

Paediatric Care (0-5 Age Group) In Developing Countries

(With Special Reference to India)

Dr. P. C. Bhatla*

(SUMMARY: An attempt is made to highlight the urgency of effective paediatric care to ensure positive health free from predictable and preventable morbidity amongst the new-born right upto pre-school age.

A positive approach to deal with the gigantic problem in a developing country is suggested keeping the example of India, in view.

A definite orientation has to be given to get trained personnel including doctors to fulfill the felt needs of this population in matters of promotive, preventive and rehabilitative care in addition to ensuring curative care.

The impact of medical and health care of infants, as a top-priority national problem and providing adequate resources therefor, is the best strategy that any developing country can evolve.

A suggested programme of action with ensured community involvement in implementation of the same on a continuing basis has been outlined, keeping into consideration that any investment on this sector of population will eventually pay rich dividends in reducing morbidity and mortality and thereby improving quality of life in general of the present and the future generations.)

* Past President, Indian Medical Association

Dean, IMA College Of Gen. Practitioners

(Vice- President, WONCA)

IMA House, I. P. Marg, New Delhi-110 002

In India, annual birth rate stands at 36 per 1000 population, death rate 15 per 1000 population. With an annual addition of 22 million births, our population now exceeds 660 million. In fact, by the time a new-born is 5 years old, another 110 million infants have followed him. The infant mortality figure has come down from over 548 in the fifties to 112 per 1000 live births or is almost 11 percent of the newborns, to-day, the effective figure alive being about 20 million, as against 9 million total deaths of all ages.

The total population of age group 0-5 years remains at any given time at about 100 million against 560 million covering the population of other age groups i.e. in a ratio of 1:5.5. The infant population (of the age group 0-5 years) alone forms about 15 percent of the entire population of the country and is almost 8 times the population of Australia.

The financial allocations needed to meet the provision for food, clothing, housing, education and health, etc. for this big chunk of population is enormous, necessitating priorities in our national plans. An idea of the staggering challenges these involve may be had from Table I.

The principles of social justice have to be followed in caring for the health of this particular section of the population and cultural and economic equilibrium has to be maintained along with the health care programme itself. The chief reason being that great disparities and incongruities exist in the socio-economic status between one infant and another, depending upon whether they belong to the upper or lower economic strata of society and the urban or rural areas.

An analysis and survey of the needs of this population would startle any planner and reveal before him the tragic facts of how children forming this section of population continue to suffer. When we discuss social medicine or study data for the aftermaths of malnutrition, poverty and deprivation, we often forget that the victims of under-nourishment are already condemned to all-round retardation regarding their physical health and mental capabilities:

It has, per force, to be admitted that enough has to be done to equalise the treatment to all sections of our infant population or at least to stabilise for them the benefits of an equitable distribution and utilisation of available resources which form only about 3% of total national budget allocated for Health and Family Planning. Knowledge explosion and the

latest advances in medicine have, paradoxically enough, prolonged life span, reduced death rate, adding to problems of over population. Delivery of medical and health care is gradually getting costlier and its benefits available to only a few at all stages. For a developing country like ours, can we effectively shift spendings on the use of sophistication to other priority sectors viz. the care of the age group 0-5 years. Any investment that is made on the care of this population shall fetch a magnificent return in the shape of a generation that will be better fed, healthier sturdier and more developed mentally with better IQ. This generation will be more readily available for mobilisation as effective manpower resources for meeting the country's needs.

Such intensive care is inseparably linked with the improvement of the environment, which has to be effected through education of masses in personal hygiene, community health and environmental sanitation, nutritional guidance and service of doctors trained in preventive medicine. The role of the State, which is most vital here, is to provide necessary inputs to meet the shortages and replenish the supplies and mobilise the services of health planners, economists, agriculturists and administrators for motivating the community into accepting the programme of intensive care of the infants. The biggest role, however, has to be played by the doctors. With the help of the health workers, technicians and para-professionals, they will have to pilot the work for improving the health status of infants, to attain and maintain positive health in this section.

The present distribution of health care resources, therefore, should be urgently reviewed in the interest of betterment of existing paediatric service for the population of the age group 0-5 years, as it tends to be tilted towards urban oriented and sophistication in bigger centres. Adequate attention needs to be paid to this service in order to win the parents' confidence in the survival of their children, which in turn is bound to influence their minds in favour of limiting the size of the family, thereby helping the nation to meet the challenge of population explosion.

The first thing to be done is to direct attention to infant care and child health as a national priority, with orientation of our paediatric teaching and training programme. This programme should not only be rural-oriented but also conducted in the rural set up or in rural communities, so as to give the students of paediatrics, first hand opportunities of being familiar with the socio-economic conditions prevailing in the rural areas. Along with

reorientation of training, a situation has to be created for attracting trained paediatricians to rural service. For this purpose definite incentives like tax relief, housing and rural allowances, advance increments and out-of-turn promotions, etc. should be offered. A system of compulsory rotation of service in rural and urban areas, or obligatory 2-3 years rural service before posting in an urban areas, should be enforced.

Care of the rural infants is looked upon as a part of the community development. For this purpose, the rural people have to be persuaded to organise themselves in Health Committees, better in, broad-based Health Councils, which may even raise finances locally through a form of Health Insurance Scheme. Along with these measures efforts have to be directed towards slowing down the trends of migration from villages to cities for work or employment by quickening the pace of rural development and building up satellite towns. Endeavours should also be made for preventing the growth of slums which, besides providing breeding ground for various social ills, adversely affects the growth and upbringing of the infants.

Lastly, it has to be determined what priority the nation can give with her present resources for the health care of the most vulnerable section of its population—the infants of the age group 0-5 years. The total sums available under the budgetary allocations on health care are possibly never worked out for different age groups but it is certain that more and more people in the older age groups receive greater benefit. There is nothing to grudge over it: They being senior citizens, it becomes a moral obligation of the community to make terminal periods of their life comfortable through suitable provisions for their health care.

Our nation is signatory to the Alma Ata Declaration of "Health For All By 2000". Having pledged ourselves to achieve improvements in the socio-economic conditions of the underprivileged, of which the rural population forms a sizeable part (about 70-73%), a shift in the allocation of resources in favour of the nation's infants and children, particularly those living in the rural areas, has become indispensable.

We may now examine the patterns along which health care of the rural infants should be built up. The emphasis of the shift should be on medical and nutritional care as also general care of the child and that of the mothers of child-bearing age. For an all-round development of child care, stress should essentially be laid on prevention of diseases and promotion of positive health. This would require continuous supply of doctors trained in paediatrics and child care. They have to break the social barriers and barriers of distrust, before they

can expect the co-operation of the illiterate parents. Above all, they have to demonstrate their genuine interest and concern for the welfare of the families, particularly for the children, so as to rouse their enthusiasm for the health care of their children. Thereby the nation will derive best dividends through reduction of morbidity and mortality.

The involvement has to be assured of mothers and other sections of older population in the care of the children of age group 0-5 through Well Baby Clinics or Mothers Clinics to be set up for educating mothers in infant care and advising them on nutrition and personal hygiene, and the help of social workers and multipurpose health assistants, especially trained from among the local population for paying home visits.

As regards the type of paediatricians required for implementing this programme, it is clear that doctors of the highly sophisticated type are not desired as they would have a tendency to go for the high standards, that they have been trained in, and would prefer a hospital-oriented approach. Such senior paediatricians should be placed in the district or sub-district level to supervise the training, teaching and the organisational aspects, including utilisation of the available rural resources.

A local paediatric doctor only should be chosen as the head of the team and he should be assisted by health workers, who by working under his supervision and taking up more and more preventive programmes, would reduce his work-load gradually. His responsibilities in providing curative service, will go hand in hand with educating the people to accept newer ideas of health, live a clean life, eat wholesome food, fight malnutrition, make good use of preventive measures and seek medical advice immediately on manifestation of a disease.

In determining the health care needs of the population of 0-5 age group and setting up a Model 0-5 Clinic the following measures would have to be kept in view:

- Intensive study of the paediatric problems in the area, the quality of socio-economic group, the number of children in the community, the status of nutrition and the incidence of infections.
- Improvement and upgrading of facilities in the outdoor section to augment preventive paediatric services, while keeping curative service of a high order; combining the functions of a Model Well Mother's Clinic and a Well Baby Clinic into one, such as guidance

to mothers for infant care, hygiene, nutrition, early recognition of symptoms of disease, immunisation, health education, spacing of children and advice on family planning techniques, etc.

- Survey of common diseases as a result of malnutrition and infection.
- Development of a new strategy for drugs.
- Delegation of most of the work to Health Assistants with a view to developing a methodology of communicating with the illiterate mothers about infant care;
- The main purpose is to make available not only low cost treatment but extensive preventive care to control morbidity, reduce mortality and re-use confidence in the rural people that their children will not only live, but live a healthy life, thereby making them more amenable to adoption of small family norms.
- A continuous health education programme has to be in-built in the clinic.
- An integral part of the clinic should be its home service (domiciliary work), study and management of illnesses not brought to hospitals but taken care of at homes.
- Mobilisation of all available resources in the area so as to bring health facilities close to the people.
- The prevention of malnutrition would involve the efforts of many teachers, economists, nutritionists, agriculturists, public health workers and political leaders and it is the doctor's duty to impress the seriousness and severity of problem on those who can help in reducing the incidence of malnutrition.

For organising the health care for the population of 0-5 age group, our immediate priorities, therefore, have to be fixed with the above measures in view as under:

1. Pure drinking water supply
2. Improving nutrition
3. Early recognition of diseases
4. Recognition of presenting symptoms of diseases specially common in childhood.
5. Early immunisation
6. Imparting knowledge to the people, specially the new born during antenatal clinics:

7. Conducting surveys of specially assigned communities in areas under the jurisdiction of Health Centres to identify the felt need or the real need for protecting the most vulnerable sector of the population, viz. infants and children;
8. Planning of the training of health assistants from amongst the local rural population for undertaking health education and certain earmarked services under direct control of the doctor.
9. Eliciting the help of persons representing other disciplines for combating malnutrition.
10. Devising special training programme for the training of doctors at primary health centres and sub-centres in preventive paediatrics.
11. Laying more stress on education in paediatrics during undergraduate curriculum.

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TABLE I - Showing an Estimate of Essential Commodities and Services Required for
Hundred Million Infant Population of 0-5 Years

Essential	Minimum Requirement	Total Requirement
1. i) Milk	1/2 Kg. per day	50 million Kg. per day (10 million Kg. additional per day will be needed year after year as milk will be taken by children over 5 as well)
ii) Milch cows	5 Kg. per day per cows (average)	10 million cows
2. Food items (cereals, fats, proteins, vegetables, etc)	1/2 Kg. per day	50 million Kg. per day
3. Clothing	40-50 meters per year	4000-5000 million meters (additional 1000 meters per year)
4. Housing	4-5 children per room	20-25 million rooms (additional 4-5 million per year)

Essential	Minimum Requirement	Total Requirement
5. Doctors (Paediatricians)	1:4000 children	25000 doctors (or additional 500 doctors per year for 20 million newborns)
6. Medicines/Drugs (including immunisation)	Rs. 15/-per annum per capita (average as at present 1000 crores, 10,000 million for 640 million population)	Additional 330 million per year (as morbidity is more and vaccines are needed for active immunisation, the requirement would be always Rs. 1200-1500 million per year for entire age group 0-5)
7. Primary Health Centres (as at present)	1:1,00,000 population 6-8 per PHC	Additional 200 PHCs year
8. Sub-centres (as at present)	6-8 per PHG	Additional 1200-1600 subcentres per year
9. Hospital beds	1:2,100 (national average as of today)	10,000 additional beds per year (50,000 beds total for the age group 0-5)
10. Paramedicals	5-6 per doctor	Additional 25,000 per year
11. Primary Schools (for children as their age advances to 5 years & above)	200 children per school	Additional 100,000 schools per year.
12. School teachers	One teacher for 30-40 students (6-8 per school)	Additional 20,000 teachers per year.

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