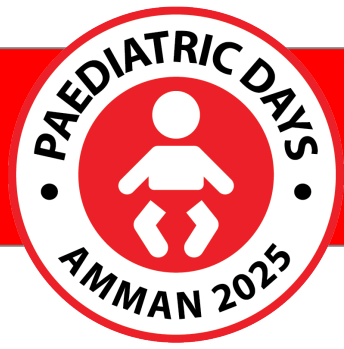


# EVIDENCE-BASED NUTRITION MANAGEMENT FOR INFANTS U6M IN GAZA

*Nutrition Under Siege: Outcomes of an  
Intervention in Gaza Amid Genocide and  
Systemic Deprivation*

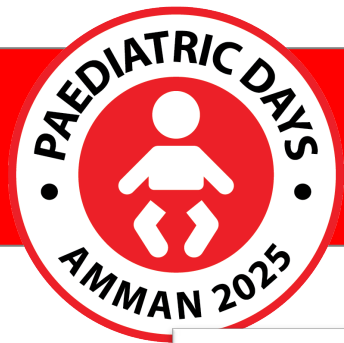
MSF OCBA & VEU  
November 2025





# 1. Background: *timeline*

- Breastfeeding (BF) = lifesaving intervention, especially in emergencies.
- Before Oct 2023 crisis: **low prevalence of wasting** (0,8% Gaza, 1,3% Palestine -WFP, 2024).
- After escalation: widespread food insecurity, mass displacement, and collapse of health services.
- Infants U6M of age are highly vulnerable.
- January 2024, MSF OCBA started outpatient nutritional activities for children 6-59months.
- In **October 2024, MSF-OCBA** launched for the first time a **nutrition intervention** targeting **infants U6M in Gaza**.



# 1. Background: *Rapid Screening Tool U6M*

Danger Signs

**Rapid Screening Tool for At-risk Infants Under 6m**

1. ASSESS		
Does the child have any IMCI danger signs? (see reverse)	<u>YES</u>	No
Infant less than 6-months & has oedema?	<u>YES</u>	No
<input type="checkbox"/> IF YES, STOP – URGENT REFERRAL TO INPATIENT FACILITY/ HOSPITAL <input type="checkbox"/> IF NO, PROCEED with screening		

Critical Factors

2. ASK		
Is the mother deceased/ absent?	<u>YES</u>	No
Was the infant born too early (before 37 weeks gestation) or too small (at less than 2.5kg)?	<u>YES</u>	No or unknown
Is the child being breastfed?	<u>NO</u>	Yes
INFANT LESS THAN 6 MONTHS: receiving other food or drink (including water) than breastmilk?	<u>YES</u>	No
CHILD 6 MONTHS & OLDER: receiving other food than breastmilk?	<u>NO</u>	Yes
Does infant have difficulties feeding &/or does mother have feeding concern(s) or breast problem(s)?	<u>YES</u>	No
Does the child or mother have any illness or medical condition that isn't currently being treated?	<u>YES</u>	No
Is the mother under 16-years of age?	<u>YES</u>	No
PHQ4 (see questionnaire on the back)	<u>≥5</u>	0-4

Anthropometric Screening

3. MEASURE MUAC <sup>1</sup> (circle answer)		
Under 6 weeks - do not measure MUAC		
6 weeks to under 6 months	<u>&lt;110MM</u>	≥ 110mm
6 months and above	<u>&lt;125 MM &amp;/OR OEDEMA</u>	≥ 125mm
Mother (if feasible)	<u>&lt;230MM</u>	≥ 230mm

PHQ4 Patient Health Question.

4. OBSERVE – DON'T ASK THESE QUESTIONS (circle answer)		
Mother/ caregiver requested infant formula	<u>YES</u>	No
Mother/ caregiver or child has visible disability or neurodevelopmental concern	<u>YES</u>	No
Mother shows or expresses signs of maternal psychological distress <sup>2</sup>	<u>YES</u>	No
Visible physical neglect (mother or infant)	<u>YES</u>	No

5. ANALYSE		
If any <b>BOLD</b> and <u>UNDERLINED</u> answers are circled, is a referral required? *	<u>YES</u>	No

\*Check whether the mother and/or infant are already receiving support for the identified risk(s) or if they require referral.  
<sup>1</sup> If able to measure weight and/or length, children with a WAZ > 2 or WLZ < -2.0 should be referred.  
<sup>2</sup> Mother appears down, depressed, or hopeless; mother appears out of touch with reality; mother appears at risk of or expresses desires to harm herself or her infant.

## IMCI DANGER SIGNS JOB AID

1. ASK	2. EXAMINE: LOOK, LISTEN, FEEL	3. CLASSIFY IF ANY DANGER SIGNS
<ul style="list-style-type: none"> <li>Has the infant had convulsions?</li> <li>Is the infant having difficulty in feeding?</li> <li>Is the infant vomiting everything?</li> <li>Has the infant had any attacks where s/he stops breathing, or becomes stiff or blue (apnoea)?</li> <li>Has the infant had fever?</li> </ul>	<ul style="list-style-type: none"> <li>Is the infant convulsing now?</li> <li>Count the breaths in one minute.</li> <li>Look for severe chest indrawing or nasal flaring.</li> <li>Listen for grunting.</li> <li>Feel for fever or low body temperature</li> <li>Look and feel for bulging fontanelle.</li> <li>Look at the young infant's movements. Does he/she only move when stimulated?</li> <li>Look for discharge from the eyes and ears.</li> <li>Is there a purulent or sticky discharge? Is there abundant pus?</li> <li>Are the eyelids swollen?</li> <li>Look at the pus. Is it red or draining pus? Does the redness extend to the skin?</li> <li>Look for skin pustules.</li> <li><u>For newborns only:</u></li> <li>Look at the umbilical cord for infection.</li> <li>Look for jaundice. Are eyes or skin yellow?</li> <li>Look at the young infant's palms and soles. Are they yellow?</li> </ul>	<ul style="list-style-type: none"> <li>Convulsions</li> <li>Poor sucking or not able to feed.</li> <li>Apnoea or breathing &lt;30 breaths per minute.</li> <li>Fast breathing at &gt;60 breaths per minute.</li> <li>Severe chest indrawing, nasal flaring or grunting.</li> <li>Body temperature feels too hot or too cold.</li> <li>Bulging fontanelle.</li> <li>Only moves when stimulated, lethargic or unconscious.</li> <li>Abundant pus/purulent discharge from eyes, or swollen eyelids.</li> <li>Pus draining from the ear.</li> <li>Many or severe skin pustules.</li> <li>Umbilical redness extending to the skin and/or draining pus.</li> <li>Jaundice in newborn younger than 24 hours</li> </ul>

POSSIBLE SERIOUS BACTERIAL INFECTION – URGENTLY REFER TO NEAREST HOSPITAL/ INPATIENT HEALTH FACILITY

Danger Signs



## PHQ4

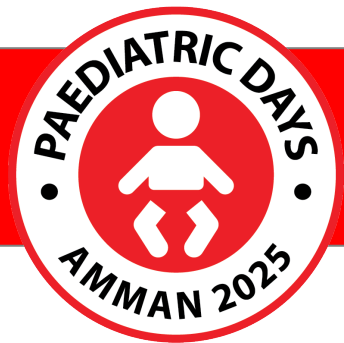
Over the last two weeks, how often have you been bothered by the following problems?

	Not at all	Several days	More than half the days	Nearly every day
Feeling nervous, anxious or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Feeling down, depressed or hopeless	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3
TOTALS				

PHQ4 Patient Health Question.



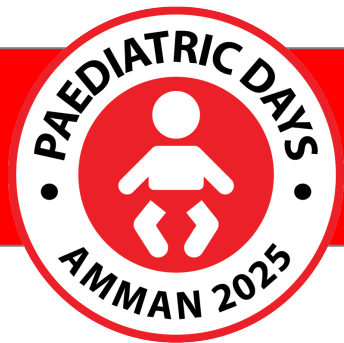
Total score is determined by adding together the scores of each of the 4 items. Scores are rated as normal (0-2), mild (3-5), moderate (6-8), and severe (9-12). Total score ≥3 for first 2 questions suggests anxiety. Total score ≥3 for last 2 questions suggests depression.



# 1. Background: *case management*

Inclusion Criteria in Outpatient	Support to be done
<b>BREASTFEEDING DIFFICULTIES</b>	Counselling Cards Relactation - supplementary suckling technique Regular visits for follow up
<b>NO BREASTFEED INFANT – BMS</b> <i>(breast milk substitutes - RUIF)</i>	Counselling Cards Teach in best practices for BMS preparation Regular visits for follow up
<b>MOTHER DEAD or ABSENT</b>	Designated carer for infant Wet nurse identified <b>or</b> Established supply of appropriate BMS where wet nurse is not available
<b>MOTHER UNDER PSYCHOLOGICAL DISTRESS</b>	Mental Health Psychosocial Support Referral to psychiatrist, if needed

**Program Goal**  
to enable and support a mother to exclusively breastfeed their infant so that it grows and develops appropriately.



## 2. Methodology



### Objective

- Describe nutritional status of infants U6M;
- Document how the IYCF-E based protocol is implemented; and
- *Assess the acceptability of the program among mothers and caregivers*



### Methodology

- Mixed methods (quantitative and qualitative data from October 2024 to August 2025).



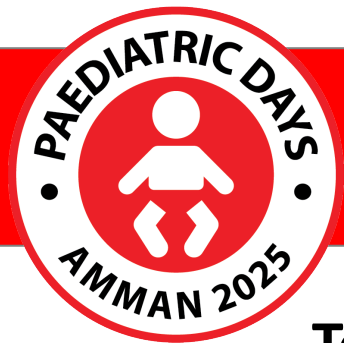
### Data sources

- 14 remote qualitative interviews.
- Programmatic MSF OCBA data.



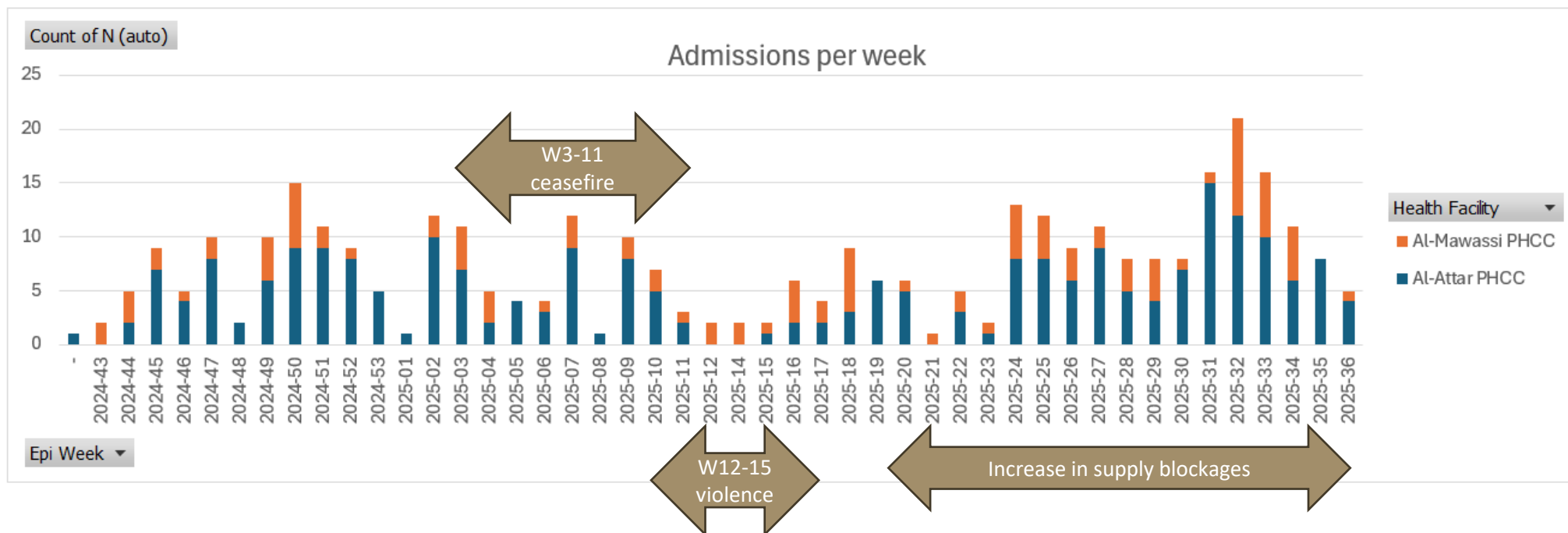
### Limitations

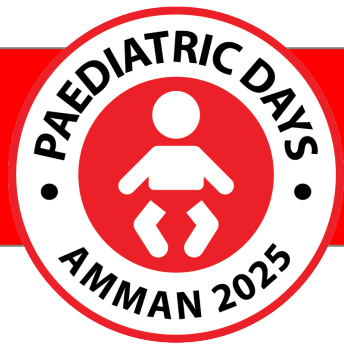
- Incomplete data from line list due to security context.
- Interview with mothers and caretakers planned for a second phase pending ethics approval.



### 3. Findings: *infants enrollment criteria*

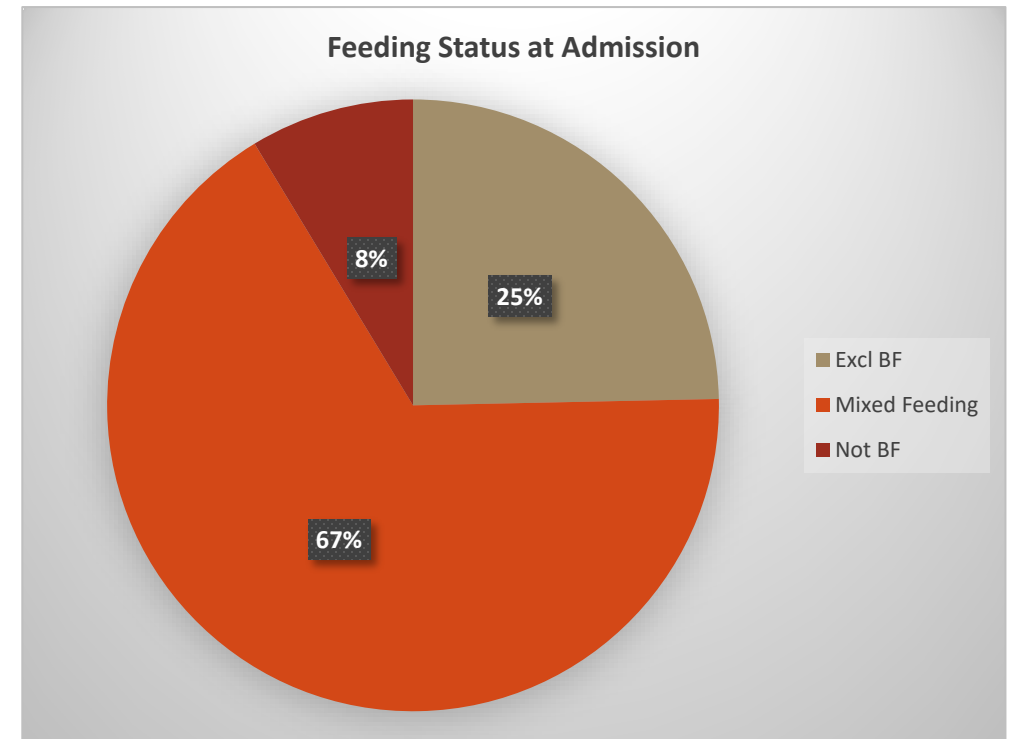
- **Total enrolled:** 345 infants U6M of age.
- **92%** admitted due to MUAC  $\leq$ 110 mm.
- 8% admitted due maternal illness, absence, breast problems, missing data etc.

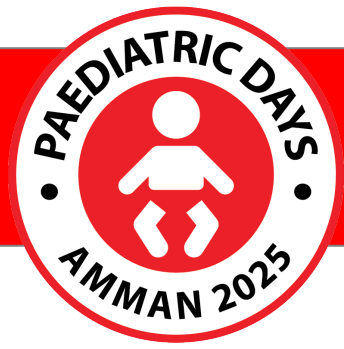




## 3. Findings: *feeding at admission*

- Feeding status at admission available for 150 infants (out of 345).
- **Only 8% of infants not receiving breastmilk** → *aligned with qualitative data from staff informing on high willingness of mothers to BF.*
- Data limitation → *missing info on feeding status at discharge.*

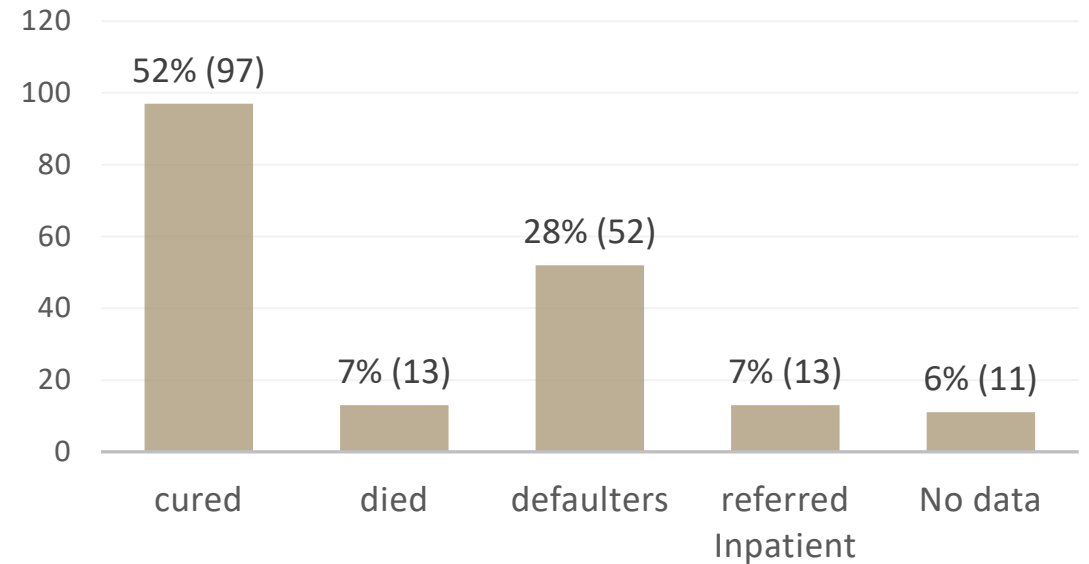


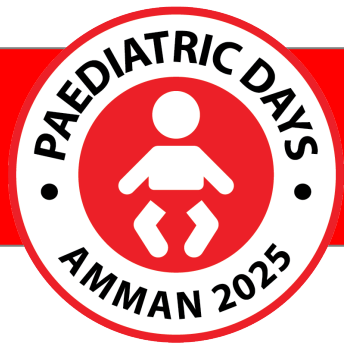


## 3. Findings: *outcomes*

- Total of 186 infants (54%) exited the program;
- Majority **cured**;
- Defaulters >15%:
  - access & availability of BMS/food
  - displacement & distance
  - expectations & follow-up

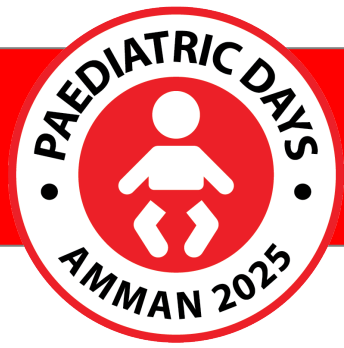
Outcomes of Infants out of the Program - 1st Sept 2025





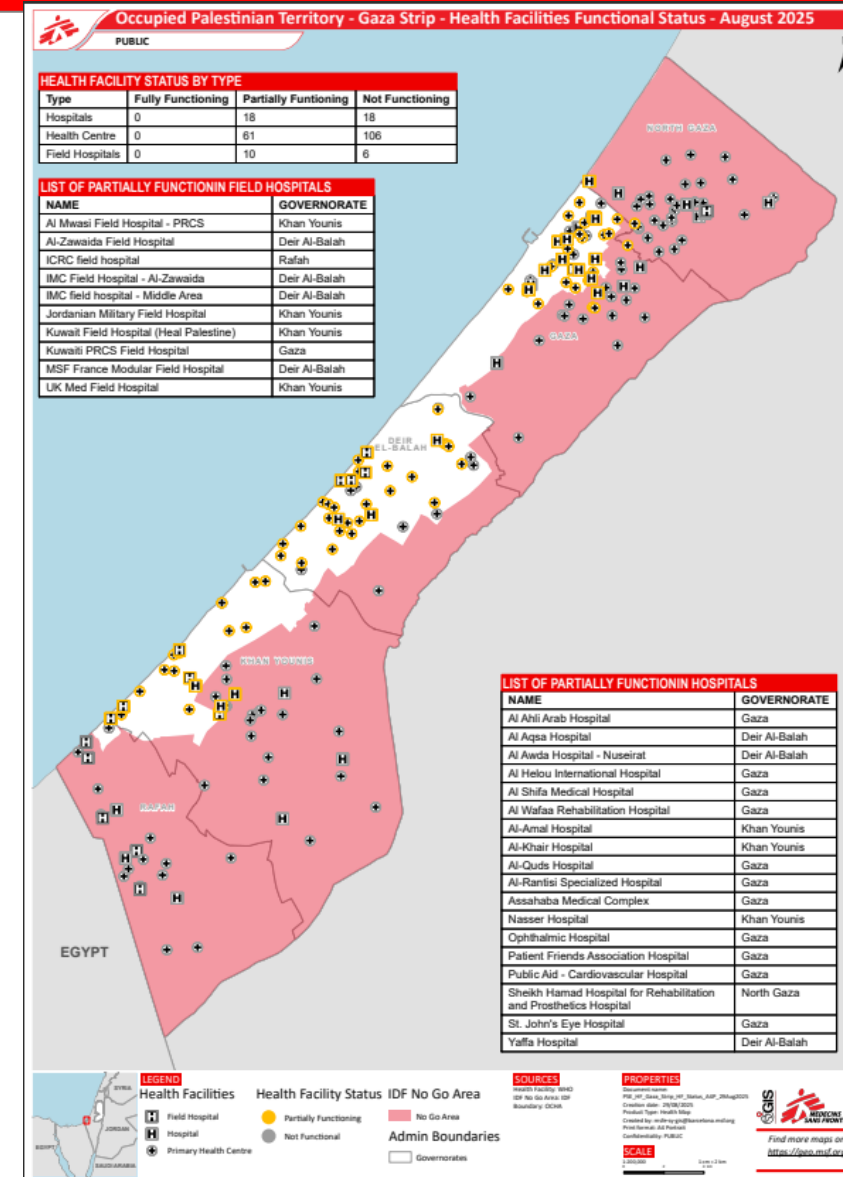
## 3. Findings: *key insights from staff*

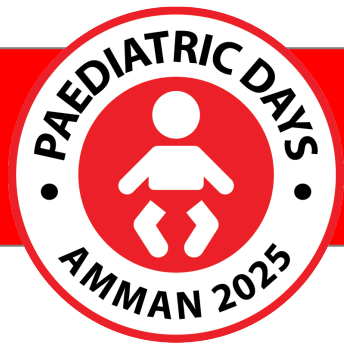
- Clear **deterioration of nutritional status among infants U6m of age** post escalation of conflict (October 2023).
- Major **barriers to BF**:
  - Physiological and psychological (maternal undernutrition, stress, illness).
  - Logistical (overcrowded shelters, no privacy, disruption in BMS).
  - Misinformation (breastmilk “not enough,” stopping during fever, early water/foods).
- **Strong willingness to implement the recommendations** related to BF and nutrition.
- Mother-baby area in PHCCs consistently in use.



# 3. Findings: *systemic challenges*

- **Supply blockages:** shortage of formula (RUIF), precarious stocks.
- **Food insecurity:** reduction of UNRWA distribution points (~400 → 4); increase of violence (lootings of food trucks).
- **Health system collapse:** repeated attacks, staff deaths (>1,400 HCWs killed), overcapacity (Nasser Hospital >180%).





### 3. Findings : *limitations*

- Severe **insecurity hindered data collection and program supervision.**
- Incomplete datasets, large loss to follow-up.
- **No community-based nutritional strategy** due to safety risks.



*Generalizability limited, but findings still critical.*



## 4. Conclusions

- Infant malnutrition in Gaza = **unprecedented** in MSF experience.
- Nutritional management = **multidimensional approach**:
  - Strengthen BF counselling and psychosocial support
  - Ensure safe and regulated provision of BMS when medically necessary
  - Train and supervise staff systematically
  - Expand community engagement through safe spaces, outreach, and digital tools
- Coordination among actors is crucial.
- Findings should inform future **emergency nutrition strategies**.



***Implementation is possible,  
even where everything is failing.***



*Special thanks to all participants*

Thank you

