

Short Report

Neonatal fall risk-assessment in hospitals: Are we compromising neonatal safety in developing countries?

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Neonatal falls have been a neglected topic in practice as well as in scientific publications. It is not even taught in postgraduate teaching programmes in the developing countries. Risks for a 'baby fall' start with the onset of labour, and continue throughout their hospital stay. A newborn is dependent on the mercy of others for his or her care and handling. This article aims to make all healthcare professionals aware of the risks of 'neonatal falls' in the hospitals of developing countries.

It is the duty of the hospital to take all necessary steps to cut down on falls among babies and increase safety measures during their hospital stay. Falls do occur in neonatal intensive care units (NICUs) and post-natal wards, but very few cases are being reported, especially in developing countries. Most incidents are neither recorded nor reported and there is no precise scale for assessing hazards and risk reduction strategies. In a study in the United States, the incidence of neonatal falls was 1.6-4.14 per 10,000 live births, and annually, 600-1600 cases of neonatal falls occur, although timing and injuries vary depending on the mechanism of the fall¹.

Most NICU nurses and physicians are completely unaware that a newborn fall risk assessment scale exists. The World Health Organisation has dedicated World Patient Safety Day to the subject of neonatal safety stating that now is the moment to act for safe and respectful childbirth, with the theme "secure mother and safe newborn"².

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A very popular scale, named 'Bayindir Hospital Risk Neonatal Fall Scale', was designed by Abike F, *et al*³ in Bayindir Hospital to assess the fall-risk of babies in the NICU. The scale is based on the Failure Mode and Effect Analysis (FMEA) method. This scale includes various maternal and baby risk factors, and an individual score has been allotted to each risk factor. Mothers under the influence of analgesia, disabled mothers, mothers with pain scores of more than one, mothers with psychiatric illnesses, being unaware of the risk of falling, mothers having vasovagal phenomena, surgical interventions, and uncooperative and inexperienced caregivers, are features that are assessed among the maternal risk factors. The main neonatal risk factors are deterioration in the clinical status of the baby while taking the baby out of the cot, transferring, bathing, feeding, giving kangaroo mother care, sedated babies and babies on ventilation. An individual fall score between 1-3 indicates the vulnerability of a fall and necessitates preventive measures to be taken immediately to reduce the calculated risk. If the score is greater than 4, additional fall precautions must be taken, including the appointment of another nurse, notification of relatives, and use of an adult fall score on the mother. An adult fall scale score and risk assessment should be used to identify high-risk mothers⁴. If a baby sustains a fall, then all such babies should be admitted to the NICU for initial evaluation. Whether such neonates should undergo imaging or not, is subjective. The decision should be made after a full clinical evaluation. Mulligan CS, *et al*⁵ conducted a 3-year retrospective analysis at a Sydney hospital and found that head injury was by far the most prominent reason for admission in 85 percent of the cases where people had a fall.

Most paediatricians working in the NICU are unaware of this neonatal fall risk assessment score. It is time to spread awareness about fall risk-assessment in neonates so that more healthcare workers become acquainted with it. As long as we do not report these incidents of fall as sentinel events, we will not be able to get proper data on them. The safety measures should focus on comprehensive care like staff awareness, addressing the fall of a baby during a procedure, equipment

safety, early risk-assessment, display of a red flag signboard in post-natal wards and making sound policy⁶.

Every hospital in developing countries should have standard operating procedures and a risk-assessment scale to prevent neonatal falls in their post-natal wards and NICU. All initiatives for newborn safety and support should be documented and communicated to parents, caregivers, and hospital authorities. There should be a quick response team to attend to such babies immediately after falling. This Neonatal Fall Assessment scale should be implemented in each and every neonatal unit in developing countries. Policies should be framed and implemented to provide a better neonatal safety environment. This topic must also be included in the teaching curriculum of undergraduate and post-graduate students.

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