

Strengthening Neonatal care: Leveraging Telehealth Hub-and-Spoke Model to Reduce Neonatal Mortality



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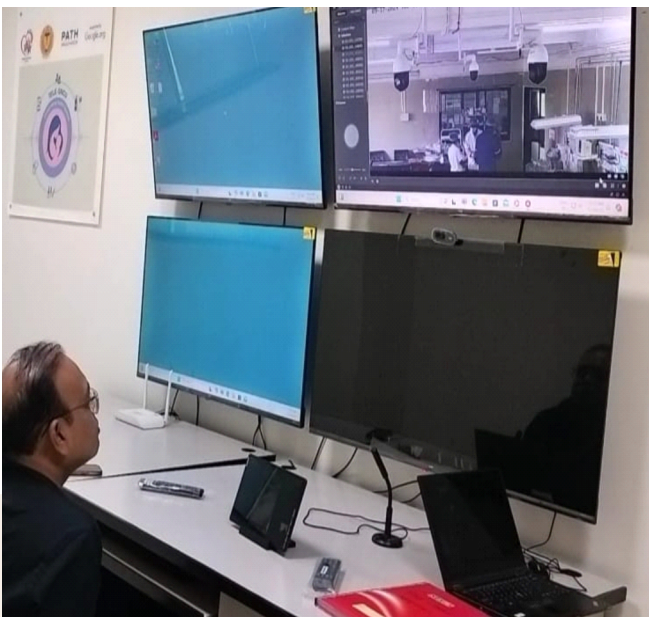
Introduction

Every day, around 6,300 newborns die, making up nearly 47% of under-5 child deaths. Progress since 2015 has stalled, with 64 countries, including India, likely to miss the SDG target for neonatal mortality without urgent health service improvements. Newborn survival rates vary greatly, especially in remote areas with limited access to specialized care leading to inequity. Digital technologies and telehealth can bridge this gap, providing timely, lifesaving interventions and better care to reduce neonatal mortality and help meet SDG targets.

Dharni SNCU is located in Melghat region of Maharashtra catering to 150 villages and lies in difficult terrain known for highest MMR, IMR. Regions institutional birth rate is only 48% and IMR of 37.4 against state average of 16 with lowest socioeconomic indicators.

Methods

PATH, in collaboration with Public Health department of Maharashtra and Neonatology department of All India Institute of Medical Sciences, (AIIMS) Nagpur, is implementing a Tele-SNCU initiative in SNCU Dharni, located in a remote tribal area in Maharashtra, India to reduce neonatal deaths. The hub and spoke setup use innovative technologies like 360-degree cameras, high-speed internet, Internet of Thing (IoT), and electronic health records for real-time remote monitoring of newborns, through dashboards by neonatologists at the hub facility for immediate action. AIIMS Nagpur, as hub, providing expert consultation, virtual rounds, onsite skill-based training, and monitoring to save newborns at the spoke facility in Dharni.

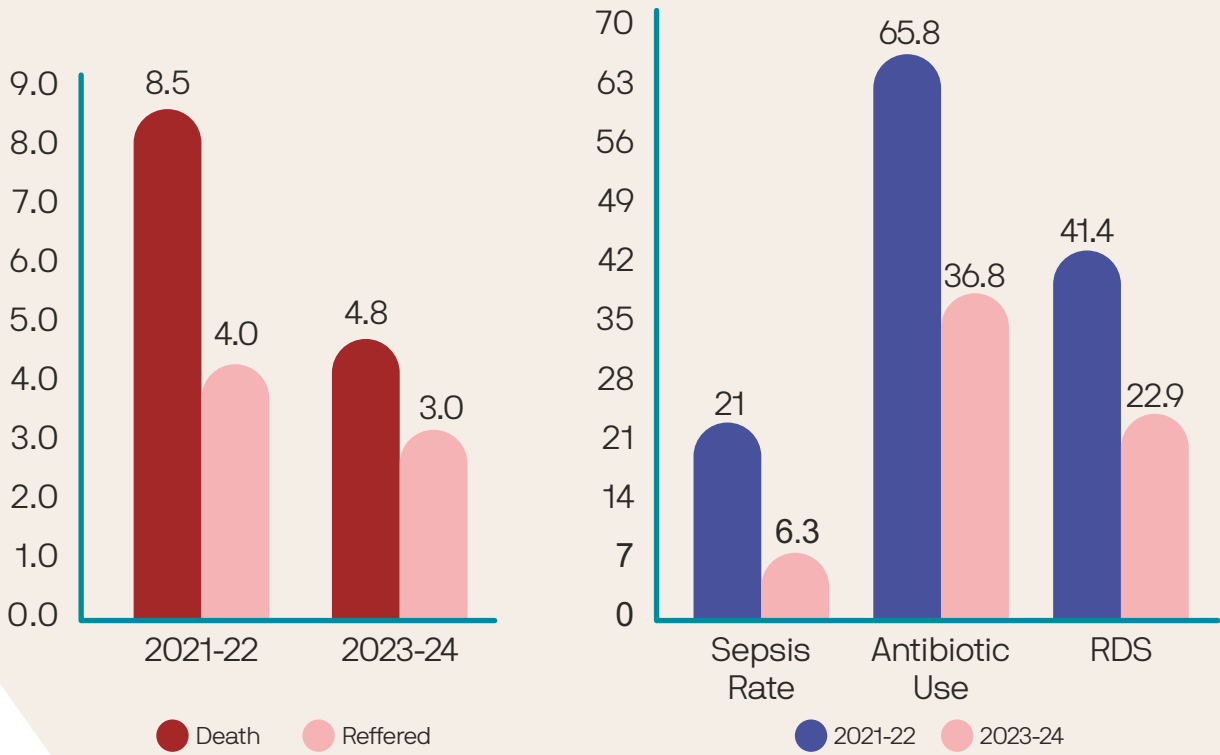


Results and discussion

- 20 Nursing staffs trained for 18 days FBNC residential training at AIIMS Nagpur
- 34 Nursing staffs (SNCU + LR) trained on Infection prevention practices
- 28 Nurses and 3 MO trained on equipment management e.g. CPAP, warmer, ventilator, phototherapy machine, syringe pumps and multipara monitors

- ~1200+ newborns consultations completed and mortality rate among LBW babies has reduced significantly.
- Strengthen oxygen ecosystem
- Strengthen lab & radiological system
- Strengthen AMR

Outcome %



Conclusion

Implementing Tele-SNCU in geographically challenging areas like Dharni is significantly improving newborn care quality. By strengthening the capabilities of medical and paramedical staff through adherence to standard protocols and infection prevention practices, the initiative is helping reduce neonatal mortality and morbidity. It also provides valuable evidence for innovative care models, improving the overall health system and contributing to a reduction in neonatal mortality in state.

