Growth Promotion for Child Development

Proceedings of a colloquium held in Nyeri, Kenya, 12-13 May 1992
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GMP Programs in Ecuador

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During the period November 1990 to March 1991, UNICEF carried out an evaluation of growth monitoring and promotion (GMP) programs in Ecuador with the purpose of looking at current GMP efforts and how GMP was affecting triple-A processes. Many aspects were evaluated in this period; this paper will concentrate on the analysis of community-based GMP programs (focused programs) and clinic-based GMP programs (national program) as they have been implemented in Ecuador, and the main lessons learned from this experience.

Growth monitoring has been carried out in Ecuador since the mid 1960s. Two years after the formation of the Ministry of Health (MOH) 1967, growth charts were introduced into the country. In 1983, a growth chart developed in Ecuador was field tested and its use generalized in 1986.

Currently, there are two institutional contexts in which GMP programs are implemented:

- National program – the MOH Growth Monitoring and Development program, with national coverage and implemented through the network of government health units.

- Focused programs – these GMP programs are based in the community and are implemented by different types of institutions and nongovernmental organizations (NGOs), sometimes in agreement with the MOH.

Infant Mortality and Malnutrition

Although infant mortality has been reduced in the last 20 years, it is still high and currently estimated to be 61 per thousand live births. A high prevalence of malnutrition exists. The National Health and Nutrition Diagnosis (DANS study 1986) performed by the National Development Commission (CONADE) and MOH estimates that 49.4% of children below 5 years of age suffer from chronic
malnutrition (low height for age), 4% from acute malnutrition (low weight for height), and 37.5% from global (low weight for age) malnutrition. Prevalence of malnutrition is higher in the lower income groups. A child between 6 and 23 months has the highest probability of being malnourished. In terms of overall access to health services, it was estimated by the MOH in 1990 that around 40% of the population does not have any access to basic health services.

Study Sample

The UNICEF evaluation study was carried out in six different areas of the country representing rural Indian highlands, rural non-Indian highland, urban-marginal highlands, rural coast, urban-marginal coast, and small coastal city (Cotopaxi province, Pichincha province, city of Quito, Guayas province, city of Guayaquil, Esmeraldas province, respectively). The study covered both national and focused programs. In each area, three communities were selected and a total of 18 communities participated in the study. The methodology used for the evaluation was the rapid assessment procedure (RAP) methodology for Evaluation of Nutrition Programs developed by Scrimshaw and Hurtado.

A total of 810 mothers were surveyed (45 per community), 18 GMP sessions were observed (one per community), 18 focal group discussions with mothers were held (one per community), and in-depth interviews were undertaken with 37 nurse aides and promoters and seven national officials.

Operational and Functional Aspects of GMP Programs

Implementation Methods

In both types of programs, national and focused, weighing and charting are used as the monitoring tools. In the focused programs, this is performed by the mothers under the supervision of a trained community volunteer, whereas in the national program this is performed by the nurse aide, as part of the routine procedures carried out on all children that come to the health unit. The active participation of the mother in the weighing of her children is the first step to an assessment of the child's growth and development.

The national program provides the services in the health units. In the provision of this service, at least two or more personnel are included: the nurse aide who usually does the weighing and the doctor who plots the weight on the growth chart and also provides medical attention.
In focused programs, mothers gather on a regular basis for a weighing session. These sessions are held in places selected by the mothers (usually in the house of the volunteer), each session is followed by a group discussion on the causes of growth faltering and actions needed to be taken. These activities facilitate the sharing of experiences among the women in terms of caring and feeding practices as well as the implementation of activities at the community level. Some actions taken have been the implementation of water and sanitation projects, income-generation activities, and raising of small animals to provide a food supplement (chickens, guinea pigs). Home visits to those failing to gain weight or being classified as malnourished are also carried out.

Community Participation

Focused programs have a very strong community participation component. In most cases, before beginning implementation, contact is made with the organized groups already present in the community and representing different community interests (local council, peasant organizations, religious groups, women's groups) to coordinate efforts and get support for the GMP program. These groups help to make contact with mothers, select volunteers, and, in some cases, help to carry out a community diagnosis.

Usually volunteers are selected by the communities to be trained so that they can be the coordinators of GMP activities within the community and perform health and nutrition education. In communities where a women's group is already functioning, this group supports GMP as one of its projects. Once the program is functioning, these organized groups continue providing support to the mothers attending the weighing sessions and collaborating when needed in the implementation of actions at the community level.

In the national program, community participation is not present. GMP activities are carried out in the clinics, which have very limited outreach programs, and, therefore, does not facilitate the involvement of the community.

Information System

In the national program, the weight information is usually registered in the clinical record, and only occasionally on the growth chart (Carnet de Salud infantil) that is given to the mothers when they come to the unit for the first time. Analysis of this information with the mother is rarely done.

In focused programs, weights are plotted on the growth charts, the community charts and sometimes in a register kept by the volunteers. Analysis of this information is made by the mothers at the time the child is being weighed,
and later analysis takes place with the group involved when the community chart is analyzed. In some cases, this information is transmitted to the local council or to the peasant organizations for further analysis and mobilizing support if necessary.

**Supervision and Evaluation**

In both programs, supervision and evaluation were found to be a weak point. They are not regular and not specifically focused on GMP. There is a need for ongoing mechanisms that will allow for adjustments in mid-course.

**Training of Participants**

In the focused programs, mothers and volunteers are trained. The type, content, and duration of training varies according to each program. In the national program, training has been provided for national and provincial levels, but has not yet reached the level of the health clinics.

One of the most important issues in training is to find the best way to provide individual counselling to the mothers as well as the use of appropriate educational material for individual and group education. Thus, training at the local level is essential.

**Weighing Technique**

In 50% of cases, it was found that a good basic weighing technique is applied as measured by an index developed during the study. The index is based on the following: undressing the child, zeroing the scales, registration of information on the group chart, consulting, and information given to the mother.

**Participants' Attitudes and Role**

In the national program, it was found that the attitude of the health workers toward mothers tends to be didactic, and not likely to help establish good communication. Sometimes, superior or unpleasant attitudes prevail. Little importance is given to GMP, which is mostly considered a subroutine of the daily clinical activities. In focused programs, sustained by the voluntary personnel from the community, the attitude is more participatory, with more respect and trust given to the mothers.
Other Findings

- Mothers weigh their younger children more frequently. In focused programs, the frequency of weighing of all children is higher than in national programs (2.95 vs 2.04 times in the last 6 months).
- Frequency of weighing starts to decrease after children reach 9 months of age. This coincides with the period of highest prevalence of malnutrition in children.
- Decrease in the frequency of weighing appears much earlier in national programs than in focused ones.
- Frequency of weighing increases as the mother’s level of education and quality of housing improves or both.
- In urban zones, children are weighed more than in rural zones (difference is on average 28%).
- Average time spent on each child during a weighing session is 6 minutes.

Conclusions

- There is a need to pay attention to the institutional context in which GMP is implemented. When this context is not supportive to community participation and enhancement of active involvement of the mothers, it is unlikely that GMP will be successful.
- Different approaches to the implementation of GMP activities have implications in terms of adequate coverage. The capacity to generate actions at community and household levels as well as actions that will have an impact on resource allocation at other levels is also affected by the choice made.
- Every effort should be made to reach those most at risk, (children between 9 and 23 months, children of mothers living in poor housing and with low educational levels or both, and especially those in rural areas).
- There is a need to develop better ways of communicating with mothers, such as spending more time with them, improving counselling skills, and communication materials.
• Sharing experiences through joint exercises between the government health units and NGO projects will contribute toward a better quality of program implementation.

• The possibility of linking the weighing activities with income generation has been a significant contribution toward the success of the program.

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References

