## **EDITORIAL COMMENTARY**



## **Quality Improvement Initiatives in Neonatal Care – The Way Forward**

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India contributes to a significant proportion in the global burden of neonatal mortality and according to National Family Health Survey-5 (NFHS-5), the neonatal mortality rate (NMR) is 24.9 per 1000 live births [1]. Despite improvement in perinatal care at various levels, several challenges do exist in reducing NMR. In resourcerestricted settings, quality improvement (QI) initiatives are novel strategies to methodically improve neonatal care utilizing team work and repeated Plan-Do-Study-Act (PDSA) cycles. QI measures intend to increase the possibility that the neonatal care provided is efficient, safe, timely, effective, equitable and also patient-centred. Neonatal mortality and morbidity in low and middle income countries (LMICs) are mostly due to prematurity, infections and perinatal asphyxia. Monitoring of quality of facility-based neonatal care needs to focus on these specific issues [2].

The study by Venugopal et al., published in this issue of the journal, was conducted in Karnataka for evaluating the feasibility and sustainability of implementing a point of care quality improvement (POCQI) methodology to improve the quality of care of neonates in a special newborn care unit (SNCU) [3]. Feasibility was defined as achievement of training for 80% or more healthcare professionals (HCPs) through workshops, their attendance in review meetings and successful completion of at least two PDSA cycles in each project. During the intervention phase, activities were designed to improve skills and knowledge of HCPs and supportive supervision in care of neonates. QI teams were formed and the teams were enabled and mentored to conduct various QI initiatives. Within a month of initiation, feasibility of training was achieved. Analysis of the results of individual projects revealed enhancement in neonatal care. Proportion of neonates being exclusively breastfed on day 5 increased,

neonates on any antibiotics decreased, proportion of any enteral feeds on day 1 and duration of kangaroo mother care (KMC) improved. Proportion of neonates receiving intravenous fluids during phototherapy also declined. This study demonstrated that facility-team-driven QI approach strengthened by capacity building and post-training supportive supervision is feasible, sustainable and effective [3].

The authors need to be appreciated for this wonderful initiative. The problems and solutions were selected by the local QI teams, simple tools including WhatsApp were used and all gains achieved were sustainable. However, it is a smaller study from a single SNCU and not powered for reduction in mortality and other health outcomes. Replicating the same interventions and sustaining the achieved targets in different settings are real challenges ahead. The WHO Collaborating Center for Newborn Health at AIIMS, New Delhi disseminates QI to other institutes through its POCQI module. A dedicated website (http://aiimsqi.org/) provides free resources for teaching and learning QI, and as a wonderful platform for capacity building of teams and sharing QI work [4]. All stakeholders should ensure that the QI movement gains momentum and becomes the norm in all delivery points and NICUs. Collection and analysis of reliable data to guide QI initiatives should be strengthened.

## **Declarations**

Conflict of Interest None.

## References

 Ministry of Health and Family Welfare, Government of India. National Family Health Survey (NFHS-5) 2019-21. Available at: https://main.mohfw.gov.in/sites/default/files/NFHS-5\_Phase-II\_0. pdf. Accessed on 14 July 2023.



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- Chawla D, Darlow BA. Development of quality measures in perinatal care - priority for developing countries. Indian Pediatr. 2018;55:797–802.
- 3. Venugopal S, Patil RB, Thukral A, et al; Team Shimoga Medical College. Feasibility, sustainability, and effectiveness of the implementation of "Facility-team-driven" approach for improving the quality of newborn care in south India. Indian J Pediatr. 2023. https://doi.org/10.1007/s12098-023-04518-8.
- 4. Sivanandan S, Sethi A, Joshi M, et al. Gains from quality improvement initiatives experience from a tertiary-care institute in India. Indian Pediatr. 2018;55:809–17.

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