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# swasth hind

July 1984

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- Feeding habits in children—  
Problems and establishment.
- Mothers first
- An immunisation programme in Dewas district—  
Success and difficulties.
- Health care delivery—  
Need of social orientation.
- The slums of Bombay
- Heart attack
- Legislation against smoking  
in developing countries.
- Health status of pre-school  
children in rural/community.



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# swasth hind

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## Readers Write

The article ARTHRITIS—FACTS & FADS by Dr K. N. Malaviya in January 1984 issue is an ideal medical write-up. Rarely we come across useful tips from medical journalists in India. Any newspaper, weekly or magazine will surely have a medical column as fixed feature, but the readers are tired of reading the same stockphrase in such medical articles.

... In this context, the article authored by Dr K. N. Malaviya is highly praiseworthy.

**K. D. Ananda**  
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I have gone through one of the issues of the **Swasth Hind** and seemed to be interesting one, especially for the family members. I request you to ask the contributors to make acquainted the readers with latest developments on research on diseases and medicine. I wish **Swasth Hind** proves successful in future.

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## OUR COVER

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# FEEDING HABITS IN CHILDREN

## —Problems and Establishment

Dr (Smt) U. MEHTA

**T**HE acquisition of good eating habits includes a good appetite to ensure eating enough and balanced food. The first year of life lays the foundation for the dietary habits of a life time. From birth onwards habits begin to be formed.

The baby is equipped with only two types of responses; the knowledge that he is hungry and crying when he is not fed. First year of life is comparatively free of feeding problems as he accepts the food offered to him regularly at every meal with joy and satisfaction. Problems begin to crop up during the second year when the child has a tendency to be indecisive, fickle and also has a negative attitude towards foods.

### Feeding problems of infants

The first problem of the mother starts with having to make a decision whether to breast feed or bottle feed the newborn infant. Breastfeeding the child is advantageous and is strongly recommended. Breast milk builds up a strong immune response system in the baby, is economical, is nutritionally balanced to the needs of the baby, is hygienic and provides psychological advantage to both the mother as well as the infant.

Weaning the infant off the breast or bottle milk or supplementing his diet with other foods should begin at the age of 6 to 9 months. In India, infants are

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**The most trying and difficult part of bringing up a child is making him to eat his food. Meal time is the most cumbersome for most of the mothers each day. Many children readily gobble up sweets and other snacks but avoid normal meals. The measures resorted to by parents are violence, bribery or surrendering to the children's whims, etc., leading to spoiling their behaviour along with their precious health.**

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generally weaned at about 9 to 12 months of age. For optimal physical and mental development of the child his diet must include adequate amounts of all nutrients required by him. Breast and/or bottle feeding and weaning of the infant can be successful only if the mother is comfortable, relaxed, and enjoyed the feeding time with her child. A normal baby does not need to be forced to eat the amount of food he requires because he has effective hunger mechanism. Generally a very small baby approximately needs to be fed every three hours and a bigger baby at every four hours interval. The best course to adopt is to feed the child 'on demand', in which the baby makes 'the schedule' and is fed when hungry.

Mothers often face problem during the night feeding in both the breastfed or bottlefed infant. Though breastfeeding requires the mother to feed the baby; in case of bottlefed infant some one else can take over this duty. As soon as possible addition of cereals to the late evening meal increases the likelihood of eliminating the middle of the night feeding.

Small children like what they are used to having and often resist change. Introducing new foods in the diet of the baby is often where some food problems start.

#### **Establishment of habits in infants**

When feeding the infant, his first weaning food, start with strained soups, fruit juices, gradually introducing pureed (soup without solid pieces) vegetables and fruits.

As semisolids, viz, cereals and pulses like *Khichri*, *Dal*, *Dalia* and other baby foods, etc., are introduced it should be remembered that the little infants' tongue movements are not coordinated. Lack of muscular coordination may make him spit his food if it is placed on the tip of the tongue. Food should be spooned towards the back of the baby's tongue.

Coordination between the hand, eye and mouth is very poor in the infants, so some spilling is unavoided. The cup should not be filled to the brim. The baby is very strongly motivated to feed himself on his own. Help him in handling his spoon until he is feeding himself successfully.

Poking fingers and messing up with food should be allowed to some extent. As the child gets used to the feel of different textures of food he will naturally start using the spoon without fuss. Serve well cooked, mildly seasoned simple preparations in small portions. A deep saucer and small spoon should be used. In case of rejection withdraw the particular food and reintroduce after a few days.

#### **Eating habits in children**

The following factors influence the establishment of eating habits in older children :

1. *Mothers' attitude and family environment*—Children are very susceptible to the moods of other people in the household. The atmosphere prevailing

in the family has a significant effect on the child's habits formation. The mother who is able to express a happy emotional attitude towards a particular food is successful in arousing an equally positive attitude in her child towards the food that he should eat. Making only constructive remarks about food in front of him and talking about your food likes rather than dislikes help in developing positive feelings of your child towards eating. At mealtimes the older members of family should not make fuss about what they are eating. They should all create a cheerful mealtime atmosphere, eat happily the food being served without expressing about their food likes and dislikes. The young child will automatically imbibe the general atmosphere of the family and also eat his meal the same way.

2. *Culture and socio-economic conditions*—Culture is our social heritage. Social customs and traditional norms have a tremendous effect on the food habits of the people. The western countries have a system of numerous (5 to 6) meals per day whereas in India we have a tradition of having 3 to 4 meals a day. Within India itself a marked degree of variation is found in the food habits of people from region to region because of cultural variations. The socio-economic status also bears a direct correlation with the eating habits of the children. The eating habits are a reflection of the socio-economic group to which the child belongs.

#### **Feeding problems of children**

A slightly different kinds of problems are encountered by parents of older children. Many studies have revealed the following types of feeding problems being faced by mothers of older children:

1. The children may have poor appetite and the poor food intake.

2. Children may be restricted in the variety of food which they eat.

3. Pre-schoolers specialise in eating certain food items for brief periods of times and then moving on to some other favoured food.

4. Some parents may be worried regarding the poor weight gain of their children whereas others may have excessive weight gain in children a problem.

5. Some illness directly related to the digestion and absorption of food may be indirectly responsible for poor appetite.

6. A psychologically aggrieved child may find meal time ideal for reacting physically and registering his protest. If the child refuses to relish and eat his food continually seek the physician's help or a psychiatrist's guidance as the requirement may be.

7. Like adults factors like distress, anxiety, extreme happiness, puzzled mood, all effect the child's appetite at mealtime. The attention of children is more easily diverted from food.

8. Anorexia (loss of appetite) may be the result of forceful feeding of the child. In some instances it may also lead to psychogenic vomiting.

9. Sometimes eating of dirt or of any inedible material may pose serious problem. The hazards of ingesting toxic substances like lead through paint and plaster may be eliminated through careful supervision.

#### **Establishment of eating habits in children**

1. Don't maintain irregular meal times. Meal time schedule should be strictly adhered to. Provision for slight variations based on the appetite of the child should be allowed.

2. Don't serve food till he is seated comfortably and don't use oversized feeding utensils.

3. Don't serve large quantities of food at a time, as foods are more acceptable to the child if served in amounts suitable to him.

4. Avoid serving foods at extreme temperatures as the mouth of the child is over sensitive.

5. Don't offer him monotonous meals repeatedly. Add variety to let him acquire taste for different foods gradually. Give him properly cooked and attractively served meals to choose from.

6. Strongly flavoured foods should not be served because children have a very sensitive sense of taste due to a large number of functioning taste buds.

7. Don't force the child into good table manners too soon, as table manners are quite developed over a period of several years.

8. Discourage the child to rush through his meal. Complete chewing helps digestion of food and efficient utilisation of nutrients by the body.

9. Don't urge the child to eat more than he needs, this is likely to irritate him. Coaxing, and forcing of food destroys the appetite and results in resistance to eat or results in a habitual over eating problem.

10. Avoid feeding the child during distress, anxiety and puzzled mood. Pacify him by diverting his attention carefully and serve food in calm and pleasant atmosphere.

11. Meal times should not coincide with the time when the child is overtired during the day. Make the child free from all activities so that he can eat peacefully.

12. Never express serious concern over the nutrition of the child in his presence. He may capitalise by holding out for special privileges in return for eating.

13. Having rigid ideas regarding what the child should eat and how much should be avoided by parents and grand-parents. Let the child's appetite be your guide normally. At pre-school age the child's rate of growth slows down so his calorie intake is reduced as a result of reduced requirement. There is a need of meals being less bulky and also providing enough nutrients like vitamins and proteins.

14. Don't allow excessive intake of 'fill up' snacks, cookies, toffees, etc., in between meals. These destroy the appetite of the child.

Properly handled, good eating habits make tremendous contribution to the child's future well-being, both physical and psychological. The person who carries the major responsibility for the care of the infant needs a good understanding of the aforesaid principles. If the child still does not relish and eat his food, seek the advice of a physician. △

THE birth of a child represents considerable investment — of love, of energy and of expectations by the parents and by society as a whole. The death, disablement or curtailed potential of an infant taxes the current generation and denies future resources to the community. The deaths every year of 17 million children under five are tragic, especially as almost all of these are preventable. However, the human loss is even larger than that. Worse in many ways is the aftermath of survival on weakened children who may be stunted or live in blindness; such children may drag out painful lives crippled by polio or be mentally retarded because of a poorly managed delivery. It is our most urgent task to limit this suffering and death and, given the determination, we have the means at hand to do so. Health care systems, as they are now run, too often fail to meet the needs of mothers and children, the most vulnerable group in every society.

Until recently, before the dawn of the concept of primary health care, the usual response of health authorities to the staggering problems mentioned above has been to demand more resources, to equip more hospitals with more advanced technology, and to train still more doctors and nurses. There was a growing feeling of dependency in the society, a feeling of helplessness that looked to physicians and high technology as the only ways to deal with the problems of childbirth and infancy. Today, there has been a shift in approach towards primary health care, and mothers and children will be the first to benefit from it.

Action to promote and protect children begins even before pregnancy, for example by such measures as wide spacing of births,

with intervals of two to three years at least, and by delaying a young woman's first pregnancy until she is physically and socially mature enough to cope with it.

Breastfeeding is one of the simplest and safest ways of ensuring adequate spacing of births. Unfortunately, it is on the wane in many places which means that there is a need to use such techniques as the pill (hormonal contraceptives), IUDs and barrier methods for longer periods of time. The consequences of this decline in breastfeeding could be dramatic. For example, if the duration of breastfeeding in Bangladesh were to decline from the current average of thirty months to less than six months, as is already happening in many urban areas of Latin America, then the use of other contraceptive methods would have to increase from 9 per cent, as it is at present, to 52 per cent just to maintain the current fertility pattern.

#### **A newborn's legacy**

A newborn's weight when it is born is a legacy for health in infancy and childhood. It may provide a boost; or it may be a handicap which can extend for years and represent a threat to the infant's health. Where low birth weight is common, affecting up to 20 or even 30 per cent of the newborn, as many as one-third of such infants die soon after birth and another one-third may perish

during infancy. This is a result of their increased vulnerability to infection and malnutrition. Even one-third of those tiny infants who manage to make it to childhood have less capacity for attaining full growth and development. Life for the low-birth-weight infant begins with a serious handicap.

Therefore, families and society should see that each child has a fair legacy by ensuring that women receive sufficient and varied food during pregnancy. They should be allowed rest and not forced to do heavy physical labour. Finally, conditions such as anaemia, still all too common among pregnant women in developing countries, should be prevented or treated.

"Modern" hospital practices developed in highly industrialized societies often owe more to the convenience of doctors than they do to sound scientific data. Many traditional practices are now being rediscovered as technically sound. For example, delivery in a squatting position, still common in many countries, allows for an easier delivery with less risk to both mother and infant, than the supposedly "modern" way, with the mother lying on her back.

#### **Dangerous traditional practices**

Delaying the first feeding of an infant, and separating it from the mother after delivery, is another dangerous practice that has crept into many countries. On the con-

## MOTHERS FIRST

MARK A. BELSEY

trary, putting the infant to the mother's breast immediately after birth helps to contract the mother's uterus and control bleeding. Breast milk itself contains protective substances and antibodies that protect the infant against germs that are present in the environment. Keeping the infant with the mother also allows the infant to build protection to germs in the hospital environment. Therefore, placing newborns in the supposedly safe, hygienic environment of a separate nursery may actually be placing them at greater risk to a variety of germs which are increasingly prevalent in hospitals.

But this is not to say that all traditional practices are good or even safe. One-half to one million infants die each year of tetanus as a direct consequence of the way in which the umbilical cord is cut and treated. By providing the traditional birth attendant with a simplified kit, consisting of a razor blade, two cord ties, clean gauze squares and a small bar of soap, and by stressing the need for cleanliness, tetanus of the newborn and sepsis could be reduced by as much as 95 per cent.

Immunizing all women of reproductive age against tetanus would make this disease as much of a rarity in developing countries as it is in developed ones.

#### Sharing responsibility

Supported by the health systems with information and appropriate technologies, families, and this includes the fathers, can share much of the responsibility for seeing that a child is growing up correctly. The use of rehydrating salts for home-based therapy can make a dramatic impact on the mortality from diarrhoeal diseases. In the case of fever, a child's mother is usually in the best position to decide whether it is serious enough to require the advice and treatment of a health worker or can be managed at home with sponging and making sure that the child gets enough food and fluid. Parents should know how important it is to keep feeding children during illness because this prevents the onset of malnutrition which so fre-

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*The foundation of adult health is laid down in childhood and adolescence. The foundation of child health is laid down during the period of pregnancy and soon after birth. Damage incurred during or after childbirth may handicap a child for life in many ways. Therefore, it is up to mothers and fathers, as well as health systems using the primary health care approach, to ensure a fairer chance for every child who is born.*

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quently follows bouts of acute diarrhoea or respiratory disease in children. Severe cases of malnutrition can lead to blindness.

Monitoring the growth of children by using a simple chart enables parents and health workers to spot inadequate growth and take action. The failure of a breast-fed infant under six months to gain enough weight, for example, can often be traced to the use of supplementary foods that are contaminated and cause diarrhoea. The failure to gain weight after six months may be due to constant infections and the parents' belief that they should stop feeding the child during illness. It may also be the result of not beginning to start supplementary feeding soon enough. It may be necessary for health workers to decide the cause but, when used by parents, the growth chart can act as a warning signal.

Immunization against diphtheria, pertussis, tetanus, poliomyelitis, measles and tuberculosis can provide a strong shield to protect infants and children. These diseases are killers in their own right but, even when they do not prove to be fatal, they undermine a child's health, making it more liable to death or disability from respiratory diseases and malnutrition.

Prevention of these diseases by vaccination is a simple and relatively cheap technique, but it requires good organization to ensure that enough children are protected and that the vaccine used is effective by being kept at the right temperature from the time it leaves the laboratory. Equally important is convincing mothers of the necessity for bringing their children in for vaccination.

The health of children today is the measure of quality of the next generation. It requires a serious investment now, by the mother, the family and the health professionals of this generation. All have a role to play, and mothers and children will profit best if they form an integral part of the web of health promotion measures that include everyone in society.

It is vital to stress that the full responsibility for dealing with mother and child health does not rest with families alone. Individuals can do just so much but their efforts must be helped through the provision of adequate health care available on all levels. This includes being able to supply the essential drugs that are needed to preserve health and prevent death. Moreover, on a larger scale, the environment, which is the responsibility of those at all levels, should be modified in such a way as to make it an ally of health rather than an enemy. The most striking example of this is the provision of safe water to replace the present insufficient water supplies which are the causes of so much illness and death in developing countries around the world.

The foundation of adult health is laid down in childhood and adolescence. The foundation of child health is laid down during the period of pregnancy and soon after birth. Damage incurred during or after childbirth may handicap a child for life in many ways. Therefore, it is up to mothers and fathers, as well as health systems using the primary health care approach, to ensure a fairer chance for every child who is born. △

--WHO

# An Immunization Programme in Dewas District

## —Successes and difficulties

WAH WONG

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*Attaining a high immunization coverage always present many difficulties at several levels—social, technical, and organizational. In the Dewas programme, launched in the winter of 1982, appropriate and well-adapted solutions were found to many of these obstacles, in large part due to the determination and commitment of the district authorities, in particular the District Collector. Through multiple, locally produced and organized means of communication—such as posters, plays, songs, etc.—the population was made aware of the value of immunization and the dates of the vaccination campaign. The vaccination sessions were conducted at the village polling stations, and were thus easily accessible. And cold boxes and the cooperation of the local ice factory solved the cold chain problem.*

*The coverage on the first round was 76%. However, difficulties were encountered on the second and third rounds: the strain on the staff, who had other responsibilities as well; the unavailability of the population, by now involved in seasonal work; and the lack of follow-up publicity to motivate the community for the second and third rounds. From the initial successes and ensuing difficulties, however, lessons have been learned for the next campaigns, and for the expansion of the programme to other districts.*

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THE International Year of Disabled Persons (IYDP) in 1981 generated a great deal of interest and activity in many parts of India, but perhaps none more so than in Dewas district, of the State of Madhya Pradesh, situated in the heart of India. There the District Collector, a member of the Indian Administrative Service (IAS) and an energetic and youthful woman officer in charge of a population of just under 800,000, initiated a series of "camps" in all six administrative blocks of Dewas district to identify disabled persons. The response was overwhelming, with nearly 3500 disabled persons attending these camps. The District Collector, with the help of voluntary agencies, organized medical doctors, orthopaedic surgeons, physiotherapists, and other health personnel to provide treatment and rehabilitation, as well as contacted banks and industries to offer training and loans for employment.

Just as this programme was under way, the District Collector, towards the end of 1981, was transferred to another post—only to be replaced by an equally enthusiastic and forceful woman IAS officer. When the new Collector presented UNICEF with a comprehensive proposal for disabled persons, the stage was set for an extensive dialogue which eventually resulted, in the summer of 1982, in a plan of action for immunization as a first priority.

### **A new strategy for polio, DPT and BCG vaccinations**

UNICEF suggested a single target—polio—because it had been identified as the cause of many child disability cases. The District Collector herself proposed that DPT be added, since both immunizations involved the administration of three doses and could as well be given together. The health authorities later recommended that BCG be included which was done in the third round of the campaign.

What distinguished this plan of action from previous ones was its insistence on taking vaccination to the villages rather than passively waiting for the mothers to bring their children to the hospitals, primary health centers, or sub-centers, which usually produced a low coverage. In the three administrative blocks selected to be covered by this plan of action, with a population of some 378 000, only 651 polio and 995 DPT immunizations had been recorded for children in 1981. Clearly a new strategy was called for, and the district authorities decided upon a small-scale mass campaign approach.

However, it was also realized that, regardless of whether a "passive" or "active" approach was adopted, results would still remain unsatisfactory unless the

mothers, the families, and the community were aware of the benefits of immunization and were motivated to bring their children forward—not just once, or twice, but three times for polio and DPT. Therefore, another major decision was to pay special attention to project support communications from the very beginning, realizing that community awareness and participation would be absolutely essential to the campaign. Everyone would be involved: the district authorities, the block officials, the locally elected village leaders, health workers, school teachers, village *chowkidars* (watchmen), and of course the mothers and children themselves. UNICEF was to play a major role in this effort.

The following steps were also agreed upon:

○ The immunization campaign would be carried out in the winter months of 1982 so as to minimize the problem of safeguarding the vaccines' potency.

○ The area of operation would be limited to half of the district, or three blocks out of six with a population of about 378 000 living in some 600 villages. On the basis of the experience gained, the programme would be extended later to the rest of the district.

○ Polling booths and schools would be used as vaccination centers because they are familiar places to the population, and are accessible; the mothers would not need to walk more than one or two kilometers on the average.

○ The local ice factory would be requested to stay open to provide ice for the vaccine carriers, just in case the refrigerators broke down. (As it turned out, this was another key decision because, through a series of unhappy events, several new refrigerators provided by UNICEF were wrongly delivered and were later found to be damaged, too late to be repaired for the first round.)

○ Doctors from the primary health centers would serve as campaign managers in their respective areas, and would provide guidance and advice where necessary. (This strengthened the credibility of the campaign. One grandfather, for example, brought his granddaughter in the second round, not for the second shot, but to complain about the abscess that had developed. The doctor on the spot spoke to the grandfather, assured him that the abscess would heal, gave him some medicine—and persuaded the grandfather to let the girl have her second shot.)

#### **Organizing the immunization programme**

An enormous amount of detailed planning and organization was needed if some 600 villages scattered

over an area of about 3000 square kilometers were to be fully covered. This work consumed much of the second half of 1982, and involved the District Collector herself as well as senior district officials, including in particular the District Panchayat Welfare Officer, the District Health Officer, and the District Administrative Officer.

#### *Selection of 252 vaccination centers*

The problems of logistics, personnel, supplies, and finance were, of course, all intertwined. As a first step, maps of the three blocks were studied in detail, and it was decided to set up 252 vaccination centers, clustering two or three villages around each center, so that the mothers need not walk too far for the immunization (there were obvious exceptions in the case for villages in remoter areas). As had been agreed, the sites selected were such well-known places as schools and government buildings which had been designated as polling stations. Thus, there was a multiplicity of centers, chosen for their convenient location, which greatly facilitated the large turn-out.

#### *Teams composed of auxiliary nurse-midwives and community health workers*

Seventeen immunization teams were organized, with three back-up teams, each team consisting of an auxiliary nurse-midwife and one or two community health workers. All 17 teams would converge on one block, beginning on a fixed day to be announced in advance, and in one week would cover all the villages in the entire block by having each team spend one day at a vaccination center. The evenings would be spent in record keeping and getting equipment ready for the next day. The week-end would be for summarizing and reviewing performance and problems. The following week the process would be repeated in the second block, and so on.

Availability of personnel posed a special problem. There were simply not enough auxiliary nurse-midwives and other staff in the three selected blocks to field 20 teams. Arrangements were therefore made to borrow from other blocks and from neighbouring districts. The fine cooperation of people outside of Dewas district was a significant factor in the whole equation.

#### *Transport and equipment*

Transport had to be organized or requisitioned so that the 17 teams could be dropped off at their designated centers in the morning and collected in the evening. Detailed schedules had to be prepared.

Board and lodging for the team members had to be arranged. Record cards and registration forms had to be devised and printed. Vaccination cards had also to be printed (the District Collector herself designed an attractive one with coloured pictures of children on one side). Arrangements had to be made for vaccines, needles, syringes, refrigerators, thermocole boxes, vaccine carriers, and ice from the ice factory. And funds had to be found for all these components.

Then 20 395 children aged 0-2 years were registered, based on records maintained in the three selected administrative blocks (Bagli, Barooha, and Sonkatch).

#### *Publicity and community mobilization*

UNICEF, in addition to providing some polio and BCG vaccines, refrigerators, a few motorcycles, and printing costs for the vaccination cards, focused on project support communications. A booklet on polio was produced in the local language; a polio song was written and taped; a photo exhibit was prepared; posters were designed.

Keenly aware of the need for full community participation UNICEF and the district authorities, with the help of government extension educators, organised a pre-campaign orientation for the block-level officers, *sarpanches* (village headmen), school teachers, and others to solicit their support and to give the widest possible publicity to the campaign. A separate orientation was arranged for all those involved in the actual vaccination work, including the auxiliary nurse-midwives, community health workers, and health guides, with special attention to logistics, the cold chain, and other related matters.

#### **In the first round, a larger attendance than expected**

All of this careful preparation resulted in an astonishing first round achievement in December 1982. The days were long and arduous for the team members, but the results were very gratifying. 27 902 children turned up for polio and DPT immunizations as against the registration figure of 20 000, necessitating the hasty despatch of additional vaccine. The thermocole boxes worked well for moving the vaccines from central stores to the primary health centers. The small vaccine carriers, filled with ice, were used by the teams to do their daily work (it was found, by trial and error that three vaccine carriers per team was the ideal number to keep the vaccine cool for the whole day, since extra ice was needed from time to time).

The children were brought by their parents and grandparents, by older sisters and brothers, and it

was impressive to see dozens of women and children at a time converging on the vaccination centers, the children waving the gaily decorated cards. Although the target age group was 0-2 years, it proved to be impossible to turn away the older children between 3 and 5 years who were also unvaccinated.

To arouse and sustain public interest, plays about polio were performed on market days. Local leaders held public meetings in the village squares to discuss the benefits of immunization. The village *chowkidar* (watchmen) went up and down the lanes, beating his drum and spreading the message, surely one of the oldest forms of communication in the country. Village children led processions, singing songs. Walls were painted with slogans. Large banners were displayed outside the centres. A voluntary agency devised a car sticker which appeared on all government and other vehicles and trucks in the area. Extension workers and volunteers made door-to-door visits to encourage attendance. In short, there was excellent community involvement and participation.

#### **A fall in attendance for the second and third rounds**

The enthusiasm generated in the first round began to diminish by the second round in January 1983, when only 15 303 children out of 27 902 came back for their second dose of polio and DPT (54.84%). It was interesting to observe that, despite the crying and pleading by virtually every child (after all they had already experienced the first shot!), the parents and older siblings who had brought them for their second shot were quietly determined that the immunization should proceed.

However, it was also very disheartening to observe, in village after village, that hardly any of the older girls had gone to, or were attending school; yet these are the future mothers of the community. It is one thing to read in cold print about the low literacy rate for females in Madhya Pradesh (15.5%); it is quite another to actually talk to bright, attractive girls who are living proof of that statistic. Thus, out of this immunization programme, there has also developed a determination to move forward in the area of female education and literacy, focusing on practical measures to enhance the situation of girls and women in the villages.

In the third round, which took place in February 1983, achievements sagged badly: only 11 424 children (40.94%) came for their third dose of polio and DPT (plus BCG).

*What were the reasons?*

First, there was the seasonality factor. Every year at this time, entire families go to the sugar factories to seek seasonal employment. It was also the time of year for festivals and weddings, and there was much coming and going of families visiting each other. A sampling of households to find out the reasons for non-attendance revealed that, in addition to the search for employment and the movement of families, illness (either in the child or in the family) was a factor, as well as those cases of "addressee not traceable".

Also, many of the available personnel (including doctors, assistant nurse-midwives, multipurpose health workers, and health guides) were involved in other important national programmes, such as family planning and the prevention of blindness, and by the third round the strains on staff time were beginning to tell.

And the momentum and excitement generated in the first round began to subside when no further publicity efforts such as staging plays and holding meetings were made for the third round, on the assumption that they were not needed.

#### **A fourth round to decrease the drop-out rate for polio**

At this point the District Collector, who was monitoring the results on the basis of daily returns and spot visits, made a key decision. She announced a fourth or "mop-up" round in order to improve the overall performance for polio. (Due to the very hot summer weather and the increased risks of abscesses, administering the DPT and BCG vaccines was not considered to be advisable.)

Because of the excellent recording system which had been established, it was possible to identify not only the villages which had the lowest returns and therefore needed the most attention, but also the households of children with incomplete immunization. Thus, children with only one dose recorded were tracked down and given their second and third doses, while those who had had two shots were similarly followed up and given the completing dose.

This effort, sustained over the period March/April 1983, resulted in a final and noteworthy achievement of 21 315, or 76.39% of 27 902 children for all three doses of polio. The coverage for DPT remained at 11 302 children for all three shots, but the final total for two shots rose to 18 716, as many children came for their second shot during the third round. The total number of BCG vaccinations came to 16 998,

as a certain number had also been administered to school-age children who had come just for the BCG.

#### **Maintenance and extension issues for the future**

What are the next steps for Dewas?

*First*, the district authorities will need to decide on the maintenance phase for the three blocks recently covered by the campaign. While the coverage was good for polio, there are still many children, somewhere in those 600 villages, who are not fully immunized. There will also be, of course, the new-borns.

*Secondly*, the other three blocks of Dewas district will need to be covered, with roughly the same population (about 400 000) and therefore with approximately the same child population to be covered (28 000). Will the political will and determination be maintained for these blocks as well? And can the same degree of community participation be invoked?

*Thirdly*, when the entire Dewas district is covered with an effective EPI programme, as a basic measure to prevent childhood disabilities, what about the other components of the comprehensive plan prepared in 1982, which includes treatment and rehabilitation as well as prevention?

#### **Some first conclusions**

In summary, what were some of the lessons learned from the Dewas experience?

1. It is possible to implement an effective immunization programme for young against the five preventable diseases, provided there is sustained community involvement and participation, based on adequate attention to communication, publicity, and orientation for the *entire* duration of the campaign.

2. A mass campaign approach is very effective in covering the back-log of unvaccinated children. Indeed, in view of the long hot summers when keeping vaccines at the right temperature is so difficult, mounting small-scale mass campaigns for three or four months during the winter period as a regular practice may be preferable to a year-round immunization schedule.

3. A fourth or "mop-up" round should be built into the programme from the beginning because many children miss the first round and come for their first

*(Contd. on page 155)*

# Health Care Delivery

## NEED OF SOCIAL ORIENTATION

DEVI SARAN SHARMA

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**There is a need of a sound and socially oriented health infrastructure for the proper delivery of health care services and dissemination of health education to improve the health status and health behaviour of the people. Therefore, the author feels that the teaching of general principles and theories of social work should be included in the medical curriculum.**

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**I**NDIA has made considerable progress in all spheres of life including health. A number of epidemic diseases like smallpox and plague have been eradicated. The death rate is showing a downward trend and years are added to life due to the improvised health care facilities and augmentation of public health services. Despite this people are still suffering from a number of communicable and disabling diseases. This situation is thwarting the physical, mental and social well-being of the people and thereby affecting the economic progress of the country.

Since we have to achieve the goal of 'Health for all by 2000 AD', with several other countries of the world, the health care facilities and health awareness should reach universally to all who seek and need them. This needs a sound and socially oriented health infrastructure for the proper delivery of health care services.

India has necessary health infrastructure for the delivery of health care services and dissemination of health education to improve the health status and health behaviour of the people. The fact has also been highlighted when the project 'IMPACT-INDIA'—an international project to prevent and cure avoidable disablement in India was launched.

Still we find that our health care delivery system has some limitations. These limitations are:

1. *Approachability*:—The services need to be conveniently accessible to those who seek them. Patients belonging to lower socio-economic groups should know that they will get proper care and attention in

clinics and hospitals. Another important thing is that such services should be within the reach of the people.

2. *Social variables*:—The importance of social variables in illness has been accepted by the medical scientists but sometimes the practice of these variables has not been adequately recognised in the health care delivery system. The negligence of social variables renders health care delivery ineffective and un-conducive to the common people. The consideration of patients' socio-economic and psychological situation is indispensable to have an interdisciplinary approach for complete and far-reaching results of therapy.

3. *Community participation*:—Participation of the community in planning, implementation and monitoring the programmes should form an essential aspect of the health care delivery system. It should also take into consideration the essential health needs and available resources of community. Community participation or involvement is one of the important components of 'Primary Health Care'.

4. *Communication*:—The health care services are not satisfactorily utilised due to lack of communication between the providers of these services and the consumers. Most of the providers are not properly trained in communication or fail to build rapport with the patients. This situation adversely affects the extent and nature of utilisation of the facilities and impact of services rendered. Proper communication is essential not only for the acceptance of diagnosis but also for the administration of treatment.

5. *Decentralisation of services* : Generally the major resources for the delivery of health care are concentrated in large cities. Even the minimum medical help sometimes is not reaching to those who need it most.

Most of the above limitations can be removed if the health care delivery and its providers are socially oriented. An effort in this direction may be possible by making some modifications in the education and training of those who are the providers of health services. It requires the reoriented thinking in medical education. But it is not the fault of education alone. It is the duty of the teachers and trainers who by modifying the training curriculum relevant to the circumstances and needs, can improve the quality of the future doctors.

#### Training through community involvement

The responsibility of social orientation of providers is to be undertaken by the teachers, particularly by the teachers of community medicine. For the task, alongwith teaching theories at lecture theatres they will have to come out of the lecture theatres in the community to teach by examples with particular emphasis on 'Primary Health Care'. This will be a team approach to training and service through a peripheral health centre, well equipped with possible medical technology and drugs. The health team during the community visits will have the opportunity to see closely the social and environmental conditions in which the community members live and fall ill. The team will also get an opportunity to see various illnesses at various stages. It is, therefore, important to see a patient when his illness is at an early stage, and when the cure and control is both easier and economical. This is only possible when the health services are provided through community involvement. Health services through community involvement, by improving community's health awareness, shall certainly enhance the utilisation of health care facilities and the chances of prevention of various communicable diseases. The team can give advice on nutrition and sanitation and educate people to take care of health by themselves.

Practical experience will also give opportunity to the team to develop insight into the health and health education needs of the community. The process will also enable the community to become self-reliant in health matters.

During such community visits the health team will know the difficulties of those who are helplessly suffering from preventable and easily curable diseases and need their help. The process consequently will help create a generation of 'socially oriented' physicians.

#### Some suggestions

The author who is working as medical social worker on the health team of the Department of Social and Preventive Medicine in a Medical College, feels that the teaching of general principles and theo-

Dr H.C. Agarwal, Assistant Director General (Health Administration) of the Directorate General of Health Services has been looking after the work of Director, Central Health Education Bureau, since 10th May, 1984 vice Dr B.C. Ghosal who has joined the South East Asia Regional Office of the World Health Organization, New Delhi, as Short Term Consultant.

ries of social work should be included in the medical curriculum ;

Trained social workers may be appointed in all hospital settings to help the doctors understand the social variables and problems in hospitalisation ;

The health services should be strengthened with sufficient staff and facilities like drugs and technology with particular emphasis on primary health care ;

Efforts should be made to accomplish sectoral and inter sectoral cooperation and coordination.  $\Delta$

(Contd. from page 153)

shot only in the second (or even third) round. Thus, stopping at three rounds would be self-defeating.

4. An adequate cold chain can be maintained by tapping local resources, in particular the ice factories or other commercial cold storage facilities which are found in many areas. If this is done, the provision of refrigerators at every point may be useful but not absolutely essential.

5. Above all, there must be political will and determination at the highest level in the community and district to carry out the entire campaign, *knowing* that there will be the inevitable problems of staffing and finances. With that political will, such problems can be solved (as the Dewas experience proves so well); without it, problems will remain as immovable obstacles.

6. Finally, as so aptly stated in *The State of the World's Children*, 1982-1983, (James P. Grant, Part I, published for UNICEF by Oxford University Press, Oxford, 1982, p. 24.) just as political commitment can achieve results, "so achieving results can help to bring about that commitment". The Dewas EPI experience has stimulated several other districts to send observers to see how it can be replicated. And, at the highest levels in the State of Madhya Pradesh, the Health Minister was recently heard to say that EPI along the lines of Dewas should be carried out throughout his state: a formidable challenge, considering that the population of Madhya Pradesh is over 50 million. The coming weeks and months will prove to be a time of testing for Dewas—and UNICEF.

—Courtesy: Assignment Children, 61/62, 1983

# The slums of Bombay

V. SRINIVASAN

THE 8,230,000 inhabitants of Bombay, capital city of Maharashtra, receive their health services from a variety of sources. The Bombay Municipal Corporation (BMC) Health Department is the main government agency involved, though the State Government runs one of the teaching hospitals, and various other schemes cover certain sets of employees. Compared to the rest of the State, the city spends an enormous amount on its health. The BMC health budget is almost a third as large as that of the Directorate of Health Services and the Directorate of Medical Education and Research for Maharashtra, which makes the BMC's per capita expenditure roughly double that for the rest of the State. Its government doctor/population and public bed/population ratios are also extremely high compared to the rest of the State.

Moreover, there is a huge private sector in the city's health; private practitioners and private facilities more than match the public ones. Of the city's 104 larger hospitals, 69 are private, and provide over 9,000 beds; this figure does not include the enormous numbers of nursing homes and maternity homes. Of course, these private facilities are beyond the income of much of the population.

Over the last year, the Corporation spent almost twice as much on

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Over half of Bombay's population lives in slums and pavement dwellings. The author suggests that the existing public health services should be targeted very largely towards the poor, since the purchasing power of other section of the society can command adequate facilities.

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the health of each citizen as was spent on the health of people living in the rest of the State. How much good has this done? How is the health of the citizenry, especially its poorer sections? In attempting to answer this question, the first point to note is that there is a remarkable paucity of data on the subject. Over half of Bombay's population lived in slums and pavement dwellings, but studies relating to them are few, and no study exists of the patterns of morbidity and mortality among this population. Statistics from non-health-oriented sources have to be partly relied upon in forming a picture, and it is at best an impressionistic picture. This absence of data reflects a more general tendency not to target and plan for the health of the urban poor.

Some insight into their conditions is given by data collected from medical examinations concluded at municipal schools in 1966, 1971 and 1975. Admittedly, these children come from poorer-than-average backgrounds and the accuracy of the information is somewhat suspect; nevertheless, the findings indicate that the morbidity rate among poor children is over 80 per cent, and has remained unchanged over the decade 1966-75. The principal causes of death among children—pneumonia, anaemia and tuberculosis—have remained essentially unaltered. Whatever improvement took place in the infant mortality rate from 1965 to 1978 (a drop from 96 to 71 deaths per thousand live births) could perhaps be attributed less to changes in general health conditions—the causes of death have remained roughly in the same proportions—than to a dramatic decline in the age of the new mothers. The picture that emerges is that, despite the expansion and sophistication of facilities theoretically available to them, the health status of the urban poor has not been dramatically changed over the past two decades.

Again, the birth rates of the city and the State are much more similar than one would expect, given the higher literacy, women's education, women's employment and vulnerability to the mass media of the urban population. What has gone

wrong with the city's family planning programme?

An improvement in the infant mortality rate would aid the family planning programme, the need for which is increasingly acute. During the 1970s, the share of immigration in the growth of the city's population declined, and the largest share went to natural growth; and the changing sex ratio of the immigrants indicates that the earlier influx of males has been followed by the arrival of their wives. Thus in attempting to minimise the pressure on the city's resources, the family planning programme acquires added importance.

Not surprisingly, the commonest ailments among slum-dwellers can be traced largely to their environment. One household survey taken in 1972 found that the most common ailments were gastro-intestinal disorders (19%), fever (17%), typhoid (15.5%) and tuberculosis (9%), while coughs, jaundice, measles, and smallpox each accounted for 4.5% of the cases.

The BMC spends twice as many rupees per capita as the rest of the State, yet the health of its poor is not substantially better (and for all we know may be substantially worse) than that of their rural counterparts. Can the reasons for this failure be found less in a paucity of funds, and rather in the nature of the services provided by this network?

It is clear that what public health facilities exist should be targeted very largely towards the poor, since the purchasing power of other sections of the population can command adequate facilities. This strategy, however, is not being pursued at present. For instance, few of the city's 157 public dispensaries are located in the slum areas, although it is universally acknowledged that good access promotes usage.

### **Emphasis on curative care.**

The overwhelming emphasis of the BMC's health budget is on curative care. "Health care" in the Municipal Budget is conceived of essentially as an activity that takes place in a hospital or clinic; the lack of out-patient services and the total lack of outreach services is remarkable. Of the BMC's total budget, only 13.57 per cent goes into preventive health measures, as compared to 38.67 per cent of the State budget.

Another example of the bias towards curative services is the amount spent on the training of doctors: 7.17 per cent of the total budget. Most of these doctors enter private practice, which limits their utility to the general public (and many do not even stay in Bombay). Could not a fraction of that expenditure be channelled into training or recruiting less sophisticated medical personnel, and using them in outreach services?

The existence of such a large network of private care suggests that it might be more cost-effective for the Government to put into effect conditional, targeted programmes of aid to private facilities so that they provide care to the poor. Certainly such conditions could be attached to any proposed expansion of private services.

Data is urgently required on the health of the poor. What are the major diseases? How do these correlate to various income groups? What income groups or social or ethnic groups use the health facilities most, and why? What is the diet of the citizenry and where do they obtain it from? How exactly do they get access to water? The centralisation that is natural to urban areas makes it far easier for such data to be collected. With them, the BMC could then commis-

sion a host of studies on the epidemiology of the city—a totally neglected subject, and one that urgently needs to be examined if the health services are to be properly targeted.

### **Outreach Services**

The disadvantages of an urban environment are mostly self-evident: the existence of large slums; the insanitary production of food; congestion which allows for the easy spread of diseases such as tuberculosis and leprosy; a social situation which contributes to the spread of sexually transmitted diseases, air pollution, road accidents and occupational hazards; and the total absence of the type of outreach infrastructure that has been developed for rural India since 1949. Not all of these disadvantages fall within the jurisdiction of the Health Department, but the list indicates the size of the problem.

The most obvious advantage for health delivery in a city is the relative proximity of all areas to health facilities, and the availability of transport, making them even more accessible to all. The possibility of easy referral from one facility or one level to another exists, and it is easier to monitor such long-term out-patient treatment as for tuberculosis and leprosy. Various other forms of centralisation also take place—people gather at their place of work, education, worship, and entertainment, and one can take advantage of these naturally occurring congregations.

### **Mass media campaigns**

The higher rate of literacy, the higher ratio of women who have had some education and of employed women, and the omnipresence of the mass media suggest that health education campaigns—for family planning, hygiene, road safety and so forth—can have much greater impact.

What major changes could be effected in the health strategy for the city?

### School health

Most children attend schools, either municipal or private, so this should translate into an extremely high rate of immunization against the commonest diseases. But health education should also be made a top priority in the curriculum. A vigorous scheme for detecting diseases among school children should involve not only periodic check-ups by doctors but also some elementary training of the teachers in detecting symptoms.

Similar use can be made of work places for disease detection and health education. Trade unions and employees' insurance schemes can get involved in such programmes since they are in their own interests.

A large-scale and systematic use of the mass media for health education is desirable. In this respect, the government has a large amount of free advertising space. Every bus and every train could carry posters about the simple signs of tuberculosis and leprosy. Other measures can easily be taken; for example, any company renting hoarding space could be required to commit a certain percentage to the BMC Health Department. The advantage of universal literacy among the middle and upper classes means that leaflets on preventive health measures for these income groups could be quite cost-effective. (Even their hypochondria can be intelligently exploited!) Television and the cinema are other areas where health education can be disseminated.

### Voluntary agencies

The mass media can be better used to solicit donations and recruit voluntary help. There has been

## Polio-free Madras is goal of Impact-India Campaign

Free of Polio by 1985—that is the goal of a campaign launched in Madras on 30 April, 1984, by the steering committee for Impact-India, South.

During the next year and a half in the city of six million, an estimated 200,000 children under six years of age are to receive three doses each of oral polio vaccine in a door-to-door campaign. This is expected to prevent any new cases of the disease in Madras. Worldwide, an estimated 500,000 children are affected by polio every year, most of them in about 70 developing countries in tropical and subtropical areas with poor sanitary conditions.

The campaign will involve volunteers, government, private industry, non-governmental organizations and the mass media. For the first time in Madras, these groups will come together as active partners in a massive effort to plan and implement a public health scheme. About 2,000 volunteers have begun visiting some one million homes in the city to identify children in need of immunization. Names of pregnant women identified in the door-to-door survey will be given to a local representative who will ensure that newborn babies are immunized.

An initial 100,000 doses of oral vaccine are being provided by the Save the Children Fund in the United Kingdom, and more donations are being sought. A major private sector manufacturer of refrigeration equipment in India will guarantee the transport of all vaccine donated for the campaign. The vaccine will be temperature-controlled to ensure that no deterioration takes place. The volunteers, who carried out the screening, mobi-

lized from all walks of life, will administer the vaccine, which can be given by anyone with only a minimum of training.

Transport has been requested for the volunteers from the Madras Municipal Bus Company. Where Municipal buses are too large to enter the Streets in slums, the Police Department has agreed to provide police vans. City authorities will close each street to vehicular traffic while vaccine is being administered.

Impact-India is the national arm of the worldwide impact programme. A joint initiative of the United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), it aims to promote low-cost measures to prevent disability, which currently afflicts one out of 10 people worldwide. Its approach is typified by the Madras campaign which is not creating any new structures, but working within existing programmes and relying largely upon local resources.

The Madras campaign is the first major activity by Impact-India following the nationwide (and global) launch of Impact in New Delhi on the anniversary of Mahatma Gandhi's birthday in October 1983. During the six weeks of the launch three governments and 120 non-governmental camps were organized for the treatment of disabilities. At least 30,000 operations were performed for the restoration of sight, movement and hearing.

—U. N. Weekly News Letter.  
4 May, 1984

no systematic attempt to aid, network and target the existing voluntary agencies, yet their cadres naturally display special commitment and loyalty. Aiding such agencies and various social work organiza-

tions and attaching certain conditions to aid, could be much more cost effective than the BMC executing the same tasks itself. There are also vast untapped sources of voluntary labour in the city. Bombay has

thousands of university students who have ample time for political organizations, debating clubs, musical societies, and so on. A programme whereby volunteers could give a few hours a week toward the delivery of some health service might prove highly fruitful. Moreover, the ethical make-up of the urban middle-class is such that a large number of housewives are ripe for recruitment by appropriate charities.

#### Slums need attention

But the most important line of attack is the development of a large-scale outreach programme. This need not cover the whole of the city's population, but should at least cover the 4,700,000 who live in slums and on the pavement. It need not exactly imitate the set-up in rural India, but the experience of that programme should be used. A programme for the slums might have as its target that for a population of 5,000, there should be

one full-time auxiliary nurse midwife and five part-time health guides. Their duties would include immunization, ante-natal care, disease detection, health education and so forth. Roughly 1,000 such units would be required in order to cover the whole slum population.

An estimated increase or re-allocation of only about five per cent in the health budget could engender a dramatic change in the city's health status. The early detection of tuberculosis and leprosy through such a network, combined with the ready availability of drugs and the relative ease of monitoring, could lead to the total eradication of these diseases from Bombay. The infant mortality ratio could really be improved, through the ante-natal and infant care provided, and the family planning programme could also take off from such a network. Since about half the city's babies are born under 2,500 grammes (the crucial weight that decides the

chances for survival), a feeding programme for expectant mothers is also vital. Its expense could certainly be justified by a further reduction in the infant mortality rate and advantages to the family planning programme.

Finally, there are more ambitious methods which could also provide major health benefits. Foremost of these, since such a large percentage of the diseases and illnesses are related to or aided by the slum environment, would be a large-scale "sites and services" programme combined with slum upgrading. Under such a scheme, the government would, by laying out plots of land, instituting proper sewerage disposal and providing drinking water, be striking effectively at the root of the problem. In fact, *any* attempt at slum upgrading can clearly be seen as a positive health measure!

—World Health  
Sep., 1983

## TIPS FOR BETTER HEALTH

- \* Get your child immunised by vaccination.
- \* Get your child booster dose of immunisation at appropriate time.
- \* Get the pregnant mother regular pre-natal check-up.
- \* Get T. T. vaccination for pregnant mothers.
- \* Get delivery of child conducted by trained personnel.
- \* Get the proper registration of birth of the newborn.
- \* Delay the marriage till at least 21 years of age for male; and 18 years for female.
- \* Delay the arrival of first child, space the second and stop the third.
- \* Consult Family Welfare Centre for free family planning services. You may now avail free M.T.P. services, if needed.
- \* Consult the doctor at the Primary Health Centre/Dispensary for advice on weaning and nutritional needs of growing children. Breast-feed the child for his proper growth.
- \* Keep the surroundings clean.
- \* Avoid eating from unhygienic places.

—Centre Calling, July-August 1983

# HEART ATTACK

DR M. L. BHATIA

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**Prevention of a heart attack is the best way of dealing with it. By changing one's lifestyle and correcting the risk factors that one can control and improve the chance of living a longer, healthier life.**

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**H**EART attack is lay man's term for coronary occlusion, thrombosis or myocardial infarction in medical terms.

Heart attacks occur when the blood vessel (Coronary artery) supplying fresh blood to the heart for its nutrition is suddenly blocked off, thereby cutting off the blood supply to a part of the heart muscle.

## **Cause of a heart attack**

The commonest disease leading to such situation is athero-sclerosis wherein fat (cholesterol) is deposited on the inner lining of the coronary artery. The gradual accumulation of the fat may ultimately compromise the lumen sufficiently enough to interfere with blood flow. When the blood flow ceases suddenly due to the obstruction, the result is a heart attack.

## **Warning signals of a heart attack**

The usual warning signals are:

Uncomfortable pressure, pain, fullness or burning sensation in the centre of the chest for several minutes on longer, generally at rest. It may be shortlasting or persist for hours.

Discomfort and pain may spread to the shoulders, arms, jaw and sometimes to the upper part of the abdomen.

Severe pain, dizziness, fainting, vomiting, sweating, or shortness of breath may accompany the above feelings. Sometimes these may be the only sensations without any significant chest symptoms.

The signals may not always be present or severe. In many instances they may subside to return hours or days later.

The signals of heart attack are not the same for everyone and may vary from very intense for one to

mild symptoms for another. These are not infrequently misinterpreted as indigestion.

## **What to do in case of a heart attack**

Heart attack can strike anyone. When it occurs there is no time for delay. Most heart attack victims survive if they recognise the early warnings of heart attack and get prompt medical attention. *Therefore, get help immediately.* Reach your doctor or a hospital casualty department as soon as you can. Till you get, medical attention:

- Avoid physical exertion,
- Rest in a comfortable position,
- Losen tight clothes, and
- Avoid chill or excessive heat.

## **Emergency care**

Hospital care is the safest for a heart attack victim. Most modern hospitals treat such patients in a coronary care area where special equipment, drugs and trained medical, para-medical personal are available to look after the patient.

With prompt and proper care the heart begins to heal. New blood supply to the damaged part is established. Later scar tissue forms at the site of the damaged area. The process of healing varies from person to person.

## **What is to be done later**

Rehabilitation can begin sometimes after the heart attack. It requires the full cooperation of the patient as well his family with the doctor-nurse-dietitian and physical instructor team. The patient may require medication, changes in diet and physical activity and other measures. A firm family support is essential and a positive outlook is of great impor-

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## HEART AT WORK

About six in every 100 workers on average suffer from a heart condition and the incidence increases with age. Its manifestations include palpitations, cardiac rhythm disorders and insufficiency, precordial pain, angina pectoris, fainting fits. Lesions may bring on a heart attack—the number one killer in industrialised countries.

But if a person has a cardiac condition, "it does not necessarily follow that his job should be changed, or that he should be classified as 'handicapped worker' or that he should no longer continue to work", says a new Encyclopaedia of Occupational Safety and Health, of the I.L.O.

It challenges several preconceived ideas about cardiacs at work; they generally don't have higher absenteeism or more occupational accidents than other workers and their work capacity is not necessarily diminished provided they are in suitable jobs. In fact it seems that many persons who have undergone heart surgery even increased their performance once they recovered. So much for good news.

Now for caution: no cardiac should be employed without a detailed medical examination which alone can show whether or not he is fit for a job.

—UN Weekly Newsletter  
24 February, 1984

tance. Patients who recover from a heart attack sometimes have to change their lifestyles. *Most of them return to work.* Continued guidance and follow-up by the doctor is important. It varies from each individual, varying according to a long term health plan drawn by the doctor for the patient.

### Prevention is best

Everyone can reduce the risk of a heart attack since atherosclerosis can be prevented or slowed by decreasing coronary risk factors.

High blood pressure, a diet high in cholesterol and saturated fats and cigarette smoking are important risk factors of heart attack. Daily stress, obesity and lack of exercise are also disadvantageous. Most of these are correctable. Unchangeable risk factors include age above 45 years, male sex and heredity.

By changing one's lifestyle and correcting the risk factors that one can control and improve the chance of living a longer, healthier life.

July 1984

Prevention of a heart attack is the best way of dealing with it.

**It is never too late to change harmful habits. Decide today.** △

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## HEART DISEASE EXPLANATION

Australian researchers have found what may prove an explanation for the statistical link between heart disease and risk factors such as cigarette smoking and emotional stress.

They said that although such conditions had been known to place sufferers at risk, the lack of scientific evidence to explain the link had inhibited the development and implementations of preventative measures.

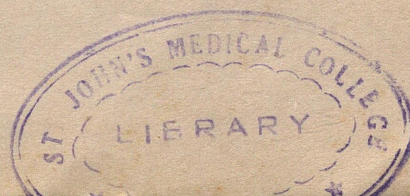
Dr. Neville Ardlie, who led the team from the Australian National University's John Curtin School of Medical Research, said the link might be due to the surge of hormones, such as adrenalin, which results from such conditions. This increase in hormone activity had been found to stimulate the clumping together of blood platelets—the small circulating cells which bunch together to prevent bleeding from open wounds.

Dr Ardlie said it had already been established that blood platelets contributed to the development of both hardening of the arteries and blood clots which in turn led to heart disease. The possibility that surges of adrenalin could lead to the aggregation of blood platelets had first been investigated more than 10 years ago without positive results. But improved techniques for studying platelets had meant they could be more successfully separated from human blood. Recent tests had contradicted the earlier findings by showing that surges of hormone which commonly occurred during period of stress, or as a result of cigarette smoking, were sufficient to promote the clumping of platelets.

While this process could be demonstrated in the laboratory it would take further research to determine conclusively whether the same pressures occurred within the body.

Dr Ardlie said that in recent years individual behavioural traits and social-environmental conditions had been increasingly linked to the development of heart disease. These factors could help to explain the presence of coronary artery disease in people with normal blood fat levels and normal values for other traditional risk factors, he said.

—A. I. S.



## Legislation against smoking in developing countries

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*The rise in smoking in the developing nations is a challenge that can best be met by international dialogue and collaboration. It is only by this true partnership that meaningful action can be deployed on the same transnational scale that characterises the tobacco industry.*

*There is an increasing need for regular exchange of information, research and comment. Health professionals in all countries have a special responsibility to the public in regard to the smoking problem. Not only should they set an example by refraining from smoking, they should also be well informed and articulate when speaking at meetings with officials, or during contacts with the mass media.*

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**T**HERE has been a marked increase in smoking in developing countries, but the number of countries which have introduced legislation has also increased to about 60. This is a threefold increase since 1976. This information was given at the Fifth World Congress on Smoking and Health in Winnipeg, Canada, recently.

The problem of smoking in developing countries was a major theme at the Congress, which was held under the sponsorship of the World Health Organization (WHO), the International Union against Cancer (UICC), and the International Union on Health Education (IUHE).

The more than 1,000 representatives from nearly 80 countries also included a strong contingent from

the developing countries. This reflects a policy decision by the Congress planning committee, and the move was generously supported by the Canadian, Danish, and Swedish development agencies.

### **International exchanges**

Participants in the discussions drew attention to the need to encourage more communication between developed and developing countries, including exchange of models of legislation, information on the marketing strategies and advertising methods of the industry, and assistance with campaigns of public education. They suggested that WHO should coordinate and help mobilise this kind of international action, in collaboration with the FAO, World Bank, ILO, EEC, etc., and with non-governmental bodies such as UICC.

### **Political Action**

There was a warning by the Indian writer and journalist Uma Ram Nath of the importance of counter-acting advertising campaigns in developing countries. She drew attention to the steady increase in smoking in India, and noted that the habit is often linked by advertisers with social status and an economically successful life-style. "It is because these images are being planted, particularly in the minds of young people, without being contested, that smoking continues to grow as a habit in India", she declared.

The importance not only of information and education programmes, but also of political action, including restriction of advertising, was stressed by Dr Abdul Rahman Al-Awadi, Kuwait Minister of Public Health and Chairman of the WHO Expert Committee on Smoking Control Strategies in Developing Countries.

"Where no tobacco industry exists, developing countries should be encouraged to maintain the status quo. Where such an industry does exist, efforts should be made to reduce its role in the national economy, and to explore alternative uses for land and labour", he declared.

### Seeking markets

In their search for new areas of market expansion, tobacco advertisers are also targeting on women. This was pointed out by Canadian Health Minister, Monique Begin in her inaugural speech at the Congress. Declaring that smoking is "the single most important preventable cause of illness and death", the Canadian Minister announced her intention of taking firm measures to deal with the problem, including raising tobacco taxes.

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## GENERAL ASSEMBLY SETS LIMITS

At a plenary session in September 1983 the UN General Assembly agreed to ban smoking in small conference rooms, and to 'discourage' it in large conference rooms. The step was taken at the suggestion of Dr Halfdan Mahler, WHO Director General. Conference rooms have been no-smoking areas at WHO for several years, and a similar measure was recently introduced in conference rooms at the World Intellectual Property Organisation (WIPO) headquarters in Geneva. Moves to limit smoking are also being studied by the staff union of the UN Industrial Development Organisation (UNIDO) in Vienna, Austria.

Participants also drew attention in this context to the development of subtle new marketing strategies by the industry in relation to so-called 'mild' cigarettes. A major element in the industry promotional campaigns is to persuade women to smoke such cigarettes, and Dr Joanne Luoto, director of smoking and health at the U.S. Department of Health and Human Welfare, told delegates that in the U.S. alone tobacco companies spent more than \$80 million on advertising in women's magazines in 1980.

### Recommendations of the Congress

\*Ministries of health to make progress reports to the next World Congress, particularly in regard to

advertising restrictions, warnings on packets, sales to minors, and education programmes.

\* Production and export of cigarettes with a tar yield of more than 20 milligrams should cease worldwide.

\* All tobacco products to carry a health warning and precise labelling of tar, nicotine and carbon monoxide levels.

\* W.H.O. should be asked to carry out an assessment of the tobacco problem Worldwide.

\* A World No Smoking Day should be held annually.

The next World Congress, which will be the sixth, will be held in Kitakyushu, Japan, in 1987.

—Tobacco Alert, December, 1983

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## BAN ON ADVERTISEMENT OF CIGARETTES

Smt. Mohsina Kidwai, Minister of State for Health and Family Welfare informed the Lok Sabha on 26 April, 1984, that "in accordance with the provisions of Cigarette (Regulation of Production, Supply and Distribution) Act, 1975, the manufacturers are required to display on every cigarette packet/advertisement/, hoarding the statutory warning: 'Cigarette Smoking is injurious to health'. It has also been decided that All India Radio and Door-darshan would not accept any advertisements which encourage smoking. Since there is no ban on production and trade in cigarettes it is difficult to consider a blanket ban on display of advertisements in public places. However, in all such cases the display of the statutory warning is enforced. The Department of Sports have issued instructions recently prohibiting display of hoardings pertaining to liquor and cigarettes in the Asiad Stadia".

## W.H.O. Seminar on Smoking and Health

The growing incidence of cigarette smoking, particularly among the young in developing countries, is assuming menacing proportions. In the process, it has become a major public health concern.

To examine the present situation and evolve suitable guidelines to implement various initiatives to curb this dangerous habit, which accounts for nearly 30% of all cancers, an inter-country seminar organized by the W.H.O. South-East Asia Regional Office in collaboration with W.H.O./Headquarters and the Swedish International Development Agency opened in Kathmandu on 21 March, 1984.

Attended by senior health officials from six countries in the Region, the seminar discussed and further developed national programmes aimed at smoking control. Considering the well-established, relationship between tobacco chewing and oral cancer and cigarette smoking and lung cancer, the seminar attempted, among other things, to examine the issue in a larger perspective as more than mere health interventions are required. For instance, the question of crop substitution, legislation, health education and introduction of other regulations which would prohibit the sale of cigarettes to the young, as in the case of alcohol, would need to be examined in the context of the economic issues involved.

As the W.H.O. Regional Director South-East Asia Dr U Ko Ko, said in his message to the seminar, there was no longer any doubt that the tobacco habit, consisting of smoking or chewing tobacco, was directly related to serious health hazards. It was estimated that globally, about a million people die as a direct or indirect consequence of the tobacco habit. Eighty per cent of cases of lung cancer were associated with smoking. An equally high or perhaps a higher percentage of cases of oro-pharyngeal cancer, one of the commonest cancers in several countries of the South-East Asia Region, was associated with the chewing of tobacco. Chronic bronchitis, ischaemic heart disease and also certain adverse effects on the foetus in pregnant women smokers were the other health consequences of the use of tobacco, the Regional Director said.

Stressing the need for effective action based on the appropriate education and information of the population, the seminar urged the Member countries to take stock of the situation in order to develop a sound programme against smoking.

The seminar also focused attention on how to prevent children and adolescents from acquiring the habit of smoking, and simultaneously, to wean smokers from the habit. The need for research in finding ways of making tobacco less dangerous, both for smoking and chewing, was stressed. The fact that precious forest resources were consumed in large quantities for the tobacco curing process was also highlighted.

—W.H.O.

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### Smoking of Bidi more harmful than cigarette

Smt. Mohsina Kidwai, Minister of State for Health and Family Welfare, informed the Lok Sabha on 26 April, 1984, that *Bidi* was more harmful as it contained higher percentage of tar and nicotine which had carcinogenic potentials. No survey had been made in regard to the smokers of *bidi*. However, as a part of the Consumer Expenditure Survey conducted during 32nd round during 1977-78, it was estimated that consumption of *bidis* in all classes in rural areas was around 46% against 33% in urban areas.

Mass health education/publicity campaigns on the hazards of smoking had been/were being undertaken through publications, magazines, Radio, T.V. and films. In addition adequate educative programmes in the form of slide projections, distribution of leaflets, posters, etc., stressing the harmful effects were being undertaken from time to time in the adjacent areas by the nine Regional Cancer Centres and 24 Early Cancer Detection Centres which had been set up and receiving Government's Grants in Aid under Cancer Research and Treatment Programme.

Another step was inclusion of a chapter on health hazards of smoking in text books for students of classes IX and X under Central Board of Education.

Industrial establishments and labour associations were engaged in educating their workers about the hazards of smoking.

## A Study

# HEALTH STATUS OF PRE-SCHOOL CHILDREN IN RURAL COMMUNITY

SURESH CHANDRA, GOPAL KRISHNA & V. K. SRIVASTAVA

THE modern medicine, psychiatry, sociology and social work has opened new doors to the understanding of needs of the child and of the services required to meet those needs. It is a fact that healthy development of the child is of basic importance, and his ability to live harmoniously in the changing environment of today is essential not only for his normal growth but also for normal activity. The child is a country's greatest asset and his welfare should be the country's greatest interest. The health condition of pre-school children is closely associated with the socio-economic conditions, environment factors, genetic characteristics, optimal health care and magnitude of health services available to them. In our country approximately 80 per cent population is living in rural areas under primitive conditions, and the morbidity and mortality rates are quite high among children in rural areas. The need for providing sufficient comprehensive health care is of utmost importance.

In rural India, the health care services are being delivered mainly by Primary Health Centres (PHCs) and their sub-centres. The villages with sub-centre headquarters have the benefit of getting better health services while the villages of remote areas lack the privilege of getting such health services. Uneven medical and health services in these two areas may result in uneven health status of children. A study has been carried out to know the effectiveness of health and medical care services provided by sub-centres of Primary Health Centre, Kalyanpur, Kanpur. Out of selected villages of both intensive and twilight areas, the pre-school children were enlisted. One thousand seventy three and 942 pre-school children were enlisted in both intensive and twilight groups respectively. 50 per cent children were selected for study from enlisted groups.

It was found that D.P.T. and Polio immunisation status was better in intensive area.

### IMMUNISATION STATUS OF CHILDREN

Immunisation	Intensive Service Area		Twilight Service Area	
	Immunised	Not Immunised	Immunised	Not immunised
B.C.G.	16	480	—	440
D.P.T.	84	412	56	384
Polio	84	412	40	400

Healthy children were recorded more in intensive area than in twilight area. It was found that the Vitamin A, Vitamin B deficiencies and anaemia were more in pre-school children of twilight area.

### Prevalence of deficiency disorders in Pre-school children

Disorder	Intensive area (N=496)		Twilight area (N=440)	
	No.	%	No.	%
P.C.M. Gr. I	172	34.68	112	25.45
P.C.M. Gr. II	68	13.71	148	32.64
P.C.M. Gr. III	20	4.03	28	6.36
Vit. A Def.	204	40.22	212	47.48
Vit. B Def.	8	1.61	36	8.18
Anaemia	316	68.55	344	78.18

It was recorded that morbidity status of pre-school children was very high in twilight area.

Morbidities	Intensive area (N=496)		Twilight area (N=440)	
	No.	%	No.	%
Skin infection	100	20.16	104	23.64
G.I. disorders	64	12.90	92	20.90
Respiratory diseases	176	35.48	208	47.26
Pyrexia	8	1.61	28	6.36
Adinitis	340	68.55	384	87.27

It was recorded that immunisation status was better in intensive area of Kalyanpur Primary Health Centre. Health status of pre-school children of intensive area was also better. The morbidity pattern was recorded very high in twilight area. Deficiency disorders were high in pre-school children in twilight area. The non-utilisation of health services largely affected the occurrence or morbidities and deficiency disorders in pre-school children of rural areas. In view of the above study the following recommendations are made:

1. To check the occurrence of various preventable diseases in rural areas, and action plan on priority basis be implemented by Primary Health Centres to cover the remote areas and more sub-centres should be opened.
2. Prospects for incentives should be made for health personnel to achieve certain landmarks in specific field.
3. Effective nutrition and health educational services should be provided to mothers specially in remote areas.
4. Community Health Volunteers should be utilised for active participation in expansion of mother and child health services.
5. The Integrated Child Development Service's Scheme should be implemented in every block.
6. The infrastructure of health service agencies should be expanded to the limit that no area should remain as twilight.

△

## ON FAMILY PLANNING

### WILL AYYAMPALAYAM BE THE POINTER ?

**D**EVOID of fan-fare and publicity, silent and intensive family planning measures are at work in the village of Ayyampalayam situated in Gopichettipalayam of Periyar district, Tamil Nadu. Shri T.V. Antony, Second Secretary to Government, Tamil Nadu, who had visited Ayyampalayam vilage some time back in his capacity as the Chairman of Tamil Nadu Milk Producers' Federation has stated that he has been impressed by the remarkable progress shown by the village, in the matter of acceptance of family planning concept. Many families in that village have not more than one child. In other cases, families have only one male and one female child. Since the villagers are strictly adopting the family planning concepts, the population in that village has remained more or less the same for the last five years. Encouraged by the statement made by Shri T.V. Antony, press people visited the village and interviewed a few of the villagers.

Each family in that village has to spend a lot of money by way of dowry, jewels, etc., when they have to celebrate the marriage of a daughter. Therefore, when the first-born child in a family is a male child they stop further deliveries. If the child is female one, they expect the next child to be a male one. If the next born is also a male, then there will be no further issues in the family. If that next born happens to be a female, then they resort to birth control measures. 'Not more than two issues', has become the motto of the villagers in Ayyampalayam.

The teachers of that village have also resorted to family planning and are mainly responsible for educating the villagers and persuading them to fall in line with them.

Majority of the villagers are enlightened. Many of the women folk have studied upto VIII Standard.

It is not a wonder that teachers who are well versed have resorted to family planning, but it is really surprising how there has been an awakening among the ordinary villagers who are steeped in tradition.

Viswanathan, who is a labourer doing contract work in a canal; Eswari, an educated house-wife; Royappan, an agriculturist; who were interviewed, spoke in praise of family planning scheme and explained how they

have been benefited by that scheme. Ayyavu, who was engaged in casual labour; Chinakali, a washerman; and Subramaniam, a carpenter; who were also interviewed expressed the benefits they were able to get by adopting family planning scheme. Shri A.K. Palaniswamy, who is working as a clerk, in Ayyampalayam Cooperative Agricultural Society, told that the villagers did not want fragmentation of their small land holdings by increasing family and hence, they zealously observed family planning. Palaniswamy has two daughters and he told that he would undergo family planning operation in a few days.

The villagers are thrifty and have educational facilities. This village with the population of above 5000 has not come into lime-light, although it has gained high achievements in the matter of family planning. Perhaps, there may exist hundreds of villages in Tamil Nadu with similar awareness in family planning as in Ayyampalayam.

When one returns from Ayyampalayam, he is sure to reflect and exclaim 'Oh! Ayyampalayam! Will you not lead other villages in India in the field of family planning'.

*(Based on an article rendered from the Tamil Journal 'Ananda Vikatan', dated 4 March, 1984).*

### TAMIL NADU GOVERNMENT EMPLOYEES SUPPORT FAMILY PLANNING

Government employees of Tamil Nadu have assured the Government that they would extend their cooperation of all kinds for the success of the family planning programme. They have also decided to celebrate the year 1985 as a 'No Delivery Year'. This was decided in a resolution passed by the leaders of 27 State Associations of Government Employees at a meeting on 24 February, 1984. The text of the resolution is:—

- (i) We, the Government employees of Tamil Nadu, have realised the necessity of Family Planning Programme which is considered as an important programme both by our Government and the

Central Government. We assure the Government that we shall extend our cooperation of all kinds for the success of this programme.

- (ii) We resolve wholeheartedly that to reduce our family responsibilities after retirement, we will not produce more than two children, and we will not produce any children after the age of 33, and also we will request our friends and relatives to adopt similar principles.
- (iii) As a symbol of our resolve and to ensure the welfare of our existing children, we will take all steps to ensure that in our families no lady, except those who are newly married, conceive during this year. As a result of this and to ensure the welfare of our existing children, we will celebrate the year 1985 as a 'No Delivery Year'.

## FACTS ON WORLD POPULATION

\* World population may reach 500 crores by 1988. This is the projection of world population prepared by the Population Reference Bureau.

\* World population was estimated to be 467 crores in 1983. The report covers all member countries of the UN and all other countries with population of 1.5 lakh and above.

\* For the last 20 years the birth rate has fallen in some developing countries while longevity has risen. Birth rates are 33 per 1000 in Less Developed Countries (LDCs) and 15 per 1000 in More Developed Countries (MDCs).

\* Women in the reproductive age group in the LDCs have 4 to 5 children while in MDCs they have only one or two. With this ratio, the LDCs will double their population by 2025 AD.

\* Death rates are almost similar. It is 10 per 1000 in MDCs and 12 per 1000 in LDCs.

\* Infant mortality is 93 per 1000 in LDCs and 19 per 1000 in MDCs.

\* Life span is 73 for MDCs and 58 for LDCs.

\* MDCs have a calorie supply of 134 per cent of a person's minimum requirements and LDCs 101 per cent.

—PIB

## BE WELL WITH THE PILL

Today, 60 million women in the world use oral pills for proper spacing of children.

It is one of the many methods of family planning. The pill is an oral contraceptive. A woman has to take a pill everyday, preferably at a fixed time, for 21 days, beginning on the fifth day of her menstrual cycle. A break, even once, can defeat its purpose. The pills come in packets of 21. Each packet contains seven tablets which contain iron. These tablets help eliminate anaemia, caused by excessive loss of blood during menstruation. They are available in all cities and Primary Health Centres. After the Drugs and Cosmetic Act was amended, trained paramedical personnel and health guides also started distributing pills, even though, only doctors were permitted to do so earlier.

When the next baby is wanted, the woman stops taking pills. Pregnancy during the first cycle after stopping pills can cause difficulties. Sometimes the after-effect of pills may harm the baby if pregnancy occurs during this period. Therefore, when a woman on pills wants another baby, it is better to use barrier methods of contraceptives such as sheaths for at least three months to avoid conception.

The pill should not be used by women who have cancer, liver disease, jaundice, diabetes, vaginal bleeding, heart disease or high or low blood pressure. Women below 35 are most suited to be on the pill. The pill user should not have visual disturbances or epilepsy or severe allergies. Nursing mothers also are usually advised not to go on the pill. If a woman has any of these troubles, she is examined medically and pills are advised only afterwards.

If a woman has been on pills for more than five years without any trouble, she may continue. It reduces pre-menstrual pain and symptoms of tension and regularises the menstrual cycle.

At the first instance, a woman may go on pills for a continuous period of three years. It would be advisable for a woman on pills to see her doctor at least once a year.

—PIB

# HEALTH IN PARLIAMENT

## LOK SABHA

1 March, 1984

### RISE IN CHILD DEATHS DUE TO MALNUTRITION

Smt. Mohsina Kidwai, Minister of State for Health and Family Welfare, in a statement said "there are no survey reports to indicate the exact number of children who die due to malnutrition. However, according to the sample survey carried out by National Nutrition Monitoring Bureau in 10 states in the country, child malnutrition is fairly widespread in 1—5 years age group. This group runs a greater risk of deaths due to various infections and infestations.

According to available information the World Health Organization and the UNICEF have not compiled any data regarding deaths of children due to malnutrition in India. International agencies like W.H.O. and UNICEF have recommended certain health strategies to reduce infant deaths due to malnutrition by 2000 AD. The Government of India have formulated a National Health Policy and one of the objectives laid down is to reduce the infant mortality to the minimum by 2000 AD through better health care at the primary health level.

The following measures have been initiated to achieve this objective:

#### (1) Maternal Care

Particular emphasis have been given to provide ante-natal care prophylaxis against nutritional anaemia, protection against tetanus and availability of trained personnel for ante-natal and post-natal care.

#### (2) Infant and child care

In order to overcome the problem of malnutrition among children the Government is implementing the following supplementary nutrition programmes through various Ministries.

*Prophylaxis against Vitamin A deficiency* : Under which a massive dose of Vitamin A solution is being given to children in the age group of 1—6 years throughout the country.

*Prophylaxis against nutritional Anaemia* : Under this programme tablets of Iron and Folic Acid are being distributed to children suffering from Anaemia.

*Mid-day Meal Programme* : This programme is for the benefit of primary school children throughout the country.

*Special Nutrition Programme* : This is being implemented for children below six years of age and expectant mothers and is in operation in urban slums, tribal areas and backward rural areas.

*Balwadi Nutrition Programme* : This is for the benefit of children in the age group of 3—5 years and is being implemented in rural areas.

*Integrated child development services* : Under this programme a package of services such as supplementary nutrition, immunisation, health check-up, referral services and non-formal education is being given to expectant and nursing mothers in backward, rural and tribal areas and urban slums.

Besides Governmental agencies, voluntary organisations, local bodies as well as International Agencies like W.H.O. and UNICEF are assisting the Government in this Direction."

### GOITRE AND ITS ERADICATION

Smt. Mohsina Kidwai, in a statement on goitre and steps taken to eradicate it, said, "Goitre is a non-communicable disease caused by deficiency of iodine in food and is characterised by swelling of the thyroid gland in the front part of the neck. Nearly 40 million people are suffering from this disease in Sub-Himalayan region—Jammu & Kashmir, Himachal Pradesh, Punjab, Assam, Sikkim, Uttar Pradesh, Mizoram, Gujarat, Meghalaya, Tripura, Nagaland, Arunachal Pradesh, Maharashtra, West Bengal.

Surveys conducted indicate that areas where iodised salt has been properly used, the number of goitre cases has decreased.

To tackle the disease, the National Goitre Control Programme is in operation in the endemic areas with focus on the supply of iodised salt for human con-

# BOOKS

## **RETRIEVAL FROM RETARDATION : WHAT COMMUNITY CAN ACHIEVE WITH PROFESSIONAL HELP.**

Kulkarni, J. L. *Medical Service* 1983 Nov; 40(9) : 5-7, 9.

Mental retardation is irreversible at present levels of scientific knowledge and medical competence. But in most cases it could have been avoided even in an adverse context of poverty. The extended arm of professional support enables a community to be aware of and escape the common causes of mental retardation. Citing the example of work done at Srimati Motibai Thackersey Institute for Research in the Field of Mental Retardation, author identifies the three elements in managing mentally retarded children—(i) prevention (ii) early detection and intervention, and (iii) rehabilitation. Various modes of managing these three aspects are discussed and several suggestions are offered in this area.

## **BOOM OR BUST : FUTURE OF HEALTH PROFESSION EDUCATION.**—Garza, D and Evans, D. W. *Journal of School Health* 1983 Oct 53(8) : 494-8.

The future of allied health education depends on the nature of economic, social, political and health trends. It behoves educators and administrators to consider such trends as dramatic outbacks in educational funding, revision of Medicare and Medical hospital reimbursement policies, establishment of diagnosis related groups (DRG), increasing technology, the wave of conservatism and the ageing population. The effect on the health professions is speculative, however, knowing these trends and properly preparing revising and reorganizing for them will keep allied health educational programme viable. This paper addresses the trends and their impact on education.

—Highlights from *Current Health Literature*, Vol. III, No. 5-6, March '84

—Courtesy : *National Medical Library*, New Delhi-29.

sumption. The programme which is run in close co-operation with the State Governments consists of identification of goitre endemic zones through Central Survey, banning of sale of non-iodised salt in the identified zones by the concerned State Governments, channelisation of iodised salt to the identified areas with the help of the Salt Commissioner of India and subsidisation of the cost of iodisation of salt by the Government of India. The actual extension of the programme to all endemic zones is dependent upon the coordination of all these activities.

In order to further strengthen the programme, the State Governments have been advised:

- (1) To encourage commercial production of iodised salt both in the public as well as private sector to meet the requirements of iodised salt of their endemic areas.
- (2) To set up goitre control units in their State Health Directorates.

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- (3) To lift the entire allocated quota of iodised salt.
- (4) To strictly enforce the provision of the PFA Act banning the sale of non-iodised salt in the goitre endemic areas.
- (5) To set up State level coordination committee on goitre control programme for its effective implementation.
- (6) To keep constant monitoring and evaluation of the programme.

Ministry of Railways have also been advised to extend their full cooperation by providing the required number of railway wagons for movement of iodised salt (covered wagons) on priority basis.

A high level coordination committee has also been set up under the Chairmanship of Union Health Secretary to review the Goitre Control Programme at the Central level." △

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