## INVITED ARTICLE

# The Problems and Demands of Children in Indonesia for the Next Twenty Years.

by

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## I. Introduction.

Indonesia as is the case with other developing countries has a "young" population of which 43% consists of a population of underfifteen.

Since we know that these children will be the back bone of our nation in the future, efforts to support the endeavour to promote child health will be very beneficial for a long term program.

We ought to be happy that the long term health program in Indonesia is directed to the young and productive section of the community and attention is especially given to the low income section or to those in the rural areas.

It is therefore natural that those two groups of people are given priority in our health program as 82% of our underaged population live in the villages.

Children are given a special position in the community, because they can not be treated as mini-adults.

Since the nineteen thirties in Indonesia Pediatrics has been separated from Internal Medicine and specialization is directed toward the child population.

Subsequently in 1964 Pediatrics has developed into Child Health Care, which reflected the social aspects of Pediatrics and is not only concerned with child's disease, but also with the healthy children and how to preserve their health.

To term "young" refers to that part of the population who are between 0-15 years of age. In this age-group, we observe periods of development which require more attention and care than other periods. This is the case with BA-LITA (children under 5 years of age) which requires much more attention, because of the much higher mortality rate of this age group.

10% of infants born throughout the world die (12 million babies out of 125 million births) and 50% of these infants never reach their fifth birthday.

It is the right strategy to attend to the rural people. Ordinarily developing countries compete to show off development of new technology. They also imitate medical progress from the West, which is not only expensive, but is only beneficial to a small group of people. It is an irony that ¾ of the government budget for health services is spent in the big cities where also ¾ of all medical doctors are.

It is a fact that 34 of deaths in Indonesia is caused by diseases which can actually inexpensively be prevented, but the reality shows that 34 of the health care budget is spent for curative purposes, which are usually very expensive (Morley, 1973).

Mother and child can not be separated, so the young age and productive age should be managed together, as pregnant and breast feeding mothers have an important role to bear their infants and raise their children to become intelligent and healthy people.

## II. For the next twenty years.

In the year 1977, an agreement has been made among the WHO members,

including Indonesia to announce a movement which is called H.F.A. 2.000 or Health for All by the year 2.000.

This movement endeavours to achieve z

- 1. no malnutrition.
- 2. no ignorance in matters of health.
- 3. the availability of clean water,
- 4. proper housing for all.

To support the movement, health services should be promoted, especially concerning skilled manpower, hospitals, drugs and immunization facilities.

As we also know health matters can not be separated from other sectors of development, so that in reality the H.-F.A. 2.000 is in fact a holistic concept which encompasses industry, agriculture, education, housing and transportation.

Thus, the H.F.A. 2.000 is identical tothe economic development in its entirity (Mahler, 1981). To eradicate ignorance for instance the people has to be made literate first, so that it will be easier to give them information about the meaning of health and how to preserve health. The way of approach to achieve H.F.A. 2.000 is as discussed in a conference at Alma Alta in 1978, in which it was agreed that the best way of approach is what is called The Primary Health Care (P.H.C.), which involves the participation of the community. P.H.C. can be defined as a health service which is practical and employs simple technology but is scientifically justified. The implementation should be of a relatively low budget which is attainable by the community.

The most important thing to be emphasized is, that the local community accepts the realization of the project so that the spontaneous participation of the community is enhanced thus encouraging self confidence in planning various health programs in their own region.

Family planning activities, immunization programs, preventive measures against endemic diseases, health education and simple medication to combat common diseases in the community could be methods of approach to P.H.C. The purpose and target of a long term health development program pays a special attention to problems of childhood viz:

- 1. Life expectancy rate at birth is set at minimally 60 years (now 50 years).
- 2. The infant mortality rate must be maximally 50 per 1.000 live births (now 110 per 1.000).
- 3. Low birth weight infants with body weight of less than 2.500 gram is to be 10% (now 20%).
- 4. Three years aged children with body weight of 11,5 kg is to be less than 30% (now more than 30%).

5. Neonatal tetanus should be suppressed to be 1 per 1.000 live births (now 11 per 1.000).

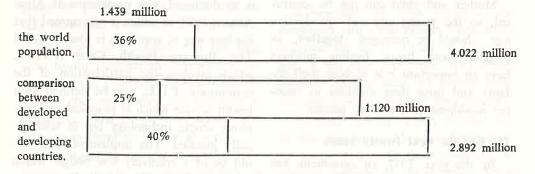
It is obvious that there are only 18 years left to achieve the target of this long term health program and this can not be successfully accomplished without persistence and awareness of the ideals.

On the occasion of KONIKA V held in Medan 1981, the Minister of Health even challenged to surpass the target.

## III. Childhood problems and demands.

The population problem must be given priority in the consideration. 36% of the world's population consist of underfifteen years.

In the developing countries it is even more than that and it is ironical that this should be the case in countries that can hardly effort to supply the bare necessities for the children to develop properly.



According to the latest census in Indonesia (1980) the population is 149.490.298 with a population growth of 2.3%. This population growth figure shows a balance between the crude birth rate (of 35.09 per 1.000) and the crude death rate (12.48 per 1.000). Many gestational births occur, even though a lot of those children die of diseases.

43% (63 million) of the total population of Indonesia consist of children between 0 - 14 years of age, of which 24 million belong to the underfive years.

A 1/3 of the underfive year olds (8 million) is in the breast-feeding period (infants under 2 years).

As mentioned before, 80% of the population live in the rural areas far away from Health Service facilities, even the simplest of which have never been seen (let alone experienced).

The gross national income per capita is very low in comparison to that of our neighbouring countries, that is less than US \$ 250,00 or Rp. 175.000,00 per annum.

The average size of a family is 4,9 and life expectancy rate at birth is still below 50 years. Literacy amounts to only 59,6% and the school going children according to their age groups are shown in table 1:

TABLE 1: School going children according to age.

— elementary school	6 — 12 years	78,1%
- junior high school	13 — 15 years	27,3%
<ul> <li>senior high school</li> </ul>	16 — 18 years	15,4%

The second problem is that of nutrition:

According to data collected at Dr. Soetomo Hospital 17-20% of infants born are with birth weights below 2.500 grams (low birth weight infants, LBW) of which 45-50% are small and do not confirm with the age (small for date).

Obviously, these LBW infants have suffered from intrauterine undernutrition so that they are born too small for their age.

These infants have already suffered and grown up in an unwealthy community, so that it can be imagined how they will further develop. When they in turn become adults, under the same poor conditions they will deliver unhealthy babies too.

This is the important problem and our attention must be focused to it from the begining and measures taken, so that LBW's and undersized infant can be prevented (Ranuh, 1980).

The perinatal period is a very important and vital period. To be more exact, the period lasting from mid pregnancy until the age of 2 years is a very crucial time interval for the growth and development of the brain. Undernutrition during this period will result in an underdeveloped brain and consequently affects the child's intelligence (Ranuh, 1980).

Sometime ago a survey was conducted on elementary school children of between 7-10 years in Surabaya and the conclusion was, that 50% had an I.Q. which is below normal.

Undernutrition seems to have been chronic since pregnancy until birth. Those children have adapted themselves to this situation unnoticed and only a special study will bring this to the surface. Official data report that children under 3 years of age with body weights of less than 11,5 kg number 30%. About 9 million of under five year olds (30%) suffer from undernutrition, while 23% suffer from severe malnutrition.

As many as 500.000 pregnant women (7%) and 200.000 breast feeding mothers (23%) suffer from undernutrition.

Each year 45 — 50.000 under five year olds are prone to blindness and about ½ million children have clinical abnormalities concerning their eyes. And 15 million suffer from night blindness with a very low vitamin A concentration in their blood.

Iron deficiency anemia is observed in 40% of pre-school age children, 31% in school age children, 70% in pregnant women and 40% in low income labourers (Tumbelaka, 1981)

Let us look into the problem of breast milk. It seems that there is a great tendency among mothers to replace breast milk with bottle milk.

This problem is more encountered in the large cities resulting in many cases of infection and undernutrition. Much has been written about this subject proving that breastmilk is far more superior to bottle muk, enner from the biological or psychological point of view and also when considering the economic and socio-cultural aspects (Tumbelaka, 1981).

Several surveys have been conducted, and the causes of the decline in breast feeding in Indonesia are very complex and inter-related. Several conditions have been put forward as important factors, which may play a role in the decline, i.e.:

- a. the changing pattern of socio-cultural and economic conditions.
- b. psychological factors.
- c. health factors such as the physical health of mothers and infants.
- d. ignorance and misunderstanding of mothers and health workers.
- e. extravagant promotions of formula milk.

To correct this situation, prompt and intensive measures have to be taken soon. But the problem is HOW? This can be done through several forums, scientific, or nonscientific, together with community groups.

But more important is, that all health workers must be aware of the importance and benefit of breast milk. In this matter it is very essential that all obstetricians, pediatricians cooperate in the campaign for the use of breast milk.

The mass media can also be of assistance. A strategy has been practised in

several hospitals and maternity houses where mother and child are put together in one room, with the aim of improving the mother's knowledge and skill in child care and nursing, including breast-feeding.

The campaign for the promotion of breast feeding in the community should go together with planned parenthood activities and primary health care.

The third problem is mortality and morbidity. The main cause of morbidity and mortality in infants and children are infections. In the large cities, we may add the frequency of accidents and poisoning among school and preschool age children; although the total number is much smaller than death caused by infectious diseases, these threats must not be neglected.

According to data at Dr. Soetomo Hospital, 10.000 children are hospitalized annually in the Department of Child Health, of which 90% are admitted because of infectious diseases and only 10% of other causes. The out-patients numbering about 66.000 each year follow the same pattern, 90% infectious diseases and 10% other causes. The most common infection of hospitalized children is gastroentenitis (51,2%), followed by respiratory tract infections (18,6%), central nervous system (10,7%) and a small number of genito-uninary tract infections (0,2%) while the other 1,23% comprise disturbances of other systems such as: nephrotic syndrome, severe anemia and leukemia. Children with severe malnutrition also belong to this group.

The pattern observed in the out-patient section is very similar. The highest mortality rate in Dr. Soetomo Hospital is caused by respiratory tract infections (17.4%), especially bronchopneumonia and bronchiolitis.

The mortality rate in cases of acute gastroenteritis has dropped substantially from 21,3% in 1971 to 11,3% in 1977.

Oralit has now become popular, due to the intensive efforts of the health workers, together with the community and mass media, and patients come earlier to seek medication, which resulted in a decline in the mortality rate.

Those figures mentioned above does not reflect the actual situation in the community because these data apply to conditions in the hospital, where only grave cases are admitted to hospital.

But the pattern of the disease can be used as criteria of the fact that most diseases suffered by the community are of the kind that are relatively easy to prevent.

Gastroenteritis and its complications, bronchopneumonia, bronchitis and bronchiolitis, typhoid fever, hepatitis, diphtheria, tetanus, morbilli, are the most common diseases encountered every day throughout the whole year, with peak incidences.

With the availability of clean water in every home, improved sanitation and environmental cleanliness, and by the

introduction of family toilets together with the promotion of health services and immunization, facilities against various infectious diseases, the morbidity and mortality rate can surely be kept down. A disease can be aggravated by circumstantial conditions. An undernourished child who suffers from measles later on dies of bronchopneumonia which appears to be fatal. However, morbilli is the intermediary and malnutrition the initial cause. If only the child has not been undernourished, he will not have died of bronchopneumonia.

#### IV. Measures to be taken.

We all know the problems, we also know the methods to solve the problems and the approach to achieve our aim has been formulated. What is now required is our concentrated effort and a great amount of enthusiasm. As child health specialists or any physician who serve the community, we are expected to formulate effectual methods to keep down morbidity and mortality rates as stipulated as our longterm aim in our health development program.

Our colleague Arif Haliman of Banjarnegara has proved his ability to advance the health standard of his community despite the fact that his region is a "minus" area (Haliman, 1977).

Abroad, we must admire dr. Shanti Ghosh (1976) who has devised simple guidelines for the Indian community. Even though she has had a profoundly Western education, she is able to apply specific methods in her own country using the facilities available in the community.

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