GOAL:4

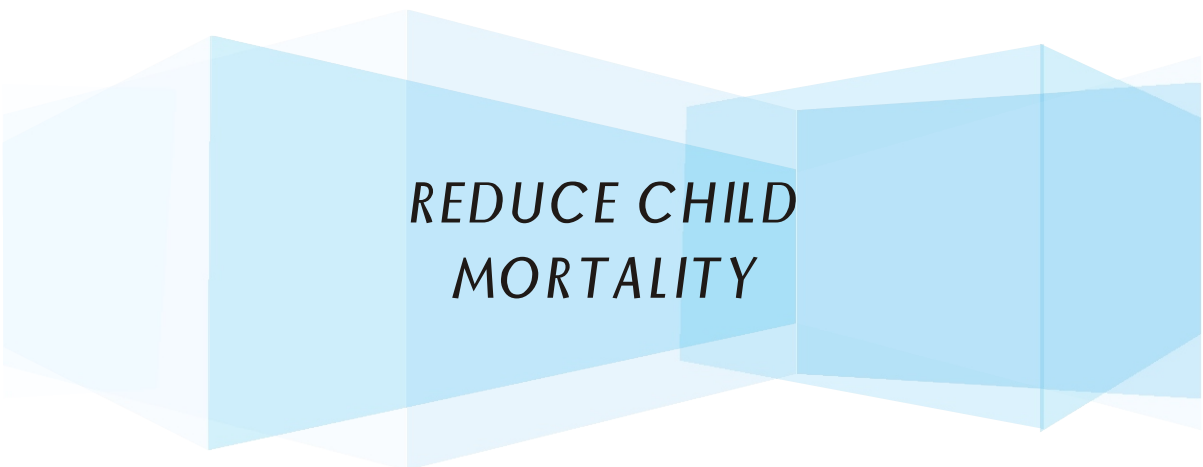


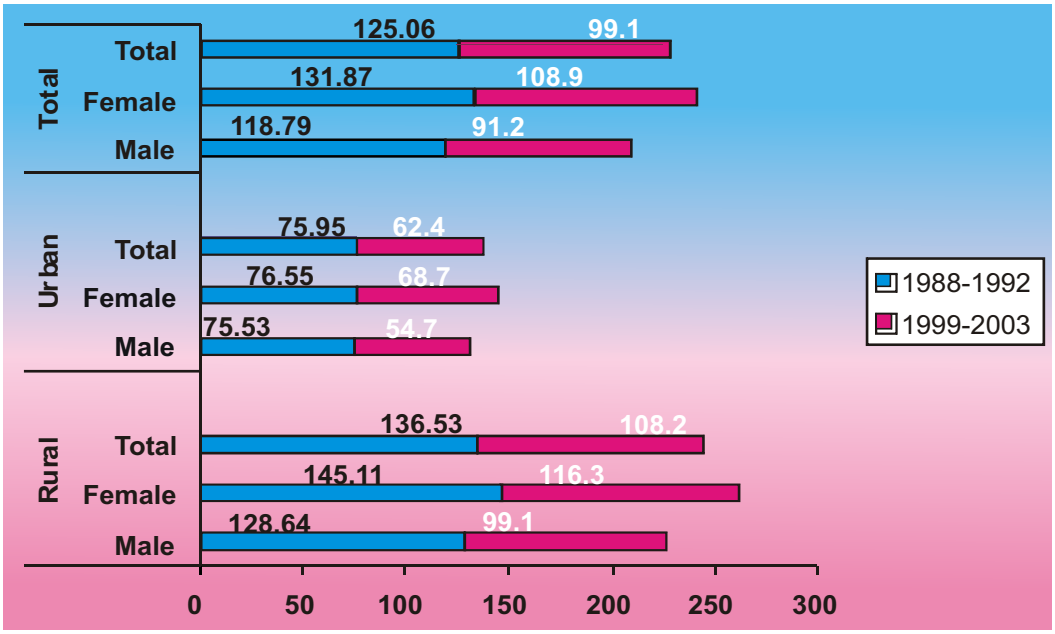
Table 4.1: Under 5 Mortality Rate, 1999-2003 (per '000 live births)

Table 4.1: Under 5 Mortality Rate, 1999-2003 (per '000 live births)									
India and bigger states	Composite			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
India	99.1	91.2	108.9	108.2	99.1	116.3	62.4	54.7	68.7
Andhra Pradesh	78.8	73.9	89.7	90.8	82.6	99.3	51.6	45.9	57.5
Assam	111.4	105.1	118.1	114.7	109.2	120.6	72.3	58.6	87.6
Bihar	127.2	120.6	142.3	136.9	125.7	149.0	76.7	82.9	69.6
Gujarat	93.1	79.9	106.5	100.3	87.3	115.7	76.5	65	82.9
Haryana	93.6	75.8	116.6	100.1	77.9	123.8	71.2	63.6	80.9
Himachal Pradesh	82.4	81.0	81.0	81.8	82.0	81.4	68.3	64.9	72.2
Karnataka	78.9	73.3	85.3	95.4	88.3	102.7	34.3	32.6	36.0
Kerala	18.4	23.1	15.0	14.9	14.6	15.3	21.6	50.2	14.1
Madhya Pradesh	147.7	134.0	161.5	157.7	143.8	171.4	83.3	75.9	92.5
Maharashtra	57.2	53.3	61.5	67.1	64.2	70.2	39.3	33.6	45.5
Orissa	126.0	120.6	132.2	129.3	124.5	134.3	93.6	79.1	108.6
Punjab	69.3	59.9	81.4	74.0	62.3	89.0	53.0	51.8	54.6
Rajasthan	129.2	118.9	141.0	137.9	124.9	150.3	82.8	82.2	83.6
Tamil Nadu	60.1	60.6	59.7	65.0	67.6	62.4	49.5	45.0	53.2
Uttar Pradesh	121.2	110.3	133.4	124.6	112.9	137.9	100.0	94.9	105.9
West Bengal	93.2	90.3	94.8	99.9	99.8	100.0	63.0	56.3	70.0

Source: SRS Based Abridged Life Table,1999-2003

4.3 U5MR is higher than the national average in the States of Assam, Bihar, MP, Orissa, Rajasthan and UP in respect of rural, urban and combined estimates and also for both men and women when corresponding values at national level are compared with. The two-thirds of 1990 U5MR at the national level, which will have to be achieved by 2015, is nearly 83 per '000 live births. Some States, which are already lower in U5MR level from the national target, are Kerala (18.4), Maharashtra (57.2), Tamil Nadu (60.1), Punjab (69.3), Karnataka (78.9). A faster decline in the national U5MR will depend on very rapid decline in the States, which in the case of India are the larger and more populous States and are also comparatively socio-economically backw-ard having higher-than-national U5MR. U5MR is highly related with Infant Mortality Rate (IMR). The rate of decline in IMR in the larger and more populous States of the country is therefore, the matter that needs to be addressed.

Fig. 10
Under 5 Mortality Rates



Infant Mortality rate (IMR)

4.4 The country has observed a continuous decline in IMR. It stood at 192 during 1971, 114 in the year 1980 and 58 in 2005. The decline in IMR has been noticed both for male and female during the period. However, the rate of decline is more pronounced in the case of male as compared to female.

4.5 Within a period of 5 years, the drop in the heart-land States has been in the range of 10 to 20 points while it is less than 10 points in almost all other States and about 10 points only in rural-India or India as a whole. This progress is heartening and requires further momentum to cause a landslide drop in the States where it matters most.

Table 4.2: Infant Mortality Rate by Sex (Per 1000 live births)

Year	Male	Female	Total
1980	113	115	114
1985	96	98	97
1990	78	81	80
1993	73	75	74
1996	71	73	72
2000	67	69	68
2003	57	64	60
2005	56	61	58

Source: Office of the Registrar General of India

Fig. 11
Infant Mortality rate (IMR)
Deaths per 1000 live births

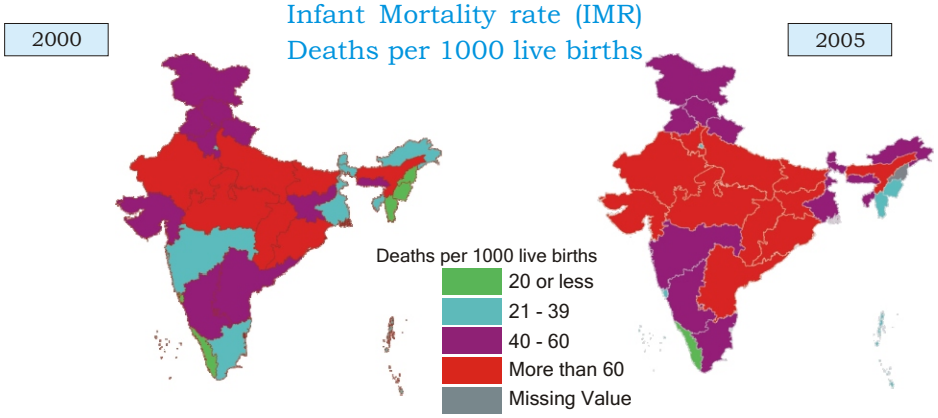
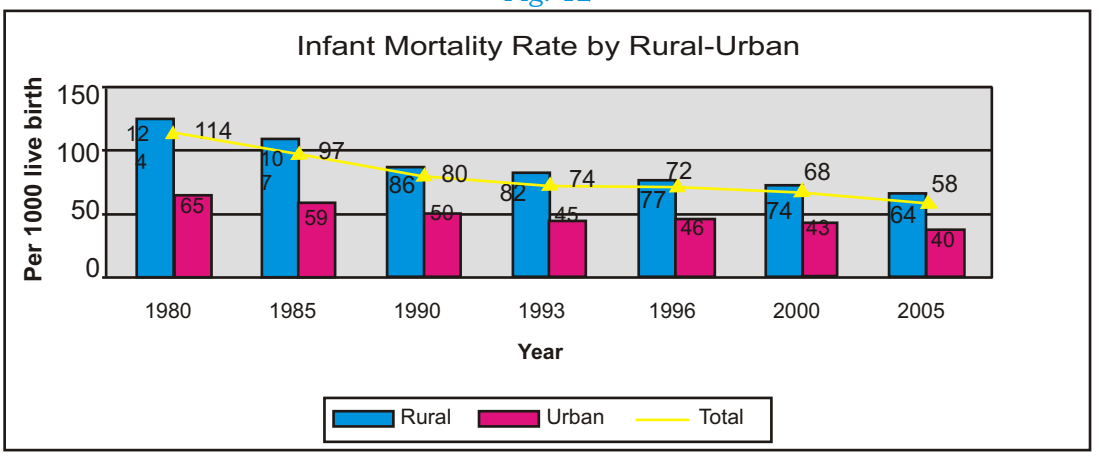


Fig. 12



4.6 On account of child health interventions, the infant mortality rate in the country has gone down from 114 in 1980 to 58 in 2005. While looking at the IMR of the country, it is observed that there is a continuous decline both in rural as well as in urban areas although urban areas of the country are observing rapid decline in IMR as compared to rural areas attributing this change to better health care facilities easily accessible in urban areas. The Table 4.3 shows the IMR according to rural-urban residence status:

Fig. 13
Trend of Infant Mortality Rate 1990-2005

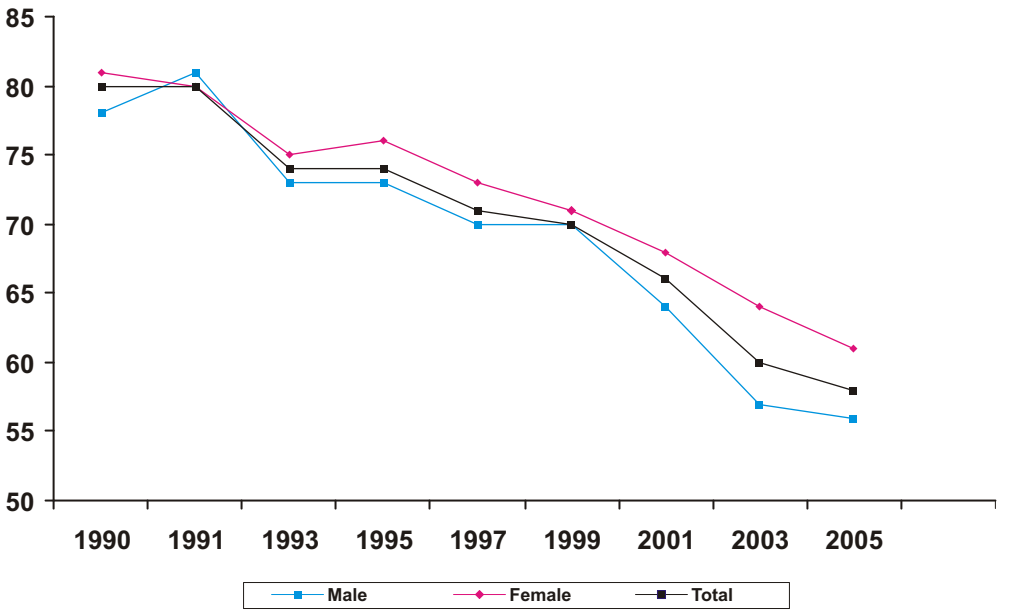
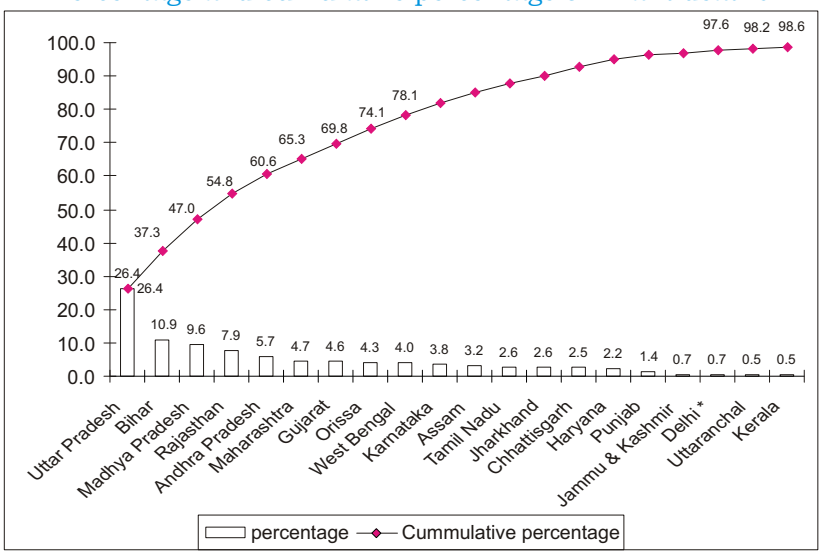


Table 4.3: Infant Mortality Rates with Rural-Urban break up (per 1000 live births)

Year	Rural	Urban	Total
1980	124	65	114
1985	107	59	97
1990	86	50	80
1993	82	45	74
1996	77	46	72
2000	74	43	68
2003	66	38	60
2005	64	40	58

4.7 In terms of number of infant deaths, in 2005 about 1.5 million children below age one died in India. If India was on track on achieving the Goal 4 it could have averted 260 thousand deaths in this year. Out of 1.5 million children who died before reaching age one, one million died before age one month (neo-natal deaths). This amounts to almost 30 percent of worldwide neonatal deaths. Exclusive breastfeeding, simple interven-tions for the prevention and prompt treatment of infections, and special care for low birth-weight babies have been shown to substantially reduce neonatal mortality.

Fig 14
Percentage and cumulative percentage of infant deaths



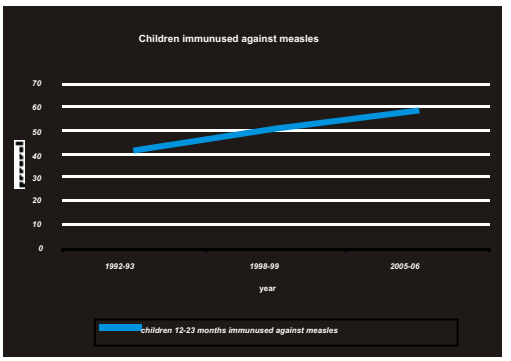
4.8 The disparities in IMR are very high. While on one extreme Madhya Pradesh has an IMR of 76, Kerala has achieved a very low level of 14. Four states, Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan, account for about 55 % of infant deaths. Four more states account for another 19%, or a cumulative 74%. The Malwa and Vidhya regions of Madhya Pradesh and Southern region of Orissa have IMR more than 90, a value the country as a whole had achieved 16 years ago.

4.9 The principal causes of infant mortality in India are:

- Premature delivery;
- Diarrhoeal diseases;
- Acute respiratory infections;
- Vaccine preventable diseases;
- Inadequate maternal and newborn care;
- Malnutrition (contributing to over 50% of child deaths);
- Low birth weight (30%); and
- Birth injury.

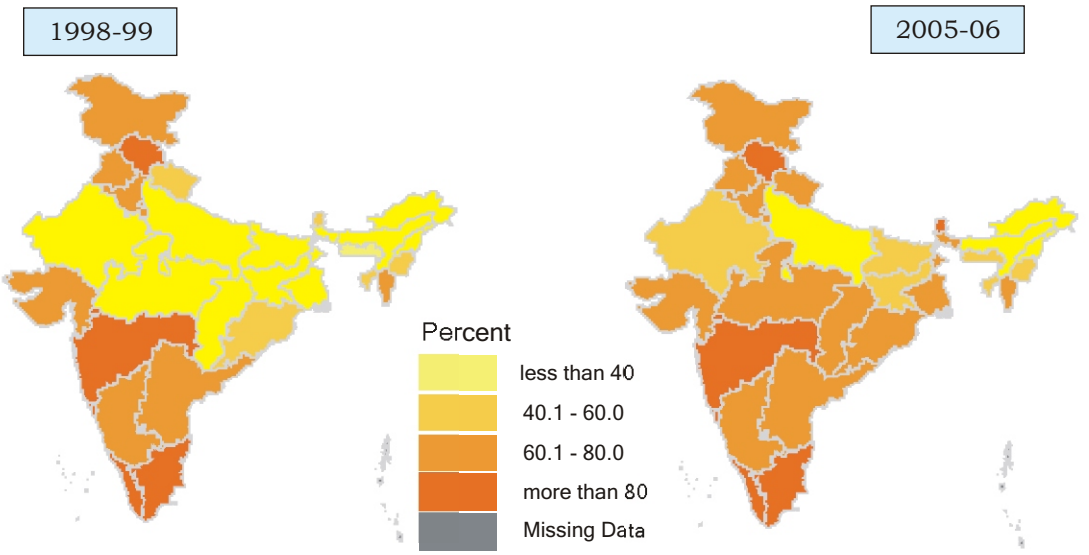
4.10 There has been a paradigm shift in service delivery from the method mix target based activityapproach to its current status of provision of client centered, need based, demand driven high quality services. The focus is now on changing the attitude of service providers at the grass root level and strengthening the quantity and quality of reproductive and child health care services offered. Decentralization is the key word in this programme.

4.11 Notable among the child health interventions have been the Universal Immunization Programme, Diarrhoeal Disease Control Programme and Acute Respiratory Infection (ARI) control programme. These were merged under the Child Survival and Safe Motherhood Programme in 1992. With the paradigm shift came the Reproductive and Child Health Programme (RCH), which was launched on October 15, 1997. The second phase of RCH has been launched in April 2005 with more focus on child survival and safe motherhood.



Immunization of children of 12-23 months of age as per NFHS-II (1998-99) against measles was 50.7% as compared to 42.2% during NFHS-I (1992-93). As per NFHS III (2005-06), immunization level has further increased to 58.8 %.

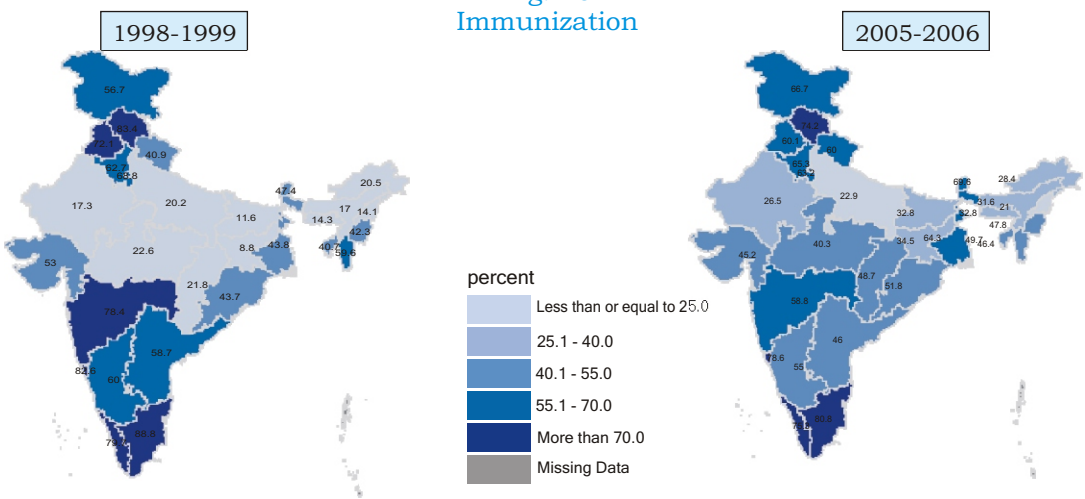
Fig. 15
Proportion of 1-year old children immunized against measles (%)



4.12 It has been realized that a faster pace of progress is needed if the goal of achieving an IMR of 30 per 1000 by the year 2010 as stated in the National Population Policy is to be achieved. Accordingly, a new strategy has been adopted with a view to giving the child health interventions a holistic approach i.e. the Integrated Management of Neonatal and Childhood Illnesses (IMNCI). It aims to train the baseline workers in the management of measles, malaria, pneumonia, diarrhoea and malnutrition in a holistic manner with appropriate health facilities. Another unique feature of IMNCI is that the community is to be involved in the recognition of the sick child so that there is no delay in seeking treatment. This initiative is being implemented in at least 125 districts throughout the country in a phased manner.

4.13 In addition to the above, the Government is implementing prophylactic programmes for the prevention and treatment of two micronutrient deficiencies relating to Vitamin A and Iron. Children below 2 years of age who are fully immunized (BCG, anti-measles, three doses each of polio and DPT) at the national level as per NFHS-III (2005-06) are 43.5% against 42% in 1998-99 and 35.5% in 1992-93.

Fig. 16
Immunization



4.14 Given the high prevalence rates of malnutrition among children emphasis is also being accorded to promotion of (i) exclusive breastfeeding up to the age of six months and (ii) breast feeding along with appropriate practices related to the introduction of complementary feeding after the age of 6 months up to the age of 2 years or more (weaning).

4.15 Under the New Born Care scheme, 80 districts in Phase I and 60 districts in phase II of the Empowered Action Group States were provided newborn care equipment to upgrade neonatal care facilities. In the selected districts, the National Neonatology Forum (NNF) has imparted training to 2544 Medical Officers, Pediatricians and Obstetricians, and generated new trainers for the programme. The programme is to be implemented through ASHAs.

4.16 Iron Deficiency anaemia is widely prevalent among young children. As per the results of the National Family Health Survey-III (2005-06) 79.2% of children under the age of 3 years were anaemic. There is a marginal difference in the prevalence in the rural (81.2%) and urban (72.7%) areas. The prevalence ranges from 55.7% in Kerala to 87.6% in Bihar.

4.17 Under the National Programme, iron folic tablets containing 20 mg of elemental iron and 0.1 mg of folic acid are provided at the sub-centre level. Current programme guidelines instruct health workers to provide 100 tablets to children clinically found to be anaemic.

4.18 To address the issue of high infant and child mortality, Ministry of Health & Family Welfare, Government of India is implementing various programmes including Immunization Programme as it is one of the key interventions for protecting children from life threatening conditions. The following new initiatives have been taken under the immunization programme:

- Introduction of Auto-Disposable syringes for all immunization activities replacing the existing glass syringe and needles for improving injection safety and easy handling by the auxiliary nursing midwives (ANMs).
- Mobility support to State and District Immunization officers for better monitoring and supportive super-vision.
- Mobilizing children to the immuniz-ation sites by Accredited Social Health Activist (ASHA), Anganwadi workers, Women Self-help Group volunteers, etc.
- Vaccine delivery to the immunization site from primary health center (PHC) to village so as to save the time of ANM and enable her to concentrate on immuniz-ation at site.
- Annual average expenditure of last 5 years on immunization is Rs. 127 crore. It is now stepped up to Rs. 524 crore average for next 5 years, an increase of around 400%.
- Outreach sessions are now being organized in close co-ordination with Anganwadi workers and Panchayati Raj Institutions.

4.19 The **Integrated Management of Neonatal and Childhood Illness (IMNCI)** is the Indian adaptation of Integrated Management of Childhood Illnesses, which was developed by WHO and UNICEF.

Pre-Service IMNCI

4.20 Long term programme needs can only be met if the new cadres of health professional and workers possess optimum skills for managing newborn and children. In service training, therefore, must be complimented with pre-service training for new born and child health. IMNCI is a new approach and it is being introduced as a part of the teaching curriculum of medical students, nurses and ANMs as pre-service IMNCI.

4.21 The primary focus in RCH II has been in-service training. The outcome of introducing IMNCI in the pre service programmes would be in the creation of a large cadre of IMNCI trainers who would be useful for in service training programme as well. There are around 200 medical colleges in the country producing an average 200,00 medical graduates every year. Such a large number of trained human resources are likely to help the child survival activities not only in the public but also the private sector. Similarly ANM and nursing force with its trained human resources are likely to contribute towards India achieving its national health policy and MDG-4 goals.

Referral Care of Sick children and newborn:

4.22 Hospital-care for severely ill children so complimentary to primacy care, providing a continuum of care for severely ill children. Implementation of the integrated Management of Neonatal & Childhood illness (IMNCI) at first level health facilities will result in up to 20% of the children diagnosis as severely ill being referred to district hospitals. FRU's and 24 hour functional PHC's. Good quality hospital care for children is required to increase the impact of appropriate primary care interventions on child survival and contribute to achieving National health Policy goals & MDG 4 , which aims to reduce child mortality . It has been shown that more than half of the children are under- treated or inappropriately treated with antibiotics, fluids, feeding or oxygen. Lack of triage and assessment, late treatment, inadequate drugs supply, poor knowledge of treatment guidelines and insufficient monitoring of pediatric inpatients were additional adverse factors observed in these studies.

4.23 Strengthening the health facilities is one of the main objectives of RCH-II under NRHM. Capacity building also needs to be addressed simultaneously to provide quality care to sick children and newborns. Guidelines for capacity building of medical personnel at referral facilities have been developed and are likely to be implemented in all districts.

Kishori Shakti Yojana:

4.24 The sex ratio in the age group 0-6 years is 927 females for 1000 males with a similar pattern at the State level, which is lower than the overall sex ratio. However, there are certain States/ Districts with an alarmingly low sex ratio. This indicates to some extent son preference, widespread prevalence of pre-natal sex determination and selection practices and existence of socio-cultural practices like dowry and unequal status accorded to women in decision-making. The PNDT Act mandates the maintenance of records relating to the use of ultrasound machines and other equipments for sex determination and the bodies registered for the same. Kishori Shakti Yojana for adolescent girls (11-18 years) was launched in 2000-01 as part of the ICDS. Immunization of the girl child is given special attention under the RCH programme.