**PERCEPTION AND HEALTH SEEKING BEHAVIOURS AMONG MOTHERS OF NEONATES WITH JAUNDICE IN** **TAMALE TEACHING HOSPITAL**

**ABSTRACT**

The aim of the study was to assess health-seeking behavior among mothers of neonates with jaundice in Tamale. A qualitative approach using an explorative descriptive research design which was adopted for the study. A purposive sampling technique was utilized in selecting thirty mothers of neonates with jaundice admitted at the Neonatal Intensive Care Unit of the Tamale Teaching Hospital. Data was collected by the use of a semi- structured interview guide through one-on-one in-depth interview with sampled mothers and audio taped till saturation was reached. Recorded interviews and field notes during the interview were transcribed verbatim and analyzed using thematic content analysis (TCA). The results show that mothers generally had good knowledge of neonatal jaundice, with the condition often described from a biomedical perspective. The results further indicate two dominant pathways for seeking care by mothers; hospital care and traditional treatment by herbalists. The health-seeking behaviour of mothers was influenced by perceived efficacy of treatment, accessibility, financial status, and support in decision-making from family and friends. Although mothers often detected neonatal jaundice at an early stage, they adopted home remedies such as sun bathing for vitamin D, glucose supplements, fruits, and traditional healing prior to seeking hospital care. There is the need for public education of mothers regarding the need to report neonatal jaundice at an early stage to prevent complications and neonatal mortality.

**Key Words:*****Health, mothers, Neonatal Jaundice, Tamale,*** ***audio taped,*** *glucose*

**INTRODUCTION**

Neonatal jaundice is a leading cause of newborn death. It is a prevalent illness that affects around 60% of full-term and 80% of preterm infants globally within the first week of life (Taheri et al., 2014). In 2018, the World Health Organisation (WHO) reported that 2.5 million deaths were recorded during the neonatal period, accounting for approximately 45% of all deaths in children under the age of five. This means that around 7,000 neonatal deaths occur each day, with one quarter of these deaths occurring on the first day of life and three quarters occurring within the neonatal period (Setiamy & Deliani, 2019). Neonatal jaundice, often referred to as neonatal hyperbilirubinemia, is characterised by the yellowing of the mucous membrane, skin, and sclera of the eyes in newborns. This discoloration occurs as a result of elevated amounts of bilirubin in the bloodstream of the neonate (Mitra & Rennie, 2017). Woodgate & Jardine, (2015) stated that newborn jaundice occurs when bilirubin builds up in the skin due to an excessive breakdown of red blood cells and a decrease in bilirubin excretion.

According to the global burden of disease 2016, NNJ was ranked as the seventh leading cause of morbidity and mortality among neonates worldwide in the first week of life. In Sub-Saharan Africa, including Ghana, it was ranked as the eighth leading cause (Bre et al., 2018). Neonatal jaundice is responsible for 75% of hospital re-admissions within the first week of life, as well as 35% of all admissions to the neonatal intensive care unit. It is also a significant factor contributing to neonatal morbidity and mortality, particularly in Latin America, Asia, and sub-Saharan Africa (Lawn et al., 2014; Onyearugha et al., 2011). However, the incidence of complications arising from neonatal jaundice in poor and middle-income countries is alarmingly high, necessitating urgent scrutiny and investigation (Slusher et al., 2017).

The 2014 Demographic and Health Survey (GDHS) in Ghana revealed that the infant mortality rate decreased from 64 per 1000 live births in the five years leading up to the 2003 GDHS, to 41 per 1000 live births in the five years leading up to the 2008 GDHS (Ghana Demographic and Health Survey, 2014). In the same time frame, the under-five mortality rate decreased from 111 per 1000 live births to approximately 80 per 1000 live births. Although there has been progress, it is believed that over 50 percent of newborn mortality happen during the neonatal stage of life (Ghana Statistiscal Services (GSS), 2015). Evidently, this suggests that there has been no substantial enhancement in the rate of infant mortality. During the period from 2014 to 2018, the neonatal mortality rate increased from 30 to 32 per 1000 live births. Ghana's neonatal mortality rate is significantly higher than the global average of 20 per 1000 live births. Neonatal mortality is a major contributor to deaths in children under the age of five, making up around 40% of all under-five deaths in Ghana.

Shaikh et al., (2008) argue that the health outcomes of a population are frequently influenced by their health-seeking behaviour. While several studies indicate a slight improvement in the health-seeking behaviour of women with regards to newborn jaundice, the progress is happening at a significantly sluggish rate. In underdeveloped regions, newborn death is frequently ascribed to factors linked to inadequate healthcare and the postponement of medical intervention following birth and throughout the initial days of life (Setiamy & Deliani, 2019). A study conducted by (Ogunlesi & Abdul, 2015) unveiled that a significant number of women exhibited a delay of at least 48 hours in promptly seeking proper care for their newborns. Furthermore, the combination of poverty, insufficient support for the health sector, and inadequate water and sanitation facilities may lead to suboptimal health-seeking behaviour among mothers of newborns, ultimately culminating in neonatal jaundice.

Given the relatively high occurrence of Neonatal Jaundice (NNJ), it is crucial for women to practice proactive health-seeking behaviours to promptly identify and address NNJ. This study aimed to investigate the views, beliefs, and health-seeking behaviours of mothers, as well as the factors that influence their health-seeking behaviour, and the pre-hospital therapies used to manage neonates with neonatal jaundice in Ghana. The results of this study are expected to influence policies aimed at enhancing mothers' understanding of NNJ and promoting prompt action by both mothers and healthcare facilities in managing infants with neonatal jaundice. By implementing this approach, the incidence of newborn jaundice will decrease, along with the subsequent consequences linked to the condition.

**METHODS**

Study design: This study employed an exploratory descriptive design in order to explore and describe the health seeking behavior among mothers of neonates with jaundice. Such a qualitative approach allowed the study to discover meanings which reveal realities. Specifically, the use of an explorative descriptive design made it possible for the study to tease out in-depth information from mothers regarding their perceptions and beliefs towards neonatal jaundice, as well as their health-seeking behaviour.

Setting: The study was conducted at the pediatric department of the Tamale Teaching Hospital, specifically at the Neonatal Intensive Care Unit (NICU) where mothers seek health care for their neonates.

Target Population: The population of the study consisted of mothers of babies with neonatal jaundice on admission at the Neonatal Intensive Care Unit of the Tamale Teaching Hospital.

Inclusion Criteria: Mothers above the age of 18years with their neonates admitted with Jaundice to the NICU of TTH who consented to partake in the study.

Exclusion Criteria: Mothers’ who delivered at the hospital and their neonates were admitted to the NICU through the maternity ward on account of NNJ. And also, mothers who were not emotionally stable.

Sampling Technique: The study employed purposive sampling technique to select the mothers of babies with jaundice. According to (Gomm, 2008), purposive sampling involves searching for individuals who have peculiar insight on a particular topic. In the sampling process, the researcher together with research assistants visited the Neonatal Intensive Care Unit and introduced themselves to mothers of babies diagnosed with neonatal jaundice. The selection of mothers of neonates occurred when they were admitted to the facility to receive treatment for jaundice.

Sample Size: Eighteen (18) mothers of neonates with jaundice were sampled for the study.

Data Collection Instrument: Data for this study was collected through semi-structured interviews which gave focus direction to the pattern of the in-depth one on one interview in order to retrieve very useful information from the participants (Polit & Beck, 2010).

Data Collection Procedure: According to (Gomm, 2008) interviews constitute a conversational practice where knowledge is produced through interactions between an interviewer and an interviewee or a group of interviewees. For this study, in-depth interviews were held with sampled mothers of babies with neonatal jaundice at the Neonatal Intensive Care Unit of the Tamale Teaching Hospital due to the desire to obtain rich insights through interaction, into the health-seeking behaviour of mothers of neonates with jaundice.

Data analysis: This in qualitative research is defined as the process of systematically searching and organizing the interview transcripts, observational notes, or other non-textual materials that the researcher accumulates to increase understanding of the phenomenon (Wong et al., 2019). Therefore, this study employed thematic content analysis (TCA) which involves coding and categorizing the information to determine and describe method of identifying, analyzing and reporting trends and patterns of words within a raw data (Vaismoradi et al., 2013). Data in this study was coded manually, analysed concurrently with data collection and transcribe verbatim to generate themes and subthemes.

Methodological Rigour: In a qualitative research, methodological rigor refers to the genuineness of the findings of the study. According to (Prion & Adamson, 2014), rigor is the principle that underpins the being sure of data collection, analysis and interpretation as factual. For this reason, rigor ensures the trustworthiness of the study. Trustworthiness can be ensured through credibility thus by looking at how well the information presented denotes the participants accurate data and also demonstrating the value of the data and its interpretation. This was ensured by establishing rapport with eligible participants who consented to be part of the study. To ensure transferability, the researcher gave a comprehensive description of the study context, methodology, data analysis using participants own words. This will guide readers to decide on the possibility of replicating the method on another population with different context but similar characteristics. To determine dependability, an audit inquiry was conducted to scrutinize the researcher’s record notes of data, procedures, judgements, findings and relevant supporting documents by external reviewer. Thus, member checking was done step by step in order to give much understanding of the entire process. Confirmability is how the entire process of data collection was carried out objectively and neutrally without any biases by keeping records of field notes of nonverbal communications.

**STUDY FINDINGS**

Two broad themes were obtained based on the objectives; perceptions and beliefs of mothers on the causes of neonatal jaundice, and the health seeking behaviour of mothers of neonates with jaundice.

**Socio-demographic Features of Participants**

A total of eighteen (18) mothers of neonates with neonatal jaundice were sampled for the study. The socio-demographic characteristics of sampled mothers, included their age, marital status, number of children, religious background, level of education, occupational distribution, and nationality. It was prudent to establish the socio-demographic characteristics of study participants as it provides an opportunity to determine the influence of personal factors on their beliefs and perceptions regarding neonatal jaundice, their health seeking behaviour, factors that influence their health seeking behaviour and pre-hospital interventions in managing neonatal jaundice.

With regards to the age distribution, the finding showed that the dominant age group of the youngest mothers was 25-34 years (13), with the minority (5) being 35-50 years old. Most (14) of the sampled mothers of neonates with neonatal jaundice were married while three (3) were single, with one (1) being widowed. The number of children among study participants varied and ranged from one (1) to three (3) children. Eleven (11) study participants had one child, the youngest (neonate) of which was between four days to a week old. Four (4) study participants had two children, with the remaining three (3) having three children.

On religion, the findings indicated that most (12) of the study participants were Christian, four (4) were Muslim, with two being Traditional African believers. Regarding the educational background of study participants, most of them had an appreciably high level of education. Nine (9) mothers had secondary school level of education, four (4) had tertiary education (six Higher National Diploma holders, and two university degree holders), two (2) had basic level of education (primary and junior high school), with the remaining three (3) mothers having no formal education. Majority (15) of study participants were gainfully employed, with three being unemployed. Out of the number employed, most (9) were traders, three (3) were administrative workers (secretaries), while two (3) were health workers (nurses), with the remaining one (1) being teachers. Finally, the findings indicated that all study participants were Ghanaian.

**Organization of Themes**

Below is table one (1) indicating summary of themes and subthemes that were generated during transcription.

***Table 1 Themes and sub-themes***

|  |  |
| --- | --- |
| **Themes** | **Sub-themes** |
| Beliefs and perceptions concerning NJ | Myths and beliefs; family history of NJ; biological and environmental causes. |
| Health seeking behaviour of mothers | Early detection of NJ; feelings of sadness, fear and anxiety; hospital intervention; traditional herbal treatment. |

**Beliefs And Perceptions Concerning NNJ**

The first objective of the study sought to establish the beliefs and perceptions of mothers regarding neonatal jaundice. Questions asked included the perceived causes of neonatal jaundice, whether neonatal jaundice was as a consequence of spiritual attacks and why, family history of neonatal jaundice as a possible cause, the influence of ethnicity on neonatal jaundice, as well as whether perceived infections could contribute to the development of neonatal jaundice.

**Myths And Beliefs**

With regards to the perceived causes of neonatal jaundice, responses gathered can be put into two categories: myths and beliefs surrounding the causes of neonatal jaundice; and biomedical explanations. With regards to myths and beliefs, a minority of mothers considered spiritual attacks a possible cause of neonatal jaundice, although they were generally not sure of their response. According to a participant:

“*Some of my relatives and friends told me that I should stay indoors to prevent people from seeing me after delivery but I didn’t listen. Some few days later, I noticed that my baby started becoming yellow which was attributed evil forces. (P1).”*

Another study participant added that:

“*I have heard people say that jaundice is due to spiritual forces but I do not know if it is true. I am a Christian and I believe that God is protecting my family but my close friends and family members sometimes tell me that my child’s condition is because of evil spirits” (P8).*

A third study participants shared the following view:

“*Not every person you meet has good intentions for you or your family. When I gave birth to my daughter, I thought everyone who visited me was happy for me. So, when my baby initially had the sickness, I thought it was because someone had brought some bad luck to me. It was after I went to the hospital that I realised it was a medical condition common in babies” (P6).*

From the narratives above, it can be deduced that although the spiritual explanation of neonatal jaundice did not constitute the dominant view of mothers, it was however significant that they initially considered neonatal jaundice as possibly the result of evil attacks or supernatural forces. However, following medical diagnosis, they came to the realisation that neonatal jaundice was indeed biological, devoid of spiritual connotations.

**Family History of Jaundice**

On the possibility of neonatal jaundice being the cause of family history of jaundice, some participants shared the belief that a history of existence in a family makes it possible to transfer the condition to a child through birth. One study participant stated that:

“*When my baby’s condition started, I asked my mother if anyone in the family has ever gotten jaundice. And she said I and my elder brother got it before* *(P10).”*

Another participant shared that:

*I think neonatal jaundice can be inherited or passed onto babies. Since it has previously occurred in my family, when my baby developed it, it was nothing new to me. (P18).”*

**Biological And Environmental Explanation**

While the above cited narratives reflected the majority view of sampled mothers of babies with neonatal jaundice, majority of study participants shared a contrary perspective to the effect that neonatal jaundice was not traceable to family history but rather to biological and environmental factors. According to a respondent:

“*Neonatal jaundice is when a baby has high body temperature, loss of appetite and also has yellowish eyes* *(P15)*.”

Another study participated added that:

*“I think it is because of my intake of oily foods. And maybe because my pregnancy was postdate (42 week) (P18).”*

A third participant shared the following belief regarding the biological explanation of neonatal jaundice:

“*Neonatal jaundice is due to the absence of breast milk. That is, the mother not been able to breast feed the baby. Poor breast feeding of the baby and exposure to poor hygienic environment could also cause neonatal jaundice* *(P 16).”*

A fourth participant indicated that:

“*Yes. I was**told at the hospital that**infection can cause a baby to be**yellow. But I do not know the details about how that happens* (P11)”

From the above narratives, it could be deduced that biological causatives of neonatal jaundice was the predominant explanation given by mothers of babies with neonatal jaundice. Significantly, most sampled mothers demonstrated awareness of poor or improper breastfeeding, infections, poor environmental hygiene, and the intake of oily foods during pregnancy. This indicated that some respondents had access to information from health professionals regarding the cause of neonatal jaundice, thus diffusing possible explanations of neonatal jaundice as the product of spiritual attacks, or family history.

**4.5 Health-Seeking Behavior of Mothers**

In order to satisfy the second objective of the study regarding the health seeking behaviour of mothers with neonatal jaundice, the study sought questions related to the timeframe and reaction of mothers when neonatal jaundice was noticed, first line of action following detection and the choice of treatment.

**Early Detection of Neonatal Jaundice**

With regards the timeframe of detection of neonatal jaundice, the findings generally indicated that mothers noticed the condition within a week, ranging from two days to five days following the birth of their child. In most cases, mothers of neonates with jaundice detected the condition themselves, whilst others shared that family members and health workers noticed and informed them of the condition. Another participant had this to say:

*“I did not know until a nurse told me my baby had jaundice and advised I take my baby to the hospital. (P8)”*

Another participant added:

*“I did not notice it myself. My sister noticed it four days after my baby was born. (P6)”*

The above sentiments highlight the fact that detection of neonatal jaundice did not entirely rest with mothers, as nurses and family members also played a crucial role. These findings are significant because they have highlighted facts on why neonatal jaundice was detected or reported early (within one week) for intervention. Moreover, they indicate how neonatal care is the product of joint effort on the part of mothers, family members and health workers.

***Feelings of Sadness, Despair and Anxiety***

Following the detection of neonatal jaundice, most mothers initially expressed reactions or feelings of sadness, despair, and anxiety. Further probing revealed that such feelings or reactions were primarily attributed hitherto perceived spiritual cause of neonatal jaundice and more importantly the lack of information or knowledge regarding the biomedical cause of neonatal jaundice. In the words of a participant:

*“I was unhappy and scared when my baby’s skin started turning yellow. I thought something bad had happened to my baby. (P14)”*

Another added that:

*“I was very sad because I expected my baby’s eyes to be normal but they were not. I was really terrified and so I rushed to the hospital to seek medical attention. (P3)”*

A third participant shared the following:

*“I thought my baby was going to be very fair in complexion until I noticed that my baby’s skin color was beginning to change to yellow. I informed by husband about this and together we decided to seek treatment. (P12)”*

From the narratives above, it can be deduced that indeed, feelings of fear, sadness and despair were widespread among mothers following the detection of neonatal jaundice in their babies. This possibly informed the first line of action of mothers which included reporting to their husbands, family members, and health centres for timely treatment. However, subsequent explanation by health workers during hospital visits allayed previous feelings of anxiety, despair and sadness.

***Preference for Hospital Intervention***

With regards to mother’s preferred choice of treatment for neonatal jaundice, the results highlighted two main pathways for seeking care: hospital care, and traditional treatment. Majority of mothers of neonates with jaundice considered hospital care to be the best form of healthcare for their neonates. One mother noted that:

*“The hospital is the best place to seek treatment for my daughter’s condition. At the hospital, I was assured that quality care will be rendered to my baby where she will be placed under a blue light for treatment. (P5)”*

Another participant recounted the following:

*“Some years ago, I lost one of my children because I opted for home treatment (self-medication) rather than going to the hospital. After that experience, I always go to the hospital whenever I am sick or my children are. So, it was an easy choice going to the hospital when I noticed that my baby’s skin was becoming yellow. (P9)”*

In other instances, the choice of hospital treatment by mothers was not solely due to the efficacy of such treatment, but rather reservations regarding the potency of traditional medicine, prior bad experience or failure of traditional medicine in treating child ailments. They further shared that traditional medicine was based on traditional beliefs, devoid of standards, measurements, and based on ‘try and error’ methods. As a result, such mothers preferred modern medical practices administered at hospitals or healthcare centres.

***Traditional Herbal Medicine as a Minor Pathway***

Minority of mothers who preferred traditional medicine professed that such treatment yielded positive results in terms of treating neonatal jaundice. Although just a few of sampled mothers indicated that traditional medicine was their preferred treatment for neonatal jaundice, it is worth noting that all mothers considered their choice of intervention (hospital treatment vs traditional healers) effective for the treatment of neonatal jaundice.

**DISCUSSION**

**Beliefs and Perceptions towards NNJ**

Beliefs and perceptions encompass the personal endeavours to extract significance from one's sickness. The African understanding of illness and the causes of sickness are mostly associated with its system of beliefs. The concept of beliefs and perceptions encompasses the efforts of patients and healthcare providers to understand and interpret medical conditions. It has been deduced that they play a key function in living with disease since they can occasionally impact our health behaviour in controlling illness. The study's current focus is on the beliefs and perception of mothers around newborn jaundice. The findings of the current study suggest that the various causes of neonatal jaundice, as reported by the participants, can be categorised into two groups: myths and beliefs, and biomedical reasons. Certain mothers attributed newborn jaundice to potential spiritual assaults. A study conducted by (Moreno & Cardemil, 2013) revealed that irrespective of social position, the majority of individuals hold a belief in the presence of a supernatural entity and frequently resort to spiritual explanations for health concerns. The study findings align with a study conducted by (Dharel & Bhattarai, 2017), which found that mothers' beliefs about the causes of neonatal jaundice were linked to the violation of cultural norms by consuming specific prohibited foods during and after pregnancy, as well as supernatural forces, specifically associated with perceived malevolent spirits. In their study, (Le et al., 2014)Le et al. (2014) found that out of the 979 moms selected, 118 were concerned that their newborns had jaundice but did not seek medical care. Among these mothers, 40% had non-medical views regarding the cause of jaundice or employed traditional forms of treatment. Nevertheless, the aforementioned conclusion of the present study lacks empirical evidence. Research conducted in 2014 by the Paediatric Society of Ghana concluded that jaundice is not attributed to spiritual factors (Paediatric Society of Ghana, 2014). This suggests that there were more variables, apart from spiritual forces or attacks, that led to neonatal jaundice.

The biological explanation of newborn jaundice attributes it to elevated levels of bilirubin, inadequate nursing, infections, suboptimal environmental cleanliness, and the consumption of fatty foods during pregnancy. The aforementioned findings support the conclusions of previous investigations about the biological cause of newborn jaundice. Initially, (Amadu et al., 2021; Mishra & Palanivelu, 2008) ascribed newborn jaundice to abnormally elevated levels of serum bile pigment bilirubin. Elevated bilirubin levels in the bloodstream can be neurotoxic to newborns and lead to neurological impairments.

The conclusions of this study on neonatal jaundice are supported by empirical evidence, which confirms the link between inadequate nursing and nutrition and the occurrence of this condition in newborns. (Najib et al., 2013) found that inadequate breastfeeding practices, delayed initiation of breastfeeding, and maternal malnutrition during pregnancy can contribute to the occurrence of newborn jaundice. Furthermore, the empirical evidence substantiates the conclusions of this study with regards to infections as a contributing factor to newborn jaundice. A study conducted by (Onyearugha et al., 2011) shown that newborn jaundice might emerge in the first few days after birth as a result of intrauterine illnesses. However, there is limited knowledge about the role of poor environmental hygiene in causing infant jaundice prior to this study.

The present study's findings indicate that neonatal jaundice can be attributed to a family history of jaundice, hence increasing the susceptibility of some families to having neonates with jaundice. Neonatal jaundice can be explained genetically by the presence of an inherited enzyme deficiency called glucose 6 phosphate dehydrogenase (G6PD). Scientific data, although not definitive, suggests that this defect could lead to jaundice in newborns (Buus-Frank, 2005; Najib et al., 2013). (Najib et al., 2013) found that a majority of newborns with jaundice had siblings who also had the disease. Nevertheless, while the likelihood of newborn jaundice is elevated in families with a jaundice history, it is important to note that neonatal jaundice is not inherited.

**Health-Seeking Behaviour of Mothers with Newborns Diagnosed with NNJ**

Health seeking behaviour refers to the actions made by those who believe they have a health issue or are unwell, with the intention of finding an appropriate solution. This notion is based on the description of disease behaviour by (Ward et al., 1997), which aimed at assessing health behaviour separately from seeking care as a preventive strategy.

The study findings indicated that moms of newborns with jaundice typically detected the problem early, within a week after their child's delivery, with the range being two to five days. Typically, moms were the ones who identified the disease on their own, while in some situations, family members and healthcare professionals identified and told the mothers about the illness. Mothers often experience feelings of sadness, fear, and anxiety when their newborn is diagnosed with neonatal jaundice. These emotions can be attributed to the spiritual connotations associated with the condition, as well as a lack of prior information or understanding about the biomedical causes of neonatal jaundice. The findings indicate that the majority of mothers of neonates with jaundice sought early attention due to sentiments of fear, despair, and grief.

The results of this study align with previous research on the early identification of neonatal jaundice and the emotional experiences of anxiety, fear, and grief that parents may have upon receiving a diagnosis of jaundice in their newborns. A study conducted by (Berhane et al., 2018) revealed that the vast majority (92.8 percent) of mothers were able to identify illnesses such as jaundice in their children at an early stage. These mothers promptly reported the problems to health centres to ensure timely and effective care. In a similar vein, (Ekwochi et al., 2015) reached the conclusion that mothers frequently identified neonatal diseases at an early stage. Approximately half of these mothers (47.7%) promptly sought medical attention for their neonates without attempting any home remedies. Moreover, research on the emotional well-being of mothers with newborns admitted to the Neonatal Intensive Care Unit typically shows that they experience anxiety, fear, and depression as a result of the uncertainty surrounding the health of their neonates, particularly those with jaundice and other illnesses (Jubinville et al., 2012; O’Hara & McCabe, 2013). The findings emphasise the importance of providing social support to mothers of neonates with jaundice to alleviate feelings of grief, anxiety, fear, and possibly despair.

The survey identified two primary avenues through which mothers seek care for their infants with jaundice: hospital care and traditional medicine provided by herbalists. The majority of moms expressed a preference for hospital care. The selection of the hospital for treatment was based on the assessed effectiveness of contemporary medical practices and the competence of healthcare professionals in managing newborn jaundice. However, mothers' decision to seek hospital therapy was not primarily based on the effectiveness of such treatment, but rather on concerns about the effectiveness of traditional medicine, previous negative experiences, or the inability of traditional medicine to address child diseases. In addition, the majority of surveyed moms perceive traditional medicine as being rooted in traditional ideas, lacking standardised practices and measurements, and relying on trial-and-error approaches.

The aforementioned emphasised findings of the present study align with research on the health-seeking behaviour or selection of care by mothers related neonatal jaundice. In line with this research, (Goldman & Heuveline, 2000) discovered that women in Guatemala had a greater inclination to pursue hospital medical treatment for infant jaundice and other neonatal ailments. (Egube et al., 2013) found that the majority of mothers/caregivers opted for hospital care for infants with jaundice. The aforementioned results highlight the necessity for healthcare professionals, especially nurses, to implement standardised and professional approaches when dealing with neonatal jaundice. This is crucial in order to achieve favourable treatment results and maintain mothers' preference for hospital care in the management and treatment of neonatal jaundice.

**CONCLUSION**

The study had revealed that mothers possess a significant level of understanding regarding neonatal jaundice, and the ailment is frequently identified in its first phases. The study reported that mothers predominantly choose hospital intervention for managing or treating neonatal jaundice, recognising its effectiveness compared to traditional or home-based remedies, which were previously the primary approach for neonatal jaundice. While the decision to choose hospital care for neonatal jaundice may be seen as positive and proactive, the study's results indicate that many people still opt for pre-hospital or home-based remedies. This highlights the importance of interventions to enhance maternal awareness of the risks associated with home or pre-hospital intervention for neonatal jaundice.

Consent

As per international standards or university standards, patient(s) written consent has been collected and preserved by the author(s).

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1.

2.

3.

**Reference**

Amadu, L., Boateng, K.-H. T., & Fuseini, A. (2021). Experiences of Mothers with hospitalized Preterm Babies in Tamale Central Hospital, Ghana. *Asian Journal of Pregnancy and Childbirth*, *4*(1), 234–251. https://doi.org/10.9734/ajpcb/2021/v4i162

Berhane, M., Yimam, H., Jibat, N., & Zewdu, M. (2018). Parents’ Knowledge of Danger Signs and Health Seeking Behavior in Newborn and Young Infant Illness in Tiro Afeta District, Southwest Ethiopia: A Community-based Study. *Ethiopian Journal of Health Sciences*, *28*(4), 473–482. https://doi.org/10.4314/ejhs.v28i4.13

Bre, B. O. A. C. D. N.-Y. M. K. C. R. H. O. D. W. B. N. H. K., Olusanya, B. O., Davis, A., Wertlieb, D., Boo, N.-Y., Nair, M. K. C., Halpern, R., Kuper, H., Breinbauer, C., de Vries, P. J., Gladstone, M. J., Halfon, N., Kancherla, V., Mulaudzi, M. C., Kakooza‐Mwesige, A., Ogbo, F. A., Olusanya, J. O., Williams, A. N., Wright, S. M., … Kassebaum, N. J. (2018). Developmental disabilities among children younger than 5 years in 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet. Global Health*, *6*, e1100–e1121. https://api.semanticscholar.org/CorpusID:52143196

Buus-Frank, M. E. (2005). THE GREAT IMPOSTER. *Advances in Neonatal Care*, *5*(5). https://journals.lww.com/advancesinneonatalcare/fulltext/2005/10000/the\_great\_imposter.1.aspx

Dharel, D., & Bhattarai, A. (2017). Maternal Perception about Neonatal Jaundice in Eastern Nepal: A Qualitative Study. *Health Prospect*, *16*(1 SE-Original Papers), 1–6. https://doi.org/10.3126/hprospect.v16i1.17098

Egube, B. A., Ofili, A. N., Isara, A. R., & Onakewhor, J. U. (2013). Neonatal jaundice and its management: knowledge, attitude, and practice among expectant mothers attending antenatal clinic at University of Benin Teaching Hospital, Benin City, Nigeria. *Nigerian Journal of Clinical Practice*, *16*(2), 188–194. https://doi.org/10.4103/1119-3077.110147

Ekwochi, U., Ndu, I. K., Osuorah, C. D. I., Amadi, O. F., Okeke, I. B., Obuoha, E., Onah, K. S., Nwokoye, I., Odetunde, O. I., & Obumneme-Anyim, N. I. (2015). Knowledge of danger signs in newborns and health seeking practices of mothers and care givers in Enugu state, South-East Nigeria. *Italian Journal of Pediatrics*, *41*, 18. https://doi.org/10.1186/s13052-015-0127-5

Ghana Statistiscal Services (GSS). (2015). Ghana Demographic and Health Survey (GDHS). *Demographic and Health Survey 2014*, 530. https://dhsprogram.com/pubs/pdf/FR307/FR307.pdf

Goldman, N., & Heuveline, P. (2000). Health-seeking behaviour for child illness in Guatemala. *Tropical Medicine & International Health : TM & IH*, *5*(2), 145–155. https://doi.org/10.1046/j.1365-3156.2000.00527.x

Gomm, R. (2008). Social Research Methodology. *Social Research Methodology*. https://doi.org/10.1007/978-0-230-22911-2

Jubinville, J., Newburn-Cook, C., Hegadoren, K., & Lacaze-Masmonteil, T. (2012). Symptoms of acute stress disorder in mothers of premature infants. *Advances in Neonatal Care : Official Journal of the National Association of Neonatal Nurses*, *12*(4), 246–253. https://doi.org/10.1097/ANC.0b013e31826090ac

Lawn, J. E., Blencowe, H., Oza, S., You, D., Lee, A. C. C., Waiswa, P., Lalli, M., Bhutta, Z., Barros, A. J. D., Christian, P., Mathers, C., & Cousens, S. N. (2014). Every Newborn: progress, priorities, and potential beyond survival. *Lancet (London, England)*, *384*(9938), 189–205. https://doi.org/10.1016/S0140-6736(14)60496-7

Le, H. H., Hodgkins, P., Postma, M. J., Kahle, J., Sikirica, V., Setyawan, J., Erder, M. H., & Doshi, J. A. (2014). Economic impact of childhood/adolescent ADHD in a European setting: the Netherlands as a reference case. *European Child & Adolescent Psychiatry*, *23*(7), 587–598. https://doi.org/10.1007/s00787-013-0477-8

Mishra, S., & Palanivelu, K. (2008). The effect of curcumin (turmeric) on Alzheimer’s disease: An overview. *Annals of Indian Academy of Neurology*, *11*(1), 13–19. https://doi.org/10.4103/0972-2327.40220

Mitra, S., & Rennie, J. (2017). Neonatal jaundice: aetiology, diagnosis and treatment. *British Journal of Hospital Medicine (London, England : 2005)*, *78*(12), 699–704. https://doi.org/10.12968/hmed.2017.78.12.699

Moreno, O., & Cardemil, E. (2013). Religiosity and mental health services: An exploratory study of help seeking among Latinos. *Journal of Latina/o Psychology*, *1*(1), 53–67. https://doi.org/10.1037/a0031376

Najib, K. S., Saki, F., Hemmati, F., & Inaloo, S. (2013). Incidence, risk factors and causes of severe neonatal hyperbilirubinemia in South of Iran (Fars Province). *Iranian Red Crescent Medical Journal*, *15*(3), 1–4. https://doi.org/10.5812/ircmj.3337

O’Hara, M. W., & McCabe, J. E. (2013). Postpartum depression: current status and future directions. *Annual Review of Clinical Psychology*, *9*, 379–407. https://doi.org/10.1146/annurev-clinpsy-050212-185612

Ogunlesi, T. A., & Abdul, A. R. (2015). Maternal knowledge and care-seeking behaviors for newborn jaundice in Sagamu, Southwest Nigeria. *Nigerian Journal of Clinical Practice*, *18*(1), 33–40. https://doi.org/10.4103/1119-3077.146976

Onyearugha, C. N., Onyire, B. N., & Ugboma, H. A. A. (2011). Neonatal jaundice: Prevalence and associated factors as seen in Federal Medical Centre Abakaliki, Southeast Nigeria. *Journal of Clinical Medicine and Research*, *3*(3), 40–45. http://www.academicjournals.org/JCMR

Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, *47*(11), 1451–1458. https://doi.org/10.1016/j.ijnurstu.2010.06.004

Prion, S., & Adamson, K. A. (2014). Making Sense of Methods and Measurement: Frequencies. *Clinical Simulation In Nursing*, *10*(1), e53–e54. https://doi.org/10.1016/j.ecns.2013.05.002

Setiamy, A. A., & Deliani, E. (2019). *No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する共分散構造分析Title*. *2*, 5–10.

Shaikh, B. T., Haran, D., & Hatcher, J. (2008). Where Do They Go, Whom Do They Consult, and Why? Health-Seeking Behaviors in the Northern Areas of Pakistan. *Qualitative Health Research*, *18*(6), 747–755. https://doi.org/10.1177/1049732308317220

Slusher, T. M., Zamora, T. G., Appiah, D., Stanke, J. U., Strand, M. A., Lee, B. W., Richardson, S. B., Keating, E. M., Siddappa, A. M., & Olusanya, B. O. (2017). Burden of severe neonatal jaundice: a systematic review and meta-analysis. *BMJ Paediatrics Open*, *1*(1), e000105. https://doi.org/10.1136/bmjpo-2017-000105

Taheri, P. A., Sadeghi, M., & Sajjadian, N. (2014). Severe neonatal hyperbilirubinemia leading to exchange transfusion. *Medical Journal of the Islamic Republic of Iran*, *28*(1), 1–5.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, *15*(3), 398–405. https://doi.org/https://doi.org/10.1111/nhs.12048

Ward, H., Mertens, T. E., & Thomas, C. (1997). Health seeking behaviour and the control of sexually transmitted disease. *Health Policy and Planning*, *12*(1), 19–28. https://doi.org/10.1093/heapol/12.1.19

Wong, C. H., Siah, K. W., & Lo, A. W. (2019). Estimation of clinical trial success rates and related parameters. *Biostatistics (Oxford, England)*, *20*(2), 273–286. https://doi.org/10.1093/biostatistics/kxx069

Woodgate, P., & Jardine, L. A. (2015). Neonatal jaundice: phototherapy. *BMJ Clinical Evidence*, *2015*.