

# PERSPECTIVES IN CHILD HEALTH IN INDIA

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The National Health Policy (1983) had defined several specific goals relating to child survival, maternal mortality rate, pregnancy and delivery care, immunization of pregnant women and children and reduction in occurrence of low birth weight infants. However, the recent trends over the past five years have shown that none of these objectives are likely to be achieved unless current strategies are modified or new strategies adopted.

## SITUATIONAL ANALYSIS AND CURRENT STATUS OF CHILD HEALTH

### A. Child Survival

#### A.1 Infant Mortality Rate

The decline in Infant Mortality Rate from 147 in 1951 to 95 in 1989 may appear significant but in actuality it is a fall of roughly one point every year in the last 40 years. Furthermore, in some parts of the country it has shown an increase in the last couple of years instead of a decline (Table I).

#### A.2 Neonatal, Perinatal and Maternal Mortality Rates

The neonatal, perinatal and maternal

mortality rates continue to remain at almost the same level for at least the last 15 years forcing the conclusion that there is something seriously wrong with the present National Programme and health care delivery relating to this aspect. It is most surprising that no attention has been paid to the care of the newborn even though neonatal mortality contributes to over 50% of the infant mortality rate. There is no apparent attempt to deal with pregnancy, child birth, neonatal care and family welfare as a comprehensive integrated programme.

#### A.3 Pre-School or 1-5 Years, School or 6-10 Years and Prepuberty and Adolescence/ or 10-14 Years Mortality Rates

The mortality for these groups has also declined slowly (Tables II & III). There is an attempt by midday meal to improve the child nutrition and decrease malnutrition, and blindness by Vitamin A Prophylaxis Programme. However, for strange reasons the technology mission on immunization had excluded coverage of these group of children from its main campaign and whatever immunization is being done is through the Extended Programme on Immunization (EPI). Still illness like tuberculosis, typhoid, etc., continue to remain as leading causes of morbidity and mortality.

### B. Pregnancy, Child Birth and Maternal Care

The National Health Policy envisages a 100% antenatal coverage of pregnant women and immunization against tetanus and 100% deliveries by trained birth attendants. In reality, not even 40% pregnancies are even registered at the community level (Table IV). The same is true for delivery

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**TABLE I—Changes in Maternal, Perinatal and Infant Mortality Rates**

Mortality rate	Period				
	1951-60	1961-70	1971-80	1981-85	1986-90
Maternal	3.34		4.5	3.4	3.5
Perinatal	73.4	58 to 105	63.7	54 to 82	70
Neonatal	83.6	68.0	80.2	73.6	N.A.
Post Neonatal	66.0	61.0	49.8	38.0	N.A.
Infant	165	113-129	130	105	97

Data not available before 1950.

**TABLE II—Change in One to Four Year Mortality Rate in India**

Period	Mortality
1970-72	85.8
1973-75	79.4
1976-78	78.6
1979-81	55.9
1982-84	47.1

Average of 3 consecutive years.

and child birth and the women continue to be delivered by totally untrained or poorly trained birth attendants. Even in a large metropolitan city like Delhi at urban level, the antenatal clinics, remain overcrowded with very little effort at quality care; the

postnatal wards are forced to keep 2 or 3 women on the same bed.

There is no provision for newborn care, either at birth or in neonatal period. The newborn is considered a mere appendage of the mother. There are, therefore, neither any newborn special care nurseries nor any staff or equipment to look after a low birth weight, a sick or asphyxiated infant.

### C. Low Birth Weight

The low birth weight prevalence which has been assumed to be about 30% is expected to be reduced to 10% by 2000 AD. However, there is no discernible change (Table IV) in any of the States or Union

**TABLE III—Change in Age Specific Death Rates (5-14 Years) in India**

Period	5-9 years				10-14 years			
	Rural		Urban		Rural		Urban	
	M	F	M	F	M	F	M	F
1968	5.5	6.3	—	—	2.3	2.6	—	—
1971	5.0	5.4	2.4	2.4	2.2	2.3	1.6	1.2
1976	4.8	5.4	2.2	3.3	2.6	2.6	1.1	1.5
1981	4.1	5.0	1.7	1.7	1.8	1.0	1.6	1.4
1985	3.7	4.8	1.4	1.9	2.0	2.1	1.2	0.9

TABLE IV—*Changer in Reflectors of Perinatal and Neonatal Care*

Parameter	Period				
	1951-60	1961-70	1971-80	1981-85	1986-90
Antenatal registration	NA	NA	NA	40-60	40-60
Untrained birth	NA	91.9 R 43.3 U	77.2 R 36.5 U	75.8 R 35.0 U	— —
Mean birth weight (g)	2672	2736	2829	2500-2800	2880
Low birth weight (%)	—	29-37.4	25.7-48	25-40	25-38
Preterm births (%)	10.5	14-24	10.9	10-16.1	7.0-10.0
Asphyxia (%)	12.9	10-12	6-10	9.9	7.0-10.0
Infections (%)	—	6.2	10.0	6.0-12.0	3.0-10.0

Territories in its prevalence or reduction in mortality or morbidities. It is unlikely to occur in the present situation as this problem is complex and the causation of low birth weight and death are dependent on multiple factors, such as environment, socio-economic status, cultural practices and pregravid status of the mother herself.

#### D. Immunization

The EPI and Universal Immunization Programme are beginning to have an impact on total coverage of the children with DPT, polio, BCG and measles. While these programmes may provide the primary immunization, it is difficult to speculate on the status of booster immunization which comes at different periods during pre-school and school years.

#### E. Population Control

The current status on crude birth rate, effective couple protection, net reproduction rate, annual growth rate, and family size speaks for itself. In the last seven five year plans, the Government has accorded higher priority and budget to population

control measures than to actual Maternal and Child Health Welfare Programmes. It is crucial to debate whether the maternal and child care should be through family planning as priority or to reverse and say family planning through ensured quality maternal and child care.

#### F. Health Delivery

The health delivery at the rural community level is being effected through Sub Centres, Primary Health Centres, and Community Health Centres. The health workers include Village Health Guides, Female Multipurpose Workers, Health Assistants and Dais, etc. The health care is supposedly under the charge of District Medical Officer but there is no linkage between these services and there is no referral system to back the primary care services.

The actual utilization of these services by the population continues to remain woefully inadequate. A recent survey by the Indian Council of Medical Research has shown that even basic facilities like weighing machines, BP instruments, hemoglobin and urine analysis, etc., are not available.

The continued Government policy of multiplying these services and health workers, therefore, becomes open to serious doubt and debate.

At the urban level there is no structured health delivery system and the situation in urban slums continues to worsen every day.

### G. National Maternal and Child Health Programmes

The following national health programmes are currently offering maternal and child care:

1. EPI and Universal Immunization programme.
2. Integrated Child Development Services.
3. Vitamin A Deficiency Prophylaxis.
4. Oral Rehydration Therapy.
5. Treatment of Acute Respiratory Infection.
6. All India Hospitals Post Partum Programme.
7. Maternal Anemia Prophylaxis Programme.

The administrative set up to supervise and deliver these programmes at Central and State level include Deputy Commissioners in Maternal and Child Health, Assistant Commissioners of Maternal and Child Health, Director Universal Immunization Programme, Deputy Commissioner, Assistant Director of UIP, ORT, ARI and so forth at Central and State levels.

A perusal of these programmes would indicate that the main objective of each programme is to deal with one or more specific aspect of maternal and child health or maternal and child problems and family welfare. None of these programmes were intended to deliver Maternal and Child

Health in an integrated or comprehensive manner. Many of these had common goals, e.g., Immunization programme, which is also being partly provided by ICDS and Family Welfare. Each in its zeal of pursuing their programme refuse to offer other advice, e.g., Family Welfare Centre dealing with immunization would not provide oral rehydration therapy or medical attention for minor ailment.

### H. Pediatric Education

Even though children comprise 40% of the population, Pediatrics is not considered important enough to be a separate subject of examination in the undergraduate medical examination. It is an established fact and reality that students mostly read to pass an examination. It is, therefore, not surprising that a medical student after obtaining his graduate MBBS degree is neither equipped to deal with sick child or know enough about immunization, oral rehydration or rational drug therapy.

The same situation prevails to a large extent with regard to training and education of nurses, para-health workers such as ANM, FMPW, Dai or Village Health Guide or Primary Health Centre Medical Officers.

There is no participation by Pediatricians or those adequately familiar with child health and problems in totality. This results in the inadequate or inappropriate treatment, spread rather than containment of infectious diseases and abuse rather than appropriate use of drugs.

### I. Pediatric Research

The premier research body of the country, the Indian Council of Medical Research, has a Division dealing with

**Maternal and Child Health.** But, it excludes from its purview the noncommunicable diseases in children. It is, therefore, not surprising that there is no one to initiate or undertake research on Pediatric problems in a comprehensive manner. The research in Pediatrics, therefore, remains limited to a few areas of Maternal and Child Health.

In brief, the current state of child health appears to be due to a cumulative effect of its continuous neglect by not according it its rightful place in key areas of medical education and training, research and health delivery system. Fragmentation of its different components such as perinatal care, neonatal care, immunization, *etc.*, at administrative level and at different levels of health care has further compounded the problem in recent years. In order to make a visible and rewarding change, it would be necessary to bring in a basic change in policies of Family Welfare, Maternal and Child Health, on one hand and modification in the existing health delivery system and the National Programmes suitably on the other.

The concept that Family Welfare, and Maternal and Child Health are intrinsically related to each other and that these should be offered to families as a composite programme is sound and logical. But, what appears to be wrong is the present approach in caring for the child as the least important component of these services. More explicitly to offer family planning as the first, maternal care as the second and child health as the third part of the services does not appear to be either logical or sensible. All the three components are important and should be given equal weightage. It is now an established fact that childhood mortality adversely and significantly affects the family planning practices—the higher

the number of fetal, neonatal or child deaths, the lesser is the adoption of family planning practices. It is, therefore, crucial to ensure not only the survival but an "intact survival" of a child to the family. This can only be brought about if the care of the woman during pregnancy and at child birth, and that of her child is improved dramatically from newborn period to adolescence.

Other extremely important reason for non-utilization of the existing health care facilities and its impact on national goals appear to be fragmentation of the maternal and child health services. Provision of launching of vertical programmes such as immunization against tetanus and iron and folic acid supplementation of pregnant women, Extended Programme of Immunization, Universal Immunization Programme, Control of Diarrheal Diseases, Acute Respiratory Infection, Vitamin A Prophylaxis for prevention of blindness are example of this. This approach has resulted in each programme limiting itself to its main objective and ignoring to provide the essential and basic needs of the child in an integrated comprehensive manner.

A third crucial reason is the failure of our medical education and training systems for medical, nursing and primary health care functionaries. The continuation of Pediatrics as a part of general medicine examination contrary to world practice of separate examination for it in undergraduate medical education level and teaching and training in maternal and child health by those have themselves never undergone training and education in the subject are examples of this.

Failure to provide basic needs such as the essential drugs, weighing scale, blood pressure recording, hemoglobin estimation, delivery facilities at primary care

levels by the existing health delivery system has resulted in total indifference by the users of these facilities.

The planning process should be addressed towards maximizing from the resources existing at present. A substantial increase in sub-centres, PHC, parallel community health centres will require parallel increase in resources for buildings, staffing and supplies. The past experience has shown that user rates for services do not keep pace with these investments.

### POSSIBLE MODIFICATIONS

Constraints dictate that distribution of funds and resources should be based on priorities and the existing know how to tackle them. Based on this principle, the following areas deserve prioritization:

1. Improved and universal care during pregnancy.
2. Safe, clean delivery including receiving of newborn babies.
3. Improved newborn care with emphasis on care of low birth weight.
4. Immunization for vaccine preventable diseases.
5. Improved nutrition including Vitamin A and anemia prevention.
6. Control and management of common childhood disorders including diarrhea, ARI, tuberculosis, typhoid, etc.
7. Care of sick children.

The immediate tasks would thus appear to offer programmes which are acceptable to the community on its felt needs. Several surveys have documented that community regards maternal care during pregnancy and delivery, care of the sick, immunization of children as the highest priorities for

their health care. It would, therefore, be essential to provide these services in an integrated comprehensive manner. The ongoing services and National Programmes will have to be appropriately modified to meet these expectations as outlined below:

- A. Comprehensive National Child Health Programme.
- B. Perinatal, Neonatal and Family Welfare Programme.
- C. Strengthening Pediatric services for sick children at all levels of health care.
- D. Improving and making education and training in Maternal and Child Health to be more meaningful, relevant and need based.
- E. Child Health Advisory Committee at National and State levels to advise, monitor and evaluate medical education, research and health care for children.

### A. Comprehensive National Child Health Programme

The objectives of this programme will be to provide integrated health care to children and would include:

1. Control of infectious diseases.
2. Prevention of nutritional deficiency diseases.
3. Promotion of optimal physical, mental and emotional growth and physical growth monitoring.
4. Treatment of sick children.
5. Provision of Family Welfare practice facilities.
6. Specific programmes aimed at reduction of preventable morbidities and mortalities such as diarrhea, acute respiratory infections, anemia, blindness, tuberculosis, typhoid fever, etc.



The objectives explain the basic approach of dealing with these problems in a comprehensive integrated manner. It prioritizes tackling of problems and does not aim to offer essential needs of a sick or healthy child in isolation. It does not fragment the health care but rather integrates it.

A serious attempt must be made to critically evaluate whether the current Universal Immunization Programme, Diarrheal Diseases Control Programme, Acute Respiratory Infection Programme, Vitamin A Supplementation, Extended Programme of Immunization, *etc.* can be integrated into one composite programme or the benefits of several vertical programmes outweigh integrated services.

## **B. Perinatal and Neonatal Care**

The currently existing programmes do not offer comprehensive integrated services for care during pregnancy, delivery and postnatally. The newborn care has remained neglected and there is no provision of newborn care at hospital or community level.

The Government of India, Ministry of Health, Task Force on "Minimum Perinatal Care" and "Maternal Mortality" have made comprehensive recommendations which aim at providing the minimum needs. These recommendations deal with reductions of mortality rates and low birth weight and at risk approach which recommends care for all but more for those who are at risk. These also spell the staff, equipment and other logistic requirements.

Amongst the ongoing programmes relating to Family Welfare, the National All India Hospital Post Partum Programme can be extended to include Perinatal and Neonatal care as the other two major

objectives. The Post Partum Programme like the Universal Immunization Programme can be extended to provide a comprehensive package of perinatal care delivery, postnatal and neonatal care programme. If this modification is made, the families would accept family planning methods more readily than offering them as a Welfare Programme to mother during pregnancy, child birth and postnatal care.

Provision of a perinatal and neonatal care either as a vertical programme or on package will remove a major lacuna in the present health delivery system of a comprehensive Programme of Perinatal, Neonatal and Family Welfare. It would improve not only the maternal survival but morbidity and mortality and thus help in achieving the national goal of PNMR of less than 60 in the next decade. Comprehensive care of the pregnant mother, application of at risk approach, early identifications of fetal growth retardation is bound to result in reduction of low birth weight prevalence. To date there is no programme dealing with either reduction of low birth weight or offering care to these highly vulnerable infants.

## **C. Strengthening of Pediatric Services for Care of Sick Children and Provision of Essential Drugs**

In the last four decades there has been hardly any qualitative change in the facilities to treat sick children in children wards at Primary Health Centre, District Hospitals or even Medical College Hospitals. The care continues to be given purely on clinical grounds. The result of such a care is obvious in the unchanged mortality in hospitalized children. There is, therefore a need for a qualitative change in the care.

Quantitatively too, the number of children beds in proportion to total and other hospital beds remains small. There has been no increase in beds for children. If primary care approach is to be strengthened then it is necessary to provide back up support for referrals at Community Health Centres, District Hospitals and Urban Hospitals. Development of referral system between primary and secondary level could become a major gain by strengthening with appropriate logistics support.

#### **D. Improving Education and Training in Maternal and Child Health to be More Meaningful, Relevant and Need Based**

Pediatrics rightfully deserves to be a major independent subject. Therefore,

immediate steps at all levels should be taken to ensure that it is granted this stature by the Medical Council of India and all the Universities of the country. This step will begin to correct the malady for a graduate who at the primary care level has to teach, supervise, train his colleagues and treat children from an extreme premature and low birth weight to all kinds of fatal diseases.

Training and retraining in an integrated comprehensive manner and developed as a need base for the local situation or region should be given the highest priority. The training is required by all levels of health functionaries. In maternal and child health *per se* the training should be integrated to include skills for tackling aforesaid problems.

### **NOTES AND NEWS**

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Heartiest congratulations and good luck to all of them from Pediatric Fraternity of India.

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