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CHILDREN'S DAY-1986

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OBJECTIVES

Swasth Hind (Healthy India) is a monthly journal published by the Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, New Delhi. Some of its important objectives and aims are to:

REPORT and interpret the policies, plans, programmes and achievements of the Union Ministry of Health and Family Welfare.

ACT as a medium of exchange of information on health activities of the Central and State Health Organizations.

FOCUS attention on the major public health problems in India and to report on the latest trends in public health.

KEEP in touch with health and welfare workers and agencies in India and abroad.

REPORT on important seminars, conferences, discussions, etc., on health topics.

OUR COVER

Children are the most vulnerable group in the community who suffer more from various communicable and other diseases and malnutrition. Breastfeeding and traditional weaning diet offer safeguards against these diseases. *Our cover* shows supplementary feeding of a child. We devote this issue of *Swasth Hind* to Children's Day, observed every year on 14th November, in the country.

In this Issue

Editorial and Business Offices

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HEALTHY CHILDREN : INDIA'S FUTURE

Dr (Smt) Niharika A. Nath

Children below 14 years of age constitute about 40 per cent and those below five years of age 12.9 per cent of India's population of 750 million. And they account for 50 per cent of the total mortality in the country. Why do these children die young ?.... The need is for adoption of an educational *cum* service approach and its delivery by each and every category of health and family welfare worker including doctors, social workers etc. to reduce childhood morbidity and mortality.

SEVEN HUNDRED AND FIFTY MILLION people of India live in an area of 3,287 square kilometres. Roughly forty per cent of this large population is constituted by children below fourteen years of age. Children below five years of age constitute 12.9 per cent of the total population and account for approximately fifty per cent of the total mortality in the country. When the mortality figures are translated in absolute number: the total number of children under five years of age who die every year is 10 million. Why do these children die so young? And can the country prevent these deaths? It is a stark truth that death cannot be prevented. But, untimely and early deaths can certainly be prevented, or at least reduced to a very small number.

Malnutrition in children

To-day, an invisible malnutrition touches the lives of approximately one-fourth of the country's children. It quietly steals away their energy, it gently restrains their growth, it gradually lowers their resistance. And, in both cause and consequence it is interlocked with the illness and infections which both sharpen and are sharpened by malnutrition itself. Perhaps, as many as half of all the cases of severe child malnutrition are precipitated not primarily by the lack of food but by intenstinal parasites, fever and infection—especially diarrhoeal diseases which depresses the appetite, burns the energy and drains away the body-weight of the child. As a result, a number of children in the country die of malnutrition and infection every day. And, for every one who has died, six children live on in a hunger and ill-health which will be forever etched upon their lives.

No statistics can express what it is to see even one child die in such a way, to see a mother sitting hour after anxious hour leaning her child's body against her own, to see her anguished eyes seeking help at the last hour. And, even if she gets help at the last hour, it is too late to save the life of her child. Perhaps, all it does is to provide some solace to her dwindling hope against life itself.

But, to allow one-fourth of the children to die like this is unconscionable in a country which has mastered the means of preventing it. A number of schemes and programmes of supplementary nutrition have been launched by the Government and by voluntary agencies to curb this problem and it is earnestly hoped that malnutrition amongst children will be completely eradicated by the turn of this decade.

Besides malnutrition, children also suffer from deficiency diseases in India. About 85% of the pre-school-age children have anaemia, and 25,000 children in the same age-group become blind every year due to vitamin A deficiency. One hundred and eighteen million children belonging to 0-14 years age-group live below the poverty line and suffer from inadequate calorie intake, resulting into retarded physical growth and lack of energy.

Universal child immunization

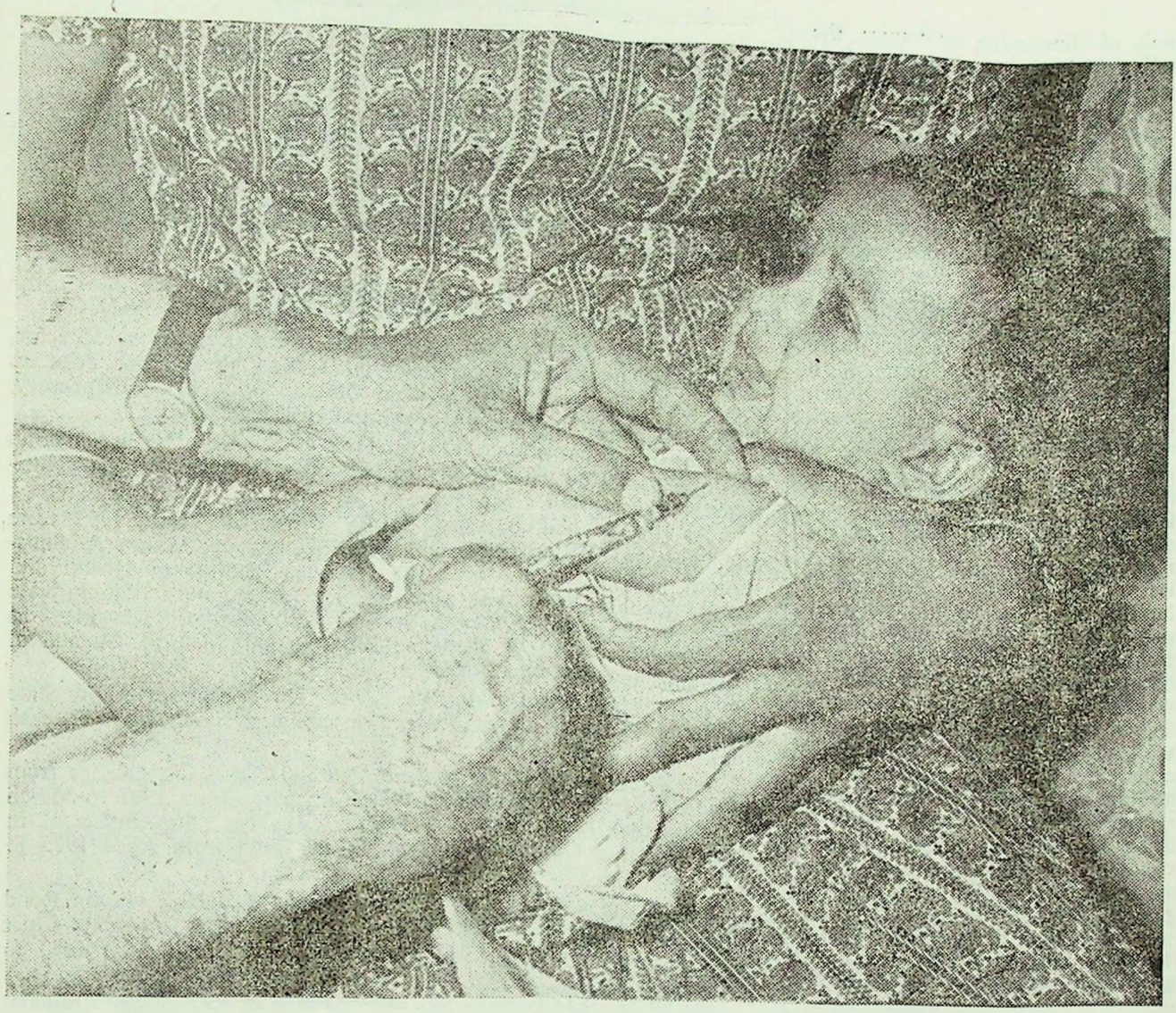
A positive step taken by the Government of India to safeguard the health of the children and pregnant mothers is to set a target to immunize 85% of infants and pregnant mothers by 1990 against six vaccine-preventable diseases. The coverage will be extended over a five-year period in a phased manner immunizing about 13 million infants and 24 million mothers every year. This programme will ensure greater child survival and a sudden drop in childhood mortality. The six diseases for which 85% of infants will be immunized are measles, diphtheria, whooping cough, tetanus, poliomyelitis and tuberculosis, which, combined together, kill almost one million children every year. Ninety per cent of children under five years of age suffer from measles every year, 3% of them dying due to bronchopneumonia or encephalitis. Another 12% of these children develop other complications like diarrhoea, respiratory diseases, etc. Measles also seems to have an adverse affect on the vitamin A status of the child causing corneal lesions and keratomalacia.

At present, the programme is being implemented through 30 districts and catchment area of 50 medical colleges. It will be expanded to cover all the districts by 1990. The sensitivity to heat of several vaccines has constituted one of the main constraints to the expansion of immunization programme. But, work is now under way on the development of more stable and more effective vaccines and already major improvements have been made. Measles vaccine, for example, can now be carried on patrol to reach rural populations further away from centres with refrigeration facilities.

The cost of immunizing a child has also decreased and with each of these possible interventions, the improvement of children's lives will be as dramatic as prevention of children's deaths. For, such diseases are also major causes of malnutrition. Whooping cough, for example, can induce malnutrition by the frequent vomiting which its coughing fits provoke. Measles itself claims ten per cent of body-weight in one-fourth of all cases and halts weight gain for several weeks. And incomplete as it would be, immunization of all children against the major diseases would also be an 'indirect' immunization against malnutrition itself. Any increase in protection against malnutrition would, in its turn, reduce the risk of infection.

Oral rehydration therapy

The discovery of oral rehydration therapy (ORT) and its use is a breakthrough in preventing diarrhoeal deaths due to dehydration. Diarrhoeal diseases kill maximum number of children every year compared to any other childhood disease. Shortage of clean water, infrequent washing of hands, unsafe sanitation, and the lack of health education means that the average child in a poor community will have anything between six and sixteen bouts of diarrhoeal infection each year. Often, the mother's response is to withhold food and fluids. And the result is that the child is malnourished by both the illness and the treatment. Each episode of infection can increase malnutrition. Each increase in malnutrition increases the risk of infection. Each



The Government of India have launched the Universal Immunization Programme in the country. The objective is to provide protection to all the expectant mothers and children against six vaccine-preventable diseases by the year 1990.

period of weight loss, broken only by the plateaux of partial recovery, leads the child further down the broad steps of malnutrition.

Most children recover. But many fall into sudden and severe dehydration. In only two or three days, 15 per cent of body-weight can be lost. And at this point, death is away between one and two hours only. This is not a mere theory. It kills children every minute. And previously it could only be treated by qualified nurses or doctors using expensive intravenous feeding in an often inaccessible hospital. With the discovery of oral rehydration therapy, it can be treated by a mother giving her child the right mix of sugar, salt and water in her own home.

Birth spacing

There is an apparent conflict between child survival and bringing down the population growth rate in the country. It is a conflict which is dissolved by time. For, when people become more confident that their existing children will survive, they tend to have fewer births. That is the principal reason why no nation has ever seen a significant and sustained fall in its birth rate without first seeing a fall in its child death rate.

Historically, when overall death rates make that first steep fall from around 40 per 1,000 as a

result of eliminating epidemics, the decline in birth rate follows a long way behind. The result is rapid population growth. But history has also revealed that when overall death rates have fallen to 15 per 1,000 people in developing countries, then each further fall of one point in death rate has usually been accompanied by an even larger fall in the birth rate. It was seen in Thailand between 1960 and 1980 that a seven-point fall in death rate (15 to 8 per 1000) was accompanied by a 14-point fall in the birth rate. Therefore, to bring down the birth rate to a significant level, India will have to strive hard to bring down infant and child mortality. Availability and utilization of family planning services can shorten the time-lag between falling death rates and falling birth rates. The availability of family planning services would in itself have a crucial part to play in improving the health of mothers and children and reducing the rate of infant mortality. For, too many births too close together undermine the health and the nutritional well-being of both the mothers and the children. A survey of 6,000 women in South India, for example, showed that the death rate among infants born within one year of each other was approximately 200 per 1000 as opposed to 80 per 1,000 among infants born three or four years apart. Therefore, making the family planning services more accessible, is one of the most important steps which can be taken to reduce the infant mortality and increasing the health of both mothers and children.

OUR NEW DIRECTOR

Dr (Smt.) Vishva Kirti Bhasin has taken over as the Director, Central Health Education Bureau on 1 September, 1986. Prior to this, Dr Bhasin was Chief Medical Officer, Minto Road Dispensary, New Delhi under the Central Government Health Scheme.

Born on 8 September, 1931 at Dera Gazi Khan, Dr Bhasin is no stranger to the readers of *Swasth Hind*. For, she has been a contributor to this journal.

Dr Bhasin had obtained MBBS degree in April 1953 from S.N. Medical College, Agra and M.D. (Community Health Administration) in March 1981 from the National Institute of Health and Family Welfare, University of Delhi. This is the only Post-graduate Degree in the field of Health Services Administration recognised as a distinct speciality of medicine both by the Medical Council of India and the Government of India.

After obtaining her MBBS degree, Dr Bhasin served in State Service as PMS(W) in medical/health care delivery in Uttar Pradesh from 1953 to 1957.

Dr Bhasin worked as Medical Officer, CGHS dispensaries from July 1957 to 1961 and Medical Officer-in-charge from 1962 to March 1975 in New Delhi. She was Deputy Medical Superintendent in Kalawati Saran Children's Hospital, New Delhi from April 1975 to 1978.

Dr Bhasin was Medical Officer Incharge, Dr Zakir Husain Road Dispensary, New Delhi from 1982 to 1983. Later, she became Chief Medical Officer, Minto Road Dispensary, New Delhi from 1983 to August 1986.

Dr Bhasin has participated in a number of workshops, seminars, conferences, symposiums, etc. in the field of health and family welfare.

Dr Bhasin with a special interest in writing has contributed articles on health in various magazines. She was awarded Dr. C.L. Sahni award for her best paper by the Indian Medical Association in 1984-85.

Health education

Illiteracy clubbed with ignorance is abundantly prevailing in Indian women. Not only that they are illiterate and ignorant, even their parents are bound by age-old customs and practices leading to the marriage of their daughters at young age. Health education of parents, young girls and mothers, therefore becomes essential for them to undestand the issues related to mother and child's health, prevention of infant morbidity and mortality, right age of marriage and spacing between child-births. Young girls in schools or outside the school must learn about motherhood, family planning methods available to prevent unwanted births, spacing of children and its advantages for betterment of their own health and that of their future children. These girls should be exposed to sessions on population education which include sex education, and implications of having a large family on socio-economic status of their family. Mothers should receive education on family planning, child-rearing, personal hygiene, role of immunization during pregnancy and for prevention of diseases amongst their children, use of ORT when their children have diarrhoeal infection and nutritional requirements of children at different age-groups. The educational efforts should be sustained and complemented with provision of services. Unless an united educational-cum-service approach is adopted, and is delivered by each and every category of health and family welfare worker including doctors, social workers, etc., a dent in the reduction of childhood morbidity and mortality cannot be seen. India has been independent for the last 39 years, and it is time that her children are born independent and free of diseases. ●

IMPACT OF MOTHER'S EDUCATION ON INFANT FOOD SUPPLEMENTATION —Contribution of Health Education

DR S.C. GUPTA

Although the poor educational attainment of the mothers adverselly affects the inclusion of semi-solid food into the diet of a child, yet it can be checked through health education.

TWICE the percentage of mothers having a higher educational level than those with a lower educational level introduced the semi-solid food to their children at the age of four months. The lower the educational level of the mother, the lesser is the inclusion of semi-solid food into the diet of a child at an appropriate age. Among the illiterates and primary pass (1-5th class) mothers, 6.1% and 41% of the mothers respectively delay the inclusion of semi-solid food into the diet of their children up to the age of eight months. At every educational level of the mothers, who introduced semi-solid food to their children within five months of their birth are those mothers who were repeatedly exposed to health education feeding practices among the children. Although the poor educational attainment of the mothers adversely affects the inclusion of semi-solid food into the diet of a child, yet it can be checked through health education.

There are enough data which reflect that infant's food supplementation at an appropriate age has a far reaching positive influence on the child health. (Cowan, 1982 ; Jelliffe, 1955; Ghosh, 1979 and Kent 1981). With regard to the above statement WHO, 1979; Maniar, 1979 and Martin, 1975 have reiterated that breast-feeding among the infants must be supplemented at the age of four months to six months. Similarly, Cowan (1982) and Jelliffe (1955) also concluded that inclusion of semi-solid food into the diet of a child at an very early age, *i.e.*, within four months, also got an adverse effect on the growth and development of a child. Sen (1954) and Jelliffe (1955) have observed that in certain families, owing to the various rituals and ceremonies, the inclusion of semi-solid food into the diet of a child is delayed. Ghosh (1979) and Gupta (1981) have also cited that the mothers' higher educational level often has a positive association with the timely introduction of semi-solid food to the child. In view of the above fact, an attempt has been made to investigate that to what extent the mother's education is exactly associated with an infant age at food supplementation? Secondly, to what level the above correlation can be modified through health education? Keeping in view the existing literature it was hypothesised that health education promotes the inclusion of semi-solid food ino the diet of a child at the appropriate age among the low educated mothers.

Materials and methods

This study was limited to the City of Ludhiana in Punjab. The total sample consists of 300 children (0-2 years) and their mothers. Of the total sample, 100 respondents were selected through systematic random sampling procedure among the mothers, who delivered their children in the Christian Medical College, Ludhiana. These mothers were repeatedly exposed to health education on scientifically recommended child feeding care during antenatal clinics, postnatal clinics and hospitalization for delivery services. The remaining sample of 200 respondents was drawn through stratified random sampling method. Data were collected with the help of a structured schedule. The services of paediatricians, obstetricians, medical and nursing students were also availed of for strengthening the health educational drive before the onset of data collection.

Analysis of data

Infant food supplementation is the process by which foods rather than breast-milk are introduced. Therefore, first of all an effort was made to study the impact of mother's educational attainment on the food supplementation. Table I presents data on the same.

Table 1

Respondents by education of mothers and children about four months of age at which the semi-solid food was introduced

Education	0—16 weeks	17—24 weeks	25—32 weeks	33—40 weeks	41—48 weeks and above	The total number of cases 100%
Illiterate	..	16.7	22.2	22.2	38.9	18
Ist—5th class	..	23.1	34.6	14.4	26.9	26
6th—8th class	3.4	16.7	33.3	23.3	23.4	30
9th—10th class	..	31.3	21.8	23.9	22.9	96
Undergraduate	6.1	42.4	27.3	15.2	9.1	33
Graduate and above	9.1	45.4	23.0	15.9	4.5	44
Total %	2·7	31·6	25.9	20·3	8·9	247
Total number	7	78	64	50	22	247

Table 1 shows that on the whole an inclusion of semi-solid food into the diet of an infant is not common. A very negligible number of mothers did not keep the infants on exclusive breast-feed up to four months. Twice the percentage of mothers having a higher educational level (above 10th class) than those with a low educational level started giving the semi-soid food to their children at the age of four months. On the other hand, about four times the percentage of mothers with a low educational level introduced the semi-solid food to their children after the age of eight months compared to the mothers with high educational attainment. The above findings reveal that the higher educational attainment of the mothers has an appreciable positive association with the introduction of semi-solid food to the child. From the above Table, it is concluded that the lower the educational level of the mother, the lesser is the introduction of semi-solid food into the diet of a child within four months of its birth. This shows that the poor educational level of the mother is a formidable obstacle in an early infant food supplementation. The above findings correspond with the result drawn by Ghosh (1979) and Evans *et al* (1976). The next pertinent question which arises is; to what extent the negative effect of low educational level of the mother can be modified through health education? How far health education can supplement the impact of educational level of the mother? Hence, to determine the above relationship, in the following analysis, the educational level of the mother will be controlled and then simultaneously the impact of place of delivery will be ascertained.

Table 2

Respondents by educational level and children about four months of age at which the semi-solid food was introduced to them and the place of delivery. Age at which semi-solid food introduced

Level of education	0—16 weeks	17—24 weeks	25—32 weeks	33—40 weeks	41 weeks and above	Place of delivery. Each total number of cases = 100%
Illiterate	..	13.3	26.6	20.0	40.8	Home 15
	..	33.3	..	33.3	33.3	Hospital 3
Ist—5th class	..	19.0	38.0	14.3	28.6	21
	..	40.0	20.0	20.0	20.0	5
6th—8th class	..	17.5	30.4	21.7	30.4	23
	14.3	14.3	42.9	28.4	..	7
9th—10th class	..	25.7	10.6	30.3	33.3	66
	..	43.3	46.7	10.0	..	30
Undergraduate	5.3	26.3	10.5	26.3	15.8	19
	7.2	42.8	50.0	..	..	14
Graduate and above	4.3	30.4	26.1	30.4	8.7	23
	14.3	61.9	23.8	..	..	21
Total number and %	2(1.2)	42(25.1)	34(20.0)	43(25.7)	26(27.5)	167
	5(6.2)	36(45.0)	30(37.5)	7(8.7)	2(2.5)	80

The findings show that health education promotes the inclusion of semi-solid food into the diet of a child at an appropriate age (4–6 months) among the low educated mothers.

Table 2 shows that at every educational level, the mothers who introduced the semi-solid food to their children within four months of their birth, are over represented among the mothers, who delivered their children in the hospital. However, as is apparant from the above Table, the impact of health education in the context of the introduction of semi-solid food to the child, is more operative among the mothers, having higher educational attainment. It is evident from the above Table that although the poor educational attainment of the mother adversely affects the inclusion of semi-solid food into the diet of the child, yet it can be checked through health education. The above findings show that health education and general educational level of the mother are complementary and supplementary to each other and they have a striking association with the infant food supplementation. If we divide all the respondents into low (0-10th class) and high (undergraduate and above), it is quite evident that the above findings are in agreement with our hypothesis, *i.e.*, health education promotes the inclusion of semi-solid food into the diet of a child at an appropriate age (4-6 months) among the low educated mothers. To ascertain the validity of above hypothesis, X^2 (Qui-square) test was applied. The above test showed that our hypothesis is statistically significant ($p < 0.05$). The above observation adds to the experience of Ghosh (1979) and Jelliffe, (1979) and is in confirmity with Cowan (1982).

Health education activities regarding infants' food supplementation, therefore must be strengthened, especially among the low educated sections of woman population.

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Winning respect for health facilities

From the humblest of village health posts to district hospitals, health facilities have to command respect if they are to be socially acceptable. They need not be sophisticated, but they have to be at least considerate of people, well managed, clean and tidy in order to inspire confidence as centres for health and not focal points for disease.

—Halfdan Mahler, Director-General of WHO. Address to the Thirty-ninth World Health Assembly, WHO

BABIES—BURDEN OR BOON ?

S. V. NARAYANAN

The ICDS programme has, indeed, brought about significant changes. Independent evaluations have found remarkable improvements in child development. Infant mortality has been reduced to 88.2 per thousand in ICDS villages as compared to the national average of around 114. Immunization coverage is significantly high in ICDS areas.

In our country, as in many other nations, children are deemed as God's gift. Young couples, to whichever community they may belong, invariably pray for healthy progeny. But it is a moot point how many of these young men and women who crave for the boon of a child know how to take care of a child. That they are ill-equipped to protect the 'God's gift' is evident from the fact that of the 63,000 babies born everyday, over 7,000 die before completing their first year. This infant mortality rate of 114 per thousand births is still very high despite our concerted health care measures in bringing it down. It has been primarily attributed to poverty and malnutrition. But it must be said that in spite of poverty, our children can overcome illness and death, if only the parents and other family members know certain things they ought to know.

Mother's milk

Let us first consider the food for the infant. For the first four to six months best and complete food for the child is mother's milk. Breast milk is nature's first gift to the baby and there is no substitute for it. Nature has endowed even malnourished mothers the capacity to lactate. Hence for the infant, food should not pose a big problem at least for the first four months. There is also another important aspect—the use of 'colostrum'. The milk that flows from mother's breast for the first day or two after delivery is called colostrum. This first milk is extremely nourishing for the infant. It has been found that this first milk contains antibodies in great quantities that protect the newborn babies from some diseases and infections.

Traditionally, Indian mothers throw away the colostrum in the belief that it is not good for the health of the child. They do not know that by throwing away the first milk they are depriving their children of the best possible nourishment and protection it offers against diseases. As a UNICEF report puts it: "Colostrum" is just what the newborn needs after its birth". Every Indian family, rural and urban, should know these facts and they should be helped to overcome timeborne prejudices.

Immunization

UNICEF's 1985 report on 'The State of the World's children', referring to malnutrition, points out that in perhaps half of all cases of child malnutrition, infection is the prime cause. Immunization of children during the first year against six common childhood diseases—Diphtheria, whooping cough, tetanus, polio, tuberculosis and measles—will help the child fight its way through and pick up health. Lack of proper awareness and lack of proper motivation have led to helpless neglect and consequent morbidity or death of children. Lack of adequate facilities is also major contributory factor. Immunization coverage for the entire infant population is a must for any child development programme and this deserves to be taken up on a war footing.

It may be appropriate to refer here to the way in which the immunization programme is tackled in a country like Colombia. To achieve the objective of total immunization, major campaigns are launched on the National Vaccination Days involving the entire population. Thousands of volunteers turn up and vaccination camps are set up in schools, parks, townhalls, market places; almost every where. General Election Style, news about the progress of the work is broadcast every two hours over the Radio network there. A similar effort can be made here and it has to be made. This will create a greater awareness among the people about health and hygiene.

By building up such an awareness it will be easy to tackle another major infant killer—diarrhoea. Mothers should know that there is a very simple and very cheap way to fight diarrhoea. A simple mixture of common salt, sugar and clean water would do to avoid total dehydration due to diarrhoea. The spread of the message about this Oral Rehydration

Therapy (ORT) will start a veritable child survival revolution across the country.

This stress on the need to bridge health information gap should in no way undermine the importance of attacking poverty and malnutrition. In fact, nutritional support, education and child care facilities must all go hand in hand.

Integrated child development

With this very objective in view the Government of India introduced in 1975 its most ambitious and comprehensive plan to increase child survival rate among the poor and enhance the health, nutrition and learning opportunities of school children and their mothers. The scheme, Integrated Child Development Services has been designed to provide non-formal pre-school education, immunization, health check-ups, medical referral services, supplementary nutrition and health education for women.

The programme was first started on an experimental basis in 33 Community Development blocks. Over the last ten years it has been expanded to 1189 blocks and also to 157 Urban slums in the country. 'Anganwadis' are the converging points for ICDS activities. Each Anganwadi (or pre-school child centre) is run by an Anganwadi worker (AWW) and her helper, and usually covers a population of 1000. Anganwadis identify the poorest children below the age of six and expectant and nursing mothers in the village and render them integrated services. This includes nutritional feeding support for 300 days a year.

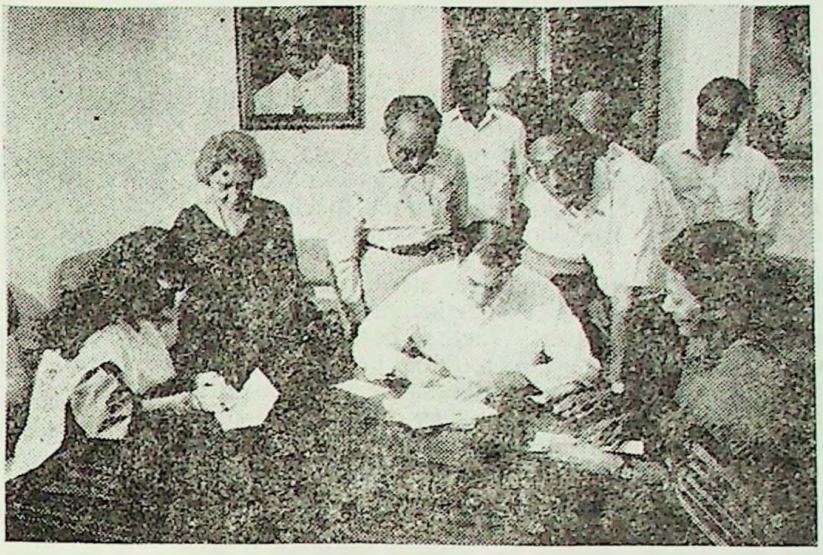
Significant changes

ICDS programme has indeed brought about significant changes. Independent evaluation have found remarkable improvements in child development. Infant mortality has been reduced to 88.2 per thousand in ICDS villages as compared to the national average of around 114. Immunization coverage is significantly high in ICDS areas. Higher child survival rate and overall improvement in the health of children in ICDS areas has changed the situation. Sick children were almost a burden but healthy ones are a real boon. This change has had its impact on family planning with better chances of survival. The birth rate in ICDS areas declined to 24.2 as against the national average of 33.3. The ICDS is thus becoming an important instrument of not only child development but also sound development in general.

Inhibiting factors

But there are quite a few inhibiting factors. The ICDS even after sizeable expansion over the years covers only 23 per cent of India's rural and tribal Community Development Blocks and just three per cent of the urban slums. The Anganwadis with very limited staff have so much work to handle that they often are not able to act effectively as catalysts of rural change.

With their concentration on pre-school activities, the Anganwadis devote much more time on children of the age-group 3-6 than the really needy group of 0-3. If they concentrate more on the 0-3 children group they would be able to achieve greater immunization coverage as well as spend some time with mothers giving them the necessary nutritional and health advice. This is essential because it has been found that the common cause for no immunization or partial immunization is lack of information about the number of doses to be given for each vaccine. In many areas, vaccination was not performed because the child was not well. The ICDS personnel must carry the



SHRI RAJIV GANDHI PLEDGES HIS EYES

The Prime Minister of India, Shri Rajiv Gandhi, and Smt. Sonia Gandhi signed the pledge for donation of eyes to the National Eye Bank in New Delhi on 25 August, 1986. The Minister of State for Health and Family Welfare, Kum. Saroj Khaparde, was also present.

Injection Technique

All of the EPI vaccines except OPV must be administered by injection. All injections must be given by trained staff using sterile equipment. Many programs need to improve both training in injection technique and supervision of vaccination sessions to ensure that proper procedures are followed.

Lack of sterilization or improper sterilization of needles and syringes has been a major problem in many immunization programs. Whether because personnel do not have time to sterilize reusable needles properly, because they reuse needles that they should throw away after one use, or because they do not understand the importance of sterile injection equipment, workers have often been seen using unsterilized or improperly sterilized needles.

Using unsterilized needles can spread hepatitis B and other viral infections. Also, questions have been raised about whether LAV/HTLV-III, the virus that causes Acquired Immuno Deficiency Syndrome (AIDS), also could be spread this way. Responding to this concern, WHO has stated:

Thus far, there has been no demonstrated transmission of LAV/HTLV-III as a result of immunization. Since the possibility exists that unsterile needles and unsterile syringes can transmit not only LAV/HTLV-III, but other infectious agents including hepatitis viruses, immunization programmes have the obligation to ensure that a sterile needle and a sterile syringe are used with each injection.

In addition to making sure that all immunization equipment and containers are sterile, workers must wash their hands often, avoid touching nonsterile surfaces, and use forceps to handle needles. Workers' hands should never touch needles during vaccination sessions.

During vaccination sessions only one vial of each vaccine should be opened at a time. At the end of the session, any vaccine remaining in the open vial and the vial itself should be destroyed, according to EPI standards. Nonetheless, personnel should not hesitate to open a new vial even if only one child remains to be vaccinated. In Egypt, for example, a 1984 evaluation team concluded that workers in many health centres needed more supervision and training because they often did not follow these standards.

Types of Equipment

There are three types of injection equipment—reusable syringes, disposable syringes, and jet injectors:

- Reusable glass or plastic syringes with steel needles are most often used. They work well, are cost-effective, and are safe when properly sterilized. To sterilize needles and syringes completely, one of the following procedures must be followed:

  Sterilize in pressurized steam (in an autoclave or pressure cooker) for 20 minutes

  or

  Sterilize in boiling water (100°C) for 20 minutes (where steam sterilization equipment is not available).

- Disposable needles and syringes are convenient, but they add to the cost and quantity of supplies that must be distributed and stored. In addition, although they are not meant to be reused, they often are, and without satisfactory sterilization. Specially designed needles and syrings that cannot be reused have been tested but are currently too expensive for widespread use.

- Jet injectors force vaccine through the skin in a pressurized spray. They are fast, easy to use, and it had been thought that they avoided the risk of infections due to unsterilized needles. Recent evidence suggests that they may transmit some infections, however. In addition, they need regular maintenance, which is often difficult to provide. Also, because they are expensive to buy, jet injectors may be cost-effective only when used in mass immunizations.

—*Coustesy* **Population Reports**

message that there is no contra-indication to vaccination unless the child is seriously ill.

The ICDS experiment must be strengthened with more ground support in the form of more funds, facilities and staff. It may be pointed out that 1,000 ICDS projects cost only 0.13 per cent of the country's gross domestic product. We can certainly spend more to build our children on whom the future of this country depends. Of course, a child's development is linked with the economic set-up in which it grows. A holistic attack on poverty is, therefore, a must. That the Government is seized of this problem is evident from the 1986-87 Union Budget in making massive allocations for anti-poverty programmes. With such sort of a support much can be done in improving child care facilities in our country.

ROLE OF SCHOOLS IN THE PREVENTION OF BLINDNESS

SMT C. K. MANN

About 10-12 per cent of children of primary classes suffer from eye problems including visual impairment. Because of close contact with the students over a period of years, teachers can observe the child with signs and symptoms of vision defects. Indeed, schools have a vital role to play in promotive and preventive aspects of eye health care.

TODAY, a large number of persons lose their sight due to ignorance, lack of knowledge of simple preventive and curative measures and failure to adopt healthy eye care practices. The number of blind persons is increasing and unless action is taken in time to check its occurrence, it is estimated that their number will double in the next 15 years. Therefore, it is the concern of every individual to help in the promotion and protection of eye health; to conserve sight and to prevent defects and diseases related to eyes. The enormity, urgency and complexity of this task for the poor majority in developing countries has been highlighted several times and certain actions have been initiated by the governmental as well as international organizations. Urgent efforts are required to ensure that no citizen goes blind unnecessarily and those who are already blind need not remain so becoming a burden on the society.

India has an estimated 9 million blinds; of which two-thirds of blindness could have been averted if adequate and appropriate measures had been taken at an appropriate time. The problem of eye diseases in school children is also considerable. According to certain studies about 10-12 per cent children of primary classes suffer from eye problems including visual impairment. In order to promote ocular health at an early stage, concerted efforts of parents and school authorities need to be mobilized. Children of school age form very important segment of the population in our country as they comprise one-fourth of the total population. A large majority of them are now attending schools and it becomes very easy to reach this young population through well established network of school system in the country.

Ocular health and visual preservation play an important role in the growth and development of the personality and overt behaviour of the children. In view of the lack of adequate infrastructure and accessibility to reach the young captive population, the school system with a large number of teachers can help to a great extent in the prevention of blindness. It has been estimated that about 2.5 lakh children under the age of 14 years in the country are partially blind. A large number of them are blind on account of nutritional deficiency of Vitamin A, besides eye injuries and other eye infections.

The schools have to play a very vital role in the prevention of preventable blindness. The close contact the teachers have with the students over a period of years makes it very easy for the teacher to observe the child with signs and symptoms of vision defects.

Perfect vision in each eye and good binocular health and coordination is essential for every person. Defective vision in one of the eyes is often not detected in the children in the early stages which may lead to squint and irrepairable loss of vision.

Ocular diseases may damage vision and lead to blindness, besides pain and discomfort. Early detection of these diseases in children is of considerable importance since the children may not understand the gravity of the symptoms.

Complex eye problems

(i) *Long sight*: The eye at birth is hypermetropic (long sighted) and as the child grows the hypermetropia reduces gradually and by the age of 15 years the eyes usually become normal.

Visual defects apart from affecting the personality can be responsible for producing eye strain, headache, disinterest in studies. It can also cause squint. Some children often complain of headache and eye strain especially after reading although their visual equity may be normal. These symptoms usually produce astigmatism and impair balance of the eye muscle. Such children should be referred to the specialist for necessary treatment.

(ii) *Common eye diseases*: The common eye diseases among children are conjunctivities and lid infections, trachoma, allergy, irrita-

tive conjunctivitis, malnutrition due to Vitamin-A deficiency which may lead to night blindness, formation of foamy, grey spots on the white of the eye-ball (Bitots' spots), dry eye (Xerophthalmia), corneal ulcers. These cases should be treated with intensive intake of Vitamin-A.

(iii) *Eye injury*: Injury to the eye is another very important cause of blindness particularly among children. The common causes of these injuries in children are due to playing with Gulle Danda, bow and arrow, pen and pencils, needles, careless handling of fireworks (crackers), etc.

Promotive and preventive activities for eye health

In order to promote eye health and prevent loss of sight leading to blindness, the school occupies a very important position and can play very significant role. This will involve health education about eye care to the students and the parents; orientation of teachers so that they are equipped with the scientific information related to the promotive and preventive aspects of eye health care and coordination with health departments for making use of the available health services for diagnosis, treatment and rehabilitative activities.

Teacher's orientation

Since the teachers occupy pivotal position in school system, teacher preparation is of tremendous importance. The teacher should act as an effective educator capable of making the students aware of the importance of eye health care, and causes responsible for vision defect which can lead to blindness. Instructions with regard to the personal and environmental hygiene, nutrition, sanitation and protection of the eye should also be given to the students. The teachers should stimulate individual's participation in activities related to prevention of blindness and become actually involved in community based treatment programmes. The training of the teachers should be simple, practicable. It may be remembered that teacher is not a substitute for a doctor, but teacher can help in early identification of students which are deviant from normal vision and refer such cases to a specialist for appropriate treatment and follow-up.

Vision screening

Vision screening in schools assumes great importance for early detection of vision defects and provision of timely eye health care to reduce the incidence of preventable blindness. The teacher, after a brief orientation in the use of Snallen Eye chart, can do the vision screening. The chart may be kept at a distance of three metres from the point where the child is to stand and the teacher asks the child to cover his one eye and read the last line. This may be repeated for the second eye and those children cover his eye and read the last line may be referred to a specialist.

Teacher's observations

Since the students remain in constant contact with the teacher for about 5 to 6 hours in a day, the teacher is in a best position to observe any health problem among the children. On the basis of teacher's observation, children with eye problems may be referred to a concerned specialist for early treatment. Therefore, teachers should be trained to take care of children with following complaints:

(i) Inability to see clearly the letters on the black-board except without sitting close to the Board.

(ii) Headache and tiredness after reading or doing class work.

(iii) Blurred vision.

(iv) Unequal vision in both the eyes.

Appearance of eyes

Margins of lids may show redness, repeated occurrence of styes.

Observance of behaviour of the Child

(i) Difficulty in reading and may skip lines, re-reads or reads slowly.

(ii) May frown, blink excessively or have a squint.

(iii) May hold book too close to eyes to read.

In such conditions the teacher should constantly observe the child and refer him/her to the specialist for specific diagnosis and treatment.

Detection of infectious eye diseases

The child may have the following symptoms of infectious eye diseases.

1. Sore eyes or discharges in the eyes.
2. Red eyes.
3. Frequent rubbing of eyes.

Responsibilities of schools

1. Arrangements for eye examination by the specialists to detect those children who have eye problems so that they can be provided early treatment.
2. To liaise with voluntary organisations engaged in the prevention of blindness programme for coordination in the provision of eye care services
3. To mobilise community resources for the poor and needy children who need glasses.
4. To follow up with those students who are prescribed the use of regular remedial measupervised by the teachers for regular use of spectacles.
5. To educate parents about the importance of eye care and use of regular remideial measures like spectacles, etc.
6. To provide orientation training to the teachers enabling them to conduct vision screening of all the students to detect children with vision problems.
7. To encourage students to develop school garden for growing vegetables and fruits rich in vitamin A.
8. **Safety measures in the schools**

Children are exposed to vari-

A large majority of children of five years and above are now attending schools and it becomes very easy to reach this young population through a well-established network of school system in the country. Health check-ups organised by the schools help detect many health problems including ocular diseases at an early stage.

Collaboration between school and community may be sought in the eye health care programme. This can be elicited by forming a school, home and community coordination committees which may meet frequently to provide directions to the schools for taking up eye health care programmes.

ous hazards in the school while playing games, using pens and pencils, and other pointed articles in the classroom and running up and down during free time. In the laboratories, they are exposed to substances like acids, chemicals which are poisonous. They should be taught to handle them carefully and keep them at appropriate place after labelling them. Eye washing equipments may be made available in the laboratories so that if any irritant gets into the eye, the child is able to wash it with clean water and thereafter may report to the doctor.

9. **Education of children on eye care**

(i) Educate them about safe handling of pointed items like pen, pencil, knife and other materials.

(ii) Teach them to handle chemicals, etc., in the laboratories carefully. Inculcate habit of keeping such things labelled at a place outside the reach of the younger students, both in the laboratories and in the home.

(iii) In case a foreign body falls in the eyes, it should not be rubbed out. Wash it with plenty of clean water. If the foreign body is not removed the teacher should remove it with moist cotton. In case of any injury the student should be referred to the medical officer immediately.

10. **Advice to students**

(i) Advise the regular use of spectacles, if prescribed.

(ii) Advise not to play injurious games like *gulli danda*, and bow and arrow.

(iii) Advise to avoid playing with school children having sore eyes.

(iv) While watching television, they should sit at about three metre away with one light on in the room.

(v) Avoid playing with fire works or crackers.

(vi) Eat balanced and nutritious diet with plenty of green and yellow vegetables and fruits which are rich sources of Vitamin A. This Vitamin is essential for the prevention of night-blindness.

(vii) Never look directly at Sun.

(viii) Never see solar eclipse.

(ix) Do not use Kajal/Surma and never use the Kajal needles used by others.

(x) Do not go to school in case of eye problem.

(xi) Always consult a qualified eye doctor and follow treatment with regularity.

11. **Inculcate good reading habits**

(i) Advise students not to read while moving.

(ii) Advise them to read with good light coming from left side.

(iii) While reading a book, hold 30 cm away from your eyes.

(iv) Do not read while travelling in a bus or a train as it causes strain.

(v) Give rest to the eyes.

(vi) Do eye exercises of Yoga to strengthen eye muscles.

School and community collaboration

School occupies a unique and prestigious position in the community. It has a great influence on the community as it is considered to be a centre of community resource.

Collaboration between school and community may be sought in the eye health care programme. This can be elicited by forming a school, home and community coordination committees which may meet frequently to provide directions to the schools for taking up eye health care programme. It will be the school's responsibility to inform the community about the gravity of the eye problem among the school children and seek parents' assistance in preventive measures. It should motivate parents to bring the children for eye examination when arranged in the school; follow up the use of glasses if prescribed by the doctor; mobilise community resources for providing glasses, for providing Vitamin A rich food to the students; create awareness among the community about the use of Vitamin A rich food in their daily food for good eye health and encourage them to develop kitchen gardens.

Frequent use of mass media especially television and radio may be made to educate the community on the importance of eye health and preservation of eyesight and also to inform them about the availability of modern eye care health services. Shortage of drugs is hampering most of these programmes and as such community may be mobilised to raise funds for the purchase of essential drugs. School can also take steps to educate the people on the dangers of consulting quacks in case of any eye problem.

CAMPAIGN FOR UNIVERSAL COVERAGE INVOLVING MEDICAL STUDENTS AND INTERNS

Dr A. K. Govila

Immunization is an important activity for preventing diseases and disability among children and pregnant women. It is an ongoing activity in Greater Gwalior. From the start of the session, 1985-86, students were divided into fifty-two teams, each team for one municipal ward of Greater Gwalior. These students identified the beneficiaries in the township and assisted the sector doctors in the universal immunization coverage.

With a view to giving a boost to the Universal Immunization Programme and to cover the resistant and difficult areas of Greater Gwalior. an intensive campaign was launched from 3—6 April, 1986, involving the students and interns of the medical college. Regular teaching classes were suspended to make the campaign a success.

Plan of action

To start with the students were briefed about the Universal Immunization Programme and the campaign. The following action plan for each team was worked out before launching the campaign:

3rd April, 1986	Morar
4th April, 1986	Gwalior
5th and 6th April, 1986	Lashkar

Period of campaign : 8.00 a.m. to 4.00 p.m.

Both the interns and the students were trained in the technique of giving BCG immunization and maintaining the cold chain at the Immunization Clinic being run by the department at the teaching hospital of the medical college. For the success of the campaign, 28 teams, each headed by one intern with 5-6 students as members were constituted. The sector doctor and para-medical workers of the respective areas were informed in advance about the campaign to assist the medical students in their work in the field.

The campaign was organised from 8.00 a.m. to 4.00 p.m. daily. One member of each team was made responsible for the collection and return of the immunization kit used during the campaign.

The output of the Intensive Immunization Campaign is as under:

1. The total number of 4655 immunization cards were prepared and handed over to the beneficiaries/head of the family
2. The total number of vaccinations done by the medical students were : BCG (2879), DPT I dose (2106), DPT II dose (580), DPT III dose (391), OPV I dose (2114), OPV II dose (589), OPV III dose (379), Measles (148), Tetanus toxoid I dose (326) and Tetanus toxoid II dose (73).

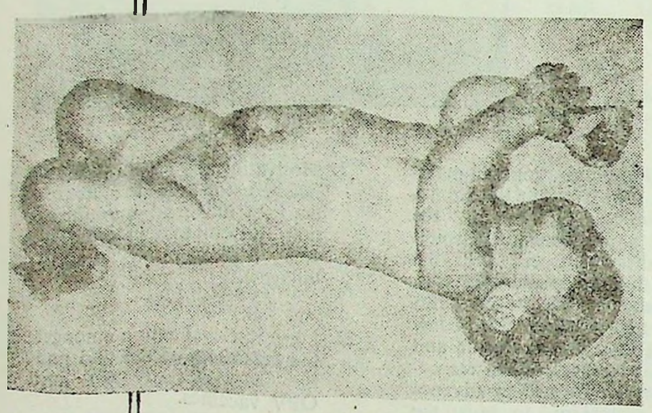
Conclusions

Based on the experience gained, it was concluded that the campaigns are useful in the following manner:

1. Motivating the resistant beneficiaries towards the acceptance of universal immunization programme in different areas (slums and adjacent villages).
2. For a retrieval action amongst the defaulters of the 2nd and the 3rd doses of DPT and OPV vaccines.
3. Boosting up the coverage of BCG immunization significantly.
4. Maintenance of the Universal Immunization Programme in preparing immunization cards for the eligible children for immunization during the year, 1986-87, at the nearest hospital.
5. Providing an opportunity of field exposures to the interms and the medical students of this medical college about the overall health situation in an urban community, including slums.
6. Providing an opportunity of practical field training under the universal immunization programme to the medical interns and students.

Immunizing the World's Children

Measles →



Tuberculosis ↑

Poliomyelitis ↓

Immunization against the most common and deadly childhood diseases saves the lives of some one million children in developing countries each year. But more than 3.5 million others are killed or disabled by diseases that immunization could have prevented. Fewer than half of one-year-olds have been immunized against the major preventable diseases. Concerted efforts are now underway to expand immunization services to all the world's infants and pregnant women by 1990.

The World Health Organization (WHO) Expanded programme on Immunization (EPI) focuses on six diseases:

- Measles affects nearly all unimmunized children and kills over two million children annually.
- Pertussis (whooping cough) kills some 600,000 children each year and affects millions more.
- Neonatal tetanus, contracted through contamination of the umbilical cord at birth, kills at least 800,000 each year.
- Polio is the major cause of lameness in the developing world and each year kills about 30,000.
- Tuberculosis, which each year attacks 10 million, can be especially severe in young children.
- Diphtheria is less common but kills 10 to 15 per cent of its victims.

Immunization against these diseases is safe and effective. Decades of experience in developed countries and a variety of evidence from Africa, Asia, and Latin America show that sickness and death from these diseases fall sharply where immunization is widely available.

The challenge is to deliver the basic vaccines to all infants and tetanus toxoid to all pregnant women. Programmes have been able to immunize an infant fully for as little as five to 15 dollars (US), but many programmes reach less than half of the population at risk.

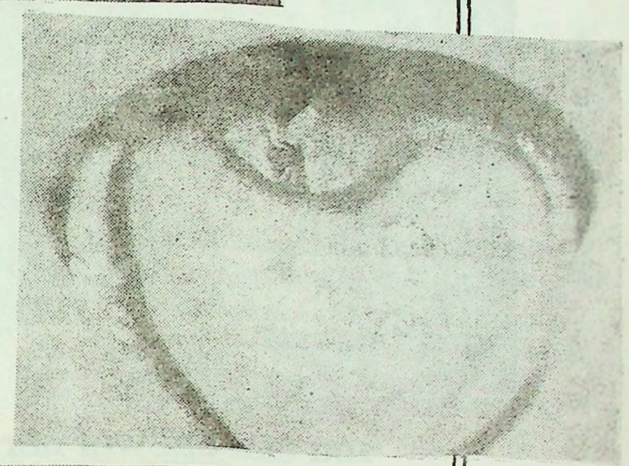
Most programmes start by offering immunizations at fixed health posts. Outreach and mobile services that set up temporary vaccination points in the community are often needed as well. Also, intensive campaigns have immunized many children quickly. For example, special vaccination days, widely publicized by mass media and even door-to-door visits, have proved effective. Whether such campaigns encourage the development of long-term, continuing immunization services is much debated. Even without campaigns, persuasive communication efforts are necessary.

A major logistical problem is keeping vaccines cold to protect their potency. Careless handling, a broken refrigerator, or electrical failure can break the cold chain and leave children unprotected.

Comprehensive evaluations show that immunization programmes face common problems. The chief weaknesses are limited surveillance of disease cases and immunization coverage, inadequate supervision, and insufficient communication efforts. Nonetheless, many programmes have expanded coverage greatly in the last decade. In some countries sickness and death rates have dropped sharply. Like family planning and other basic health measures, immunization programmes can succeed when there is planning, commitment, skill, and persistence at every level.

Courtesy—POPULATION REPORTS

Tetanus ←



Diphtheria ↑

Whooping cough ←

Reproduced by the Central Health Education Bureau, Directorate General of Health Services in the interest of eye donation programme.

SOCIAL PUZZLES AND FACTS ABOUT FOOD AND NUTRITION

DR SURESH CHANDRA, DR R. P. SHARMA & DR S. C. SAXENA

At present, a knowledge of nutrition is gaining importance because of the increase in the world population. In many under-developed areas a large proportion of the population does not receive enough food of right kinds for full physical development and good health. The man has been in search of food from his primitive history. The role of food in health and disease has been under investigation from the dawn of the medicine. The significance of nutrition was further understood and emphasized as more and more knowledge on nutrition was gathered. There is gap between the nutritional knowledge for healthy living and nutritional practice among masses. This gap exists because the food habits are deeply embodied in our culture and tradition. Whenever efforts are made to improve the nutrition of individual or masses by introducing newer scientific methods, resistance to adaptation of this knowledge is often exhibited. However, it cannot be denied that social and cultural factors contribute significantly to the overall picture of malnutrition in our communities. Faulty feeding habits arising from ignorance, superstitions and various types of social prejudice have been found to be responsible for aggravating malnutrition among different segments of our population. The customs, religious beliefs, superstitions, food taboos, and fads, and local traditions, all play their role in the adoptation of the changes.

Social Factors	False Concepts	True Facts
(A) *Food Habits, Attitudes, Customs, beliefs & Traditions.*		
(i) Papaya is avoided during pregnancy due to false belief that it causes abortion.	..	It is good source of vitamin A (666 ug/100 gms) calcium (28 mg/100 gms), Iron (0.9 mg/100 gms) and Vitamin C (12 mg/100 gms) which are very important ingredients for a pregnant woman.
(ii) *Dhals*, green leafy vegetables, rice and fruits are avoided by pregnant women (widespread belief in Gujarat).	..	*Dhals* are a rich source of protein, green leafy vegetables are of iron and fruits are rich in vitamins and minerals which are excessively required during this period.
iii) "Hot Food."-Eggs, meats and pulses are considered 'hot foods' with the false belief that they cause nasal bleeding, skin rashes, vertigo, burning during micturition constipation, insomnia, nocturnal ejaculation, burning palms and soles, and dryness of throat.	..	Eggs, meats and pulses are good source of protein. Protein energy malnutrition is a very common problem of our country, this false belief is an obstacle which keep away people from consumption of nutritious foods.
(iv) "Cold foods"—Butter milk, curds, cucumber, melons, gourds, tomatoes, *Amla* and few leafy vegetables are considered "cold foods" and so are avoided in winter due to false belief that they cause common cold, ceryza, sinusitis, headache, sore throat, pain in chest, cough and sneezing.	..	These foods are rich in minerals, specially iron and vitamins, which are protective nutrient for human health.
(v) During lactation pumpkin, eggs and fish are avoided.	..	Eggs and fish are highly rich in protein, vitamin A and other vitamins and minerals which are extra advantageous to lactating women.
(vi) 'Colostrum' is not given to infants, it is considered as 'Pus' or mixure of 'blood and pus'.	..	Colostrum contains huge amount of protein, and antibodies which is very useful to infants.
(vii) Teething causes diarrhoea which is treated by giving a diluted milk.	..	Addition of more water decreases the quantity of protein and carbohydrate to child making it prone to develop malnutrition.
(viii) 'fish' is not given to pregnant women due to false concept that it causes worms in the intestine.	..	Worms are different parasites, which develop due to unhygienic conditions of foods and walking barefoot in open air defaecated areas.
(ix) Best foods are given to the head of family followed by other males and the rest to women.	..	Pregnant and lactating women require more calories proteins, minerals and vitamins so they require best food.

Contd. on page 283

BANISHING MEASLES

DR S. M. YADAVA

Experience gained in India indicates that measles is amenable to control by vaccine which is one of the safest vaccines available

IT is estimated that around 14 million children suffer from measles and two lakh children die consequent upon complications from measles every year in India. The disease is known by different names and many communities consider measles as a part of life rather than a disease and do not report it to any health institution. Then there seems to be a gross under-reporting in official data. It is also a well known fact that most children attacked by measles also suffer from chronic malnutrition with associated lower resistance.

Experience gained in India indicates that the disease is amenable to control by vaccine which is one of the safest vaccines available. Planning Commission has recommended a coverage of 63 per cent of eligible children (Age group 9-12 months) by 1990.

Keeping these observations in view an Intensive Measles Immunization Drive was launched in Udaipur city of Rajasthan in the first week of April 1986, on the eve of the World Health Day. The whole drive was planned in the following manner to yield desired results:

1. Health education

Health education focussed attention on measles as a public health problem and priority for vaccination.

- Leaflets, posters, and slogans were developed and displayed.
- Cinema slides for all movie theatres.
- Press publicity and AIR coverage.
- Publicity using public address system.
- Publicity stickers.

2. Short orientation of workers

All health workers were asked to attend the one day orientation course on measles vaccination and were provided guidance regarding management information, monitoring and evaluation system. They were specifically told to cover the children in the age group of 9 months to 2 years, to make necessary entries in the beneficiary column of the register after immunization of children and subsequently to visit the child in next 7 to 10 days.

3. Manpower management

The whole municipal area of Udaipur city was divided into 18 sectors according to the location of various dispensaries and other institutions. For each sector one team comprising of the following personnel was constituted.

—Medical Officer	— One
— M.P.W. (male)	— One
— M.P.W. (female)	— One
— Nursing students	— two

4. Cold chain logistics

Sufficient amount of vaccine was procured in advance and was stored in the Walk-in-Cooler freezer being maintained at Udaipur. The vaccine was supplied every day in the morning in Thermocol boxes and workers were told to check the temperature inside the Thermocol and also the condition of ice.

Every team was given a set of 100 autoclaved hypodermic needles alongwith 10 syringes. Sufficient amount of analgesics and antiseptics were also given to take care of any possible complication.

Achievement and constraints

A total number of 6,116 children in the age group of 9 months to 2 years were covered under this drive during the 10 days period through house to house visits. Assuming the city population to be 3 lakhs for the current year, the estimated total population of children in this age group would be around 8,500. Hence we could immunize 70% children between 9 months and 2 years.

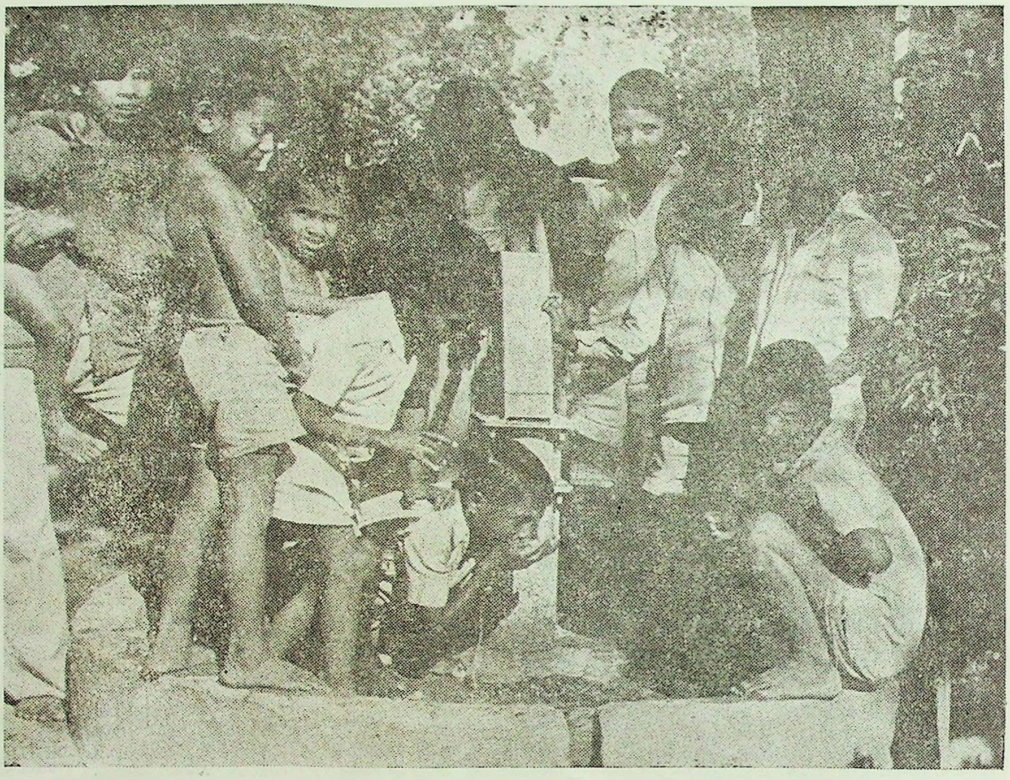
Follow-up and surveillance

On door-to-door follow-up visits after a period of 10 days revealed that there were no major complications or side-effects.

A strict vigil on occurrence of measles in Udaipur city is being kept through our various peripheral health units. Each unit has been provided with measles surveillance records so that timely information reaches us and suitable action can be taken.

To mop up remaining number of children and new entrants in eligible age group we have planned periodic immunization campaigns through our peripheral units.

The child being immunized against measles in one of the Sectors in Udaipur



PERSONAL HYGIENE —A Way to Health

Dr Daksha D. Pandit

Personal hygiene influences the health and well-being of an individual. Any deviation affects health. The practice of personal hygiene is largely a matter of individual responsibility. Since the foundations of personal hygiene are laid in childhood, health education aims at providing relevant information as to how personal hygiene can protect an individual from various diseases.

THE term, personal hygiene, includes all those personal factors which influence the health and well-being of an individual. In other words it can be defined as a science that deals with the rules of keeping the body clean and acquiring habits of healthful living. It comprises a broad range of day-to-day activities such as care of teeth or oral cavity, care of eyes and ears, care of skin, care of posture and cultivating good habits regarding eating, diet, exercise, sleep, smoking, drinking and attitude towards life. Any disruption of these activities may affect health. Following are some of the important factors which affect personal hygiene:

Care of the skin

Care of the skin and its appendages like nails and hair is very important. The condition of the skin will reveal whether a person has been taking his daily bath and the proper care of the skin or not. If not, it will cause many infectious skin diseases like scabies, boils, furunculosis, septic foci, ringworm and eczema. A daily bath with soap is essential in removing the dirt on the skin. Well kept hair add beauty. For well kept hair, it is essential to comb it daily and take headbath at least once a week. It will make hair healthy and attractive. At the same time it will prevent the development of dandruff, pediculosis, i.e., louse infestation and fungal infection of the soap. Nails also deserve lot of attention. If the nails are not cut short then dirt collects in them which consists of many harmful germs. The same germs will enter the gastrointestinal tract while eating and may cause many types of gastrointestinal disorders. So nails should be periodically trimmed and never bitten. Hands should be washed with soap and water before handling food and after toilet. This practice is very important in preventing diarrhoeal disorders. Many studies have also proved that handwashing is a simple, effective and beneficial practice in preventing diarrhoeal diseases.

Oral hygiene

Neglect of oral hygiene will result in offensive breath, dental caries and pyorrhoea. The golden rule of keeping the teeth healthy is to brush either using brush and tooth paste or Datun in the morning and at night. The correct procedure of brushing is to begin from gums, and in the case of upper teeth bring the brush downwards, and in the case of lower teeth bring the brush upwards from the gums. Each time after food, teeth, gums and mouth should be cleaned properly.

Care of the eyes and ears

It is necessary that while washing face, due attention is paid to the eyes. It is very essential to clean the eyes with clean water. Most of the diseases like blepharitis, conjunctivitise and trachoma are caused as a result of poor hygienic upkeep of the eyes. In newborn babies, Kajal or Surma should not be put into eyes. Ears do not need much care. Hard, sharp, objects should not be put into the ears for cleaning the wax as they may cause infection in the ear. Good clothing not only makes the person presentable but also healthy. Clothing should be changed daily. It should not be too tight or too loose. It should vary as per the season. Besides these, good food habits, regular bowel movements, keeping away from drinking, smoking and drugs, and regular physical activity will go a long way in achieving health. The practice of personal hygiene is largely a matter of individual responsibility or selfcare. Since the foundations of personal hygiene are laid in early childhood, the goal should be to provide a broad range of relevant information about ways in which personal hygiene can protect from various diseases and improve health. Health education makes a family member to understand and adopt scientific promotive measures for the family. There is no doubt that good personal hygiene, wholesome and healthy habits will make everyone a winner. △

KUM. KHAPARDE PLEDGES HER EYES

Kum. Saroj Khaparde

Kum. Saroj Khaparde, Minister of State for Health and Family Welfare has pledged her eyes in the presence of officers and staff members of her Ministry on 2 September, 1986.

In a week-long, nation-wide drive for eye donation launched on 2 September 1986, a number of other functions were also organised. Many officers and other staff members of the Ministry of Health and Family Welfare signed a pledge to donate their eyes.

THE HEALTH OF MOTHERS AND CHILDREN
—Key Issues In Developing Countries

Poor health of women, complications of pregnancy and childbirth, low birthweight as well as general malnutrition and infection —all these are to blame for globally high levels of newborn, infant, early childhood, and maternal mortality and morbidity. All of these conditions are strongly affected by fertility patterns. And they do not occur in isolation, but in the context of poor socio-economic situations where education, health and other social services are lacking.

Newborn and Infant Deaths

In many developing countries, at least half the deaths of children aged under one year occur during the first month of life. These are mainly caused by the mother's poor health before and during pregnancy, unsafe childbirth practices and inadequate care immediately after birth.

The birthweight of a newborn baby is closely linked to its chances of survival, and subsequent growth and development. Of the 129 million infants born in 1985, about 20 million (or 16 per cent) had a low birthweight (less than 2500 grams). Of these, 19 million were born in devloping countries.

In the developing world, one out of every 12 infants dies before reaching one year of age. Ninety-seven per cent of all infant deaths are in the developing world, where infant mortality rates are about ten times as high as in the developed regions. Overall, one child in eight dies before reaching the age of five in the developing world.

Mothers' health determines Birthweight

Low birthweight and prematurity are associated with factors such as the mother's height, weight gain during pregnancy, smoking and alcohol consumption.

In developing countries, low birthweight is mainly due to women's exposure to insufficient calorie intake, malaria and cigarette smoking.

For each additional 100 Kcal per day digested throughout pregnancy, the birthweight will increase by about 100 grams.

Prevention and treatment of malaria can bring about a rise of 165 grams in mean birthweight; in the Solomon Islands, for instance, the low birthweight rate fell from 20.5 to 11.8 per cent in 1969-1971.

Birthweight can be reduced by as much as 11.1 grams per cigarette smoked per day by the mother, particularly during the last trimester of pregnancy.

In developed countries, low birthweight due to both intrauterine growth retardation and premature delivery could be reduced by eight to 36 per cent if pregnant women stopped cigarette smoking.

Childbirth affects mothers' health

Over half a million women in developing countries die each year from causes related to pregnancy and childbirth, leaving at least one million children motherless.

In Europe the maternal mortality rate is six per 100,000 live births, while in parts of Africa and Asia it may reach 1,000 per 100,000 live births.

In the poorest countries, the risk of dying from pregnancy or childbirth is 200 times higher than in developed countries.

Inadequate care during pregnancy and childbirth, inappropriate timing and spacing, and excessive number of pregnancies are responsible for most maternal deaths. In addition, millions of women who are not properly cared for in pregnancy and childbirth are in a constant state of ill health, developing uterine prolapse, chronic infections, fistula or urinary incontinence, which can lead them to become social outcasts when rejected by their family.

Illegal abortions resulting from undesired pregnancies account for half of all maternal deaths in some Latin American countries. Each year about 200,000 women in the world die from illegal abortions. Making planning methods available and accessible to all couples who require them will markedly reduce these deaths.

Mothers' education is critical

In every economic setting the children of literate women have a better chance of survival than those born to illiterate women. Schooling often ends when young women become pregnant. Women with schooling tend to marry later, delay childbearing, are more likely to practice family planning, to reject

harmful traditional practices related to childbirth, to adopt healthy feeding habits, to see the need for immunization and domestic hygiene, and to use available health services in times of sickness.

Young pregnant girls are at greater risk

Mothers under 18 years of age run a high risk of complications and/or death in pregnancy and childbirth, and of giving birth to premature babies. In some areas of Africa, five per cent of the young adolescent girls die when they become pregnant for lack of antenatal care. These deaths can be prevented by the postponement of marriage until physical maturity is reached and by better access to family life and family planning education, as well as services appropriate to the local setting.

Family planning promotes health

A cess to and acceptability of family planning services improve the condition of women and families. However, contraceptive use in many parts of the world is still denied to unmarried women.

In 1980-81, 68 per cent of married women of reproductive age were using a contraceptive method in developed countries as opposed to 38 per cent in developing countris; usage varied from 69 per cent in East Asia to 11 per cent in Africa.

Today, about 300 million couples who do not want more children are not using any method of family planning.

By spacing births at least two to three apart, deaths of newborn babies and infants will be reduced and the health and well-being of infants improved.

Safe deliveries

Births attended by a trained person are safer. In developed countries, 98 per cent of births take place in the presence of a trained person, whereas in some developing countries, only 20 per cent of births are so attended.

The mother should prepare herself for breastfeeding the baby. The earlier a mother suckles her child, the more milk she will have.

Trained birth attendants can ensure a clean delivery by using a simple delivery kit consisting of a clean plastic sheet, one or two towels, a piece of soap, an implement for cleaning their own nails, a razor blade and clean cord to tie off the umbilicus. Three "cleans" are indispensable during delivery: clean hands of the birth attendant, a clean surface on which to deliver, and clean cutting and care of the umbilical cord.

Clean deliveries through the training of birth attendants, and immunization of pregnant women against tetanus (2 doses at 4 weekly intervals), will sharply reduce neonatal deaths due to tetanus, a major cause of early infants' deaths.

In Bangladesh in 1982, neonatal death rates stood at 85 per thousand live births when there was no intervention; they dropped to 39 per thousand live births with the immunization of pregnant women, and to 24 per thousand live births when the traditional birth attendants were trained.

Warmth is life

Exposing a newborn baby to a temperature of 20-23°C has the same effect as exposing a nude adult on an iceberg (0°C). Rapid change from the womb's 37°C to an environmental temperature of 20-23°C can cause considerable heat loss, and even death.

Warming and humidying the room, drying the baby immediately after birth, ensuring skin-to-skin contact between the mother and the baby, wrapping the baby in a dry blanket or towel, and avoiding cold surfaces are simple prevention techniques.

Exclusive breastfeeding from birth

Exclusive breastfeeding from birth provides healthy growth and development of the infant. Most infants require no other food or fluid than breast milk for the first four to six months of life to grow healthy. Breastfed babies are better protected against infections. Breastfeeding also promotes mother-child bonding, which motivates better care of the child by the mother and provides psychological well-being for the infant.

Proper weaning is a key to healthy childhood

The weaning period is extremely important both for the health and nutrition perspective of the child, and for its psychological development

The introduction of foods other than breastmilk until the infant can share the family diet has to be carried out progressively. The weaning foods can be prepared from the family's normal diet: food with a high density of nutrients, relatively clean and uncontaminated, and easy to eat.

Growth monitoring—A useful tool for action

Measuring the weight of a child regularly provides useful information on its health and nutritional status. Malnutrition can be detected through growth monitoring long before signs and symptoms become apparent.

Growth charts, on which the weight of the child is plotted at regular intervals by the health worker or the mother, are the most convenient way of monitoring growth. A downward growth curve means that immediate action must be taken. A flat growth curve is a warning signal. A flat growth means a healthy child.

Timely immunization against major Killers

Among the major killers of children are the communicable diseases that can be prevented through timely and complete immunization. Children should be immunized against a six major diseases: BCG vaccine against tuberculosis at birth or soon after; combined diphtheria/pertussis/tetanus vaccine at six, ten and 14 weeks; polio vaccine at birth, six, ten and 14 weeks; measles vaccine at nine months or soon after.

Primary health care offers a way out of the cycle of ill-health, poor nutrition, impaired social and individual development and poverty. It is about appropriate technologies; about helping people to help themselves to better health and about using education, water and sanitation, agriculture and social welfare.

Prevention and treatment of infectious diseases

About 1,000 million episodes of diarrhoea occur each year in young children in the developing world (excluding China). Acute diarrhoeal diseases kill many young children as a result of dehydration. The discovery of Oral Rehydration Therapy has provided a simple, inexpensive and effective way of preventing and treating diarrhoeal diseases. This method can be carried out in the home environment.

Acute respiratory infections are an underlying or contributing cause of death in countless children. They can be prevented by immunization, by health education of mothers; and can be treated at the community level with appropriate referral to more specialized care.

Primary health care: A unique opportunity

Primary health care offers a way out of the cycle of ill health, poor nutrition, impaired social and individual development, and poverty. It is about appropriate technologies; about helping people to help themselves to better health; and about using education, water and sanitation, agriculture and social welfare. Among its actions it involves training for safe births, nutrition policies and programmes, immunization, simple actions to prevent and treat diarrhoeal diseases, and family planning.

In Costa Rica in 1982, 46 per cent of the decrease in infant mortality was attributable to primary health care technologies and programmes, including family planning, for a cost of only 17 per cent of the total health budget.

Contd. from page 275

Social Factors	False Concepts	True Facts
(x) In villages of Bengal, Annaprasan ceremony (Weaning) is done by sago and arrow root which is continued as main food stuffs to infants for 3—7 months.	..	Continuous use of only sago and arrow-root may result in protein calorie malnutrition.
(xi) Marasmus or PEM is considered as caused by evil spirits and treated by restriction of diet only with sago, water, sugar and breast milk.	..	Protein Calories malnutrition will worsen if the proteins and calories in the diet are reduced.
(xii) Skin lesions of 'Pellagre' are considered to be caused due to contact with chemical fertilizers, and is treated by giving purgatives, emetics and rubbing of camphor with brandy.	..	'Pellagra' is a nutritional disease and due to deficiency of 'Niacin'—an ingredient of vitamin complex.
(xiii) 'Febrile' conditions are corrected by starving the patient.	..	During the fever, basal metabolic rate is increased, so body requires more calories, instead of withdrawing of energy producing food stuffs.
(B) *Castes, Religions and Social Status.*		
(i) Food Taboos—Hindus do not eat beef, Muslims do not eat pork and Jains do not eat meat, fish, eggs and certain vegetables like onion, which are easily available to them.	..	These are body building and protective foods.
(ii) Rich men's food and 'Poor men's food'. Apples, sugar and milled rice are preferred in place of guava, jaggery and parboiled rice respectively because they are considered poor men's food.	..	Guava contains high amount of vitamin C, jaggery contains carbohydrate and minerals, while minerals are not present in sugar, milled rice loses to vitamin B complex.
(iii) Over expenditure for Cashew nuts rather than ground nuts.		Groundnuts also have high amount of fat and protein and much cheaper than Cashew nuts.
(C) *Food fads and Cooking Habits.*		
1. Costlier wheat and rice is preferred than cheaper one due to taste.	..	All qualities of wheats and rices have the same nutritive values.
2. Ripe cucumber is preferred than green one due to good taste.	..	Green cucumber has more dietary fibre and iron.
3. Throwing away of supernatant water from boiled rice, *dhals* and vegetables.	..	Most of water soluble vitamins are lost by this practice.
4. Dehusked *dhal* is considered better and used more.		Whole seed *dhals* have good amount of dietary fibres and vitamins.
5. Vegetable are cooked after removal of quite thick part of their skin.	..	It loses huge amount of dietary fibres, vitamins and minerals.
6. Highly milled flour is used for a few delicious foods.		Highly milled flour loses its dietary fibre and vitamins of outer cover ing
7. Wheat bran is removed from flour.	..	Bran is one of the richest source of dietary fibres and vitamin of B-Complex group.

Viewed in this light, it is not only the overall food availability that matters for problem of malnutrition but also as to how the available food is put to best utilisation. That is what makes all the difference between life and death for the countless people in our country. Availability of food and over production of food stuff is necessary to solve the problem. But, malnutrition is becoming a man-made disease of human societies which is very much determined by social factors. Hence, the statement by F.A.O. seems to be correct that hunger and malnutrition did not show any sign of abating despite good harvests. The number of the under nourished in the developing world has risen from 400 million to 450 million and the situation in the subsequent years is uncertain despite production increase. It is a well-established fact that malnutrition is very much determined by social factors. This can be overcome in communities by purposeful and intensive health education for creating awareness and bringing about social changes about false concepts and habits regarding diet and nutrition.

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International Meet on Blindness Prevention

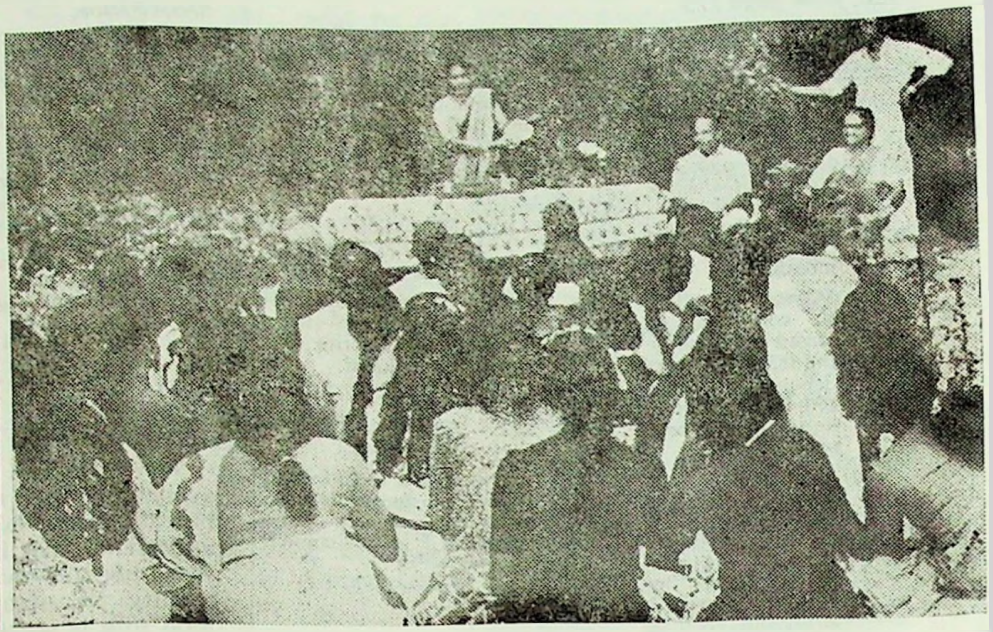
India will play host to the third General Assembly meeting of the International Agency for the Prevention of Blindness (IAPB) in New Delhi (Hotel Taj Palace) from 6-11 December, 1986.

The IAPB is sponsored jointly by the National Society for the Prevention of Blindness (NSPB), India and the Times Eye Research Foundation (TERF), New Delhi. Over 800 delegates from India and abroad are likely to attend. This is the first time that the IAPB Assembly is being held in this part of the world, the two previous Assembly sessions were organised in the United Kingdom (Oxford) in 1978 and the USA (Bethesda, Maryland) in 1982.

The theme of the General Assembly will be 'A decade of progress'. Nine Regional Committees will present their reports. They are from Africa, Eastern Europe, Latin America, Middle East, North America and the Caribbean, South Asia, South-East Asia, Western Europe and Western Pacific.

Simultaneously the NSPB will conduct symposia on five subjects relevant to the developing countries—magnitude of blindness in India, operation and delivery of eye care services, industrial blindness, role of mass media, and community participation in blindness prevention. The society has also organised a special session for the presentation of scientific papers by experts in the field of ophthalmology.

IAPB will also conduct four workshops on training of personnel: curable blindness and clearing of backlog in cataract surgery with emphasis on community motivation; multi-disciplinary approaches to children and corneal diseases: and prevention and rehabilitation and their complementary relationship with the national programmes.



Campaign To Promote People's Participation In Family Planning

As part of the six-week intensive nation-wide family welfare campaign with emphasis on spacing methods (during July 16-August 31, 1986), a five-day mass communication campaign to promote greater participation and a better sense of necessity among the masses in regard to acceptance of family planning was undertaken in Thanneermukkom panchayat of Shertallai taluk, in Alleppey district of Kerala, from 4-8 August, 1986.

Organised by the Alleppy Unit of the Directorate of Field Publicity of the Union Ministry of Information and Broadcasting, in collaboration with the UGC-aided, Kerala University sponsored Centre for Adult Education and Extension (CAEE) attached to the NSS College (Shertallai), this special drive was executed with the involvement of the District Family Welfare and Health Education Bureaux, and the Primary Health Centre (Muhamma).

The active co-operation of leading local non-official voluntary organisations such as the 124th Alleppey Tagore Open Sea Rover Crew Scout Group (Muttathiparampu), the Priyadarshini Vanitha Samajam (Vellyakulam), the AKG Arts and Sports Club (Varanem), etc., had also been enlisted in the drive, which covered five out of the 13 wards of the sprawling semi-coastal village.

An Orientation Class for the Instructors of the 30 Adult Education Centres functioning in the village, and a series of four health and family welfare education classes for mothers and young girls were the highlights of this purposeful campaign sans glamorous ceremonies. The classes were supported by instructional documentary filmshows.

A total number of 191 mothers and young girls, (mostly drawn from the weaker sections of the society such as traditional coir workers, fisherfolks, lime-shell workers and grass-mat workers), majority being illiterates, attended the family welfare education classes held at Madachira, Ayyappancheri, Varanom and Vellyakulam—the interior/water-logged virgin pockets.

—P.N. Krishna Pillai

SAFE APPROACH TO EYE CAMP SURGERY

The National Seminar on "Safe Approach to Eye Camp Surgery" held on 7 September, 1986 in New Delhi, decided that eye camps are a necessity to cope with the large number of cataract patients in the country.

The Seminar was attended by over 200 ophthalmologists, social workers, etc. Dr H. V. Hande, Minister for Health and Family Welfare, Tamil Nadu, himself being a qualified doctor, had headed a National Committee on the subject about four years back; thereafter he ensured its implementation in Madras. Based on his experiences he gave an account of how Tamil Nadu carried out 4.4 lakh cataract surgeries in the last four years, including a record one lakh surgeries in the Government-run ones.

Dr S. R. K. Malik, Chairman of the Seminar and Executive President of the National Society for the Prevention of Blindness, India, also spoke on the subject.

Dr Madan Mohan, Adviser, (Ophth.), Government of India, Dr P.M. Kapoor, Assistant Director General of Health Services (Ophth.) were among the other distinguished speakers.

Summary of Recommendations

The camps should be held in rural areas where running water supply and electricity facilities are available. In villages, where these facilities are not available, screening camps should be organised to select patients requiring surgery and transport them to camp sites or base hospitals. The sanctioning authority should monitor the camps. However, the agencies organising the camps and the funding agencies would also ensure that the guidelines provided are being strictly followed by the camps. The official engaged to do the monitoring work should be an ophthalmologist of 10 years' standing in the profession after post-graduation.

Camp surgery should be done in permanent structures, such as, school building, Dharamshalas or primary health centres. The rooms selected to serve as operation theatres should be well-washed and scrubbed and the walls whitewashed with copper sulphate mixed in the distemper/lime a week in advance. The room should be fumigated and carbolised two days before the surgery.

The camp should last at least six days after the last day of surgery. The patient should be admitted 24-48 hours before the operation. In a camp not more than 200 operations should be done.

One of the eye surgeons of the operating team should conduct the post-operative follow-up. The patients should be called for re-checkup once a week and three weeks after the operation. They should be prescribed spectacles six weeks after the surgery.

Para-medical and non-medical personnel should be banned from doing any surgical procedures. A surgeon should perform only 50 operations a day. Locally prepared eye drops and physiological solutions should be autoclaved even when they are supplied as sterile preparations.

Surgical technique is best left to operating surgeon. However, adequate number of sutures (at least 3) must be applied.

An anaesthetist should be available in the camp who can act as a physician, resuscitationist and anaesthetist.

Health education emphasizing personal hygiene of patients before arrival in the camp should be done. Patients should be educated on the steps to be followed by them while in the camp and after discharge. ●

Couurse on Research Methodology in Public Health and Clinical Ophthalmology planned

A course in research methodology in public health and clinical ophthalmology will be part of the Third General Assembly meeting of the International Agency for the Prevention of Blindness (IAPB) scheduled for 11 to 16 December, 1986 in New Delhi. The meeting is jointly sponsored by the National Society for the Prevention of Blindness and the Times Eye Research Foundation, New Delhi.

Dr Carl Kupfer, President of IAPB and his colleagues from the National Eye Institute, Bethesda, Maryland, USA and other WHO collaborating centres in the United States of America and the United Kingdom will participate. The course will be restricted to 40 participants to be selected from among applicants. The course subjects include: (1) an overview of study design, (2) case control studies, (3) population based studies, (4) operations research and health care delivery and (5) opportunities in research on major causes of blindness.

There will also be small group discussions on (1) Operations Research and its application to cataract intervention programme; (2) Vitamin-A-focussing attention on Indonesia and the Philippines and a survey to determine the extent of the deficiency of this vitamin, and (3) Onchoceriasis Clinical Trial—focussing attention on Africa where the disease is widely prevalent.

CRUCIAL ROLE OF CO-OPERATIVES IN FAMILY WELFARE

Shri P. V. Narasimha Rao, Union Minister for Health and Family Welfare, has said that it is essential to buttress the family planning programme with necessary services. Calling upon cooperatives to help provide the technical services, he said, if we fail in this crucial field, the motivation to adopt family planning would diminish. He was inaugurating a day-long conference of cooperatives and family welfare programme convened by the Family Welfare Department on 10 September, 1986 in New Delhi.

The family welfare programme in India was one of the largest in the world today. When we could say to the people, "it is your programme, how can we help", we would truly have succeeded in making it a people's programme, he said.

The cooperatives were involved in economic life of almost every village in the country today. The cooperatives could play a vital role in bringing the programme down to grassroot level, Shri Rao said. He further remarked, "We know the effectiveness of cooperative movement and its potentials. On our side we are trying for cooperatisation of Indian economy. All Parties are for it. My Party believes in cooperative commonweath".

Highest priority

Earlier, the then Deputy Minister for Family Welfare, Shri S. Krishnakumar, welcoming the delegates, said population stabilization was being given highest priority in the agenda of the Government. The small family norm forms a part of the core curriculum of the National Education Policy. The new strategy envisages a quantum jump in spacing methods. He called upon the coopartives to help in the sale of contraceptives, oral pills, etc. As leaders of public opinion, the cooperators had an important motivational role to play, he said.

The Deputy Minister urged upon the cooperators to intensify the family welfare campaign through their societies to cover all eligible couples and young persons by the year 2000. He said that India had set for itself the demographic goal of NRR 1 by AD 2000 and in order to achieve that about 60 per cent of the estimated 180 million eligible couples would have to be covered by some method of contraceptive protection.

One of the most crucial sectors was the cooperative sector which has a huge infrastructure consisting of 3.5 lakh cooperatives covering nearly 95 per cent of the villages with a membership of over 12 crores. Cooperatives had become part of the daily lives of the people and were involved in such diverse activities such as financing, procuring, processing, marketing, etc.

Shri Krishnakumar said that the cooperative sector was unique in that it was a vast and well developed training network headed by the National Cooperative Union at the National level with training colleges and training centres spread throughout the country. It was sought to use this training infrastructure to educate the members of the cooperatives on the need as well as use of various contraceptives. Some training modules have already been developed which will be discussed during this conference.

Hasten development

The Union Minister of Agriculture, Shri G. S. Dhillon said if any agency could hasten the process of development, it was the coperative sector. Family welfare was aimed at improving the quality of life and the cooperatives must contribute to the success of the programme, he said. He called for setting up of camps where cooperative functionaries could be motivated to spread the message of small family norm.

Cooperative training

Also present was the Minister of State for Agriculture and Cooperation, Shri Yogendra Makwana. He said his Ministry had prepared a scheme of cooperative training and the family welfare programme, now under consideration of the Health Ministry. Dairy cooperatives had already appointed lady health inspectors to act as motivators, he said. The sugar and fertiliser cooperatives had also set up population cells to promote family planning through incentives and education.

Shri Makwana further added that the sale of contraceptives through the cooperative societies including Nirodh at concessional rates, had been a significant aspect of the cooperative activity. Incentives in the form of advanced increments had been given to their employees for undergoing vasectomy and tubectomy.

HEALTH MINISTER CALLS FOR CO-EXISTENCE BETWEEN INDIAN AND WESTERN MEDICAL SYSTEMS

The indigenous systems of medicine must co-exist and coooperate with the western medical systems. Remedies prescribed in ancient texts must be empirically verified and given a scientific basis, said Shri P. V. Narasimha Rao, Union Minister for Health and Family Welfare, while inaugurating a conference on involvement of practitioners of Indian systems of medicine in the family welfare programme on 2 September, 1986 in New Delhi.

Deprecating the intense bickering between practitioners of different systems, the Minister said the controversy must stop. He stressed the need for a holistic approach and called upon the practitioners to adopt a cooperative, open-minded approach. Only then can a positive end result be achieved. The whole gamut of family welfare and not family planning alone must be kept in mind.

Shri Rao explained how the Hakims and Vaidyas are respected in the rural areas where more than 80 per cent of Indian population lived. Family planning methods have to be explained to them and the faith the villagers have in them should be taken advantage of in this regard.

Development of ISM

Presiding over the meeting, Kumari Saroj Khaparde, Minister of State for Health and Family Welfare, said the institution of the Vaidyas and Hakims in the villages would help in achieving greater acceptance of the family welfare programme. The Indian Systems of Medicine (ISM) are especially equipped to deal with the goal of preventive and promotive health care that the National Health Policy seeks to achieve. The classical literature on Ayurveda, Sidha and Unani mentioned the age-old quest for an effective contraceptive by mankind. There was mention of oral drugs as well as local drugs for preventing conception in women of reproductive age. There are more than three lakh registered practitioners of non-allopathic systems. The Government has earmarked Rs. 40 crores in the Seventh Plan for the development of ISM, she added.

Leadership role

Earlier, the then Deputy Minister of Family Welfare, Shri S. Krishnakumar, welcoming the delegates, said the large reservoir of practtitioners of ISM would be harnessed to further the family welfare programme. A scheme would be launched to improve their technical, managerial and motivational skills. 15-20 private practitioners of ISM from the catchment area of each PHC would be identified and trained in education, motivation, follow-up care of couples adopting various family planning methods and distribution of family planning devices. He called upon the practitioners to take up a leadership role in mobilising support for the programme.

MODERN EYE CARE DURING SEVENTH PLAN

TEN CENTRES OF EXCELLENCE on the pattern of Dr. Rajendra Prasad Ophthalmic Centre, New Delhi, will be set up during the Seventh Plan to train adequate number of personnel in modern eye care technologies. This will help reduce the prevalent rate of blindness from 14 per 1000 population to five per 1000 population by the year 2000 A.D.

Under the National Programme for the Control of Blindness, eye camps are organized to provide immediate relief to the needy. Permanent eye care facilities with specialists are also provided alongwith health education under the Programme.

Eighty Central Mobile Units, each catering to the needs of nearly five districts, have been established. These units organise camps in the remote rural areas to provide medical and surgical treatment to the eye patients besides looking after the eye health education and survey and screening of the population.

All the district hospitals have been strengthened by adding equipment and manpower so that each district has the necessary eye care facilities at the intermediate level. At the tertiary level also, 58 medical colleges have been identified for the development of manpower and research in modern eye care technologies.—Yojana.

BOOKS

Maternity care monitoring-A model information technology (A review of cases using 801 form)

Mehta, A.C., Jhaveri, C.L. and Jamshedji, A.

Journal of Obstetrics & Gynaecology of India 1986 Feb; 36(1): 10-21.

While battling the immediate problems of delivery in India, improved methods of data collection, analysis and feedback are of paramount importance. With compunter technology easily available, Maternity Care Monitoring (MCM), can be effectively utilised to improve the quality of care at hospitals. This paper shows MCM as a data collection tool used at the hospital level. MCM can act as an indicator for the improvement of health care services and for early interventions.

This is a pooled analysis of 6,136 maternity cases reported from 14 participating Centres of the Indian Fertility Research Programme. The primiparas were at a relatively lower risk than the grand multiparas, which formed the high-risk group. However, the incidence of foetal neonatal complications was higher among the primiparas than the grand multiparas. The perinatal mortality rate for this series was 64.8 per 1000 deliveries. Women with foetal neonatal loss had a lower educational level and received inadequate antenatal care compared to women with infants discharged alive. The incidence of foetal neonatal complications was higher for foetus neonates who died before discharge from hospital than for those infants who were discharged alive. Younger women had a lower incidence of puerperal complications and accepted contraceptive methods more easily than their older counterparts.

Chronic Protracted Watery diarrhoea in Malnourished Children

Santhanakrishnan, B.R. and Uma Devi, L.

Indian pediatrics 1986 Jul. 23(7) : 515— 519

Sixty-eight malnourished children under two years of age with history of watery diarrhoea of more than two weeks duration were studied in detail. 83.7% children studied were under the age of one year. 25 (36.8%) children developed septicemia in addition and 16 (23.5%) of them had associated urinary tract infection. In addition, other associated respiratory infections were seen in 27 (39.7%) children. Sugar intolerance was observed in 20 (29.4%) children. The management of chronic diarrhoea in malnourished children must include not only appropriate fluid therapy, correction of electrolyte imbalance, but also adequate and appropriate treatment of associated infections and proper dietary management depending upon the presence of sugar intolerance.

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THE TWENTY-POINT PROGRAMME—1986

Health and Family Welfare

The Government of India announced a new 20-Point Programme on 19 August, 1986 laying emphasis on the removal of poverty in rural areas; raising productivity; reducing income inequalities; removing social and economic disparities; and improving the quality of life. The Programme has been "restructured in the light of our achievements and experience and the objectives of the Seventh Five-Year Plan". The points related to health and family welfare under the Programme have been spelt out as under:

8. HEALTH FOR ALL

We shall :

*Improve the quality of primary health care;

*Fight leprosy, TB, malaria, goitre, blindness and other major diseases;

*Provide immunization for all infants and children;

*Improve sanitation facilities in rural areas, particularly for women;

*Pay special attention to programmes for the rehabilitation of the handicapped.

9. TWO-CHILD NORM

We shall :

*Bring about voluntary acceptance of the two-child norm;

*Promote responsible parenthood;

*Reduce infant mortality;

*Expand maternity and child care facilities.