WHO Conference on Health Aspects of Tsunami Disaster in Asia

Dr. Stephen J. Atwood
Regional Advisor, Health and Nutrition
UNICEF East Asia and Pacific Regional Office

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Purpose of this presentation

- To review the issues related to UNICEF’s nutrition interventions in Aceh Province and in southern Thailand following the Dec 2004 Tsunami.

- To respond to session questions regarding: (i) food aid vs non-food interventions in addressing food insecurity; (ii) management of nutrition information; (iii) other key nutrition interventions; and (iv) responses to existing challenges.
Aceh Province
Aceh Province – nutrition surveys

- **Jan 2005**: Rapid preliminary nutrition assessment; convenience sample of displaced children in two districts; CDC technical support.

- **Feb-Mar 2005**: Rapid nutrition assessment in 13 tsunami-affected districts/municipalities; 16 collaborators including National and Local Government, UN Agencies, NGOs (local and international), academic institutions.
Survey
Aceh Province – Key results related to this session

- Absence of difference between the rate of wasting among displaced children (11.7%) and those surveyed in their own homes (11.4%).
- Districts with the highest rates of wasting included some of those least affected by the tsunami, suggesting a poor pre-disaster nutritional situation in these locations.
Nutrition survey assessed access to water, housing, health services, etc., recognising nutrition as outcome of a variety of factors, not just food.

Morbidity such as diarrhea, cough/ARI, fever, and skin infection among all children was relatively high. IDP children suffered higher rates of diarrhoea than non-IDP children

Nutrition interventions have to be hand-in-hand with water, sanitation, hygiene interventions.
### Association between morbidity and wasting

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence of wasting</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhea</td>
<td>13.1</td>
<td>1.23 (1.00, 1.53)</td>
</tr>
<tr>
<td>No Diarrhea</td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td>Cough</td>
<td>13.9</td>
<td>1.58 (1.30, 1.92)</td>
</tr>
<tr>
<td>No cough</td>
<td>9.2</td>
<td></td>
</tr>
<tr>
<td>Fever</td>
<td>13.4</td>
<td>1.54 (1.26, 1.89)</td>
</tr>
<tr>
<td>No Fever</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td>14.9</td>
<td>1.43 (1.10, 1.86)</td>
</tr>
<tr>
<td>No vomiting</td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td>Anemia</td>
<td>12.5</td>
<td>1.40 (1.05, 1.88)</td>
</tr>
<tr>
<td>No anemia</td>
<td>9.2</td>
<td></td>
</tr>
</tbody>
</table>
Aceh Province -- results

- Emergency relief efforts seemed to have had a positive impact on at-risk groups and likely to have reduced the adverse impact of the Tsunami on acute undernutrition.

- A high prevalence of anemia among children, taken together with low coverage of foods with protein, low consumption of fresh foods and low coverage of micronutrient supplementation indicates that emergency relief had greatest impact on the Macronutrient situation, rather than on Micronutrients.
Aceh Province – Conclusions from survey

- Emergency relief effort reached a high proportion of at-risk groups -- reduced the adverse impact of the Tsunami on acute undernutrition.
- High prevalence of anemia and stunting in children implies poor nutrition is a chronic public health problem exacerbated by but not the direct result of the Tsunami.
- Chronicity relates to poverty, poor nutrition knowledge and practices, inadequate intake of micronutrients, lack of health services, and poor sanitation as well as food.
- Interventions should target both IDP and non-IDP households, considering the similar prevalence of wasting among IDP and non-IDP children.
Aceh Province – Conclusions from survey

Notes:

– Iodized salt was not included in the food aid although it appears that in many areas, people were getting this commodity from somewhere else, perhaps the market.

– Soon after the disaster, markets started to be re-established and so communities, even IDP communities were able to supplement food aid rations with food from the market assuming they had access to money
Aceh Province: management of nutrition information

- Nutritional assessment done *immediately* gives overall assessment of population well-being (although maybe not causality)
- Useful to simultaneously measure contributing factors like food security, health status, access to health interventions, access to safe water, sanitation.
Aceh Province: management of nutrition information

- Repeat rapid assessment every 6 months for trends over first 1-2 years.
- In medium term, re-establish surveillance based on pre-existing systems: e.g., family poverty assessments, posyandu GMP, food security thru monitoring crops, etc.
- Need specific resources dedicated to information management
Aceh Province: involvement of government

- Develop Govt ownership and involvement in planning and preferably data collection while recognizing reduced numbers and increased workload.
- Recommend using district health teams for data collection.
- Recommend using national nutrition institutes as key technical partners for training, supervision, etc., where possible
- Note: short-term emergency staff from international agencies may give less emphasis to developing govt. ownership unless sensitised to the need.
Aceh Province: Other recommended interventions

- **Strengthen breastfeeding and control formula donations:**

  train health staff and NGOs how to support women to breastfeed;
  train health staff and NGOs re. how to use formula donations;
  develop policy on what to do when women cannot breastfeed.
Donations to MOH
Aceh Province: Other recommended interventions

- **Food aid to include fortified foods** to increase MN intake, including iodized salt
- **MN supplements and deworming**, “wedding package” for new couples, support to adolescents,
- **Water and sanitation and personal hygiene** interventions.
Aceh Province: Other recommended interventions

- **Therapeutic feeding** in the event of severe malnutrition
- **Strengthening nutrition services** like Posyandu
- **Prevention of disease** eg. Measles, malaria, diarrhoea
- **Importance of livelihoods** for income generation, particularly since markets were re-established quickly
Aceh Province: Other recommended interventions

- **Capacity Development for health staff**
  - Many new staff since many were killed,
  - Gaps in capacity prior to the tsunami so need to upgrade knowledge,
  - Post-tsunami means focus, scope and extent of work is different requiring new knowledge

- **Fellowships to central level Nutrition Directorate**
  - Evaluate implementation of innovative interventions.
  - Money available and innovative interventions were taking place on a wide scale – too good an opportunity to miss.
Aceh Province: Additional Challenges

- Improving coordination amongst international agencies, NGOs and government
- Ensuring a comprehensive package of commodities and services and targeting efforts for greatest impact and efficacy
- Addressing MN deficiencies – through MN supplements for women and sprinkles for children in the short term.
- Developing sustainable surveillance system that meets everyone’s needs and is not overly reliant on external funding.
Thailand
Vast amount of food aid was available from many sources, including government, WFP, and food companies – but mainly from private individuals.

Particularly privately donated food supply was unregulated, not inventoried, poorly stored. Included infant formula, bottles, etc.
Because of poor management, the food supply became insecure and was exhausted for some populations (see below) in weeks.

Although most affected groups had access to sufficient quantity of food, problems were:

- **Inequity of distribution** - unregistered Burmese migrant workers: difficult to count, many had fled to the hills, were not able to access the food aid; Moken groups particularly affected

- **Appropriateness of food aid** – nutritional quality, provision for vulnerable groups (young children, pregnant/lactating women), specific diet requirements e.g. pork products to affected Muslim populations
During first few weeks, cooking in communal kitchens meant that food hygiene/safety was an issue. As people moved to cooking in family units, the potential for disease outbreaks from food contamination was reduced.
Thailand: Interventions

- Assessment of food and nutrition situation conducted by government and academic groups, resulted in recommendations for immediate and longer term action.
- In Krabi - Collaborative planning involving local government, civil society, UN, and private sector resulted in improved communication between village leaders and district officials about needs related to food, water and sanitation, housing and livelihood rehabilitation.
Thailand: other non-food aid interventions

- Disease surveillance was very well organised and diarrhoea cases promptly investigated to avoid outbreaks which could potentially have led to malnutrition.
- Bottled drinking water was available in large quantities initially. Since these supplies were likely to run out, different groups supported the installation of large scale water purifiers among communities identified by local authorities as most in need.
Thailand: food vs non-food assessments

- **Needed:** Improved assessment of nutrition and food needs for all affected populations, particularly:
  - Vulnerable groups within populations = children < 2, pregnant/lactating women,
  - Minority groups (Burmese, Moken etc.)

- Assessments should be conducted in close collaboration with
  - relocation (return to villages) schemes,
  - income and livelihood regeneration schemes,
  - monitoring of market prices for foods (which increased substantially in places like Koh Lanta, affecting everyone)
Thailand: food vs non-food assessments

- **Lesson learned:**
  Improve organised system of collecting, planning and distributing food donations, including breast milk substitutes, cooking equipment and utensils (in the Burmese camp, charcoal stoves donated but no charcoal)
Example of good practice: post-tsunami assistance in Krabi province:

- UNICEF supported the district to form a working group, including village leaders and 2-3 volunteer health workers from the affected villages, to help organise assessment of needs, purchase and distribution of food.

- medium term provision of food aid planned in conjunction with local livelihood regeneration schemes
Thailand: management of nutrition information

- Local authorities are the most influential group in planning and implementing interventions, thus it is important that they are involved in:
  - planning and conducting food security and nutrition assessments
  - using the information generated to develop a longer term action and monitoring plan.
Thailand: Challenges
Thailand: Challenges

- Donations of BMS and Bottle-feeding:
  - prevalent in all affected areas; recommend a central distribution system for BMS along with food so it can be provided only to those who needed it.
  - Recommend mobilise national breast feeding groups to provide increased support for breast feeding and guidance on the provision of formula feed and hygiene practices associated with bottle washing.
Thailand: Challenges

- Need for ‘ready to use’, adaptable community communication materials on nutrition and health – a communication ‘tool-kit’ – that is virtually press-ready for any emergency.
- Need improved collaboration between government and UN/other agencies in timely provision of communication materials.
Overall Conclusions

- Food and nutrition assessments are needed to
  - define the overall well-being of children and women,
  - facilitate organization of rational, efficient and equitable distribution of a package of health and nutrition commodities and services
  - plan for an effective longer term monitoring system.

- Local government involvement most important; national government to provide resources. Need coordination between government, civil society, UN, and private sector.
Overall Conclusions

- Disasters uncover inequity in any society and offer opportunities for resolving those inequities in the post-disaster setting.