MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

MSF NEONATAL CARE POLICY

INTRODUCTION

MSF operates in countries with poor access to health care due to conflict, political insecurity, natural disasters, displacements and poor economic conditions. Newborn and child mortality rates are often high.

Despite a significant reduction in under-five mortality over the past decade, sadly, a similar reduction in mortality did not occur in newborns. Of the 6.6 million under-5 children who died in 2012, over 3 million were newborns accounting for 43 % of all under-5 deaths. Additionally every year a similar number are stillborn *(WHO Fact sheet N° 178, September 2013*

For the first time in history, since 2011, two newborn causes of death, preterm birth complications and birth asphyxia, rank as the second (17%) and third (11%) most common cause of under-five deaths. Unless a rapid scale-up of interventions occurs, prematurity is expected to become the number one cause of global child mortality by 2015 *(Liu et al, 2012).* Cost-effective interventions such as birth resuscitation, breastfeeding support, thermal care, and treatment for infections can improve life expectancy for newborns. The newborn's first 24 hours of life are the most critical for survival a key period for intervention.

It is also estimated that greater than 90% of children living with HIV acquired the virus during pregnancy, birth or breastfeeding, which are forms of HIV transmission that can be prevented through PMTCT *(UNAIDS, 2008).* In 2012, 62% of pregnant women living with HIV received the most effective drug regimens (as recommended by WHO) to prevent mother-to-child transmission of the virus *(WHO Fact sheet N° 178, September 2013).*

MAIN OBJECTIVES

MSF has the capacity to decrease neonatal mortality and so under five mortality as well as short, mid and long term morbidity through provision of simple medical care (lifesaving, routine and preventive) while targeting the main causes of neonatal mortality and morbidity.

SPECIFIC OBJECTIVES

1. To increase child survival, MSF considers mother and newborn as a paired entity across the continuum of care (antenatal, intrapartum and postpartum) *(Lassi et al, 2013).*
2. To ensure that essential needs of neonates are addressed with quality care, MSF aims to define priorities and to deliver the adequate package of care based on the type of settings.

GENERAL PRINCIPLES

1. Neonatal care focusing on **mother and child as a paired entity** should be included in MSF to decrease neonatal mortality and morbidity.

2. In poor resource settings neonatal care is **simple and feasible to provide**. **It includes an evidence-based response** focusing on the three main causes of neonatal deaths: birth asphyxia, neonatal infections and complications of prematurity.
3. The **neonatal care package should be chosen based on the type of setting** to which it is applied taking into account the specificity of each context and project and the level of care available… limited by medical and ethical principles.
4. Neonatal care in poor resource countries and remote settings is **more dependent on trained human resources** than on complicated technology. Strengthening of knowledge and skills depending on the context and level of knowledge is key to improve provision of care.

PART 1 NEONATAL CARE ASSOCIATED WITH OBSTETRICS CARE (ESSENTIAL NEONATAL CARE)

During the first month, up to one half of all deaths occur within the first 24 hours of life, and 75% occur in the first week. The 48 hours immediately following birth is the most crucial period for newborn survival (WHO Fact sheet N° 178, September 2013).

POINT 1: Intrapartum care

- Ensure that delivery conditions are adequate to the project context for the infant with respect to maternal factors, environment, materials and staffing.
- Ensure newborn care including resuscitation at delivery when needed within the first minute of life emphasizing basic resuscitation (bag and mask ventilation) as needed. Further management of the newborn at delivery would include routine care as well as prevention and recognition of danger signs, such as hypoglycemia, hypothermia and infection.
- All infants determined to be viable should receive resuscitation and neonatal care *(Gold et al, 2001; Gruskin et al, 2008*) taking into consideration the pathologies of the child, the context and the medical environment.
- Further rapid decision making in the delivery room should be based on expected long term prognosis and quality of life in the best interest of the child. The following needs to be taken into account: **gestational age (if known)**, **birth weight**, **actual clinical and neurological status**, prenatal **history (if known), environment, as well as the team's judgment and parental wishes**. Parents should be included in the decision making process. Context-appropriate guidance on when and when not to resuscitate, as well as length of resuscitation will be made available.

POINT 2: Postpartum essential neonatal care *(WHO, UNICEF, 2012; Darmstadt et al, 2005)*

- MSF will implement and prioritize interventions shown to prevent neonatal deaths and optimize healthy outcomes, such as:
  - Rapid clinical examination including weight and determination of gestational age.
  - Promotion of early and exclusive breastfeeding.
  - Kangaroo Mother Care (KMC) for low birth weight babies.
  - Environmental interventions with specific attention to individual and hospital hygiene to address infection control.
  - Routine care interventions, including eye and umbilical cord care, vitamin K1, and vaccinations at birth.
  - Prevention of transmission of maternal infections including HIV.
  - Caregiver- child bonding.
  - Maternal health
  - Postnatal visits for the mother and baby (at least one follow-up visit within the first week after delivery) should be organized.

- Linkages to other programs, i.e. MNCH, PHC, PMTCT and HIV early diagnosis and treatment programs, and other care programs should be foreseen and strengthened.

POINT 3: Antenatal care

- Key maternal interventions which protect the newborn should be reinforced *(refer to MSF SRH policy, preventive action, ANC p. 3).*

PART 2 NEONATAL CARE NOT ASSOCIATED WITH OBSTETRICS CARE: NEONATAL CARE IN PAEDIATRIC PROGRAMS (INTERMEDIATE AND COMPREHENSIVE NEONATAL CARE)

POINT 1: Neonatal care in MSF programs at hospital level

- When a neonate is admitted, specific attention should be given to the main causes of neonatal mortality, specifically neonatal infections and complications of prematurity and Low Birth Weight (LBW). MSF should ensure coverage of essential care for neonates depending on contexts and constraints, whenever possible. When appropriate and feasible units for sick neonates could be developed linked to already existing projects or as independent projects.

POINT 2: Neonatal care at health centre level

- Ensure that clinically well Low Birth Weight infants (LBW) are managed through Kangaroo Mother Care (KMC) as part of the routine activities.

If feasible at health centre level, staffed and equipped units could be implemented

POINT 3: Neonatal care at community level

- Community interventions are expected to have the greatest impact on mortality reduction in settings with very high neonatal mortality rates and limited access to skilled birth attendance *(Dutta, 2009).*
- According to context and intervention objectives, MSF is to consider community-based interventions such as neonatal care during the first week of life, KMC in the community, post-natal home visits, and partnerships with Traditional Birth Attendants (TBA) / Community Health Workers (CMH).

POINT 4: **Staff training in neonatal care** *(Senarath et al, 2007; WHO Essential Newborn Care Course, 2010)*

- Healthcare staff tends to be less familiar with the care of newborns. MSF should consider sensitization of staff, and appropriate training for its unspecialized national and international staff according to the context.

PART 3 PMTCT and Early Infant Diagnosis (EID) / TREATMENT

In view of the importance of a focus on the maternal-new-born paired entity, this concept should be applied within the provision of maternal sexual and reproductive healthcare services. Screening for and treatment of prenatal and intra partum infections having maternal and new-born health implications is crucial for prevention of long-term complications in both mother and infant (WHO 2013, Global Action Report on preterm birth).

Integration of PMTCT not only into SRH services during the antenatal or intra partum period (when possible) but also into MNCH services during the entire breastfeeding period

- In contexts where HIV prevalence in the general population is > 1% and where MSF has a significant involvement, PMTCT should be delivered in MSF programs.
- Maternal infections should be screened for and treated as per protocol with possible newborn complications foreseen and planned for.

- Implementation of early newborn testing should be ensured wherever possible to identify those newborns at risk and thereby ensure early intervention.
- Re-testing the mother during the breastfeeding period should be considered (ideally every three months).

PART 4 SOME PRINCIPLES TO GUIDE MSF DECISION-MAKING PROCESSES IN NEONATAL CARE

POINT 1: Limitations to neonatal care (please refer to the MSF neonatal strategic paper for more precise recommendations)

- In all cases decisions should be made in the best interest of the infant keeping in mind mid and long term prognosis, potential implications for cognitive development, prevention of suffering, preservation of dignity and access to treatment *(Inwald, 2008).* Parents should be included in the decision making process.
- Context-appropriate guidance on when and when not to resuscitate, how long to continue and when to stop will be discussed in the MSF strategic paper on neonatal care
- In situations when medical interventions are destined for failure, health care professionals can decide to limit or stop invasive care in order not to do harm. Medically, ethically, legally and culturally appropriate training and guidance should be provided to staff on when to withhold treatment if the infant is deemed unable to respond. Parents should be adequately and regularly informed.
- A decision to stop resuscitation or to limit treatment does not automatically lead to immediate death and does not signify abandoning the infant. MSF should ensure that guidance is available for staff on how to provide symptomatic care to the infant. Support to and involvement of the family is a part of this process *(Gold et al, 2001; Gruskin et al, 2008*).
- Once the decision is made to discontinue all life saving measures, context and case dependent provision of comfort (alleviation of symptoms) for the neonate should become the focus of further care with parental participation *(WHO 2014).*

POINT 2: Neonatal outcomes: implications for care and further research

- MSF should be attentive to quality of life, potential disabilities and short, mid and long term outcomes for its neonates.
- In each context, there will be some neonates who survive with minor, moderate or major disabilities. In these cases MSF should identify their special needs and provide clear guidance for staff and advice to parents on how to care for their child.
- Information regarding the long term outcomes of premature and acutely ill infants in developing countries is still lacking (*Ballot et al, 2012).*

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