Growth Promotion for Child Development

Proceedings of a colloquium held in Nyeri, Kenya, 12–13 May 1992

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GMP Implementation in Indonesia: Does Behaviour Change Take Place?

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The joint FAO/WHO Expert Committee on Nutrition recommended nearly 30 years ago that the weights of individual infants and preschool children should be recorded on a chart. This recommendation was followed by the work of David Morley and his colleagues in Africa (Morley 1968). Since the 1980s, growth monitoring and promotion (GMP) has become one of the most important characteristics of primary health care in many of the developing countries.

In Indonesia, GMP emerged as a national strategy from the results of the assessment of the Applied Nutrition program carried out by Sayogyo in 1973, which concluded that changing behaviour, mainly of mothers, should be the means by which good nutrition among young children could best be achieved. Starting from small-scale programs in various places, a more concise program, called the Family Nutrition Improvement program (Usaha Perbaikan Gizi Keluarga–UPGK) was developed in which growth monitoring is the core activity. The objective of UPGK is clearly stated as:

- Nationwide coverage and the full participation of all families,
- Encouraging behaviour that promotes good growth, and, ultimately,
- Improving nutritional status of all children under 5 years of age.

Major expansion of this approach was a focus of the third, Five-Year Development Plan (REPELITA 3) between 1979–1984. By 1984, over 40,000 villages were carrying out UPGK. This massive expansion was made possible through political commitment at all levels; broad-based intersectoral organization; and a massive voluntary force at village level, backed up by the local women's organization (PKK) (Hill et al. 1983). A second expansion started in 1984, when UPGK was integrated into the Integrated Health and Family Planning program, which was conducted in the community through integrated posts (Department of Health, Indonesia 1986). In addition to GMP, this program includes provides four other activities, i. e., immunization, MCH, family planning, and control of

diarrheal diseases, which are intended to increase child survival and development as advocated by UNICEF (Posyandu 1986). There are now about 300,000 Posyandu in the country.

Berman (1988) and Basta (1989) found that at various levels of comprehension, most people in Indonesia understood and accepted the idea of GMP. Most recently, Scrimshaw et al. (1990) commented that the whole concept and structure of the integrated post is sound, if properly implemented. Hill et al. (1983) suggested earlier that the strengths of the program were also its weaknesses. The rapid expansion of the program precluded full coverage within the program areas, and lowered the quality of services. This assumption was confirmed later by Berman (1988), Fuhr (1988), Basta (1989), Junadi (1989), Ruel (1989), Scrimshaw et al. (1990), and other experts, who also stated that to meet the objectives of GMP, the quality of the activity should be improved in various ways.

Based on their experiences of implementing GMP in some developing countries, the triple-A approach was launched by UNICEF. This approach posits that all GMP activity provides information that can be used for assessment and analysis of the cause of growth faltering; this analysis can then be followed by affordable and appropriate actions at individual, household, community, and district levels.

As part of a worldwide effort sponsored by UNICEF, an assessment of GMP implementation was conducted in Indonesia to discover to what extent the hypothetical definition of GMP is implemented, with a view to maintaining, improving, and expanding the program. Rapid assessment procedure (RAP) as described by Scrimshaw and Hurtado (1987) was used in the assessment. All Posyandu in 12 villages in four different provinces were selected as the site of the assessment. In-depth interviews and focus-group discussions were conducted with 60 mothers, 62 voluntary community workers from the Posyandu (called kaders), and health and family planning officials at all levels. Observations were made at all 49 Posyandu in the selected villages, and structured interviews were carried out with 1,033 mothers in a random cluster survey.

Based on the results of the assessment, this paper reviews whether the intermediate objective of the program, in terms of change of behaviour (aimed at good or better growth and nutrition) takes place, particularly at the level of the individual mother as child caretaker, her family, and the community. Behavioural change happens as a result of communication. Therefore, Posyandu should function as a centre for communication, where kaders and mothers gather together weighing the children and plotting their growth chart. There the kaders should counsel individual mothers and take part in all the other related activities

that could provide a means of communication between them. Information from the weighing should lead both kaders and mothers to understand the status of growth of each child, to recognize growth faltering if it occurs, and to consider together the appropriate actions to overcome faltering. Three prerequisites for successful programs are reviewed in this paper and are: the mothers should use the Posyandu, the mothers and the kaders should communicate successfully with each other, and everyone should understand the growth message that healthy children gain weight.

Access and Use of Posyandu

Apart from their individual degree of understanding of growth, all mothers claimed that the Posyandu was beneficial for their children. The benefit varied from "just meet friends," to "get immunization and medicine," "to keep the child healthy." The above claims were all supported by kaders and community leaders. Although Nabarro and Chinnock (1988) commented that such activities are no more than a "formal weighing ritual," it seems true, as Hendrata (1986) has pointed out, that the gathering acts as a forum. This "...forces mothers to be in contact every month," either with each other or with the kader and health personnel. When the mothers were asked "...why should you weigh your child if you only come for the gathering...?" the answers were very interesting, for example, "I cannot imagine a Posyandu without weighing...." This supports the opinion of Basta (1989) that "...Posyandu (or GMP) is a name, and it becomes the message by itself...." It has become a symbol of nutrition, health, and anything else mothers perceived.

All community leaders and most mothers, supported by all officials in various levels, claimed that Posyandu improved the health status of the children in the villages. They were also convinced that the children who came to Posyandu more regularly had better health than those who did not come or came irregularly. They also said success or failure of Posyandu was related to other activities in the community such as agriculture or cooperatives. In a good community, where other activities work, Posyandus tend to be successful.

All mothers in the survey knew where the Posyandu in the village was. Over 90% stated that the Posyandu was easy to reach, and about 69% remembered what day and date the next Posyandu session would be organized. About 40% of all the target groups attended Posyandu regularly (4–6 times per 6 months), the younger the age of child, the more education the mothers had or the richer the family, the more likely that the child would be brought to Posyandu regularly. Tables 1, 2, and 3 show the distribution of attendance among the mothers over the 6 months preceding the interview.

Table 1. Frequency of Posyandu attendance by age group (%).

	Age of child in years					All ages
	0.5–1	1–2	2–3	3–4	4–5	combined
Never	14	22	32	49	60	30
1 – 3 times	34	33	31	26	21	31
4 – 6 times	52	45	37	25	19	39
Total	100	100	100	100	100	100
(n)	(232)	(315)	(241)	(161)	(84)	(1033)

Table 2. Frequency of Posyandu attendance by level of education of mothers (%).

	Years of mother's education		
	None	0–5	>5
Never	46	34	22
1 – 3 times	36	28	31
4 – 6 times	18	38	47
Total	100	100	100
(n)	(156)	(360)	(517)

Table 3. Frequency of attendance by family socioeconomic status (SES) (%).*

	SES			
	Poor	Medium	Rich	Combined
Never	32	42	30	30
1 – 3 times	32	27	25	31
4 – 6 times	36	41	45	39
Total	100	100	100	100
(n)	(372)	(464)	(197)	(1033)

*SES is as classified by the village headman.

Communication Process

In theory, Posyandu sessions were organized in a "five-table system." Children were registered (Table 1), weighed (Table 2), the result plotted on the growth chart (Kartu Menuju Sehat-KMS) (Table 3), counselling took place based on the plotting (Table 4), and various services were mobilized (Table 5). It was observed in all assessment sites, however, that the system did not work well. Mothers spent an average 9.6 minutes for the whole process, and out of this time, 2.1 minutes was for individual counselling, which in most cases was given by a health/family planning supervisor instead of the by the kader as designed in the program. The counselling did not cover analysis of the possible causes of growth faltering when it occurred or possible ways to utilize family resources to eliminate the problems. However, after being served, most mothers stayed at the post and did other things, such as discussing their children's health and, in particular, whether or not they gained weight. This could be seen as a "loose" counselling. The kader, on most occasions, joined in the activities as well.

After the session, no meetings between kader and community leaders were organized to conclude the activities and analyze the growth status of the children, the causes of problems and the possible actions to utilize the community resources. Hence, follow-up activities, like identifying the 60% of target age group children who do not regularly attend GMP sessions, or planning follow-up visits to families with children whose growth is faltering, are not perceived by kaders to be important and, on most occasions, did not take place. However, community leaders played various roles in the process, and the more active the community leaders, the more mothers joined the session, and the better the quality of the session.

Most kaders had less than 6 years of primary education and had received 1–3 days initial training before service followed by some shorter refresher training sessions. The educational flipchart provided for counselling was limited to a set of messages about what mothers should do, instead of equipping the kader to analyze the possible causes of growth faltering before proposing any action. Aside from the limited time available for counselling and the number of children attending the sessions, the lack of preparation for improving a kader's competence explained why good "structured" counselling did not take place.

The situation worsened after UPGK was integrated into Posyandu because kaders were involved in many more activities. The presence of health/family planning officials was also found to reduce a kader's confidence to perform counselling.

Message of Growth

Growth as an abstract concept was formulated and concretized in the key message "A Healthy Child Gains Weight Every Month" (*"anak sehat bertambah umur bertambah berat"*), in a sense that the words "healthy," "gaining," "months," are already familiar. Other messages, including nonnutritional ones were related to the key message.

During free conversations and discussions, mothers suggested various descriptions of the (physical) attributes of an ideal child. The word "attractive" (*"menyenangkan"*), active (*"lincah"*), "well nourished" (*"montok"*), heavy (*"berat"*), tall (*"jangkung"*), smart (*"pandai"*), and other common terms were used. Almost everybody was able to repeat the key message correctly. Terms like gaining (*"naik berat badan"*) or not gaining (*"tidak naik"*), growing (*"tumbuh"*) or not growing (*"tidak tumbuh"*), healthy (*"sehat"*), nutrition (*"gizi"*), breastmilk, food (*"makanan"*), give more food or give better foods. All these program achievement indicators and many other terms used in the program were mentioned very frequently by all of the mothers. In further conversations and discussions, most mothers were able to relate gaining weight to other common indicators of good health that they already knew.

The growth charts (Kartu Menuju Sehat-KMS) were found in adequate quantities at all Posyandu visited. The extensive use of the card was very impressive. After being filled out and plotted by kaders in the Posyandu, the KMS were carried home by mothers. In the Posyandu before they went home, it was very common to see mothers discussing their children's KMS. When mothers were asked about the chart, results showed that both mothers and community leaders understood that an increasing growth curve on the KMS card is "good" and that a stationary or down curving line is "bad." However, only about half of interviewed mothers could identify correctly whether a child was growing well or not on two standard growth cards presented to them during the survey (Table 4).

Table 4. Correct interpretation by mothers of the KMS according to attendance at Posyandu (%).

	Attendance at Posyandu		
	Never	1–3 times	4–6 times
Correct answer for increasing slope	35	48	59
Correct answer for decreasing slope	31	45	57

Discussion

Some mothers attended the GMP session. Their children were weighed and the weights were plotted onto KMS. Individual counselling did not take place properly as planned. Other activities were integrated into the session and mothers tended to join them all.

Although "structured" communication did not take place as planned, most mothers had a good grasp of the nutrition messages and reported that they had gained this knowledge from the UPGK program. They claimed that their increased knowledge had enabled them to provide better food for their children. They also believed that joining Posyandu, getting information from the kader and the health/family planning workers, and sharing experiences with other mothers during the sessions one way or another improved their children's health.

It could be argued that, in the narrowest sense, activities such as identifying growth faltering, plotting the findings on a growth chart, analyzing and discussing the causes of any problems individually, and finally advocating that mothers, families, and communities take action on these problems, were largely not happening in Indonesia. However, in a wider sense, the Posyandu, with its nutrition and communication components was observed to implement GMP, at least at all visited sites. Informal, nonstructured communication between the kaders and mothers and among mothers themselves either during or after the sessions assumes the role of the biggest communication process within the program. Any exchange of information, and any alteration of attitudes and practice happens in a very nonstructured way. In other words, conceptual understanding of the causes of growth faltering and counselling happened in an unplanned and nonstructured fashion.

Due to design limitation, the assessment failed to prove whether or not any change in knowledge led to an improvement of attitudes and practices among mothers and the community as whole; or even, whether there was better feeding, care, and environment for better growth of the children.

Whatever its level of success or failure may be, GMP is now implemented in almost all communities in Indonesia. To judge the program as good or bad will not be a fruitful exercise. Instead, we should concentrate on ways to improve it, and if we consider GMP as a communication process then the following two approaches can be discussed.

Professionalization of the Process

If professionalization of the process is selected, all components of the GMP as a communication process should be made more professional. Kaders could be given extra training to improve their skills as communicators and, whenever possible, a more professional health communicator can be also considered, for example, a midwife.

More professional educational tools, including manuals and flipcharts could be developed to help the communicator to analyze the causes of growth faltering and to find ways to help mothers, family, and community to solve their problems. A better setting for the Posyandu could be considered to provide facilities for each child's case to be assessed and analyzed and the mother given advice, in an individual setting and in a convenient way, bearing in mind time, place, privacy.

This approach is a "modern" approach that needs a lot of resources, in terms of money and personnel. It might also stifle the current success of the program.

Demedicalization of the Process

In demedicalization of the process, all components of GMP could be improved to provide better and easier ways within their cultural references for mothers and the community to make use of it and to adopt ideas and take action to keep their children in good growth patterns.

As a priority, the growth message should be brought closer to the concepts the mothers and community already have. "Gaining weight for what...?" will be the key question to be answered in this effort. The answer should come out of local understanding of the local concept of growth.

The setting of the Posyandu and all its components could be broadened to facilitate communication between kader and mothers, and particularly among mothers and other community members. Weighing and plotting can be done wherever and whenever possible. Counselling could be carried out anywhere and at whatever time was suitable. It does not need to be in the same place or at the same time as weighing and plotting, etc.

This approach requires a certain degree of "freedom" from health and nutrition system dependency. It becomes more of a community (social) movement, which empowers family and community to solve their own nutrition problems.

Neither approach is the "recipe-type" answer that will solve all the problems of the GMP program and make it able to facilitate and empower family and community to solve their nutrition problems. However, local decisions, based on local assessment and analysis of the available and potential resources, should be the best way of improving the quality of GMP.

Summary

In Indonesia, GMP as a national strategy for reducing child malnutrition started in 1973 and, after being integrated into a more comprehensive system of Posyandu, it now covers roughly 300,000 posts in 80,000 villages over the country. An assessment was conducted to examine the achievement of the program in identifying growth faltering, analyzing the causes of the problem, and helping family and community to solve it. Various aspects were covered, and this paper reviews the implementation of GMP through Posyandu as a communication process.

The structured communication process as prescribed by the program did not take place as planned. However, change of knowledge among mothers on the concept of growth and actions to be taken to maintain it were observed. This was assumed to take place in a "looser" communication process within and outside the GMP session.

Based on these findings, as far as improvement of the implementation of GMP as a communication process is concerned, two approaches to improve the process are proposed, i.e., professionalization or demedicalization of the process. The decision whether to choose one or a combination of both approaches should be taken locally.

Management of growth promotion involves several approaches. They all include the three necessary steps of assessment, analysis, and action (the triple-A process). They also require different levels of resources, and so each particular context calls for different methods. The promotion of growth for child development is a very important activity, most particularly in areas where growth faltering is prevalent.

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