Why Growth Monitoring in Under-fives?

Increasingly immunisation rates are reaching above 85% of all children in many parts of the World with low development indicators. Similarly more and more pregnant mothers are delivering babies under skilled supervised conditions. Sustenance of these activities is a must. However once reached high levels of coverage, the scope of further improvement is dramatically reduced. Routine immunisations have got rid of smallpox, polio, diphtheria, whooping cough, tetanus and measles, eliminating morbidity and mortality from these diseases. At the same time antenatal care and supervised child birth is addressing the high maternal mortality in many countries. These vertical efforts have paid off, but imagine the situation if growth monitoring of Under-5s was combined with these efforts. We would have certainly seen some improvements in reduction of childhood malnutrition and stunting leading to further reduction in morbidity and mortality among children.

Demographic Health Surveys in most of the countries with poor health indicators show that one third to half of all children below the age of five years are underweight and stunted. Why is it that we have not addressed this problem along with other services to women and children? It may be that this activity requires sustained effort through nutrition education and promotion to the care takers. The vicious cycle of under-nutrition, leading to low resistance to infection, contracting infection, loss of appetite and further weight loss continues.

Growth monitoring is the regular measurement of a child's weight and height in order to document growth. The child's measurements must then be plotted on a growth chart. This is extremely important as it can detect early changes in a child's growth. Both growing too slowly or too fast may indicate a nutritional or other health problem. Therefore, growth monitoring is an essential part of *primary health care* for children. Measuring a child's size is of very little value unless it is used for growth monitoring. Every child must receive this service if we are interested in improvements in child survival and hence bettering infant mortality rates. Primary health care providers have a responsibility to ensure that every child in the catchment area, as for immunisations, receives this care. Antenatal and post natal care must be followed by growth monitoring of Under-5s to achieve optimal maternal and child health care (MCH). Unless a comprehensive MCH care is available to all women and children, achieving sustainable development goals remains an ambiguity.

More than THIRTY years ago, Hendrata and Rohde**[1]** pointed out ten common pitfalls for growth monitoring programs failures. These failures often stem from a lack of understanding of program implementation. To date we have made no progress in these areas. Judge it for yourself:

1. Health workers tend to desire a diagnostic curative approach to malnutrition where Growth Monitoring and Prevention (GM/P) is a preventative measure.
2. Most current nutrition and GM/P programs start with children who are already undernourished. GM/P's should start with infants.
3. Nutritional status is currently emphasized rather than growth.
4. Mothers need to participate in monitoring more than they are currently expected to.
5. Standard GM/P's are normally not conducted on an individual basis. GM/P's must focus on communication between mother and worker.

6. GMP is simple in concept, but certainly not easy to implement.
7. GM/P is usually conducted as an isolated nutritional activity instead of an all-encompassing primary health care service.
8. GM/P is carried out by health workers with minimal community participation.
9. Most GM/P's provide free supplemental foods as incentive for mothers to attend monthly meetings, but the food becomes a preoccupation instead of an incentive.
10. People have too many false expectations of the program that are not grounded in reality.

If workers concentrated on the overall goals and objectives of GM/P, these programs would have a greater impact on the health care of children.

So much for the primary health care providers. What can the parents do for their children? Once parents or care takers have realised that nutrition is important for child's normal growth, they must learn how to do it. Fundamental to this exercise is to realise that there is no magic to it but it is simple hard work. If the breast feeding has been successful, during which mother's nutritional needs must be attended to, there is little work for feeding the child other than demand breast feeding. It is after six months, when generally breast milk alone is insufficient for the baby, that weaning must start. Weaning requires sustained effort and patience along with common sense. There is enough literature available either for parents who can read for themselves or for the health workers who are responsible for advising on the subject. However, three things are poorly understood:

1. **Quality** of food given to the child is important. It must be nutritious and balanced. Growing child needs adequate amounts of proteins and calories, along with essential minerals, for optimal growth;
2. **Quantity** of food given to a small child is often misjudged. Feeding is started with small amounts and gradually increased as the child tolerates to three to four table spoons. Often care takers are satisfied with a tea spoon or two, half of it is usually spat out. Gradual introduction to variety of foods enhances the nutritional value of the feeds.
3. **Frequency** of feeds is equally important. Once child has learnt to take semisolids feeding every three to four hours during day time is critical.

Obviously this space does not do full justice to the subject, but the purpose of this article is to point at the responsibility of the health care providers and the parents/caretakers, as the babies are yet to learn to feed themselves!

[1] Hendrata L and Rohde JE. Ten pitfalls of growth monitoring and promotion. **Indian J Pediatr.** 1988 Jan-Feb;55(1 Suppl):S9-15.