



Barriers That Hinder Health Care-seeking Behavior of Mothers from Health Facilities for Neonatal Danger Signs

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How to cite this paper: Elias Ezo. (2024). Barriers That Hinder Health Care-seeking Behavior of Mothers from Health Facilities for Neonatal Danger Signs. *Clinical Nursing Perspectives*, 1(1), 22-30.
DOI: 10.26855/cnp.2024.12.003
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Received: October 1, 2024

Accepted: October 22, 2024

Published: November 12, 2024

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Abstract

Background: Modifiable behaviors including failure to recognize the neonatal danger signs, local illness beliefs, and using traditional, and home remedies for neonates hinder the healthcare-seeking behavior of mothers from health facilities. **Objective:** To explore the barriers that hinder the healthcare-seeking behavior of mothers from health facilities for neonatal danger signs in the Gamo community. **Methods:** An exploratory and descriptive qualitative study was carried out on selected key informants (mothers who had infants less than six months of age whose neonate faced neonatal danger signs, various religious leaders, wogeshas, and traditional birth attendants) in the community. Data saturation was achieved through in-depth interviews with 29 key informants, including mothers, religious leaders, and traditional birth attendants, selected using a purposive sampling technique. The Lincoln's and Guba's model principles were used to ensure trustworthiness. The data were analyzed using thematic analysis. **Findings:** The responses of mothers who had an infant less than six months of age and whose neonate faced neonatal danger signs, various religious leaders, wogeshas, spiritual healers, traditional birth attendants, and tribe leaders were described in five themes; availability of home and local remedies, religious perspective, deficiency of knowledge, perception of danger sign and medical care, and parental and environmental instability. **Conclusion:** The barriers that hinder mothers seeking care from health facilities were categorized into five themes; availability of home and local remedies, religious perspective, deficiency of knowledge, perception of danger signs and medical care, and parental and environmental instability. Therefore, providing health education concerning seeking health care from health facilities, and avoiding giving home remedies and unknown herbs might lead mothers to seek care from health facilities for neonatal danger signs.

Keywords

Barriers; health care seeking behavior; mothers of neonates; neonatal danger sign

1. Introduction

The neonatal period is the most critical for the newborn to survive its life [1]. Neonatal danger signs are those danger signs that occur in the first four weeks of life since birth [1-3]. These include inability to feed since birth or stopped later, convulsion, fast breathing, severe difficulty of breathing, fever, hypothermia, weakness and lethargy, jaundice, and signs of local infections such as reddened eye or pus draining from umbilicus [4, 5].

Mothers' health care-seeking behavior is influenced by their perception of disease severity, cultural practices, and

socio-economic factors, which can delay or prevent appropriate care [6]. The majority of the mothers and their neonates live in a social community that does not support healthcare-seeking behavior if a problem is faced [7]. In Ethiopia, traditional beliefs have greater influence over the prevailing attitudes and practices of governmental policies. Modifiable behaviors including failure to recognize the neonatal danger signs, local illness beliefs, and using traditional, and home remedies for neonates hinder the healthcare-seeking behavior of mothers from health facilities [8]. However, local illness beliefs, and using traditional, and home remedies for neonates contribute to high neonatal and infant mortality rates [8, 9].

About 73% of neonates die at home because mothers fail to seek appropriate health care during the neonatal period [8]. A large number of neonatal deaths occur at home in resource-limited settings in developing countries [10, 11]. Inappropriate care-seeking behavior contributes to the high neonatal mortality in developing countries. On the other hand, early identification of neonatal danger signs and encouragement of giving birth in health facilities improve the healthcare-seeking behavior of mothers for neonatal danger signs [8, 12]. Effective healthcare-seeking behavior of mothers for neonatal danger signs is the backbone of decreasing neonatal mortality [13]. Despite the widely known intervention that could save the lives of women, newborns, and children, millions of newborns and children die from preventable causes each year. Almost half of these deaths occur in Sub-Saharan Africa [14].

In Ethiopia, according to the 2019 mini Ethiopian Demographic Health Survey, the neonatal mortality rate is 30 deaths per 1,000 live births. The post-neonatal mortality rate was 13 deaths per 1,000 live births [15]. However, the neonatal mortality rate was 29 deaths per 1,000 live births in the 2016 Ethiopian Demographic Health Survey report [16]. The government of Ethiopia has already made great initiatives to empower communities to improve maternal and child health through health extension workers and health development army platforms. In the study area, traditional beliefs have a greater influence over prevailing attitudes and practices than governmental policies [4].

Failure of mothers to seek appropriate health care for their neonates from an appropriate place within the appropriate time is an important reason for increased neonatal and infant mortality [17]. Previous researchers in Ethiopia focused on quantitative conclusions [18-21], rather than exploring behavioral barriers that hinder mothers seeking health care from health facilities for neonatal danger signs. In my previous quantitative publication done in one of the Gamo communities, 10.3% gave home remedies, 5.9% sought traditional care, 4.7% called a priest/pastor to pray and 2.2% sought from drug sellers [21]. Based on the research's observation as one member of the community, a large number of mothers seek health care from various religious leaders, wogeshas, and spiritual healers, consult traditional birth attendants, and use home remedies. As a result, this qualitative study explored and addressed barriers that hinder mothers seeking health care from health facilities for neonatal danger signs in the Gamo community.

2. Methods and materials

2.1 Study setting

The study was conducted in the Gamo community in the Gamo zone, south Ethiopia's regional state. Gamo community is located around 556 km away from Addis Ababa and 217 km from Wolaita Sodo, the capital city of south Ethiopia regional state. Most of the people of the community are settled in highland and mountainous topographic places. The living status of the community is agricultural-based. Inset and bamboo trees are the common plants in the area. Also, various cultural and spiritual healing places serve all age groups. There are many wogeshas, various religious leaders, and traditional birth attendants in the community.

2.2 Study design

Exploratory and descriptive qualitative study was carried out in this study focusing on selected key informants in the community.

2.3 Study parents

Key informants (mothers who had infants less than six months of age whose neonate faced neonatal danger signs, various religious leaders, wogeshas, and traditional birth attendants) in the community.

2.4 Eligibility criteria

Mothers who had an infant less than six months of age whose neonate faced neonatal danger signs, various religious

leaders, wogeshas, and traditional birth attendants) in the community were included in the study. However, severely ill key informants who could not give responses for in-depth interviews and religious leaders who lived for less than six months in the community were excluded from the study.

2.5 Sample size determination

As the researcher of the qualitative study is not aware of the potential number of participants that could be involved before the commitment of the research, the sample size might fluctuate during the study. Sampling in qualitative research can continue until a plateau is reached whereby there is no new is raised [22, 23]. In this study, the sample size of 29 participants responded to in-depth interviews, and the saturation of data was reached. The in-depth interview method of data collection was used because of the distance of geographical locations.

Particularly, in-depth interviews with mothers who had infants less than six months of age whose neonate faced neonatal danger signs, with Orthodox religious leaders, Protestant religious leaders, Muslim religious leaders, traditional religious leaders, with wogeshas, and traditional birth attendants. The specific number of in-depth interviews was determined by the saturation of the idea.

2.6 Sampling procedure

A purposive sampling technique was used to select the key informants. Literature also indicates that the purposive sampling technique is preferable to attain the considered representative of the population [24] and purposive samples consist of characteristics based on a particular quality that benefits the study [25].

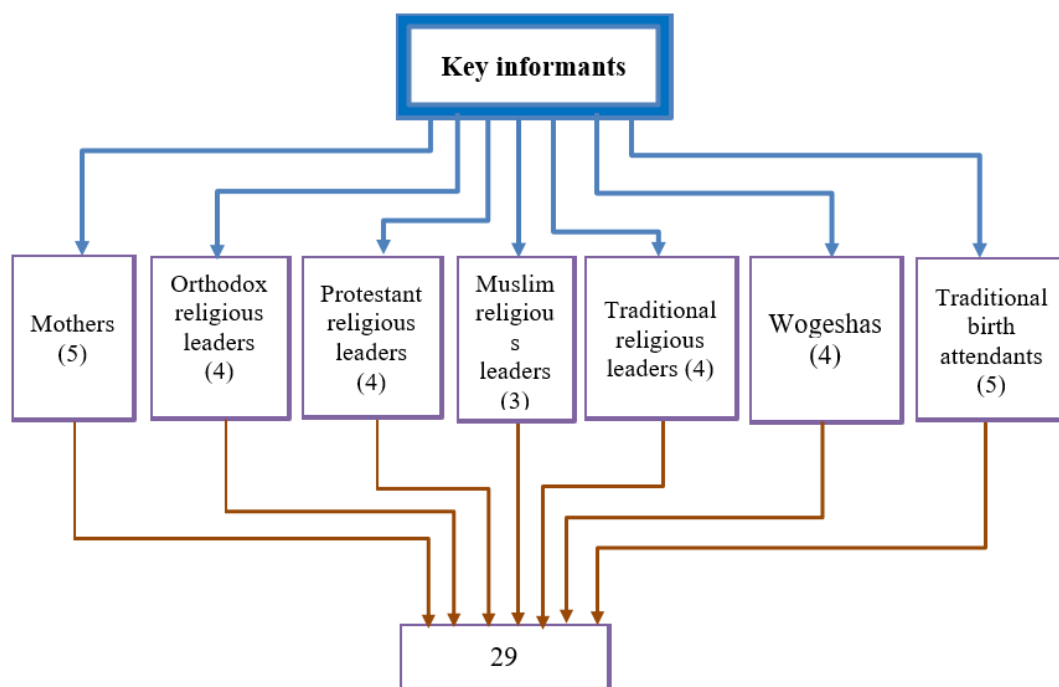


Figure 1. Sampling procedure of key informants.

2.7 Definitions of key concepts

Neonatal danger signs: Danger signs that occur in the first four weeks of life since birth [2]. They are identified by who and UNICEF, and include: inability to feed since birth or stopped later, convulsion, fast breathing or respiratory rate greater than or equal to 60 bpm, severe chest in-drowning or difficulty breathing, body temperature greater than or equal to 37.5 °C or fever, body temperature less than or equal to 35.5c⁰ or hypothermia, absence of movement even with stimulation or weakness and lethargy, yellow skin or jaundice and sign of local infections such as reddened eye or pus draining from umbilicus [4, 5, 21].

Health care facility: An institution in which mothers seek care for neonatal danger signs. It included health posts,

clinics, health centers, and hospitals that could be owned by government, private, or non-governmental organizations [21].

Wogesha: An individual who cares for fractures, sprains, and dislocations. He or she also performs tonsillectomy, skin piercing, tattoo, cuts uvula, disperses abscesses, and gives massage services.

2.8 Data collection tool and procedure

Data in this research was collected by using in-depth interviews of key informants. Specifically, 5 mothers who had an infant less than six months of age whose neonate faced neonatal danger signs, 4 Orthodox religious leaders, 4 Protestant religious leaders, 3 Muslim religious leaders, 4 traditional religious leaders, 4 wogeshas, and 5 traditional birth attendants were interviewed.

The time duration for the in-depth interview was 35 to 50 minutes. The researcher explained to participants in in-depth interviews what was expected from them, the purpose of the study, and the agreement for participation. Furthermore, the key informants were provided and showed their agreement with the signature. Field note was taken by the investigator and the speech was recorded by a trusted tape recorder.

2.9 Data quality assurance

Trustworthiness was established following Lincoln and Guba's principles, focusing on credibility, transferability, dependability, and confirmability, with in-depth interviews conducted in a secure and quiet setting [26]. The four principles used were credibility, transferability, dependability, and confirmability. A safe and quiet place was selected for an in-depth interview. Trusted tape was prepared for recording the interview and the recorded data was securely put.

2.10 Data management and data analysis

The collected data from the in-depth interview were analyzed using thematic analysis. The tape record was listened to repeatedly and familiarized. Then, transcribed Gamogna (the mother tongue language of the Gamo community) and translated to English. The taken note during the in-depth interview was assessed in parallel with the tape record and was translated into English. The translated data were categorized according to themes.

3. Findings

3.1 Socio-demographic characteristics

Out of the twenty-nine key informants, 17(58.6%) were males, the age group of 13(44.8%) was 40-49 years old, and 10(34.5%) not attended formal education. The monthly income of 21(72.4%) key informants ranged between 3,001-6,000 Ethiopia birr and from the six mothers whose neonate faced a neonatal danger sign, 3(50.0%) had 4-5 live children. Similarly, from 6 mothers, 5(83.3%) did not have counseled about danger sign during antenatal care. The distance from home to the nearest health facility for 19(65.5%) was 61-120 minute on foot journey and most, 24(82.8%) of the key informants were living in rural village (Table 1).

Table 1. Sociodemographic characteristics of the key informants

Variables (n = 29)	Category	Frequency	Percent
Gender	Male	17	58.6
	Female	12	41.4
Age	21-29 years old	2	6.9
	30-39 years old	10	34.5
	40-49 years old	13	44.8
	50-62 years old	4	13.8
	Not attended formal education	10	34.5
Educational status	Grade 1 st -8 th	9	31.0

Table 1 Continued

	Grade 9 th -12 th	7	24.2
	Diploma and degree	3	10.3
Monthly income	1,500-3,000 Ethiopia birr	6	20.7
	3,001-6,000 Ethiopia birr	21	72.4
	6,001-9,800 Ethiopia birr	2	6.9
Number of living children (n = Mothers of neonates = 6)	1-3 children	1	16.7
	4-5 children	3	50.0
	6 and more children	2	33.3
Counseled about danger sign during ANC (n = Mothers of neonates = 6)	Yes	1	16.7
	No	5	83.3
Distance from home to the nearest health facility on foot	30-60 minutes	3	10.3
	61-120 minute	19	65.6
	121-180 minute	7	24.1
Residence	Rural	24	82.8
	Semi-urban	5	17.2

3.2 Description of the key informants

Table 2. Classification, number, and gender of key informants

Classification		Number	Gender
Mothers of neonates		5	All are female
Religious leaders	Orthodox	4	All are male
	Protestant	4	2 female and 2 male
	Muslim	3	All are male
	Traditional	4	All are male
Wogeshas		4	All are male
Traditional birth attendants		5	All are female

3.3 Barriers that hinder health care-seeking behavior of mothers from health facilities for neonatal danger signs

The key informants reported various barriers that hinder the healthcare-seeking behavior of mothers from health facilities for neonatal danger signs. It varies from respondent to respondent in the study area and emerged in five themes (Table 3).

4. Discussion

This study explored the barriers that hinder the healthcare-seeking behavior of mothers from health facilities for neonatal danger signs among mothers who had infants less than six months of age whose neonates faced neonatal danger signs, various religious leaders, wogeshas, and traditional birth attendants of the Gamo community. Their responses were described in five themes; availability of home and local remedies, religious perspective, deficiency of knowledge, perception of danger signs and medical care, and parental and environmental instability. Overall, these findings revealed multiple barriers that, if not addressed, could hinder the healthcare-seeking behavior of mothers

from health facilities for neonatal danger signs.

Table 3

Categories	Themes
Giving attention to locally available traditional materials. Giving non-age-related traditional home remedies. Prioritizing first for home remedies. Availability of wogesha. Availability of spiritual healers. Availability of home remedies. Availability of traditional herbs.	Availability of home and local remedies
Giving attention to pry according to their religious teaching. Welcoming religious leaders for prying. Trusting, prying, and baptizing with holy water. Believing without trust, all others are not valuable. Prying and waiting for improvement. Prying and calling pastors for more prying. Believing the holy ghost lands on the neonate and removes the sick after baptizing. Believing all diseases are ghouls that tell themselves when baptizing in holy water.	Religious perspective
Deficiency of knowledge about the severity of the disease. Deficiency of knowledge about the effectiveness of medical treatment.	Deficiency of knowledge
Listing type of danger signs suitable for prying and baptizing. Listing type of danger signs suitable for medical treatment. Listing type of danger signs suitable for home remedies. Listing type of danger signs suitable for wogesha. Listing type of danger signs suitable for traditional herbs. Estimating the type of danger sign. Inadequacy of some medications in the health facility.	Perception of danger signs and medical care
Presence of conflict between parents or families. Deficiency of money. Long distance from home to the health facility. Decision-making ability.	Parental and environmental instability

4.1 Availability of home and local remedies

Home remedies were frequently prioritized over medical care, often due to cultural beliefs in the healing power of local plants and herbs. "...most of the time, many mothers give home remedies" (participant 11). This is the same as a quantitative study conducted in Yemen that stated use of home remedies delayed healthcare-seeking behavior for neonatal illness [27]. The priority attention of the community is to locally available materials. As a result, the mother seeks health care from her home remedies, then, expands to neighbors and local healers. "...giving attention to locally available tradition materials, they give non-age-related traditional home remedies and herbs first and in some cases, they take to traditional healer" (participant 12). This is in agreement with a previous study done in northern India, that stated faith in supernatural power and giving home remedies were a major reason for the delay and not seeking care from health facilities for neonatal danger signs [13].

The community believes that one purpose of plants and herbs on earth is to function as a medicine. Having this perception, herbs are widely practiced as medicine for neonatal danger signs. "All plants on earth were made before Adam (the first human being on earth from the angle of the Bible) and are food, shelter, and medicine for him. No one tree that is not useful for Adam. However, when he eats the tree is not allowed for eating; all the secrets were covered from him and all trees we see on earth are medicine" (participant 28). The accessibility, affordability, and acceptability of the home and local remedies without or with cheap fees in the community hinder the healthcare-seeking behavior of mothers from health facilities for neonatal danger signs. This is similar to a quantitative study in Ethiopia that justified that 33.8% of mothers gave home remedies and 24.2% sought traditional healers for their

neonates [28]. This is also similar to other studies that stated that the majority of mothers sought care from non-biomedical sources for the neonatal danger signs that faced their neonates [29, 30].

4.2 Religious perspective

Religious perspectives such as prying, baptizing, and trusting according to their religion have the potential to hinder the healthcare-seeking behavior of mothers from health facilities for neonatal danger signs. This is practiced hierarchically. First, the mother herself, prides, then, she prides with her husband, next, someone from the neighbors, and lastly religious leaders continue in some religious followers. *"Giving attention to pry according to their religious teaching, religious leaders pry and allow seeking care from health facility"* (participant 2). In other cases, the sick neonate is taken to church for prayer and baptized with Holy water. *"Pry, baptizing with Holy water"* (participant 5). *"Baptizing with holy water, first asking god, because everything is simple for god"* (participant 20). *"Trust is enough for example from the bible, Job healed from his dangerous diseases with only trust in God"* (participant 19). *"Without trust, all others are not valuable"* (participant 6). This is in agreement with other studies that stated faith in supernatural power prevents health care from health facilities [13, 30].

In some cases, prying and waiting for the improvement is also practiced. At this, time they do not treat with any remedies. *"...pry and waiting for improvement"* (participant 9). *Calling pastors for more pry and finally taking to a health facility if not improved"* (participant 7). *"First baptism itself is medicine for the neonate, then when baptizing, Holy Ghost lands on the neonate and removes the sick"* (participant 8). *The religious teaching is to take to church* (participant 17). *"All neonates taken to church improve after baptism and pry, so the doctor is the church"* (participant 8). *"All diseases are ghouls that tell themselves when baptizing in holy water"* (participant 16). *"...for example, malaria is a ghouls that comes in an appearance of human and malaria is ghouls itself"* (participant 10). *"Church is more than all things if trust"* (participant 8). This strong belief and trust according to their religion hinders the health care-seeking behavior of mothers from health facilities for neonatal danger signs.

4.3 Deficiency of knowledge

A level of knowledge about the severity of the danger signs prevents the healthcare-seeking behavior of mothers from health facilities for neonatal danger signs. *"...saying it will improve by its own"* (participant 1). *Deficiency of knowledge about the severity of diseases prevents taking the neonates to a health facility"* (participant 4). This also includes a lack of knowledge about the complications of danger signs, having a traditional diagnosis, and interpretation of the danger signs.

The deficiency of knowledge about the effectiveness of medical treatment prevents the healthcare-seeking behavior of mothers from health facilities for neonatal danger signs. *"...treatments given in health facilities do not cure all diseases"* (participant 25). *"There are diseases that are complicated if contacted with health facility drugs"* (participant 27). *"...not all diseases need treatment from health facilities"* (participant 21).

4.4 Perception of danger signs and medical care

Perception especially, listing type of danger signs as suitable for prying and or baptism, suitable for medical treatment, suitable for traditional healers, suitable for home remedies, and suitable for traditional herbs is the major problem that hinders seeking care from health facilities for neonates who faced neonatal danger signs in the study area. *"... less educated mothers estimate and try to give traditional home remedies, then they take to health facility and wait for immediate improvement, if not improved immediately, they perceive that the disease is not suitable for medical treatment"* (participant 22). *"... If the disease is identified and suitable for medical treatment, possible to take to a health facility"* (participant 15). *"... I know that convulsion is due to evil eye that cannot be treated in health facility"* (participant 26).

Sometimes, there is an absence of first-line treatment medications in the health facilities *"I took my neonate to a health clinic a week ago, and the health care providers said no treatment for this disease, take your neonate to another place. Then, I have returned to my home and the neonate is treated by wogesha"* (participant 14). In the community, some types of danger signs are believed to be suitable for wogesha. *"For neonates, body hotness is due to fracture somewhere in its body"* (participant 24). There is a perception that some danger signs are simple and best for home remedies. *"Mother herself knows that convulsion is due to evil eye that can be treated with home remedies"* (participant 26).

4.5 Parental and environmental instability

In the study area, there is a deficiency of money for some parents to seek health care-seeking behavior of mothers from health facilities for neonatal danger signs. *"For some, deficiency of money is the main reason" (participant 3)*. It is similar to the literature that stated barriers to possible delay of seeking health care for neonatal danger signs as low income [31]. The distance from home to the health facility prevents seeking care from the health facility for neonatal danger signs. *"As we are in a rural area, there is long distance and rigidity of the fathers is the source for delay" (participant 13)*. The presence of conflict between parents is stated as a hindrance. Mothers do not seek care for their neonates if they have a conflict with the husband in the home. *"Presence of conflict between parents prevents health care seeking" (participant 23)*. The decision-making ability of mothers to seek health care from a health facility for a neonate that faces neonatal danger signs is different from mother to mother and parent to parent. In some cases, a soul father (spiritual father) has responsibility for decision-making with parents. *"...soul father and parents have responsibility for decision-making for their neonate" (participant 18)*. *"When any sickness happens in the home, we consult I consult my father to know the reason for the diseases" (participant 29)*. This is in agreement with other studies that put ignorance of parents, lack of money, absence of transport, and absence of a responsible person at home [13, 30].

4.6 Limitations of the study

Some key informants reported what they heard and saw from others rather than what they experienced themselves. It may also have a problem of recall bias.

5. Conclusion

The barriers that hinder mothers from seeking care from health facilities were categorized into five themes; availability of home and local remedies, religious perspective, deficiency of knowledge, perception of danger signs and medical care, and parental and environmental instability. Targeted health education campaigns, combined with community outreach programs, could help shift reliance from traditional remedies to professional medical care for neonates.

Ethical consideration

A permission letter was provided by the Debre Markos University College of Health Ethical Review Committee. The researcher explained the necessity including the aim and purpose of data collection, confidentiality, and privacy was introduced and kept, and asked for openness, and written informed consent before starting the interview.

Funding

The fund for this research was covered by Debre Markos University.

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