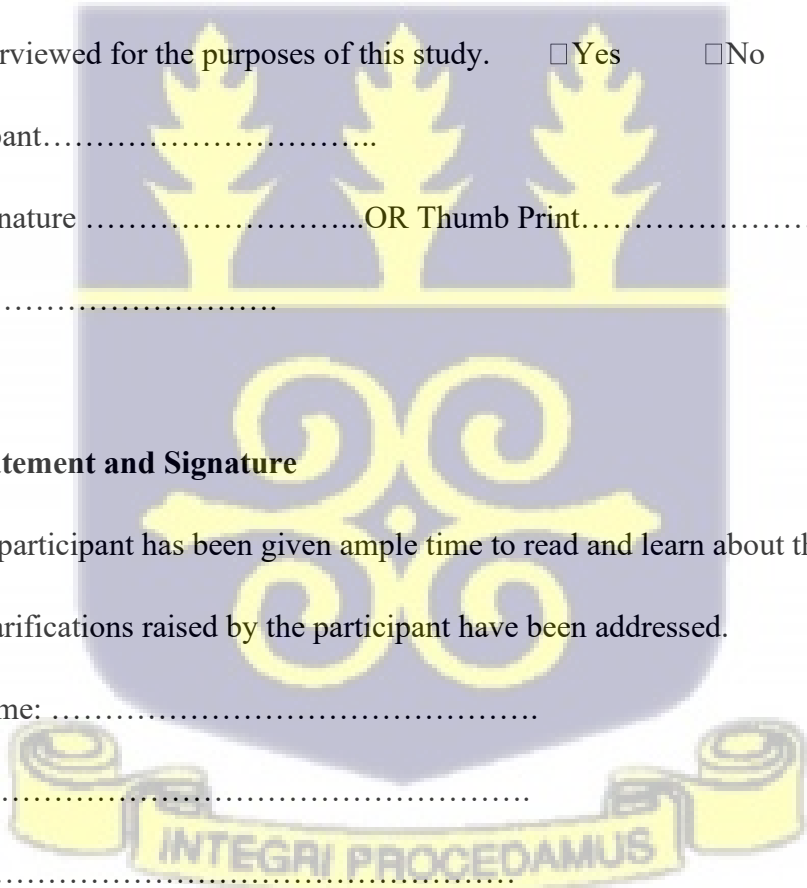
Investigator Statement and Signature

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant have been addressed.

Researcher's Name:

Signature

Date.....



Appendix D: Principal Supervisor's Support Letter



DEPARTMENT OF MATERNAL AND CHILD HEALTH
SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES

Ref: 11366951

14th January, 2025.

The Chairperson
Ghana Health Service
Ethics Review Committee

Dear Sir/Madam,

LETTER OF SUPPORT – ETHICAL CLEARANCE

I write to support the application for ethical clearance of Quarshie-Odoo Benedicta Karley, an MPhil Paediatric Nursing student in the Department of Maternal and Child Health at the School of Nursing and Midwifery, University of Ghana, Legon.

As part of the requirements for the MPhil Paediatric Nursing programme, the student is to undertake a study and she intends to use your facility as her study site.

The title of her research is **"Exploring Support for Mothers with Hospitalized Newborns with Jaundice at the Greater Accra Regional Hospital."**

I write to seek your permission to enable her undertake this study at the facility.

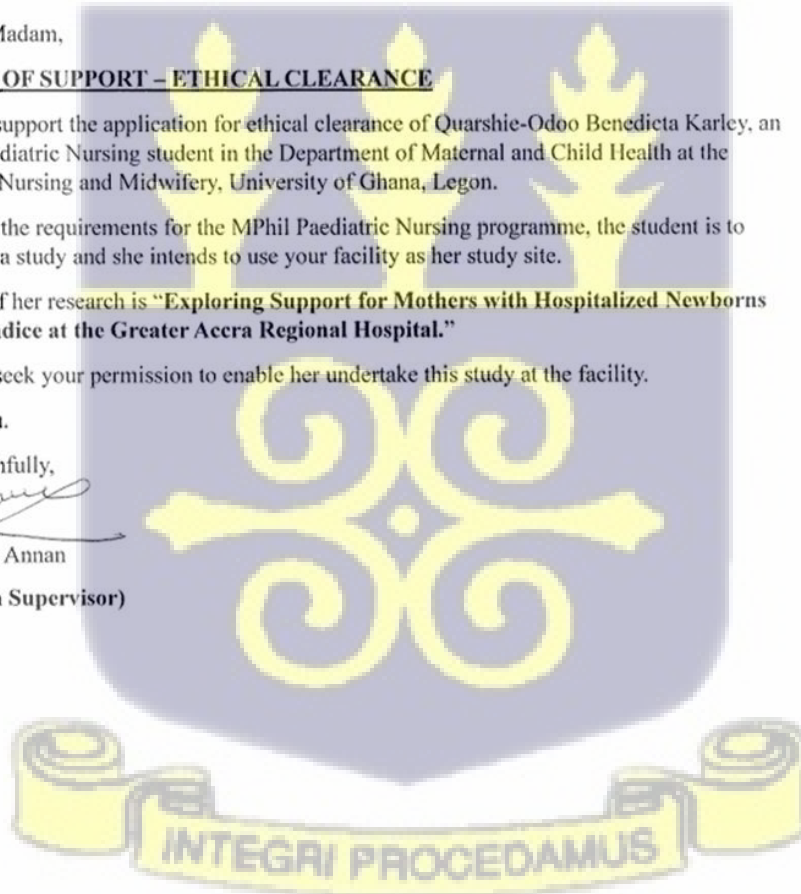
Thank you.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Emma Annan".

Dr. Emma Annan

(Research Supervisor)



Appendix E: Co-Supervisor's Support Letter



DEPARTMENT OF MATERNAL AND CHILD HEALTH
SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES

Ref: 11366951

14th January, 2025.

The Chairperson
Ghana Health Service
Ethics Review Committee

Dear Sir/Madam,

LETTER OF SUPPORT – ETHICAL CLEARANCE

I write to support the application for ethical clearance of Quarshie-Odoo Benedicta Karley, an MPhil Paediatric Nursing student in the Department of Maternal and Child Health at the School of Nursing and Midwifery, University of Ghana, Legon.

As part of the requirements for the MPhil Paediatric Nursing programme, the student is to undertake a study and she intends to use your facility as her study site.

The title of her research is “Exploring Support for Mothers with Hospitalized Newborns with Jaundice at the Greater Accra Regional Hospital.”

I write to seek your permission to enable her undertake this study at the facility.

Thank you.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Mary Ani-Amponsah".

Dr. Mary Ani-Amponsah

(Co-Supervisor)



Appendix F: Facility (Greater Accra Regional Hospital) Permission Letter



DEPARTMENT OF MATERNAL AND CHILD HEALTH
SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES

Ref: 11366951

14th January, 2025.

The Medical Director
Greater Accra Regional Hospital
P.O. Box 473
Accra-North

Dear Sir/Madam,

LETTER OF INTRODUCTION – ETHICAL CLEARANCE

I write to introduce to you Quarshie-Odoo Benedicta Karley, an MPhil Paediatric Nursing student in the Department of Maternal and Child Health at the School of Nursing and Midwifery, University of Ghana, Legon.

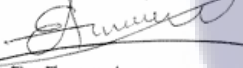
As part of the requirements for the MPhil Paediatric Nursing programme, the student is to undertake a study and she intends to use your facility as her study site.

The title of her research is “**Exploring Support for Mothers with Hospitalized Newborns with Jaundice at the Greater Accra Regional Hospital.**”

I write to seek your permission to enable her undertake this study at the facility.

Thank you.

Yours faithfully,

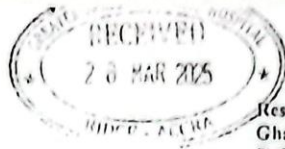

Dr. Emma Annan
(Research Supervisor)



Appendix G: Facility Approval Notice



**GHANA
HEALTH
SERVICE**
ETHICS REVIEW COMMITTEE



Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra.
Digital Address: GA-050-3303

Quote this number and date on all correspondence

My Ref No: GHS/25/123

Your Ref No: _____

Date: 26th March 2025

Benedicta Karley Quarshie-Odoe
P. O. Box OC 526
Odorkor - Accra

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	GHS-ERC: 039/01/25
Study Title	Exploring Support for Mothers with Hospitalized Newborns with Jaundice: A Qualitative Study at the Greater Accra Regional Hospital
Approval Date	26 th March 2025
Expiry Date	25 th March 2026
GHS-ERC Decision	Approved

This approval requires the following from the Principal Investigator

- Submission of a yearly progress report of the study to the Ghana Health Service Ethics Review Committee (GHS ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the GHS ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing GHS ERC if study cannot be implemented or is discontinued and reasons why
- Informing the GHS ERC and your sponsor (where applicable) before any publication of the research findings.
- Please note that any modification of the study without GHS ERC approval of the amendment is invalid.
- The GHS ERC may observe or cause to be observed procedures and records of the study during and after implementation.
- Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol
- Please note that in the event where samples will be shipped outside Ghana, a signed Material Transfer Agreement should be submitted to the GHS ERC for approval.
- Please note that future use of biological samples will require GHS ERC approval and the samples cannot be used for commercial purposes.

SIGNED.....

[Signature]
Mr. Kofi Wellington
(GHS ERC Chairperson)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra.

Attention: *HACS*
Head of Paediatrics
110... Research Unit

Tel: +233-302-602018
Mob: +233-50-3571830
Email: ethics_research@ghs.gov.gh
Website: www.ghs.gov.gh

