# Key messages, MSF Paediatrics Days

## 5–6 April 2019 || Stockholm

### Key messages

<table>
<thead>
<tr>
<th>Key messages</th>
<th>Why is it important?</th>
<th>Current challenges</th>
<th>Recommendations</th>
</tr>
</thead>
</table>
| 1. The introduction of advanced respiratory support in MSF settings is feasible in specific projects under certain conditions but should not be implemented without significant analysis and reflection. | - There is an increasing demand from the field for advanced respiratory support in MSF neonatal and paediatric projects.  
- There is a need for increased treatment options for respiratory failure in areas where referral options are limited.  
- Interventions in middle income countries (MIC) countries where advanced respiratory support is the norm put pressure on MSF to implement national standards.  
- MSF is investing in intensive care which requires the provision of advanced respiratory support, among others. | - Evaluating feasibility, operational limitations and risks of implementing advanced respiratory support in MSF fields.  
- Ensuring that the implementation of advanced respiratory support does not draw resources from other interventions that may have equal or greater impact. | Field:  
1. Ensure minimum standards of care – both respiratory (e.g. correct oxygen use and pulse oximetry) and non-respiratory (e.g. infection prevention and control (IPC), basic equipment and monitoring) – are in place and functioning well before escalating in complexity of care.  
2. Assure the provision of skilled nursing care, which is imperative in paediatric and neonatal hospital care, and even more so when providing advanced respiratory support for babies and children.  
Operations:  
3. Understand the operational implications of scaling up respiratory support, taking into account cost, expected impact and risks, and balance this with other potentially simpler activities that benefit a greater number of patients and may have a bigger impact on mortality. |
2. Both bubble Continuous Positive Airway Pressure (bCPAP) and Heated, Humidified High Flow Nasal Cannula (HHHFNC) systems have the potential to improve respiratory outcomes in MSF projects – adapted, low-cost, mechanically-simplified versions of both systems should be explored further to allow wider implementation in typical MSF settings, however the creation of ‘home-made’ circuits is not recommended.

- The ability to provide invasive respiratory support in most MSF projects is unrealistic therefore non-invasive solutions are required.
- Many traditional CPAP and HHHFNC systems are too complex and not adapted for field use.
- In the absence of traditional systems, field teams are implementing ‘home-made’ bCPAP circuits following advice from WHO, without clear knowledge on the potential risks of such circuits.

- Evaluating whether to invest in bCPAP or HHHFNC systems.
- The trend of evidence suggests that bCPAP may be more efficient than HHHFNC, but HHHFNC is simpler to implement, therefore may be more feasible and widely applicable to typical MSF settings.
- Rationalising the cost of the introduction of bCPAP circuits.
- Limitations of staffing and the need to increase human resource ratios to support the needs of bCPAP or HHHFNC implementation.

Field:
1. The use of locally-constructed or home-made CPAP circuits is not recommended in MSF fields – further studies are required to evaluate their performance.
2. Be judicious with the use of oxygen – avoid being part of a new epidemic of Retinopathy of Prematurity (ROP).

Operations:
3. Create clear implementation plans for the introduction of bCPAP or HHHFNC within projects, to ensure that it is done in a comprehensive, high-quality and sustainable way – the provision of advanced respiratory support requires continuous monitoring and investment.

Research/HQ:
4. Explore the various low-cost bCPAP and HHHFNC circuits available using evidence to guide decisions on which circuits to invest in for use in MSF projects.
5. Consider a formal study of the locally constructed bCPAP circuit suggested by WHO to determine the safety and efficacy of this circuit.
3. There is increasing evidence that Point-of-Care Ultrasound (POCUS) is feasible to implement and has a positive impact on patient care in MSF settings, and MSF has shown commitment and engagement to making this a standard diagnostic tool in MSF projects.

- There are few imaging modalities available in MSF settings and there is a need to improve diagnostic capacity in the field.
- POCUS can support clinical reasoning and improve quality and safety of clinical management.
- Provision of POCUS training is lengthy and requires repeated trainings at specified intervals before users are autonomous.
- Carrying out POCUS training at field level implies significant logistic and staff commitment.

Field:
1. Continue to deliver standardised POCUS trainings at field level and development of POCUS Focal Points in each project.
2. Minimise misdiagnosis by using POCUS alongside support networks like Telemedicine and discussion with trained colleagues.

Operations:
3. Analyse the feasibility of POCUS implementation in all MSF projects and consider universal scale up in its use.

HQ/POCUS team:
4. Ensure the availability of technical support and protocols to POCUS users.

<table>
<thead>
<tr>
<th>Field</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Continue to deliver standardised POCUS trainings at field level and development of POCUS Focal Points in each project.</td>
</tr>
<tr>
<td>2.</td>
<td>Minimise misdiagnosis by using POCUS alongside support networks like Telemedicine and discussion with trained colleagues.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Analyse the feasibility of POCUS implementation in all MSF projects and consider universal scale up in its use.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Include infants &lt;6m in nutritional surveys and rapid nutritional assessments as soon as anthropometric measures are agreed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Collaborate and share data with external partners to establish which anthropometric and non-anthropometric measures best identify nutritionally at-risk/malnourished infants &lt;6m.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Update protocols for the inpatient management of malnourished infants &lt;6m with more emphasis on breastfeeding support and promotion (see below).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Adapt and trial new outpatient packages of care for assessing and caring for malnourished infants &lt;6m that have been developed by a consortium of international bodies, in specific contexts.</td>
</tr>
</tbody>
</table>

4. Neither MSF nor international protocols and tools meet the needs of our fields for the assessment and management of malnourished infants less than 6 months (<6m) due to longstanding misperceptions, uncertainties and lack of adequate data on malnutrition in this age group.

- Traditional anthropometric measurements are not applicable to infants <6m.
- Mid-Upper Arm Circumference (MUAC) and Weight for Age Z-score (WAZ) appear to better predict mortality compared to Weight for Height Z-score (WHZ) for infants <6 months in various African studies, but cut-offs for these criteria are not yet validated.
- Longstanding misperception that infants <6m are protected from malnutrition by breastfeeding.
- Uncertainty as to which anthropometric measurements most accurately identify malnourished infants <6m, and which other criteria to use.
- A likely underestimate of the magnitude of this problem as infants <6m are not included in current nutritional survey tools.

Operations:
1. Include infants <6m in nutritional surveys and rapid nutritional assessments as soon as anthropometric measures are agreed.

HQ:
2. Collaborate and share data with external partners to establish which anthropometric and non-anthropometric measures best identify nutritionally at-risk/malnourished infants <6m.

3. Update protocols for the inpatient management of malnourished infants <6m with more emphasis on breastfeeding support and promotion (see below).

4. Adapt and trial new outpatient packages of care for assessing and caring for malnourished infants <6m that have been developed by a consortium of international bodies, in specific contexts.
### Research:

5. Consider carrying out similar research in other regions with high prevalence of malnutrition in infants <6m, predominantly in Asia and the Middle East, to define anthropometric cut-offs in different settings.

### Field/Operations:

1. Identify different opportunities and entry points to find and care for malnourished infants <6m and their mothers – post-natal care, vaccination appointments etc. Establish integrated and comprehensive services – a one-stop clinic for maternal and child care.

### HQ:

2. Ensure that the tools used to assess malnutrition amongst infants <6m include guidance on assessing the mother’s (or caretaker’s) mental and physical health.

3. Invest efforts in MSF to improve promotion and support of breastfeeding in all our projects, particularly in areas where malnutrition in infants <6m is highly prevalent. New tools, trainings, guidance and awareness-raising are urgently needed.

### Field/Operations:

1. Communicate, liaise and work in synergy with Child Protection actors in the field to ensure holistic management of children requiring protection.

2. Work with local communities to establish what

---

<table>
<thead>
<tr>
<th>5.</th>
<th>Fundamental to the treatment of any infant &lt;6m, but particularly for malnourished infants, is the acknowledgement that the mental, social and physical health of the mother-infant pair are inextricably linked: we must care for them as a unit.</th>
<th>Holistic care.</th>
<th>Difficult to find breastfeeding specialists to work in the field.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Engagement in Child Protection – defined as the prevention of and response to abuse, neglect, exploitation and violence against children – is inevitable when delivering medical care in</td>
<td>As part of their medical activities, MSF receives children who have been victims of abuse, neglect or violence. After the medical component of treatment is complete, we have a responsibility</td>
<td>Wide differences in opinion and position within MSF on our role in protection.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Difficulties in liaison and communication with other</td>
</tr>
</tbody>
</table>
| **humanitarian settings and MSF should establish guidance for medical operations.** | to ensure that the child receives all appropriate care including that related to child protection. | actors leading on Child Protection, at field level.  
- Limited knowledge of actors working in protection in the field and the roles and responsibilities of each.  
- Poor understanding of child protection and safeguarding in MSF. | mechanisms exist in their social infrastructure to detect and protect children at risk of abuse and work within these systems to find safe care arrangements for children when appropriate. |
| **3.** Establish a mapping of actors providing Child Protection services in every project as part of baseline explo information. | **HQ/Operations:** | **4.** Collaborate with specialised Child Protection organisations (e.g. the Alliance for Child Protection in Humanitarian Action (ACPHA)) to increase MSF’s capacity and knowledge in managing child protection in the field. | **5.** Clarify the minimum actions that MSF and other medical humanitarian actors should provide with regard to Child Protection based on standards developed by ACPHA and others. |
| **7.** During humanitarian emergencies, whether caused by armed conflict, disaster or epidemics, children face increased protection issues and lack of access to essential rights and services such as health, education and shelter – the creation of safe environments and child-friendly services is essential to reduce these barriers and to assure the physical and psychological health, and general wellbeing of children. | - Children are at increased risk of violence, separation from their families, abandonment, physical, psychological and sexual abuse, economic exploitation and neglect during humanitarian emergencies.  
- Due to this increased vulnerability, additional measures are required to ensure the safety and general wellbeing of children in emergencies.  
- All MSF health structures should assure safeguarding of children in - Conflicting priorities for the provision of services, with focus on medical life-saving activities during emergencies.  
- Limited MSF internal knowledge on the creation of child friendly spaces and services.  
- Lack of safeguarding policies and procedures in MSF health structures. | **Field:** | **1.** Develop child safe and friendly spaces within MSF health facilities to reduce barriers to children’s access to comprehensive healthcare and provide more adapted, holistic services.  
**2.** Consider the use of tools developed by other organisations such as ‘comfort kits’, to help children cope with emergencies.  
**3.** Create an open and trusting environment during consultations to allow children to speak without fear, knowing that they will be heard and believed. | **HQ/Operations:** | **4.** Create child safeguarding policies and procedures for MSF health structures and assure
their care.

5. Develop trainings and advice to improve the detection of occult and evident signs of physical, sexual or other types of abuse among health workers in the field.

8. Chronic and Non-Communicable Diseases (NCDs) – such as diabetes, rheumatic heart disease, epilepsy, asthma, sickle cell disease and thalassemia, among others – are common in children presenting to MSF structures, however access to adequate treatment in low and middle-income countries (LMIC) is limited.

- There are unmet needs for treatment of paediatric NCDs in MSF settings, but treatment is feasible, and we are providing it in different contexts.
- With appropriate treatment, children can live healthily with NCDs and have a good quality of life.
- In the absence of adequate treatment for paediatric NCDs, many children will die unnecessarily.

- Competing priorities for service provision in MSF projects means that NCDs are often neglected: immediate life-saving activities take priority.
- Management of paediatric NCDs in specific populations such as adolescents and pregnant women.
- Ensuring long-term access to paediatric NCD medications by other actors or ministries of health.

Operations/Field:

1. If feasible and deemed pertinent, integrate paediatric NCD prevention and management into existing MSF programmes and services.
2. Consider the need for vertical paediatric NCD programmes in certain settings, ensuring that the specificities of paediatric NCDs and the particular needs of children are addressed appropriately.

HQ:

3. Include education on paediatric NCDs in MSF projects as paramount - create internal awareness, and integrate education of patients, families and communities into programming.
4. MSF should play an important role in demonstrating the feasibility of care for paediatric NCDs in low resource settings.

Advocacy/Policy:

5. Push to change the perception of particular chronic conditions that should be considered as emergencies, such as diabetes and the need for access to insulin.
6. Advocate for higher level commitment from governments and agencies to overcome the challenges of delivering long-term care for chronic diseases.
9. As the burden of paediatric NCDs in most LMICs is only estimated, there is a need to improve diagnosis and reporting in MSF projects to have a clear understanding of needs and epidemiology.

- Until we know the true prevalence of paediatric NCDs in our settings, we cannot develop adequate strategies to tackle them.
- Poor visibility of paediatric NCDs in out-patient departments due to misdiagnosis.
- Lack of easy confirmatory diagnostic tests for many paediatric NCDs in LMICs.

**Field/Operations:**

1. When feasible, integrate diagnostic tools such as Sickle Scan into existing MSF programmes to improve diagnosis of NCDs and subsequent reporting.

2. Ensure that routine collection of data in paediatric patients with chronic disease is included in MSF programmes.

**HQ/Research:**

3. Investigate potential diagnostic tools for NCDs that can be used in MSF settings.

*A detailed account of the meeting will be presented in a separate report.*