Growth Monitoring and Promotion: Intervention or Platform for Action?

Nuné Mangasarian, UNICEF

History

1960s:
- David Morley's model of clinic-based growth monitoring gains momentum. Promotion of idea of growth as one of best indicators of health.
- FAO/WHO technical committee advocates use of growth monitoring.

1970s:
- UNICEF proposes that the growth monitoring is extended to community health workers
- WHO promotes the use of standard growth chart for international use (1978)
### History

#### 1980s:
UNICEF promotes GM within the framework of the basic services strategy, or selective primary healthcare approach: GOBI (Growth monitoring, Oral re-hydration therapy, Breastfeeding, and Immunization). Growth monitoring was to serve as:
- basis for making growth faltering visible to caretaker
- advocacy basis for attention to malnutrition (!)
- framework for building other PHC services

#### Global review of GM experience and “P” for Promotion added to GM: GMP.

- “P” for “individualized counseling” …. a spectrum of packages of interventions labeled as “P”, including referral and supplementary feeding.
- Reviews of GMP
  - 1990s:
    - UNICEF evaluates GMP
  - 2000s:
    - Many countries continue implementing GMP
GMP definition

- David Morley (1973) defined the objective of growth monitoring as preventing growth retardation through timely and early detection of growth faltering.

- The WHO defines GMP as “not only to measure and chart weight of children, but use this information on physical growth to counsel parents in order to motivate actions that improve growth” (WHO 1986).

GMP definition

- The growth chart is meant to detect growth faltering in a child before any observable sign or symptom of malnutrition becomes evident.

  Making the condition apparent to both the health worker and the mother, the first can advise on early corrective measures that have to be implemented by the latter

Overall Objective

- To make child growth visible
- to enable the analysis of causes
- support the development of corrective actions to address the causes of poor growth, therefore, to
- allow improving or maintaining the child's growth
- prevent undernutrition

The purpose of growth monitoring is prevention, not rehabilitation or treatment

In addition, the GMP:
- May serve as a basis, platform to build on for community health/nutrition interventions due to regular contacts, hence
- Increase access to community interventions

Expected outcomes

As assessment activity:
- allows early detection of growth faltering in children and appropriate actions

As educational activity:
- raises awareness of caregivers, communities, and CHWs about child growth, care, feeding, etc, hence improves child care practices

As promotional and motivational activity:
- raises caregivers’ and communities attention and commitment to child growth and nutrition
- raises community participation, ownership, and empowers them, hence

GMP ensures a right-based approach to nutrition programming
35th SCN Session WG Breastfeeding and Complementary Feeding

Assessment

Regular weighing
  Plotting
  Interpreting with regards to standards

Analysis

Normal growth
  GMP as an “educational” activity

Abnormal growth
  Same as above + assess & counsel to improve feeding practices + Link to other interventions

Action

Educate, encourage, increase use of other services

GMP as monitoring activity

GMP as a contact point (!)

Added-on interventions:
Supplementary and Therapeutic feeding, Referral to other health services

GMP

Education /counseling

Improved care practices

GMP

Families’ demand for and utilization of care services
Communities’ awareness and involvement in care
Governments’ awareness and national political action

GMP as a motivational/promotional activity
Forgotten subject? UNICEF-initiated review of GMP in 2006:

- 2006: review of global practice and literature
- September 2007 technical consultation: to reach consensus on basic conceptual issues in Growth Monitoring and Promotion and make recommendations for the way forward*
- Further programme guidance and research

Review: Characteristics of evaluations

- a. Types of outcomes in literature (both pos & neg)
  - Child Mortality
  - Under-nutrition (mostly under-weight prevalence)
  - Utilization of primary health services, knowledge..
- b. Nutritional Assessment – anthropometric measurements to assess nutrition status and decide on eligibility for food supplementation and other services considered GMP
- c. GMP as one of the many components of large community nutrition programs e.g. Growth monitoring + Nutrition and health education + Primary health care package, etc.
**Summary of review**

**Advocates believe that GMP:**

- Improves under nutrition rates ("GMP works!")
- Helps target at-risk children for secondary intervention that can prevent further growth failure and malnutrition;
- Improves caregiver knowledge and practices;
- Raises awareness about malnutrition in the community and among health professionals and empowers the community, the household, and the caregiver to improve nutrition of children;
- Increases coverage of other primary-care services (eg. immunization), and;
- Targets use of other costly interventions such as nutrition counseling and supplementary feeding.

**Criticists believe that GMP:**

1. Has virtually no effect on malnutrition on a large-scale ("does not work!")
2. Has no additive benefit when implemented with complementary interventions;
3. Is not generally implemented correctly;
4. Is not understood by caregivers, and;
5. Is not cost-effective.
Why the value of GMP is being debated?

- Largely due to misunderstanding of purpose, definition, scope, expected outcomes
- Often evaluated as a corrective rather than preventative tool
- Often difficult to separate GMP outcomes from other added interventions in community growth programmes
- Do not consider motivational aspects of GMP
- GMP not analyzed in relation to other services offered
- Lack of programmatic guidance for decision making, planning, and implementation, leading to poor quality
- Lack of attention to quality operationalization

2007 consensus: Definitions

- **Growth monitoring (GM)** is the process of following the growth rate of a child in comparison to a standard by periodic anthropometric measurements in order to assess growth adequacy and identify faltering at early stages
- Assessing growth allows capturing growth faltering before the child reaches the status of under-nutrition
Definitions

- **Growth monitoring and promotion (GMP)** is a preventive and promotive activity that uses growth monitoring (GM), i.e. measuring and interpreting growth, to facilitate communication and interaction with caregiver and to generate adequate action to promote child growth **through**: 
  - Increased caregiver’s awareness about child growth
  - Improved caring practices
  - Increased demand for other services, as needed

---

Adapted from:  
"Strategy for Improved Nutrition of Children and Women in Developing Countries."  
### Expected outcomes

- Heightened awareness of the **importance of caregiver practices** for adequate growth and its linkage to child health
- Increased **knowledge and skills** and improved child feeding and health care practices by caregivers
- Increased **coverage** of particular health services, if they are offered along with GMP
- Improved **care-seeking/utilization** of services when these are promoted/supported through the GMP counseling.

### What can not be categorized as GMP

- Child anthropometric measurement for **assessing nutritional status** are not GM or GMP. GM is not just to be used to determine levels of under-nutrition to decide on eligibility for the correction of poor nutritional status (e.g. food supplementation, therapeutic feeding, etc).
- **Periodic measurements at appropriate intervals** are crucial to the GMP concept (surveys/ surveillance!)
- When GM information is not used to inform the education and promotion element of an intervention then it is not GMP; both the monitoring of growth and using that growth information in **counseling** are essential to GMP.
GMP and reduction of under-nutrition

- GMP alone is not a comprehensive intervention to address established under-nutrition
- To reduce under-nutrition rates in the community, community nutrition programs could be designed with GMP as an entry-point or platform and as a continuous monitoring tool.
- Thus, GMP will continue to serve as a preventive and promotional measure, and will facilitate the building of a community nutrition program.

Lancet Nutrition Series listed GM as an intervention with evidence of no/little effect

- Defining GM as an intervention to improve nutrition status: GM is only an Assessment/Analysis part of triple A. it is only a monitoring component with added benefits
- Expected outcome of GMP – reduction of under-nutrition which cannot be a result of GMP alone
- Missing prevention aspects of GMP as per definition
- Absence of studies with separate analysis of all expected outcomes of GMP as per definition
- Absence of studies on contribution of GMP to the declining trend in under-nutrition
Way forward: programmatic needs

- Recommendations on GMP: universal vs. individualized
- Criteria for decision making: feasibility, capacity, nutrition status, different settings
- Programmatic guidance based on lessons learned
- Counseling, individual versus group counseling, content and ways of evaluation of KAP
- Measurements: new growth charts, weight or height (or both)
- Age group, frequency
- Community- and facility- based

Research Agenda

- Compilation of the evidence that GMP has an impact on the outcomes highlighted in the GMP conceptual framework and as a framework for community-based Nutrition programmes.
- Approaches to isolating the added value of GMP: Analysis of the impact of GMP and the contribution of GMP to the declining trend in under-nutrition
- Well- designed studies and evaluations of community-based Nutrition programmes with GMP framework
Thank You

What literature tells us: impact:

- **Family Nutrition Improvement Program (UPGK), Indonesia** - A reduction in moderate and severe malnutrition from a high of 25% to 14%
- **Iringa Nutrition Project (INP) (Tanzania)** - Reduction in overall malnutrition from 56% to 41%
- **Applied Nutrition Education Project (ANEP) in the Dominican Republic** - A 43.4% reduction in the rate of moderate and severe malnutrition in the ANEP is cited.

Source: Griffiths, 1996