

**Experts' consultation on growth monitoring and promotion
strategies:
Program guidance for a way forward**

**Recommendations from a Technical Consultation
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Introduction

Starting from early 1980s, Growth Monitoring (GM) has been promoted as one of the key components of community nutrition programmes. Since then, in areas where growth monitoring and promotion (GMP) has been implemented as part of a package of nutrition and health programs, positive impacts on child growth outcomes have been reported (Madagascar, 1996, Senegal, 1998, India, 2003, Peru, 2005). Effective programs with GMP as an important program component in Indonesia, Thailand, India, Tanzania and the Dominican Republic have shown that when GMP is designed and implemented to use growth data for decision-making and action, and when the response is tailored to an individual child, it can impact health and nutrition.

Since 1990, the effectiveness of GMP has been questioned mostly due to problems in implementation including low coverage and poor linkage of monitoring to promotion activities. Several recent reviews have made an effort to evaluate effectiveness of Growth Monitoring as an intervention per se, and the Lancet Nutrition Series listed stand-alone GM as a not-to-do intervention for lack of enough supporting evidence. In view of the confusion about the real place and value of GM and GMP in promoting better growth for children, a need for a consolidated effort towards better understanding of GMP within the larger conceptual framework of community nutrition interventions and of its purpose and expected outcomes is still widely felt.

UNICEF in September 2007 hosted an experts' consultation to build a consensus on basic conceptual issues in Growth Monitoring and Promotion and make recommendations for the way forward based on accumulated knowledge and experience in the field. The meeting mainly focused on reaching consensus around basic concepts of GMP, including: the definitions, outputs, outcomes and a conceptual distinction between GMP, GM, community growth promotion and other tools and programmes used for child growth promotion. In addition, several programmatic and scientific gaps were identified for further collaborative work in future.

In the September meeting, the consensus with regards to definitions for GM and GMP was as follows:

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.

In addition to prevention of under-nutrition, the role of GMP in capturing over-nutrition especially in light of growing problem of obesity needs to be further explored.

Growth monitoring and promotion (GMP) is a prevention 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

There was also agreement that these are the expected outcomes of GMP:

- Heightened awareness of the importance of caregiver practices for adequate growth and the link between adequate growth and child health
- Increased knowledge and skills and subsequent 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.

Critical distinctions

Child anthropometric measurements for assessing nutritional status are not GM or GMP. Periodic measurements at appropriate intervals are crucial to the GMP concept and assessment of nutritional status even at a quarterly or biannual rate does not have the ability to capture growth faltering and *prevent* under-nutrition.

GM and GMP thus should not be considered a surveillance, or just to be merely 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).

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.

It is important to emphasize that the GMP periodic measurements and counseling are primarily considered as preventive activity ensuring that the growth faltering is caught early enough so as not to reach the status of under-nutrition. However, the framework of GMP may catch also children at different stages of under-nutrition and refer to relevant services for additional interventions.

Finally, there are several conditions under which GMP would not be appropriate e.g during an emergency or in refugee camps, where screening is most appropriate.

The purpose of the current meeting (June 2008) was to build on UNICEF's previous work and to focus on the gaps identified in implementation and program design aspects of GMP, thus helping refine strategic planning and future program guidance. Participants at the June meeting came from different country program contexts (including Honduras, South Africa, Ethiopia, Nepal, and others), as well as experts in various aspects of a quality GMP program including counseling and human resources.

The objective of the meeting was to refine technical guidance covering the critical issues of promoting growth in different context, and a list of highest priorities in implementation, as well as operations research to answer technical questions with regards to effective GMP.

The meeting concluded with the following recommendations:

Anthropometric measurements

Monitoring weight remains the measure of choice particularly in the community. Assessment of length (but not necessary monthly monitoring), if possible, is desirable to better track stunting and to assess causes of low weight. This will also allow additional analysis to decide on other strategies including zinc and multiple micronutrient supplementations which can affect length/height.

Under current conditions – available equipment, ease of implementation and interpretation of measurements, common practices (tradition of weighing embedded in many cultures) – monitoring height presents significant challenges. More discussion and recommendations are needed on this issue particularly in light of the fact that some countries (e.g., Bolivia) are dropping the measurement of weight and replacing it with length.

Weight measurement should be maintained, as weight gain remains the most sensitive indicator of growth faltering. Stunting in the children under the age of 2 should be measured on a periodic basis where feasible in order to monitor program impact according to certain country criteria. A well-functioning system of GMP can be used as a platform for additional Cross-sectional assessments of prevalence of stunting in the community. These assessments can be done once or twice a year and could provide a more accurate picture of under-nutrition and further motivate community action. Again it should be emphasized that this is not to replace growth monitoring since the measurements are not frequent enough to allow for early detection of growth faltering.

Measurement of MUAC should not be part of GMP but could be used as a screening tool to identify acutely malnourished kids according to national protocols.

Critical age

- primary focus is on children under 2
- monthly measurements for the first 24 months

While there was general agreement on monthly monitoring of weight up to 12 months, how frequently to weigh children after 12 months remained in question because of the measurement error associated with weighing children over 12 months on a monthly basis with currently available equipment and normal day to day variations in weight. Small losses in weight (.1 to .2 kg) may not represent faltering but rather normal fluctuations. Therefore, messages to caretakers that their children are not gaining weight based on monthly measurements may not be accurate. In the worst case, these messages may cause caretakers undue worry. Therefore, a different frequency of measurements can be considered for older children.

However, the monthly visits after 12 months still provide a valuable opportunity for counseling of caregivers which can justify the continuation of monthly visits. Proper interpretation of weight measurements is crucial, since fluctuations in monthly weight after 12 months could be normal.

It is important to link with care for development counseling as well as other general health topics (e.g. HIV care) after the 12 months to ensure that mothers keep receiving appropriate information about optimal care and development of children.

- It is critical to emphasize growth measurements and promotion in the first month of life and counsel

The first visit of GMP should be at birth if possible, and include proper counseling on breastfeeding, care of infants in the first critical month, and referral of low birth weight infants if necessary. It is important that the birth weight of child is recorded on the growth chart.

Since the focus of GMP is on children under 2, the issue of stunted-obese children may not be too concerning.

There are a variety of circumstances when a child's weight needs to be measured (IMCI measurements of sick child to assess nutritional status, well child screening, screening for acute malnutrition, HIV visits, etc), but these cannot be categorized as GMP. GMP requires the regular contact and follow-up of the growth in the under-two children linked with appropriate counseling.

Maternal nutrition

The importance of antenatal care and maternal nutrition should be emphasized. Low birth weight is often the result of maternal undernutrition and inadequate pregnancy care is one of the major causes of childhood undernutrition.

In counseling mothers during antenatal care visits, adequate weight gain and good nutrition should be encouraged. Antenatal care visits can be effectively linked to postnatal GMP sessions to assure continuity of care.

Importance of counseling

It is important to underscore that GMP without proper tailored counseling is not recommended. Counseling aides should include generic algorithms addressing assessment, analysis and action, with specific advice for different situations, linked to individual counseling tools to address each specific situation. The algorithms and counseling cards will need to be tailored to country contexts and based on formative research results.

Counseling aides should include clear principles of effective counseling and negotiation. Importance of developing counseling skills should be emphasized.

Training should include role play and practical sessions and should be followed up by regular coaching; mentoring and support to ensure good counseling skills are developed and applied. There needs to be a tool to record the negotiated decisions, actual implementation by the caretaker and subsequent follow up.

Supportive supervision of counselors is crucial. For sustainability, it is suggested to have individuals tasked by the national structures to perform this function.

Community decision making

GMP programs should have available tools to consolidate community data and facilitate community discussions/conversations on analyzing the causes of growth faltering, identifying possible solutions/collective actions and following up on what was actually implemented. These should be tailored to different kinds of groups – communities in general and peer groups of caretakers.

There is also a need for a community level coordination mechanism to align different activities (community based public health, nutrition, etc). Programs should ensure that skilled facilitators for community decision making are in place and supported.

Referrals and linking with other services

- CHW should have an inventory of social services, health and food-based interventions(CMAM, SPF) to which children who are not growing may be referred
- Develop program guidance specific to growth of HIV+ children, ensuring the link of exposed children with available services, plus specific counseling tools
- These linkages should not dilute the purpose of GMP as a preventive intervention
- referral mechanisms (in both directions) and capacity of clinics should exist for successful follow-up to referrals
- Active follow-up of referrals
- Involvement of husbands and family members
- Quality of health services
- Access to health services
- Effective referral cards
- Linkages between health facilities and community cadres (e.g. accompanying patients to HF, active case finding and defaulter tracing)

Program guidance should include samples of referral cards and systems to link community cadres and health facilities, e.g. defining some key tasks of accompanying patients, active case finding, defaulter tracing and follow up of patients after discharge to prevent recurrence.

Scaling up

- Define/outline prerequisites for scale up and the resources
- teams of community based workers/volunteers
- formal structure for community level action
- conducive environment for community based activities or potential to create
- training mechanisms/approach, supervision and support system
- monitoring system, including system of peer review
- build in sharing of experience and good practices from high performing areas to serve as learning sites
- resources: materials, tools, infrastructure
- referral mechanism

- buy-in from nearby clinic, health system, governments
- community level coordination mechanism to align different activities (community based public health, nutrition, etc)

Indicators and monitoring

Process/performance indicators

- coverage (100% within community)
- participation (80% at least 80% of the time)
- frequency of supportive supervision visits (monthly for the first 6 months, then quarterly thereafter)
- quality of counseling/mentorship (tbd)
- performance indicator for workers (tbd)
- No. of feedback/community discussion sessions held

Outcome indicators

- Proportion of children faltering
- Proportion of faltering children who recuperated by the next visit and by the third visit
- Knowledge and practices of mothers (tbd)

Program guidance should address planning and budgeting for supervision of community cadres in a Government-run program. Program guidance could include references for effective tools/checklists for supervision and assessing performance that are feasible for implementation in a Government-run system. The tool could also provide guidance on community review meetings or other systems of community monitoring of performance, as well as Government review meetings.

Supportive environment and sustainability

Attaining good attendance/demand

- Program guidance should highlight the need for effective communication strategies to create demand.
- GMP could include different educational topics for each contact to sustain interest in attending, or be linked with the provision of other services such as deworming, supplementation etc.
- When necessary and possible, a system for home visits should be encouraged.

Next steps

These activities were identified as the next step in further aiding countries in improving their GMP programs:

- 1) Preparing a question and answer document (for country office use) in response to Lancet Series, explaining
 - difference between nutritional status assessment and growth monitoring
 - intervention aspect/element of GMP (GM is not an intervention)
 - comprehensiveness of GMP to address undernutrition per se
 - Lancet only speaks about GM without promotion; the listing of “things not to do” refers to the GM per se
 - expected outcomes

-which studies used for conclusions (only RCTS using undernutrition as impact indicator)

-value added by GMP cannot be assessed by looking at undernutrition only, GMP brings understanding to caregivers and commitment to comprehensive nutrition programmes that can eventually lead to improvement of nutritional outcomes

- 2) Finalize program guidance on GMP
- 3) Develop and disseminate joint statement WHO/UNICEF/World Bank
- 4) Share tools and examples for counseling and program management, monitoring and supervision (checklist for program managers)
- 5) Plan country and regional meetings on GMP