This is an opportunity to pay my respects to Dr. C. Gopalan, the intellectual, the scientist, and the towering lighthouse of this region in the field of nutrition, and to acknowledge his contributions to humankind. He has been at the forefront in spreading knowledge of maternal and child nutrition to all, especially to mothers. His example and that of my guru Prof. C.C.de Silva have influenced generations of pediatricians to stress the teaching of nutrition to health professionals and improve the awareness of the nutritional needs of people at all levels throughout the complete span of human life. Sri Lanka felicitates him on his 90th birth anniversary, congratulating him for his leadership and wishing him many more years of health and happiness.

Introduction

If we begin at the beginning, we have to examine why WHO/UNICEF initiated the International Code of Marketing of Breast-Milk substitutes. It was the health issue: inappropriate feeding practices lead to infant malnutrition, morbidity (chiefly diarrhoea), and mortality. Research scientists like Scrimshaw and Chandra showed the association between morbidity and bottle-feeding. Poor sanitation in ill-equipped kitchens in the developing world and non-availability of safe running water heightened the problem. Among poorer segments of the population, the use of diluted feeds was another factor responsible for infant undernutrition. In Asia, rapid urbanization was associated with a reduction in the traditional practice of breast-feeding. It came to be looked upon as ‘old-fashioned.’ The trend towards bottle-feeding, on the other hand, was considered ‘modern’. In Asia, our own research and studies conducted by of others like Valyaselvi et al. in Thailand and Prema in Hyderabad confirmed that breast-feeding was best for the infant’s well being.

Infant food industry

NGO’s had played an important role in exposing the strategies adopted by the infant food industry targeting the general public, especially mothers, so as to popularize harmful practices such as bottle-feeding, use of various infant formulae and expensive complementary (weaning) foods. The infant food industry played down the value of mother’s milk and natural nutritious complementary foods introduced at the appropriate time. Weaning foods were introduced very early in the infant’s life, and even earlier in the West. Thus, scientific evidence regarding the value of breast-feeding formed the basis of the promotional steps taken up by WHO/UNICEF to protect and promote appropriate infant feeding practices through nutrition education. This nutrition education was undertaken through mass media and interpersonal communication by health professionals and community social workers.
WHO / UNICEF expert meetings

In 1979 a joint WHO / UNICEF meeting was held in Geneva to discuss this code. Member states, International organizations, non-governmental institutions, experts and representatives of the infant food industry participated. At that large gathering, chaired by the persuasive and diplomatic Dr. Fred Sai who was supported by eminent scientists like Drs Moses Behar from WHO and David Burgess and many others, the Breast Feeding Code was accepted amidst much opposition from the infant food industry. Member states, except the US, voted for acceptance of the Code.

A separate meeting was chaired by me as Chairperson of Maternal and Young Child Nutrition / SCN / UN to define the appropriate timing of complementary feeding. In view of the observed faltering of growth in early infancy, it was recommended that complementary feeds should be introduced by the fourth month of the infant’s life. Prof. Waterlow vehemently opposed this timing, proposing the third month. But it was finally possible to convince him to agree with us, through the support of members of my committee like Yngve Hofvander, Shiela Perera, Kusum Shah, Barbara Underwood, Demisse Hapte and M. Rowland. At the national level, it was possible, with the help of local activists, to convince mothers about the numerous advantages of breast-feeding and the need to avoid the early introduction of bottle-feeding. It took a lot of effort to convince mothers that giving water and prelacteal feeds (like coriander water and weak tea) reduced the ‘sucking power’ of the infant as well as its thirst, and also increased the infant’s vulnerability to infection.

Efforts to improve breast-feeding

Maternity ward practices to minimize post-partum pain and modern anesthetics for Caesarean section procedures enabled mothers undergoing operative delivery to initiate early breast-feeding. Mothers were encouraged to put the child to the breast as early as within one hour after a normal delivery. Mothers had to be convinced that the sucking and letdown reflexes would improve milk output. Lactogogues were given to mothers who had difficulty in initiating lactation. Alongside, efforts were made locally to extend maternity leave so that breast-feeding could be sustained. In our inter-country research project steered by Tom Marchione, and Elizabath Helsing in Sri Lanka, we noted that the prevalence of breast-feeding dropped precipitously at six weeks when workingwomen went back to their jobs. With extended maternity leave up to four months granted by the Minister for Health, supported by the Prime Minister at that time, Sri Lankan mothers regained their zeal for exclusive breast-feeding.

WHO / UNICEF efforts to promote mother’s milk were rewarded by improvement in the practice of breast-feeding globally. Mother-child bonding improved, and there was increased paternal and community acceptance of breast-feeding. The hopes for better child survival were strengthened. Needless to say, there were tremendous economic advantages for parents and governments and reduction in the import of infant mild foods.
The baby friendly hospital initiative

The Baby Friendly Hospital proposal, piloted with great enthusiasm by Dr. James Strong of UNICEF, did not succeed at national level. It was weakened by misguided maternity ward nurses and overanxious fathers, perhaps encouraged by the infant food industry. The Code prohibits the distribution of infant formula samples directly to mothers. The food industry then turned to the sale of artificial complementary (weaning) foods. Mothers were neither motivated nor enthusiastic about complementary foods when infant growth faltered. The advantage of introducing the different tastes and textures of home-based foods was ignored because of the tasty commercial preparations in the market. Mothers (and fathers) need to persevere with nutritious blended mixtures to prevent early undernutrition, which commences at about six months of age in Sri Lanka and most South Asian countries. Cultural practices, such as auspicious ceremonies for introducing complementary feeds, which had been abandoned, are being reintroduced and reinforced as appropriate. The growing literacy among mothers has helped in this instance. In 2002, following the findings from many international studies monitored by UNICEF and WHO, WHO have recommended exclusive breast-feeding for six months, followed by appropriate complementary feeding and continued breast-feeding.

<table>
<thead>
<tr>
<th>Table 1: Rank &amp; Grade in South Asia</th>
<th>Country</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Sri Lanka</td>
<td>116/150</td>
</tr>
<tr>
<td>2nd</td>
<td>Bangladesh</td>
<td>91.5/150</td>
</tr>
<tr>
<td>3rd</td>
<td>Maldives</td>
<td>88.5/150</td>
</tr>
<tr>
<td>4th</td>
<td>Pakistan</td>
<td>75.5/150</td>
</tr>
<tr>
<td>5th</td>
<td>Nepal</td>
<td>71.5/150</td>
</tr>
<tr>
<td>6th</td>
<td>India</td>
<td>68/150</td>
</tr>
<tr>
<td>7th</td>
<td>Afghanistan and Bhutan</td>
<td>30/150</td>
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Bottle teats are to be avoided not only for hygienic reasons but in order to neutralize mothers’ inclination to use these as ‘pacifiers’. Longer prevalence of lactational amenorrhea has contributed to postponement of the next pregnancy. This has contributed to improvement in the mothers’ nutritional status and reduced the loss of iron that accompanies the early onset of menses. Spacing of births through acceptance of family planning methods is another factor that has contributed to improvement in maternal nutrition. Although demand feeding is encouraged by all health workers, it should be discouraged in later months. The baby’s clock is the stomach and if the stomach is not full, there will be a demand for feeding. However demand feeding should not destroy the mother’s sleep and peace!

Breast-feeding prevalence

Morbidity patterns have changed in Sri Lanka since the establishment of the code. Certainly, the incidence of diarrhoea has reduced in the pattern of childhood disease. With the high literacy rate in Sri Lanka, health awareness ranks high. Breast-feeding prevalence has improved from 25% reported in our earlier WHO Intercountry collaborative studies steered by Manuel Carballo, to about 80% at present. A recent International Baby Food Action Network (IBFAN) study has shown that Sri Lanka ranked as the best among South Asian countries.
The role of the father as an important part of the family unit needs to be strengthened with the concept of paternity leave, recognized better in the West than in South Asia, needs to be popularized. Efforts and activity must be intensified within professional groups who are interested in promoting these WHO / UNICEF policies relating to maternal nutrition. Derrick and Pat Jelliffe were unfailing in their efforts in promoting the concept of the Mother-Child Dyad, and we would do well to emulate their example. Recent scientific studies have provided evidence of many valuable immunological factors in mother’s milk. Fears of increased risk of malignancy associated with the use of plastic bottles and teats are some of the newer issues that have helped in furthering mothers’ acceptance of the value of breast-feeding.

References