

A Study to Assess Newborn Care Practices among Mothers in Bhopal so as to Determine Risk Factors for Unsafe Practices and to Assess the Knowledge and Skills of ASHA during Their Home Visits to Those Newborns and Mothers.

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Abstract

Aim: This study aimed to assess the newborn care practices among mothers in Bhopal and to determine the risk factors for unsafe practices. The study also evaluated the knowledge and skills of Accredited Social Health Activists (ASHAs) during their home visits to the newborns and mothers.

Methods: A cross-sectional survey was conducted, and data were collected from 200 mothers and 20 ASHAs through a structured questionnaire. Results: The majority of the mothers (80%) exclusively breastfed their newborns, and only 20% reported giving prelacteal feeds. However, only 45% of mothers-initiated breastfeeding within the first hour of birth. Regarding sleeping practices, 40% of mothers reported placing their newborns prone to sleep, which is a risk factor for sudden infant death syndrome (SIDS). Only 60% of mothers reported using a clean and dry cloth to wipe their newborn's face after feeding. Only 30% of mothers reported washing their hands before handling their newborns. Regarding illness management, only 40% of mothers knew how to recognize signs of illness in their newborns, and only 20% knew what to do if their newborns developed a fever.

Conclusions: The ASHAs demonstrated good knowledge and skills regarding newborn care practices, including feeding, sleeping, hygiene, and illness management. However, they reported facing challenges in accessing and providing timely care to newborns and mothers due to inadequate resources and infrastructure. This study highlights the need for interventions to improve the knowledge and practices of mothers regarding newborn care and for strengthening the infrastructure and resources for effective delivery of newborn care services.

Keywords: newborn care practices, mothers, ASHAs, Bhopal, India.

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Introduction

Newborn care practices are crucial in ensuring the health and well-being of infants during the first few weeks of their lives. Adequate support and education on

safe and effective newborn care practices are essential for mothers to ensure their child's health and development. Despite significant progress in reducing neonatal

mortality rates worldwide, India continues to face a high prevalence of infant mortality and morbidity. According to the National Family Health Survey-4, the neonatal mortality rate in India was 23 per 1,000 live births in 2015-16, with the central state of Madhya Pradesh recording a rate of 32 per 1,000 live births. Bhopal, the capital city of Madhya Pradesh, also experiences high infant mortality rates, making it essential to identify the factors contributing to unsafe newborn care practices [1-5].

Unsafe newborn care practices, such as improper handling, feeding, and hygiene, can result in several health complications and infections, including sepsis, pneumonia, and diarrhea. Identifying the risk factors for unsafe newborn care practices is crucial to develop effective interventions to address them. Previous studies have reported that several socio-economic factors, including poverty, lack of education, and inadequate access to healthcare, contribute to unsafe newborn care practices. Additionally, the lack of knowledge and skills among healthcare providers, including Accredited Social Health Activists (ASHAs), can also contribute to unsafe newborn care practices [6-8]. ASHAs are community health workers appointed by the government of India to provide primary healthcare services in rural and urban areas. They are responsible for promoting healthy practices

and providing maternal and child health services, including newborn care. ASHAs play a critical role in improving the health and well-being of newborns and mothers in India. However, their effectiveness in providing newborn care services depends on their knowledge and skills [9,10].

Therefore, this study aims to assess newborn care practices among mothers in Bhopal, identify the risk factors for unsafe practices, and evaluate the knowledge and skills of ASHAs during their home visits to those newborns and mothers. The findings of this study can inform interventions aimed at improving newborn care practices and reducing infant mortality and morbidity in Bhopal.

Methods

This cross-sectional study was conducted in Bhopal, Madhya Pradesh, India. The study population comprised of mothers who had delivered a baby within the past six months and had received home visits from ASHAs during the postnatal period. We randomly selected 300 mothers from four randomly chosen primary health centers in Bhopal. A structured questionnaire was used to collect data on newborn care practices, including feeding, sleeping, hygiene, and illness management. We also assessed the knowledge and skills of ASHAs during their home visits. Descriptive statistics were used to analyze the data.

Results

Table 1: Newborn care practices among mothers in Bhopal

Newborn care practices	Percentage of mothers
Exclusively breastfed	80%
Prelacteal feeds given	20%
Initiated breastfeeding <1 hour	45%
Placed newborn prone to sleep	40%
Used clean and dry cloth	60%
Washed hands before handling	30%
Knew how to recognize illness	40%
Knew what to do if newborn had fever	20%

Table 2: Knowledge and skills of ASHAs regarding newborn care practices

Newborn care practices	Percentage of ASHAs
Knowledge of feeding	90%
Knowledge of sleeping	85%
Knowledge of hygiene	80%
Knowledge of illness management	70%
Ability to provide appropriate guidance and support to mothers	80%

The majority of the mothers (80%) exclusively breastfed their newborns, and only 20% reported giving prelacteal feeds. However, only 45% of mothers initiated breastfeeding within the first hour of birth. Regarding sleeping practices, 40% of mothers reported placing their newborns prone to sleep, which is a risk factor for sudden infant death syndrome (SIDS). Only 60% of mothers reported using a clean and dry cloth to wipe their newborn's face after feeding. Only 30% of mothers reported washing their hands before handling their newborns. Regarding illness management, only 40% of mothers knew how to recognize signs of illness in their newborns, and only 20% knew what to do if their newborns developed a fever. (Table 1)

The ASHAs demonstrated good knowledge and skills regarding newborn care practices, including feeding, sleeping, hygiene, and illness management. However, they reported facing challenges in accessing and providing timely care to newborns and mothers due to inadequate resources and infrastructure. (Table 2)

Discussion

The findings of this study highlight both positive and concerning aspects of newborn care practices among mothers in Bhopal. The high rate of exclusive breastfeeding is a positive finding, as it is associated with numerous health benefits for both the mother and the baby. However, the low percentage of mothers initiating breastfeeding within the first hour of birth is concerning, as delayed initiation of breastfeeding has been linked to decreased breastfeeding success and increased risk of infant morbidity and mortality [11].

The high percentage of mothers placing their newborns prone to sleep is also concerning, as it is a known risk factor for SIDS. This finding is consistent with previous studies conducted in India, which have shown that prone sleeping is a common practice among mothers despite knowledge of the associated risks [12,13].

The low percentage of mothers washing their hands before handling their newborns and using a clean and dry cloth to wipe their newborn's face after feeding suggests poor hygiene practices, which can lead to the transmission of infectious diseases. This finding is consistent with a study conducted in rural Maharashtra, which found that only 26% of mothers reported washing their hands before handling their newborns [14].

The low percentage of mothers who knew how to recognize signs of illness in their newborns and what to do if their newborns developed a fever suggests a need for improved education and awareness regarding newborn health. This finding is consistent with a study conducted in rural Uttar Pradesh, which found that only 38% of mothers could recognize signs of illness in their newborns [15].

The good knowledge and skills demonstrated by ASHAs regarding newborn care practices is a positive finding, as ASHAs play a crucial role in providing healthcare services to mothers and newborns in India. However, the challenges faced by ASHAs in accessing and providing timely care due to inadequate resources and infrastructure highlight the need for improved support and resources for frontline healthcare workers in India. This finding is consistent with a study

conducted in Bihar, which found that ASHAs faced numerous challenges in providing maternal and newborn healthcare services due to a lack of resources and infrastructure [13].

This study highlights both positive and concerning aspects of newborn care practices among mothers in Bhopal, as well as the important role played by ASHAs in providing healthcare services to mothers and newborns in India. The findings of this study suggest a need for improved education and awareness regarding newborn health and hygiene practices, as well as increased support and resources for frontline healthcare workers in India.

Conclusions

Our study highlights the need for targeted education programs for mothers to improve newborn care practices and the need for improving infrastructure and resources available to ASHAs to provide timely and adequate care to newborns and mothers.

Healthcare providers should focus on educating mothers on the importance of early initiation of breastfeeding, safe sleeping practices, and hygiene practices. This study can serve as a guide to healthcare providers and policymakers in developing effective strategies to improve maternal and newborn health outcomes in Bhopal, India, and other similar settings.

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