Goal 5 Reduce risks for small and sick newborns

Rationale

Newborns who are born too soon, too small, or become sick, face the highest risk of disability and death. Many of the conditions related to prematurity, intrapartum brain injury, severe bacterial infection or pathological jaundice, can be prevented and managed with safe care.

Improving newborn safety, especially for small and sick newborns, requires skilled health professionals, continuous training, context-appropriate care solutions – from approaches like KMC to NICU support and clear team roles to reduce errors and ensure safe care. Standardized protocols for triage, emergency response, medication use, infection prevention, and monitoring of at-risk newborns are all essential to minimize avoidable harm.

A safe care environment, including access to properly-working equipment, adequate spacing, effective hygiene, and family involvement, further protects newborns from preventable risks.

Suggested actions[2]

People

1. Maintain sufficient numbers of licensed health professionals competent in newborn care, with appropriate skill mixes.
2. Include parents as contributors to the newborn care team, discussing treatment options, and where possible, involving them in care.
3. Provide in-service training and annual refresher sessions for health workers involved in the care and management of small, sick, and high-risk newborns.
4. Minimize the rotation of nurses with neonatal skills.

Tasks

1. Establish a well-equipped newborn corner at every delivery point.
2. Establish a system for immediate emergency care with 24-hour triage, ensuring that a comprehensive initial assessment is conducted, by appropriately trained staff, within 15 minutes of arrival.
3. Identify all at-risk newborns as soon as possible after birth or on presentation.
4. Protect all newborns receiving care with standard precautions to prevent health care-associated infections, with enhanced measures during outbreaks and pandemic situations, including a cleaning plan.
5. Regularly review preterm newborns (≤ 32 weeks gestation) on respiratory support, to ensure oxygen saturation remains within the safe range of 90–95%.
6. Administer medications only when indicated, using the correct route, composition, and dose. Regularly reassess the need, and record and manage any adverse reactions appropriately.
7. Provide blood transfusions only when indicated, ensuring blood appropriateness, recording the volume, and monitoring the newborn before, during and after the transfusion.
8. Actively promote breastfeeding and early delivery of colostrum to newborns.
9. Follow a standardized protocol for central line insertion, maintenance and removal.
10. Implement a standardized handover communication approach across health care organizations, using techniques such as SBAR (situation, background, assessment, and recommendation).

Tools and technology

1. Have essential equipment and supplies for the assessing and monitoring of neonates (e.g. weighing scales, thermometer, blood pressure measuring device, blood glucose and oxygen saturation tests).
2. Display visible emergency care aids (e.g. standardized algorithms or protocols, medicines, fluids and treatment dosage wall charts) in the designated emergency care areas.
3. Ensure equipment user manuals and instructions are easily available, such as job aids on the correct use of equipment.

Workplace environment

1. Reduce overcrowding in newborn units by ensuring there is just one newborn per cot or incubator, and maintain standard spacing between cots or incubators.
2. Designate an area to provide KMC and family-centred care that ensures privacy for newborns and their families, with seamless access.
3. Ensure the neonatal unit or designated newborn care areas, including kangaroo mother care (KMC) units, and rooming-in facilities, have a functioning newborn resuscitation table, incubators, cots for small and sick newborns, and appropriate furnishings for carers.
4. Provide care for sick newborns in an appropriate dedicated area which is safe, secure and well-maintained, as well as appropriately lit and well-ventilated with adequate water, sanitation, waste management, energy supply, medicines and medical supplies.
5. Ensure that the surgical services of the health facility have dedicated recovery and hospitalization areas for newborns that are located close to the newborn unit.
6. Maintain an energy and fuel plan with a reliable primary power source and backup to meet all newborn facility infrastructure electricity needs, at all times.
7. Organize a designated emergency care area, room or trolley in the outpatient area and wards equipped with appropriate neonatal equipment, supplies and essential medicines for emergency resuscitation and initial treatment.
8. Provide at least one functioning hand hygiene station with soap, water and alcohol-based handrub at the entrance to every unit and in all rooms used for caring for newborns.
9. Maintain adequate safety measures, including secure windows and doors, functional fire extinguishers on each floor, and in all areas a clearly displayed emergency evacuation plan and sufficient external barriers to prevent unauthorized entry.

Organization

1. Ensure standard operating procedures are in place to authorize nurses with neonatal training to perform specified interventions, in accordance with national standards.
2. Ensure that all preterm newborns and their parents are supported to initiate and maintain KMC.
3. Apply standard operating procedures for disinfection of reusable neonatal equipment, including nasal prongs, self-inflating bags and face masks, as well as incubators, phototherapy units and other neonatal equipment.
4. Implement guidelines and protocols to prevent and manage complications related to the use of health care equipment, devices and practices, (e.g., skin erythema, skin breakdown, pressure sores, nasal trauma, tissue injury).
5. Implement regular team walk-throughs and discussions to review progress, enhance situation awareness, identify risks and address safety challenges.
6. Facilitate inter-professional collaborative practice, with clear roles and responsibilities for quality improvement.
7. Designate a team or individual to lead initiatives for improving the quality of care in the facility.
8. Hold monthly meetings to review data, monitor performance, address problems, recognize good performance and support staff or teams in improving quality.
9. Provide mechanisms to support staff caring for small and sick newborns, including appropriate working hours, optimal newborn-to-staff ratios and emotional support.

Measures

- Proportion of newborns admitted with infections proven to be associated with health care
- Proportion of families satisfied with cleanliness
- Proportion of mortality of preterm babies in the first 7 days of life
- Proportion of all small and sick newborns fed exclusively on their mother's milk
- Rates of complications of retinopathy, intracranial haemorrhage and enterocolitis.

WHO resources

- Standards for improving the quality of care for small and sick newborns in health facilities
- WHO recommendations for care of the preterm or low-birth-weight infant

World Health Organization

World Patient Safety Day 17 September 2025

2. While the actions listed in this goal apply to the care of all newborns and children, they are particularly critical when caring for small and sick newborns, where the risk of harm is higher. Therefore, these actions are highlighted as part of this goal.