

Reducing the Burden of Neonatal Mortality in Pakistan

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The chances of dying on the first day of life are second only to the last day of life. Newborns, thus, represent a very vulnerable subset of population. This is especially the case in low- and middle-income countries like Pakistan. Although our Neonatal Mortality Rate has declined during the last few decades, it failed to keep pace with the targets set in the Millennium Development Goals (MDGs). Pakistan continues to have one of the highest neonatal Mortality Rates in the world. As we enter the era of Sustainable Development Goals, every effort should be made to meet the new targets set in the SDGs.

With the ever-increasing financial burden of healthcare (especially in a struggling economy like ours), careful thought should be given to adopting measures to save newborn lives and improve their health status. These measures should not only be efficacious but also cost effective and sustainable. Keeping in mind the mother newborn dyad, measures to improve neonatal outcome must address maternal health simultaneously.

Reducing neonatal mortality in low- and middle-income countries (LMICs) is thus a multifaceted challenge that requires a combination of strategies addressing various factors contributing to newborn deaths. Here are some effective approaches:

1. Access to Skilled Healthcare Providers: Ensuring that mothers have access to skilled birth attendants and quality obstetric care during pregnancy, delivery, and postpartum periods can significantly reduce neonatal mortality. This includes trained midwives/ LHV's, nurses, and doctors. The role of LHV's is paramount because of their close links with the community they serve.¹

2. Antenatal Care: Early and regular antenatal care visits are crucial for identifying and managing high-risk pregnancies, preventing complications, and promoting healthy behaviors such as proper nutrition and hygiene. A mechanism of effective, timely referral needs to be developed with clearly defined pathways between primary/secondary and tertiary

health care facilities.² Vaccinating pregnant mothers against tetanus is proven to reduce neonatal mortality.³

3. Quality Obstetric and Neonatal Care: Strengthening health systems to provide essential obstetric and neonatal care, including emergency obstetric services, neonatal resuscitation, and management of neonatal infections, can save countless lives.

4. Essential Newborn Care: Promoting immediate and exclusive breastfeeding, thermal care (skin-to-skin contact/ Kangaroo Mother Care and appropriate clothing), and hygienic cord care can prevent common causes of neonatal mortality, such as infections and hypothermia.⁴

5. Community-Based Interventions: Engaging communities through education, outreach programs, and community health workers can improve knowledge and practices related to maternal and newborn health, facilitate early detection of danger signs, and encourage timely referrals to health facilities.

6. Access to Essential Medicines and Equipment: Ensuring availability of essential medicines, such as antibiotics for treating neonatal infections and medications for preventing and managing complications like preterm birth, is critical. Additionally, access to essential equipment like newborn resuscitation devices for neonatal care. It is also important to develop evidence base guidelines for antibiotic use to prevent emergence of resistant strains of bacteria.

7. Improving Nutrition: Addressing maternal malnutrition through supplementation and dietary diversification can positively impact fetal growth and development, reducing the risk of neonatal complications.

8. Water, Sanitation, and Hygiene (WASH): Improving access to clean water, sanitation facilities, and hygiene practices at the household and community levels is proven to reduce the risk of

neonatal infections, such as sepsis and diarrhea⁽⁵⁾.

9. Empowering Women: Promoting women's education, autonomy, and decision-making power regarding their reproductive health can lead to better maternal and neonatal outcomes^(6,7). This information should be part of the curriculum for adolescent girls in schools and colleges.

10. Addressing Socioeconomic Determinants: Tackling poverty, improving access to education, and addressing gender inequalities can indirectly contribute to reducing neonatal mortality by improving overall maternal health and socioeconomic status.

11. Data Collection and Monitoring: Strengthening health information systems for routine monitoring and evaluation of maternal and neonatal health indicators is essential for tracking progress, identifying gaps, and guiding targeted interventions.

12. Policy and Advocacy: Governments and stakeholders should prioritize maternal and newborn health on the policy agenda, allocate adequate resources, and advocate for sustainable interventions at local, national, and global levels.

By implementing these comprehensive, cost-effective strategies, significant strides can be made in reducing neonatal mortality and improving the health and well-being of mothers and newborns in LMICs like Pakistan.

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