SMART METHODOLOGY

Standardizing Measurements of Public Health Indicators

Chambéry, September 23rd-24th, 2014
Session Objectives

- Various assessment tools.
- Importance of good quality assessments.
- Use of data when designing interventions.
- Monitoring trends using SMART.
Goals of an assessment

- Evaluate the scope and severity of a humanitarian crisis.
- Determine the needs of a new program.
- Evaluate already existing programs.
- Advocacy.
# Methods for Data Collection

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<td>Medium-term appraisal</td>
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Limitations of Cross-sectional Surveys

- Provides a snapshot at a given moment of time (not trends).
- Unable to establish causality.
- Provides insufficient information for cause-effect analysis.

→ Cross sectional survey data should be used in conjunction with other contextual information.
What is SMART?

To measure the two most vital public health indicators:

- Nutritional status
- Mortality rate

A standardised and simplified field survey methodology which produces a snapshot of the current situation on the ground.
Surveys using SMART

→ Produce representative, accurate and precise estimates of:
  - Global Acute Malnutrition (GAM).
  - Chronic malnutrition (Stunting).
  - Underweight.
  - Retrospective mortality.

These four indicators gathered through the SMART methodology provide the best available validated data that can be used for:

- Planning a new intervention
- Monitoring already existing programs.
Measuring Nutrition

- Age.
- Sex.
- Height.
- Weight.
- Edema.
- MUAC.
Measuring Mortality

Main indicators:
1. Crude Death Rate.
2. Under-5 Death Rate.

Other possible analyses:
- Age-specific death rate.
- Sex-specific death rate.
- (Cause-specific death rate).
SMART can also evaluate:

- Anemia
- Coverage of blanket programs, immunization, vitamin A distribution.
- Infant and young child feeding (IYCF)
- Food security
- Water, sanitation and hygiene (WASH)
- Mosquito net coverage

Number of additional indicators should be kept to a minimum to ensure high quality data.
Key SMART Innovations


2. **Flexibility in sample size** calculation.

3. Regularly updated, clear **sampling** guidance based on field experiences, research and best practices.

4. Rigorous **standardization test** and analysis.

5. **Plausibility check** to follow data quality and identify where the problems are.

6. **Improved census procedure** for the Mortality component.
Increased data credibility

- Rigorous standardisation of field procedures.
- Data quality checks.
- Standardised automated data analysis.

Consistent and reliable survey data is collected and analysed.
Planning Interventions

Bench-marks of GAM Levels for Planning Interventions

- Malnutrition prev >15%
- Malnutrition prev 10-15% with aggravating factors
- Malnutrition prev 5-9% with aggravating factors
- Malnutrition prev <5%

SERIOUS

ALERT

“ACCEPTABLE”
No specific intervention/surveillance

Source: MSF, 1995; WHO, 2000
SMART for surveillance

Prevalence of Global Acute Malnutrition (WHZ) in children 6-59 months, West and Central Africa May 2014
Detection of trends over time

Prevalence of Global Acute Malnutrition (WHZ) in children 6–59 months, Sub-Saharan Africa October 1983 – May 2014
ACF-CA: SMART Project Convenor

Action contre la Faim-Canada, a core member of the GNC, is the **SMART Project Convenor**, and in collaboration with the SMART Technical Advisory Group and Centers for Disease Control and Prevention (CDC Atlanta) establishes and maintains:

- Standardisation of field tools for survey managers and surveyors
- Newly re-vamped [SMART](http://www.smartmethodology.org) website.
- On-line technical forum.
- Partnerships with other agencies in trainings & survey support.