



A REVIEW ARTICLE ON NEWBORN CARE

Paediatrics

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ABSTRACT

Around 2.4 million infant fatalities occur in the first few months of life worldwide as a result of inadequate newborn care. The results of the several programs launched by WHO to promote neonatal health are encouraging. However, there is still room for improvement in terms of standards and a reduction in obstacles such low socioeconomic position and illiteracy.¹ By offering effective and high-quality treatment during the prenatal, intra natal, and postnatal periods, it is feasible to raise the ratio of stillbirth avoidance while also improving the survival and health of babies. observation of early disease warning signals and avoidance of having a sick newborn. In addition to discussing early and necessary newborn care, this article also covered a newborn's demands.

KEYWORDS

INTRODUCTION:

The term newborn refers to a baby 28-30 days from birth. A normal newborn means a newborn who has been clinically determined to have no complications or to be at low risk of developing complications.

Infant care from birth to around one month or 28 days is referred to as newborn care. Many health problems, such as infections, can arise during this time, and the newborn's health can be impacted by various etiologic factors if sufficient care is not provided.²

The primary cause of infant deaths, newborn mortality, was high on several continents, particularly in Asia and Africa. Though various projects have been started by WHO to promote the health of mothers and children, the findings point to a hopeful ratio of 17 fatalities in 2020.

Essential and routine Newborn care

- The care of newborns needs to be prioritized in society and globally. The health of infants throughout their early days depends on providing them with the proper care, including exclusive feeding (colostrum), temperature control, and vaccinations.
- In order to improve the health of the baby, the WHO has advised a specific plan, which includes educating primi mothers and primary health care providers about newborn care practices like eye, cord, skin, and immunization checks as well as exclusive breastfeeding.⁴
- Later care of a newborn includes the care that the baby needs such as rooming-in, initiating feeding, observations of early signs of diseases, care of diaper, and maintenance of personal hygiene for the prevention of infection.⁵

Coverage of Essential Newborn Care Practices

- Three composite Newborn care practices (safe cord care, optimal thermal care, and good neonatal breastfeeding) were investigated and the coverage was generally low.
- It was unable to maintain ideal thermal care because a major portion of newborns were bathed within six hours of delivery (defined as a baby wrapped within 10 minutes of birth plus first bath after six or more hours plus using warm water to bath the baby).
- The majority of mothers wrapped their newborns within 10 minutes after birth, however early bathing makes that practise insufficient for providing babies with good thermal care.
- Early meconium evacuation appears to reduce bilirubin reabsorption (the yellow pigment responsible for jaundice).
- Colostrum, which is rich in nutrients and contains antibodies that defend the infant from illnesses, is present in the first breast milk.⁶

Needs of newborn

- The newborn's primary demands are physiological and physical.
- Health workers, Mothers, and primary caretakers should be fulfilling some aspects such as: -
 - Provide a safe and warm environment.
 - Provide exclusive breastfeeding.
 - Maintain hygiene of baby and personal hygiene.
 - Provide timely immunization
 - Maintain the trust of the baby in the mother or primary caretaker.⁷

Prevalence: -

- Data from UNICEF show that the mortality rate has somewhat declined over the past few decades. Particularly from 2017 to 2020, there will be 17 deaths for every 1,000 live births. In the first month of life in 2020, there will be about 2.4 million deaths. It implies that 6500 newborns die each day.⁸
- Premature births total about 3.5 million in India. Some of them are born with congenital malformations, birth asphyxia, and birth defects.⁹
- In 2020, more over 56 babies die before their 28th day of life, with 1 death per 1000 live births to 44.

Top 10 countries with the highest number (thousands) of new-born deaths, 2019.10

Country	Number of newborn deaths (thousands)
India	522
Nigeria	270
Pakistan	248
Ethiopia	99
The Democratic Republic of the Congo	97
China	64
Indonesia	60
Bangladesh	56
Afghanistan	43
United Republic of Tanzania	43

Causes

- The main causes of neonatal deaths are severe infections, preterm, birth asphyxia, and birth abnormalities. Malnutrition, diarrhea, and pneumonia are the leading causes of death.¹¹

One of the eight Millennium Development Goals is to reduce under-five mortality rates by two-thirds by the year 2015. (MDG). Neonatal era mortality account for almost two-thirds of baby deaths and 38% of

deaths among children under the age of five.

Additionally, cutting the chord with a fresh razor blade was a typical practise (90.8%), but when one looks more closely and holistically at safe cord care (using composite indications), just 0.2% actually did that. This means it may be inaccurate to judge the situation using a single set of indications.

For example, In Bangladesh, the majority of births take place in the home in rural regions, and it has been observed that a high proportion of deaths during the early neonatal period are caused by birth asphyxia due to a lack of expert delivery attendance and infant care. 12

Mothers' Knowledge of Newborn Care Danger Signs.

The mothers' overall knowledge of crucial newborn risk signs—aside from high body temperatures, diarrhoea, and excessive crying—was deficient.

Predictors of Good Newborn Care Practices

Maternal age, the timing of the first ANC, and maternal awareness of newborn danger signs were the key indicators of successful neonatal feeding. 13

Diaper care

Mother will either use disposable or cloth diapers. Whichever method you choose, your child will have dirty diapers roughly 10 times each day, or 70 times per week.

You'll need:

- A clean diaper
- Diaper ointment
- After each bowel movement or if the diaper is wet, lay your baby on his or her back and remove the dirty diaper.
- Use water, cotton balls, and a washcloth or wipes to gently wipe your baby's genital area clean.
- To prevent or heal a rash, apply ointment.
- Always remember to wash your hands thoroughly after changing a diaper. 13

To prevent or heal diaper rash, try these tips:

- Frequently change your baby's diapers, especially right away after bowel motions.
- Allow the infant to spend some of the day unattended. This enables the skin to breathe.

Bathing Basics

Until the navel heals fully and the umbilical cord falls off, you should give your infant a sponge bath (1–4 weeks)

Before bathing your child, get the following ready:

- A gentle, unscented baby soap and shampoo;
- A soft, clean washcloth
- A soft brush to massage the infant's scalp, towels or blankets, a fresh diaper, and fresh clothing.

Sponge baths. Choose a safe, flat surface (such a changing table, floor, or counter) in a warm area for a sponge wash.

- Pour warm (not hot!) water into a bowl or sink, if one is available.
- Start with one eye and wipe it from the inner corner to the outer corner of your baby's eyes using a washcloth (or a clean cotton ball) wet with water only.
- To clean the opposite eye, use a fresh washcloth corner or an additional cotton ball.
- Gently wash the remainder of the infant with a moist cloth and soap, giving close attention to the wrinkles in the genital region, behind the ears, under the arms, and around the neck.
- After washing such areas, make sure they are dry, then clothe and diaper your infant. 13

Feeding and Burping Your Baby

- You might be unsure about how frequently to breastfeed or bottle-feed your newborn.
- Your infant may cry, put his or her fingers in their mouths, or make sucking noises as a cue to you.
- A newborn infant need feedings every two to three hours.

Sleeping Basics

- Baby actually sleeps for at least 16 hours each day.
- Newborns often snooze for 2-4 hours at a time.

- Babies should always be put to sleep on their backs to lower the risk of SIDS (sudden infant death syndrome). 14

Providing adequate care in the home

- Newborns require special care during the first few weeks after birth, both physically and mentally.
- Mothers who are nursing need additional meals, should drink enough pure water, and should only take recommended medications at this time.
- Encourages warmth, excellent ventilation, and hygiene.
- Mothers should be aware of the warning indications for infants and the significance of swiftly obtaining assistance.

What To Do If Baby Shows Danger Signs After Birth

Regardless of whether they have issues or not, every mother and child should see a health professional as soon as possible following delivery.

The first month of life is the most vulnerable period

- The majority of infant deaths (80%) are brought on by preterm delivery difficulties, intrapartum incidents such birth asphyxia, or infections like sepsis or pneumonia.
- Therefore, focusing on the period immediately following birth with tried-and-true high-impact therapies and providing appropriate care for small and unwell newborns may prevent up to 80% of newborn deaths.

ü The first 28 days

- Nearly half (48%) of under-five deaths occur in the first 28 days of life, and they are decreasing more slowly than overall child deaths.
- More than 40% of newborn deaths could be prevented with proper care at the moment of birth.
- Thirty percent of neonatal mortality could be prevented by providing care for small, ill neonates. Kangaroo mother care, infant sepsis prevention or management, neonatal jaundice treatment, and preventing brain damage from birth-related oxygen deprivation are important measures. 15

Skilled delivery and postnatal care

- Both the mother and the newborn must get skilled care at the time of birth and during postnatal visits to be healthy.
- However, globally in 2020, only around 1 in 5 births were attended by trained medical professionals (17 percent).

According to data, just 49% of newborns worldwide are breastfed within an hour of birth, and over half (54%) of newborns in places like sub-Saharan Africa are not weighed at birth. 15

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