OPEN ACCESS Freely available online

ISSN: 2167-0897
Journal of
Neonatal Biology

Commentary

Neonatal Resuscitation Knowledge and Procedures

Cissouma Tarore*

Department of Anesthesiology, B J Medical College, Ahmedabad, India

DESCRIPTION

According to the World Health Organization, over 800 women and 7000 babies die every day from preventable causes associated to pregnancy, childbirth, and unsafe abortion, with the majority dying on the first day or within the first week of life. Almost all maternal (99%) and neonatal (98%) deaths occur in nations with insufficient resources. In difficult circumstances, essential obstetric and newborn care is aimed to assist prevent mother and neonatal death. Years of specialized training and expertise are not replaced by this handbook. It's for midwives, doctors, and other qualified health-care workers who deal with obstetric emergencies.

All of the techniques detailed in this guide are not accessible to all medical personnel. While many obstetrical treatments are within a midwife's scope of practice, she does not conduct caesarean sections though she often assists in determining whether one is necessary. With the right training, a nurse may be allowed to perform prenatal or postnatal consultations. Decentralization of skills is frequently required by the medical demographics of resource-limited countries. Similarly, it is critical to consider the scarcity of obstetricians in these nations, as well as the fact that general practitioners in distant areas in some countries are qualified to undertake complex births. As a result, by covering basic technical techniques and general care of obstetric emergencies, this book intends to assist all of these personnel with varying qualifications. It can also be used to train others.

While several of the techniques in this guide, such as symphysiotomy and embryotomy, may appear to be outdated, they were included for instances where a caesarean section would be unsafe or impossible. BEmONCs, which give Basic Emergency Obstetric and Newborn Care, and CEmONCs, which provide Comprehensive Emergency Obstetric and Newborn Care, are the two types of medical facilities that provide care for mothers and newborns. In the case of the BEmONCs, the geographic placement of these facilities should allow for close proximity to care, with the CEmONCs functioning as reference facilities for more problematic deliveries. The procedures and techniques mentioned in this handbook should be carried out at the appropriate medical facility.

Successful neonatal resuscitation requires anticipation, proper planning, accurate evaluation, and quick commencement of assistance. At least one person should be present at every delivery who is responsible for the newborn. This individual must be able to start resuscitation, which includes using positive-pressure breathing and chest compressions. That individual, or someone else who is immediately accessible, should be able to do a full resuscitation, including endotracheal intubation and medication administration. 6 Several studies have shown that a caesarean section performed under regional anesthetic at 37 to 39 weeks, without antenatally known risk factors, did not increase the chance of the baby requiring endotracheal intubation, compared to a similar vaginal delivery conducted at term. The majority of neonates who will require resuscitation can be recognized before birth if risk factors are carefully considered. Additional skilled workers should be recruited and the requisite equipment should be readied if resuscitation is expected. The Textbook of Neonatal Resuscitation, 6th Edition, lists recognizable risk factors as well as resuscitation equipment (American Academy of Pediatrics, in press). 11 Special preparations will be required if a premature delivery (37 weeks of gestation) is predicted. Preterm newborn lungs are underdeveloped, making it more difficult to ventilate them and making them more sensitive to positive-pressure ventilation harm. Preterm babies also have immature blood arteries in the brain that might bleed; thin skin and a large surface area, which contribute to rapid heat loss; greater susceptibility to infection; and a higher risk of hypovolemic shock due to low blood volume.

The necessity for resuscitation should be expected at all times. As a result, every delivery attendant should be trained in infant resuscitation (including anticipation, preparation, timely recognition, and prompt and right response), as well as have the required equipment and supplies clean and functional to respond swiftly and correctly when needed. Every newborn should be dried, wrapped in a dry cloth, and checked for crying

Correspondence to: Cissouma Tarore, Department of Anesthesiology, B J Medical College, Ahmedabad, India, E-mail: tatcissoum@gamil.com

Received: 31-Mar-2022, Manuscript No. JNB-22-16672; **Editor assigned:** 04-Apr-2022, Pre QC No. JNB-22-16672(PQ); **Reviewed:** 20-Apr-2022, QC No. JNB-22-16672; **Revised:** 25-Apr-2022, Manuscript No. JNB-22-16672(R); **Published:** 03-May-2022, DOI: 10.35248/2167-0897.22.11.341.

Citation: Tarore C (2022) Neonatal Resuscitation Knowledge and Procedures. J Neonatal Biol.11:341.

or breathing problems. If the baby is not breathing, the airway should be opened by properly positioning the head, the mouth and nose should be suctioned rapidly, and the lungs should be ventilated with the self-inflating bag *via* a soft fitted face mask. The chest rise is used to determine the effect of ventilation. A heat source (preferably a radiant heater) to prevent heat loss (if this is not available, prewarmed towels and an extra blanket can be used to cover the newborn), a mucus extractor for suctioning, a self-inflating bag of newborn size, two masks (for normal and small newborns) for ventilation, and a clock to accurately assess time are the minimum equipment and supplies for newborn resuscitation. More crucial than more oxygen is adequate ventilation; fast action with the bag and mask is more vital than intubation. As a result, resuscitation may and should be started almost everywhere, especially in situations when oxygen is scarce.

The type of ventilation device utilized is less essential than how well it is used. Failure to notice the problem fast enough, not reacting quickly enough, and not ventilating effectively are the most prevalent causes of unsuccessful resuscitation. Correct methodology and evaluation of ventilation efficacy are essential. Advanced techniques (chest compression, intubation, oxygen supply, medication use) are only required in a limited percentage of instances. These techniques have stringent guidelines and are only beneficial in specified circumstances and when performed by a trained professional. . Even the most basic equipment is routinely unavailable, and qualified health professionals are in short supply. Only one birth attendant is usually present at the birth in many places, splitting her attention between the mother and the newborn. In these situations, the birth attendant can only do a limited number of interventions in the limited time available for resuscitation. Basic resuscitation will not help all neonates, but it will help the majority of them if done correctly, even if there are minimal resources and simple training available. If a newborn infant is resuscitated appropriately and resumes breathing spontaneously within 20 minutes, the risk of complications is low.

Anticipation, preparedness, skills and working equipment, prompt beginning, and precise procedures will determine whether resuscitation succeeds or fails. Resuscitation becomes more difficult when action is delayed or inadequate, and the danger of brain injury increases. Each health institution must establish basic newborn resuscitation as a practice, maintain staff skills, and ensure that working equipment and supplies are constantly available in order to offer basic newborn resuscitation to all neonates who require it. Legislation, standards, training courses, and training materials at the national level will assist health workers in completing the mission.