# CURRENT STATUS OF HEALTH IN INDIA

BY

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Duplicate

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During the ist four decades and more since the attainment of political independence much effort has been expended in India in attempting to improve the health status of the people. There have been some notable successes like the eradication of Small Pox and Plague. Life expectancy at birth has increased from about 32 years at the time of independence to about 58 years curretnly. At the policy making level a commitment to health as a social goal with emphasis on equality of health service for all social groups in the coutry, has emerged. However, a detailed examination of availabie information on mortality, morbility, delivery of health services and development of health manpower and their depioyment reveals that the picture of health status in the country is not as rosy as it seems on the surface.

## Mortaiity in india

There has been a continuing decline in the Crude Death Rate (CDR) in India since 1921-31. It was estimated to be 36.3 per 1000 popuiation for rural and urban areas combined during the decade 1921-31. It declined to 19.0 during 1961-71. Since 1971, estimates of CDR are available for rural and urban areas sepeately from the Sampling Registration Scheme of the Registrar General of India. Table 1 presents 3-year moving averages of CDR for the major states of India and for the country by rural and urban areas for three chosen periods during 1971 to 1988. Both the rural and urban rates show a continuing decline during this period. However, the rural dealth rates are substantially higher in all the States barring the singular exception of Kerala in 1986-88 with a rural rate slightly lower than the urban dealth rate. There is fair degree of homogeneity between the States in urban death rates but the rural dealth rates show considerable heterogeneity. The rates for 1988 presented in Table 2 also show this clearly. Populous states of noth India like Uttar Pradesh, Rajasthan, Bihar and Madhya Pradesh have rural death rates substantially higher than the national rural average of 11.8. The urban-rural differential is unacceptably high in these states in absolute terms.

Age and Sex specific Death Rate:

Table 3 presents the SRS estimates of age and sex specific dealth rates for 1985 (latest year for which such information is available). There are striking differences in the mortality experiences of males and females. Below 10 years of age, the deaith rates in femals, both in urban and in rural areas, are clearly higher than those in males. All available information on anthropometric measurements in India in new born children clearly shows that female children at birth do not have any health disadvantage compared to male children. If anything, the female child is shlightly better off compared to male children at birth in weight and height. The inference, therefore, is inescapable that the family and social environment in the early years of growth of the female child is adverse.

The dealth rates become equal for the two sexes in the rural areas in the 10-14 year age group. In Urban areas for the same age group, females have a suggestively lower death rate compared to males. However, in the first two decades of the female reproductive period from 15 to 34 years of age the female dealth rates are distinctly higher by 25 to 50% in the rural areas compared to males. In the urban areas, the female disadvantage in mortality experience is confined to 15-24 years only. In the 30-34 year age group in urban areas, the female death rate is substantially lower than that of males. Beyond 35 years of age, the females enjoy a lower death rate compared to males. The heavy toll of dealth child bearing takes in women reflects very poorly on the health system particularly in the rural sector.

Infant Mortality Rate

Tables 4 to 7 present different aspects of infant mortality in India. Table 4 presents the infant mortality rate (IMR) by sex in the major states of India in 1985 contrasting tham with CDR for the same year. The States fall into 3 categories with reference to IMR in males and females. In Uttar pradesh, Haryana, Himachal Pradesh and Punjab the female infant mortality is higher than that in males. The absolute difference in IMR of males and females in the first 3 states mentioned above are higher than in Punjab. In Bihar, Rajasthan, Madhya Pradesh, Tamil Nadu, Gujarat and Maharashtra the IMRs in males and females are closely similar, through in the first 3 states the rates are considerably higher than the national average for males and females. In the remaining States, the IMR in females is lower than in males. Kerala has the lowest infant mortality rates of 34/1000 live births in urban areas and 28/1000 live births in rural areas. It is interesting to note that the CDRs do not show the same relative picture that the IMRs show in the different states.

Table 5 presents the IMRs, CBR (birth rates) and CDR of the major States of India for 1988. The IMRs are arranged in the table in decreasing order of magnitude. Barring Punjab and Himachal pradesh, the North Indian States show high IMRs. It is also interesting to note that the IMRs do not show a high positive conelation with the CBRs. The rural IMRs, barring Kerala, are substantially higher than the urban rates.

Table 6 presents the average neonatal and post neonatal mortality rates for the major states of India at three selected 3-year periods between 1970 and 1985. The post neonatal mortality rates, except in the cast of Haryana, show a clear and substantial decline during the period. The neonatal nortality rates also show a decline in most States but the relative declines are smaller. Table 7 shows the estimated early neonatal and late neonatal mortality rates in the country as a whole during 1971 to 1985. These have to be taken as only rough and neady estimates, since they have been obtained by subtracting still birth rates from perinatal mortality rates. Still birth rates are generally estimated imprecisely in India, particularly, in rural India. The rural rates are substantially higher again compared to urban areas.

Matenal Mortality Rate:

Tables 8 to 11 attempt to present the maternal mortality experience in India. Data on maternal mortality are grossly inadequate in India and hence the attempt here is to present merely a qualitative picture of maternal mortality without laying claim to present point estimates of acceptable precision of maternal mortality experience.

In Table 8 the maternal mortality rates for the rural areas of the major States of India have been derived using the available statistics provided by the Survey of Causes of dealth carried out by the Registrar General of India's office. Approximately 1% of all rural dealt are reported to be due to child birth and pregnancy in India. This percentage, however, shows considerable variation between the states. Using the percent of deaths due to pregnancy and child birth, and the consponding CDR and CBR for the states, the maternaly mortality rates have been estimated. The over all maternal mortality rate (per 1000 live births) comes out to be 3.6. Utta Pradesh tops the list with a reate of 7.1 and Punjab has a low rate of 0.6 Kerala probably has a lower rate still.

Tables 9 to 11 present different aspects of maternal mortality in Anantapur district - a relatively backward district of Andhra Pradesh. The data were collected through a detailed hospital cum community survey of maternal dealths during 1984-85 by Dr. Jagdish C Bhatia of the Indian Institute of Management, Bangalore. The picture is indeed

deeply disturbing if not frightening. The overall maternal mortality rate is a whopping 8.3 per 1000 live births. Not only that, it is 11.62 and 13.27 in the 30-34 and 35-39 year age group, respectively. Nearly half of all dealths in the age group of 15-29 are due to maternal mortality.

It is interesting to note here the maternal mortality rates in some of the developed Asian and Western countries. It is 0.6 in Srilanka, 0.44 in China, 0.16 in Japan, 0.08 in USA and 0.09 in U.K. Our rural maternal mortality is probably about 15 times more than what it should be for an Asian country. It is probably 60 to 80 times more than that in developed countries of the West. The number of maternal dealths in rural India in a day is probably equal to maternal deaths in all the developed countries of the world in a month.

Table 10 presents a more grim picture in terms of the association of maternal mortality to poverty and remoteness of rural areas. In less developed villages the rate is higher than 15 per 1000 live births. In remote villages, it is nearly 10. Table 11, shows that obstetric care is of abysmally poor quality in the rural areas - 43.5% of all maternal deaths occur on the day of delivery.

Table 12 presents the attendance at delivery by untrained people in rural areas of the country as estimated by the SRS. Over 70% of all births in rural India are attended to by untrained people. The achievement reported by the Government of India of having training at least 1 dai per village does not seem to be the answer to this colossal tragedy taking place in the rural areas.

Figures 1 and 2 and Table 13 presented from the ICMR study on Evaluation of Quality of Maternal and Child Health and Family Planning Services in the rural areas published in 1989 clearly point to the gross inadequacy of elementary antenatal and intranatal care in rural India.

Causes of Death:

Tables 14 and 15 present selected data on causes of death in rural India in 1986 and 1987 culled out from the report of Survey of Causes of dealth (rural) 1987 of the Registrar General of India. Tuberculosis, Preumonia, Anaemia, Gastroenteritis, Dysentry and Typhoid together account for nearly 20% of all dealths. In fact, even to day communicable diseases account for nearly 40% of all dealths in the country. In pre-school children some of these diseases take a very heavy toll of death as can be seen from Table 15.

A recent study by UNICEF (Delhi) on Diarrhoea in rural India, shows that 12% of preschool children had diarrhoea on the day of the survey. This increased to 16% when the reference period was two weeks immediately preceeding the survey date and 48% had an episode of diarrhoea when the reference period was 2 months. Of the 5310 household surveyed in this study 23% had experienced at least one child deaith.

Nutrition Status:

Table 16 presents the change in undernutrition during 1975 to 1989 in rural Indian children of 1 to 5 years of age from 7 States in which the National Nutrition Monitoring Bureau has carried out a survey of the same villages in 1989 which were earlier surveyed in 1975. in quantitative terms the reductions shown in this table should be taken as provisionai only since the second phase of the survey in independant samples of villages in these States is yet to be compieted. However, barring Gujarat and Orissa the other states show a marked decline in severe degrees of mainutrition. The giri children show greater improvement than the boys!

Table 17 presents the results of a survey of tribai boys and girls in the 1-5 year age group in these same states during 1985-87. The prevalence of moderate and serve malnutrition is very high in all these 7 states.

It may be relevant here to mention the finding on the occurance of low birth weight rates in a recent multicentric study on "risk approach to MCH" sponsored by the ICMR in Chandirarh, Delhi, Jaipur, Gwalior, Lucknow, Pune and Varanasi. In rural areas surrounding these places the incidence of low birth weight babies varied between 33 to 41%.

Table 18 presents the prevaience of Vitomin A deficiency signs in rural areas of Tamila Nadu, Andhra Pradesh, Orissa and Gujarat. In preschool children, except in Gujarat, the prevalence ranged between 5 to 10% n the 5-11 year old children in all the four STates the prevalence was high.

Communicable Diseases Morbidity:

Tables 19 and 20 present the current situation in regard to three major communicable diseases covered by national programmes. The progress in the control of Tuberculosis of Lung is very disappointing. Both case detection and case holding rates for the required duration of Chemotherapy have to improve markedly if this disease is to be controlled in the next decade or so. We have to keep in mind the potential danger of Tuberculosis becoming rampant in the country if AIDS spreads as feared.

The Leprosy control front looks more hopeful with the introduction of multi-drug therapy. In the next 10 years or so, it should be possible to cut down the current prevalence of leprosy in the country by about 80%.

The resurgence of Malaria since 1971, though contained in a number of states in India, shows an increase in six STates as presented in Table 20.

In addition to these, it is estimated that currently over 360 million people in India are exposed to the risk of Filasis. There are 25 million microfilaria camiers and 19 million diseased persons. Japanese encephaiitis, though affecting relatively small numbers, has shown sharp increases in Uttar Pradesh, West Bengal, Gujarat and Madhya Pradesh during 1988. The case fatality in this disease is quite high. In 1988, 16834 cases of meningits most of which was meningococal were reported with 3304 dealths.

Non-Communicable diseases:

Tables 21 and 22 present information on 3 selected non-communicable diseases. Goitre is no long confined to the sub-Himalayan regions as revealed by the recent ICMR survey of Goitre. Large numbers of people, may be a third of the Indian people, are exposed to the risk of Iodine deficiency diseases. The prevalence of cretinism in some areas is very high. It is indeed unfortunate that in spite of technology for preventing this disease being readily available, we have not succeeded in controlling it.

Information on Cancer is yet confined to selected areas mostly urban, in the country through population based and hospital based cancer registries started by ICMR. The available figures do indicate that cancer can no longer be ignored as a major public health problem.

Blindness prevalence rates are quite high and even in this the females and rural areas show a higher prevalence. It is estimated that more than half of blindness prevalence is due to cataract. It is also estimated that over 70% of blindness are surgically curable. Varying estimates of blindness incidence due to vitamin A deficiency in preschool children in India are reported in the literature ranging from 20,000/- cases per year to 40,000/- cases per year. In any case, vitamin A deficiency in preschool children is a public health problem of importance that needs to be tackled expeditiously and more effectively than at present. Another problem of public health importance in the area of non-communicable diseases is Mental illness. A recent multicentric study on severe mental morbidity sponsored by the ICMR reports the prevalence to be of the order of 1% which would mean a prevalence figure of 8 million cases of severe mental morbidity.

Health Infrastructure and Health Manpower:

India has truly built up a vast health infrastructure in the rural areas of the country. Official statistics indicate that the objective of having a subcentre for 5000 people in rural areas and 3000 for hilly and tribal areas and a primary health centre for every 30,000 population is very nearly achieved. However, independent evaluations by the ICMR and the National Institute of Health and Family Welfare present a disappointing picture. The NIHFW's National Review of Immunisation Programme, carried out recently shows that only 45% of the districts had a subcentre for every 5000 population. The ICMR MCH evaluation study indicates that only 13.6% of the 198 primary health centres surveyed by them covered less than 40000 population. More than 70% of the primary health centres were looking after more than 80,000 people. A fifth were, in fact, looking after more than 150,000 people! It seems that the large functional infrastructure claimed to have been created in the country only exists largely on paper. The huge investment made in this direction needs to be utilised much more efficiently than at present.

In the area of health manpower also there is an urgent need for improvement. The ratio of male to female multi-purpose worker which is at present 1:1.6 needs to be brought to equality by recruiting more male workers. The male workers are also still designated variously as " small pox workers", "Vaccinators", "Tracloma workers" (for purpose of salary dispersal) and many of them function as 'unipurpose' workers. This needs to be corrected immediately. The MPW scheme should be implemented as envisaged originally.

No delineable pattern has emerged for the Community Health Centre which is a crucial link in the chain of helath infrastructure planned. This should form the kingpin of 'rural health care' taking cases of first referrals f curative care as well as providing the direction and leadership for public health and preventive/promotive care for the 4 PHC's under its jurisdiction.

The present imbalance in the doctor/nurse ratio needs to be speedily corrected. The more than 4 lakh registered medical practioners of the Indigenous System of medicine need to be given an honorable place in the health system.

In summary, it is no exaggaration to say that the health scene in the country is really grim even after 40 years of independence. It is being increasingly realised now that the goal of good health for the people of India can only be reached through a process that is multi-dimentional encompassing appropriate universal education, better environmental management both at home and outside, well integrated social services, an acceptable minimum living

standard and, of course, health and medical care of acceptable quality!

The message from even the limited data presented in this paper is loud and clear. The medical model of health which merely concentrates on the use of technological resources in freeing man from clinically identifiable disease or disorder is at its best an inadequate and at its worst an uneconomical and unproductive approach for the improvement of the health of a people. The medical model has to be tempered by the social model of health which as mentioned earlier approaches the goal of good health through a multi-dimentional process. Health development has to become an integral part of the socio-economic developmental process.

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DR. RAMACHANDRA'S PAPERS ANNEXE

TABLE 1.

# SELECTED 3 YEAR MOVING AVERAGES OF DEATH RATES/1000 DURING 1971 TO 1988

| State | Rural | | | Urban | | |
|---|---|---|---|---|---|---|
| | 71-73 | 78-80 | 86-88 | 71-73 | 78-80 | 86-88 |
| Arunachal Pd. | 20.9 | 17.1 | 16.1 | NA | NA | 3.8 |
| Madhya Pradesh | 18.1 | 16.3 | 14.9 | 10.9 | 9.3 | 8.8 |
| Rajasthan | 17.6 | 14.9 | 13.3 | 9.6 | 9.2 | 8.2 |
| Uttar Pradesh | 22.9 | 18.6 | 15.1 | 13.5 | 11.5 | 9.8 |
| Bihar | 16.2 | 15.3 | 13.7 | 9.5 | 7.8 | 8.3 |
| Orrissa | 18.5 | 14.9 | 13.3 | 11.0 | 9.3 | 7.6 |
| Assam | 18.1 | 12.1 | 12.3 | 9.7 | 7.2 | 7.8 |
| Gujarat | 17.0 | 13.5 | 11.3 | 11.9 | 10.1 | 8.4 |
| Sikkim | NA | NA | 11.8 | NA | NA | 5.7 |
| Andhra Pradesh | 17.0 | 13.5 | 10.7 | 10.3 | 7.9 | 7.2 |
| Meghalaya | NA | 12.2 | 10.6 | NA | 5.4 | 3.9 |
| Haryana | 11.9 | 12.4 | 9.7 | 8.3 | 8.3 | 7.0 |
| Tamil Nadu | 16.9 | 13.4 | 10.7 | 8.8 | 8.7 | 7.3 |
| Himachal Pradesh | 15.1 | 11.2 | 9.1 | 6.9 | 6.1 | 5.9 |
| Karnataka | 14.2 | 12.0 | 9.5 | 7.9 | 7.1 | 6.6 |
| West Bengal | NA | 12.8 | 9.5 | NA | 7.0 | 6.4 |
| Jammu & Kashmir | 11.6 | 11.1 | 8.7 | 6.6 | 6.1 | 6.3 |
| Punjab | 12.4 | 10.5 | 8.7 | 9.1 | 8.0 | 6.9 |
| Tripura | 14.0 | 10.7 | 9.5 | 8.0 | 6.2 | 6.7 |
| Goa | 9.9 | 8.5 | 8.3 | 5.8 | 6.4 | 6.4 |
| Manipur | 8.0 | 7.0 | 6.7 | 6.6 | 4.7 | 5.0 |
| Kerala | 9.1 | 7.0 | 6.1 | 7.8 | 6.6 | 6.6 |
| Nagaland | NA | 7.0 | 5.9 | NA | NA | 2.3 |
| INDIA | 17.4 | 14.2 | 12.0 | 9.9 | 8.6 | 7.5 |

TABLE 2

# ESTIMATED ANNUAL DEATH RATES/1000 FOR 1988*

| STATE | RURAL | URBAN |
|---|---|---|
| Arunachal Pradesh | 18.1 | 4.3 |
| Madhya Pradesh | 15.3 | 9.6 |
| Rajasthan | 14.9 | 8.5 |
| Uttar Pradesh | 14.0 | 9.3 |
| Bihar | 13.0 | 8.1 |
| Orissa | 12.7 | 7.0 |
| Assam | 12.0 | 7.6 |
| Gujarat | 11.7 | 9.0 |
| Sikkam | 11.1 | 5.5 |
| Andhra Pradesh | 10.6 | 7.2 |
| Meghalaya | 10.5 | 2.7 |
| Haryana | 10.4 | 7.3 |
| Tamil Nadu | 10.2 | 7.1 |
| Himachal Pradesh | 9.9 | 5.0 |
| Karnataka | 9.5 | 6.9 |
| West Bengal | 9.3 | 5.7 |
| Jammu & Kashmir | 9.0 | 5.9 |
| Punjab | 8.8 | 7.2 |
| Tripura | 8.5 | 4.6 |
| Goa | 8.4 | 6.7 |
| Manipur | 7.2 | 5.3 |
| Kerala | 6.2 | 6.7 |
| Nagaland | 5.7 | 1.7 |
| INDIA | 11.8 | 7.5 |

* Provisional SRS figures

TABLE 3

# ESTIMATED AGE AND SEX SPECIFIC DEATH RATES- 1985 *

| AGE ( Years ) | RURAL | | URBAN | |
|---|---|---|---|---|
| | MALE | FEMALE | MALE | FEMALE |
| 0 - 4 | 41.1 | 45.3 | 19.4 | 22.1 |
| 5 - 9 | 3.7 | 4.8 | 1.4 | 1.9 |
| 10 - 14 | 2.0 | 2.1 | 1.2 | 0.9 |
| 15 - 19 | 2.0 | 3.1 | 1.3 | 1.8 |
| 20 - 24 | 2.8 | 4.2 | 1.8 | 2.4 |
| 25 - 29 | 3.1 | 4.1 | (2.0 | 1.8) |
| 30 - 34 | 3.5 | 4.4 | (3.1 | 2.2) |
| 35 - 39 | 4.3 | 4.2 | 3.8 | 2.6 |
| 40 - 44 | 7.2 | 5.4 | 5.6 | 3.8 |
| 45 - 49 | 10.2 | 7.3 | 8.1 | 7.0 |
| 50 - 54 | 16.0 | 11.1 | 16.0 | 9.2 |
| 55 - 59 | 23.1 | 16.3 | 21.0 | 14.1 |
| 60 - 64 | 37.4 | 28.4 | 34.4 | 26.3 |
| 65 - 69 | 60.6 | 40.2 | 40.9 | 30.1 |
| 70 & Over | 106.2 | 94.2 | 99.1 | 82.0 |
| ALL AGES | 12.9 | 13.1 | 8.0 | 7.6 |

Source: Sample Registration System (1985).

TABLE 4.

# ESTIMATED IMR AND CDR BY SEX 1985*

| STATE | I M R | | C D R | |
|---|---|---|---|---|
| | MALE | FEMALE | MALE | FEMALE |
| Uttar Pradesh | 132 | 153 | 14.8 | 16.8 |
| Haryana | 78 | 93 | 8.8 | 9.5 |
| Himachal Pradesh | 77 | 92 | 10.6 | 10.4 |
| Punjab | 67 | 76 | 9.4 | 8.3 |
| Bihar | 104 | 107 | 14.1 | 15.9 |
| Rajasthan | 107 | 109 | 13.1 | 13.3 |
| Tamil Nadu | 80 | 83 | 9.7 | 9.3 |
| Gujarat | 97 | 99 | 11.0 | 10.7 |
| Maharashtra | 68 | 68 | 8.7 | 8.1 |
| Madhya Pradesh | 123 | 122 | 14.1 | 14.2 |
| Karnataka | 72 | 67 | 9.2 | 8.3 |
| Kerala | 34 | 28 | 7.7 | 5.4 |
| Andhra Pradesh | 86 | 79 | 10.8 | 9.8 |
| Orissa | 137 | 126 | 14.2 | 13.8 |
| Assam | 116 | 105 | 13.7 | 12.6 |
| West Bengal | 80 | 67 | 9.7 | 9.4 |
| Jammu & Kashmir | 97 | 71 | 10.1 | 9.4 |
| INDIA | 96 | 98 | | |

* SRS report (1985)

TABLE 5

# ESTIMATED INFANT MORTALITY RATES, BIRTH RATES AND DEATH RATES, 1988*

| STATE | RURAL | | | URBAN | | |
|---|---|---|---|---|---|---|
| | IMR | BR | DR | IMR | BR | DR |
| Uttar Pradesh | 132 | 38.0 | 14.0 | 79 | 31.9 | 9.3 |
| Madhya Pradesh | 127 | 38.2 | 15.3 | 83 | 30.9 | 9.6 |
| Orissa | 127 | 32.2 | 12.7 | 70 | 26.1 | 7.0 |
| Rajasthan | 111 | 33.9 | 14.9 | 67 | 27.7 | 8.5 |
| Gujarat | 101 | 29.8 | 11.7 | 64 | 28.0 | 9.0 |
| Assam | 101 | 33.2 | 12.0 | 67 | 23.7 | 7.6 |
| Bihar | 100 | 38.1 | 13.0 | 70 | 30.4 | 8.1 |
| Haryana | 96 | 34.8 | 10.4 | 64 | 29.4 | 7.3 |
| Andhra Pradesh | 87 | 27.0 | 10.6 | 63 | 26.0 | 7.2 |
| Tamil Nadu | 84 | 23.2 | 10.2 | 51 | 21.1 | 7.1 |
| Karnataka | 83 | 30.1 | 9.5 | 46 | 24.9 | 6.9 |
| Himachal Pradesh | 81 | 32.7 | 9.9 | 41 | 22.5 | 5.0 |
| Jammu & Kashmir | 76 | 35.0 | 9.0 | 54 | 23.6 | 5.9 |
| West Bengal | 76 | 31.8 | 9.3 | 43 | 18.7 | 5.7 |
| Maharshtra | 76 | 31.3 | 10.1 | 49 | 25.6 | 6.5 |
| Punjab | 63 | 28.9 | 8.8 | 59 | 27.5 | 7.2 |
| Kerala | 30 | 19.6 | 6.2 | 22 | 21.2 | 6.7 |
| INDIA | 102 | 32.8 | 11.8 | 61 | 26.0 | 7.5 |

* Sample Registration Bulletin, June 1990

TABLE 6.

Neonatal and Post-neonatal Mortality Rates in Major States of India
1970-72, 1976-78 and 1983-85*

| | Neonatal Mortality Rate | | | Post-neonatal Mortality Rate | | |
|---|---|---|---|---|---|---|
| ate | 1970-72 | 1976-78 | 1983-85 | 1970-72 | 1976-78 | 1983-85 |
| dlia | 71.8 | 78.2 | 64.4 | 61.1 | 50.5 | 37.7 |
| dlhra Pradesh | 65.9 | 83.3 | 54.8 | 45.7 | 38.0 | 24.4 |
| s:am | 84.1 | 73.1 | 70.9 | 49.6 | 45.9 | 30.3 |
| jjarat | 80.3 | 80.3 | 66.8 | 61.4 | 55.0 | 36.3 |
| ryana | 42.6 | 64.0 | 49.5 | 38.7 | 47.3 | 42.7 |
| mmachal adesh | 60.7 | 48.7 | 40.9 | 61.0 | 61.0 | 43.7 |
| mmu and shmir | 36.1 | 42.0 | 50.9 | 34.9 | 25.7 | 26.9 |
| rnataka | 59.0 | 54.2 | 46.8 | 36.0 | 30.5 | 24.6 |
| rala | 37.1 | 29.6 | 22.0 | 23.0 | 18.7 | 9.00 |
| dhya Pradesh | 76.8 | 77.4 | 74.2 | 68.2 | 65.6 | 48.7 |
| lharashtra | 62.4 | 57.7 | 50.6 | 39.0 | 33.0 | 23.9 |
| issa | 71.0 | 75.8 | 82.4 | 59.3 | 59.9 | 47.3 |
| njab | 21.0 | 64.8 | 41.7 | 89.6 | 45.2 | 30.8 |
| ajasthan | 70.4 | 79.4 | 68.0 | 52.6 | 61.9 | 45.3 |
| mil Nadu | 54.0 | 63.9 | 57.1 | 65.6 | 42.1 | 25.3 |
| tar Pradesh | 93.7 | 97.8 | 95.2 | 80.6 | 76.5 | 55.4 |

Source: Sample Registration System, 1970-75, 1976-78, 1983, 1984, 1985 Registrar General of ndia, Ministry of Home Affairs, Government of India, New Delhi.

TABLE 7.

Estimated Rates of Perinatal Mortality, Still births, Early and Late Neonatal Mortality Rates - India 1971-1985

| Year | Perinatal Mortality Rate | | Stillbirth Rate | | Early Neonatal Rate* | | Late Neonatal Rate** | |
|---|---|---|---|---|---|---|---|---|
| | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| 1971 | 56.7 | 35.6 | 18.3 | 12.9 | 38.4 | 22.7 | 42.2 | 22.7 |
| 1972 | 53.3 | 36.6 | 18.5 | 14.4 | 34.8 | 22.2 | 41.8 | 22.7 |
| 1973 | 53.3 | 37.4 | 18.0 | 15.1 | 35.3 | 22.3 | 36.8 | 25.2 |
| 1974 | 55.1 | 36.3 | 17.9 | 12.5 | 37.2 | 23.8 | 38.5 | 17.2 |
| 1975 | 58.8 | 36.1 | 18.6 | 12.5 | 40.2 | 23.6 | 44.1 | 22.6 |
| 1976 | 76.6 | 76.6 | 43.7 | 18.7 | 57.9 | 32.6 | 25 | 16 |
| 1977 | 69.5 | 69.5 | 16.8 | 8.7 | 52.7 | 26.7 | 35 | 15 |
| 1978 | 67.9 | 67.9 | 33.5 | 16.0 | 51.9 | 23.2 | 33 | 15 |
| 1979 | 63.1 | 38.7 | 13.3 | 9.1 | 49.8 | 29.6 | 28 | 13 |
| 1980 | 59.8 | 35.3 | 12.0 | 7.9 | 47.8 | 27.4 | 28 | 12 |
| 1981 | 58.8 | 31.5 | 11.4 | 6.2 | 47.4 | 25.3 | 28 | 13 |
| 1982 | 57.7 | 33.1 | 9.8 | 5.2 | 47.9 | 27.9 | 25.0 | 10.9 |
| 1983 | 57.7 | 35.4 | 9.4 | 8.4 | 48.3 | 27.0 | 25.3 | 12.3 |
| 1984 | 58.3 | 35.7 | 11.0 | 7.9 | 47.3 | 27.8 | 24.9 | 11.9 |
| 1985 | 52.4 | 30.4 | 10.8 | 8.9 | 41.6 | 21.5 | 25.0 | 11.8 |

* By subtracting Still birth Rate from Perinatal Mortality Rate.
** By subtracting Early Neonatal Mortality Rate from Neonatal Mortality Rate.

Source: SRS.

TABLE 8.

# M M R(PER 1000 LB)IN RURAL INDIA FOR 1987 ESTIMATED USING SURVEY OF CAUSES OF DEATHS*

| STATE | CDR | MATERNAL DEATHS AS % OF ALL DEATHS | CBR | ESTIMATED MATERNAL MORTALITY RATE |
|---|---|---|---|---|
| U.P. | 16.6 | 1.8 | 39.3 | 7.1 |
| H.P | 8.7 | 2.0 | 31.4 | 6.6 |
| BIHAR | 13.6 | 1.4 | 37.3 | 5.1 |
| M.P. | 14.6 | 1.3 | 37.6 | 6.1 |
| RAJASTHAN | 12.6 | 1.3 | 36.3 | 4.6 |
| ORISSA | 13.7 | 1.0 | 31.6 | 4.3 |
| HARYANA | 9.4 | 1.6 | 36.4 | 4.0 |
| GUJARAT | 10.8 | 0.8 | 31.6 | 2.7 |
| A.P. | 10.7 | 0.6 | 30.9 | 2.0 |
| MAHARASHTRA | 9.6 | 0.6 | 30.2 | 1.9 |
| TAMIL NADU | 11.1 | 0.4 | 24.1 | 1.8 |
| J.& K. | 8.0 | 0.6 | 32.6 | 1.6 |
| KARNATAKA | 9.7 | 0.3 | 29.9 | 1.0 |
| PUNJAB | 8.6 | 0.2 | 28.9 | 0.6 |
| KERALA | 6.1 | NEGLIGIBLE | 21.6 | - |
| INDIA | 12.0 | 1.0 | 33.7 | 3.6 |

* Source: Survey of Cause of Deaths (rural), 1987.

TABLE 9.

# MATERNAL MORTALITY IN RURAL AREAS OF ANANTAPUR DIST.(ANDHRA) 1984 - 85

| AGE GROUP (YEARS) | M M R (PER 1000 LIVE BIRTHS) | % OF MATERNAL DEATHS TO ALL DEATHS IN AGE GROUP |
|---|---|---|
| 15 - 19 | 7.98 | 47.6 |
| 20 - 24 | 8.26 | 53.3 |
| 25 - 29 | 7.02 | 48.4 |
| 30 - 34 | 11.62 | 41.4 |
| 35 - 39 | 13.27 | 35.4 |
| 40 - 44 | 3.61 | 7.9 |
| 45 - 49 | 2.71 | 1.1 |
| 15 - 49 | 8.30 | 38.4 |

* SOURCE : A STUDY OF MATERNAL MORTALITY IN ANANTAPUR DISTRICT BY DR. JAGDISH C.BHATIA, IIM , BANGLORE

TABLE 10

# MATERNAL MORTALITY IN RELATION TO STATUS OF VILLAGE IN ANANTAPUR DIST. 84-85

| DEVELOPMENT STATUS OF VILLAGE | | M M R (/1000 LB) | TYPE OF VILLAGE ACCORDING TO HEALTH FACILITY | M M R (1000 LB) |
|---|---|---|---|---|
| POORLY | 37.6% | 21.66 | PHC HQ | 4.82 |
| SOMEWHAT | | 15.23 | SUB CENTRE HQ | 7.60 |
| ADEQUATELY | 62.4% | 8.03 | 5 KM FROM PHC | 9.70 |
| HIGHLY | | 5.16 | >5 KM FROM PHC | 9.64 |

TABLE 11.

# MATERNAL DEATHS IN RURAL AREAS OF ANANTHAPUR DT BY GESTATION AND TIMING

| GESTATION PERIOD (WKS) | PERCENT OF MATERNAL DEATHS | TIMING OF OCCURENCE | PERCENT OF MATERNAL DEATHS |
|---|---|---|---|
| LESS THAN 28 | 10.4 | ANTEPARTUM | 17.9 |
| 28 - 36 | 10.3 | INTRAPARTUM | 12.2 |
| 36 OR MORE | 79.3 | POSTPARTUM | 69.8 |

43.6 % OF MATERNAL DEATHS ON THE DAY OF DELIVERY
41.9 % OF MATERNAL DEATHS DUE TO HAEMORRHAGE & SEPSIS

TABLE 12

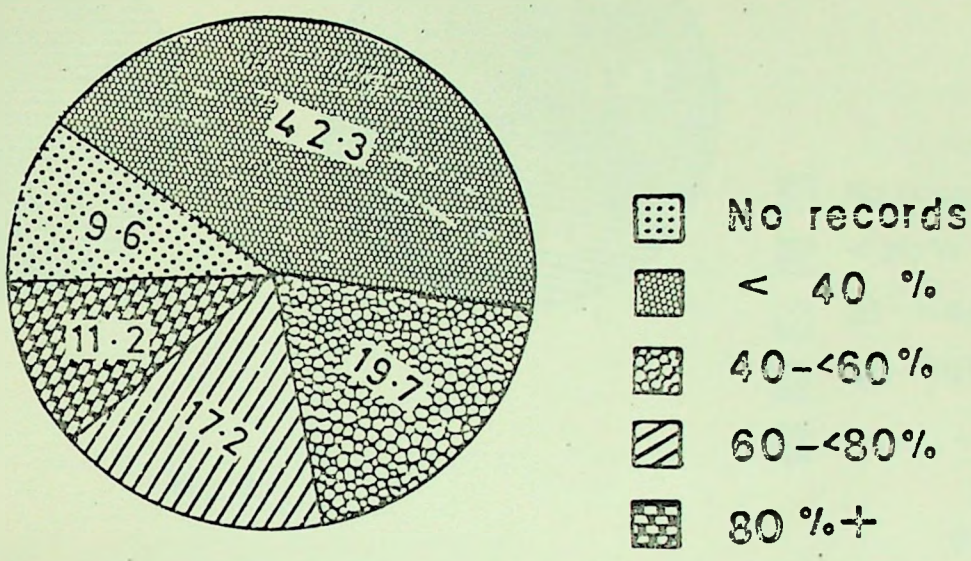
# BIRTHS ATTENDED BY UNTRAINED PERSONS IN RURAL AREAS *

| STATE | % BIRHTS ATTENDED BY UNTRAINED | | | |
|---|---|---|---|---|
| | 1983 | 1984 | 1985 | 1987 |
| ANDHRA PRADESH | 73.3 | 68.7 | 66.7 | 63.5 |
| ASSAM | 82.4 | 82.2 | 81.7 | 81.3 |
| BIHAR | 82.5 | 82.2 | 82.0 | 79.3 |
| GUJARAT | 53.9 | 53.2 | 53.0 | 50.0 |
| HARYANA | 23.2 | 23.0 | 21.5 | 19.5 |
| HIMACHAL PRADESH | 71.0 | 68.4 | 67.4 | 65.5 |
| JAMMU & KASHMIR | 78.5 | 79.8 | 78.5 | 77.2 |
| KARNATAKA | 56.2 | 57.8 | 54.6 | 50.9 |
| KERALA | 29.7 | 20.0 | 16.7 | 14.6 |
| MADHYA PRADESH | 86.6 | 87.4 | 87.1 | 86.2 |
| MAHARASHTRA | 72.8 | 72.6 | 70.6 | 68.8 |
| ORISSA | 84.7 | 83.5 | 83.3 | 82.6 |
| PUNJAB | 39.8 | 28.5 | 28.8 | 28.3 |
| RAJASTHAN | 89.6 | 89.9 | 88.7 | 88.7 |
| TAMIL NADU | 52.2 | 51.0 | 51.6 | 48.9 |
| UTTAR PRADESH | 83.3 | 82.8 | 83.1 | 80.4 |
| WEST BENGAL | 75.4 | 73.0 | 73.7 | 71.8 |
| INDIA | 71.1 | 70.2 | 69.5 | 67.5 |

* SRS Report (1987)

# ANTENATAL CARE

## Registration of Pregnant women



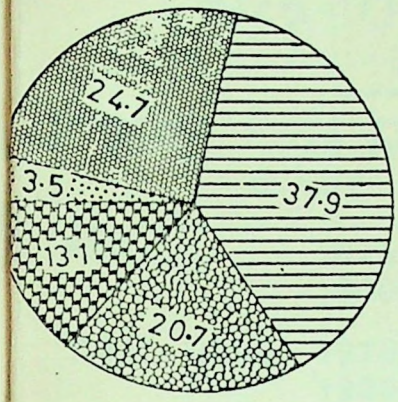

Q. E.

Fig. 1

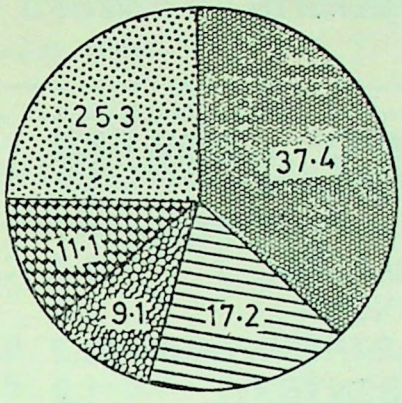
Source: ICMR

# ANTENATAL CARE

Coverag. for TT(Full dose)




Coverage for Iron/Folic acid



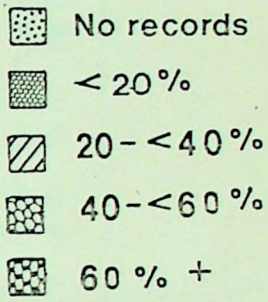




Fig 9

: ICMR

Q.E.

TABLE 13

~~TABLE 13:~~ ANTENATAL CARE AT SUBCENTRE* (FROM RECORDS OF 100 CASES)

| | Hb | B.P. | URINE EXAM. | WEIGHT | ROUTINE EXAM. |
|---|---|---|---|---|---|
| NO FACILITIES | 148 | 165 | 138 | 120 | 93 |
| NO INFORMATION | 28 | 19 | 35 | 51 | 59 |
| DONE | 22 | 14 | 25 | 27 | 46 |
| TOTAL PHC's | 198 | 198 | 198 | 198 | 198 |

* Source: ICMR. Evaluation of Quality of MCH ~~Care~~ and F.P. Core (1989)

TABLE 14

## PERCENT OF ALL DEATHS ACCOUNTED FOR BY SELECTED DISEASES IN RURAL INDIA *

| DISEASES | 1986 | 1987 |
|---|---|---|
| T.B. OF LUNGS | 5.3 | 5.2 |
| PNEUMONIA | 5.3 | 5.5 |
| HEART ATTACK | 4.7 | 5.5 |
| ANAEMIA | 3.1 | 2.5 |
| CANCER | 2.9 | 3.1 |
| GASTROENTERITIS | 2.2 | 2.3 |
| DYSENTERY | 1.9 | 1.6 |
| TYPHOID | 1.9 | 1.8 |

SOURCE : Survey of CAUSES OF DEATHS (RURAL) (1987) RG'S OFFICE .

TABLE 15

## PERCENT OF DEATHS BY AGE GROUPS IN SELECTED DISEASES IN RURAL INDIA*

| DISEASES | PERCENT DEATHS IN AGE GROUPS | | | | | |
|---|---|---|---|---|---|---|
| | 0 - 4 | 5 - 14 | 15 - 24 | 25 - 34 | 35 - 44 | 45+ |
| TB OF LUNGS | 1.7 | 2.8 | 7.4 | 17.6 | 20.8 | 49.7 |
| PNEUMONIA | 75.9 | 9.7 | 1.6 | 2.8 | 1.7 | 8.3 |
| HEART ATTACK | 0.8 | 1.0 | 4.6 | 7.1 | 11.2 | 76.3 |
| ANAEMIA | 33.4 | 8.4 | 4.3 | 6.4 | 4.7 | 43.8 |
| CANCER | 1.5 | 2.9 | 1.9 | 6.4 | 14.0 | 73.3 |
| GASTROENT. | 44.4 | 11.6 | 7.5 | 6.0 | 3.3 | 27.2 |
| DYSENTERY | 43.0 | 12.4 | 5.0 | 2.8 | 4.2 | 32.6 |
| TYPHOID | 33.5 | 12.3 | 10.8 | 6.6 | 7.2 | 29.6 |
| MALARIA | 29.7 | 10.8 | 8.8 | 5.4 | 4.4 | 40.9 |

TABLE 16

# CHANGE IN UNDER NUTRITION DURING 1975 TO 1989 IN RURAL INDIAN*

CHILDREN BELOW IN 1-5 YEARS AGE GROUP*.

| STATE | YEAR OF STUDY | BOYS MODERATE** | BOYS SEVERE | GIRLS MODERATE | GIRLS SEVER |
|---|---|---|---|---|---|
| KERALA | 1975 | 61.2 | 14.3 | 46.0 | 17.4 |
| | 1989 | 55.0 | 3.3 | 34.4 | 2.2 |
| TAMIL NADU | 1975 | 53.9 | 12.1 | 49.6 | 20.2 |
| | 1989 | 43.5 | 5.8 | 48.7 | 4.8 |
| KARNATAKA | 1975 | 56.0 | 18.0 | 55.9 | 17.0 |
| | 1989 | 61.1 | 8.0 | 53.4 | 10.3 |
| ANDHRA PD. | 1975 | 56.6 | 18.6 | 51.2 | 24.0 |
| | 1989 | 48.7 | 11.7 | 52.7 | 9.4 |
| MAHARASHTRA | 1975 | 57.5 | 29.9 | 47.0 | 32.0 |
| | 1989 | 59.9 | 9.4 | 50.3 | 9.1 |
| GUJARAT | 1975 | 60.8 | 13.1 | 53.1 | 16.0 |
| | 1989 | 51.5 | 21.2 | 43.5 | 22.4 |
| ORISSA | 1975 | 46.2 | 11.4 | 51.0 | 15.0 |
| | 1989 | 54.7 | 12.8 | 61.7 | 14.0 |

* SOURCE : INTERIM REPORT OF REPEAT SURVEY PHAS (1988 - 89 ) OF NNMB

** GOMEZ CLASSIFICATION USING NCHS STANDARDS

TABLE 17

# UNDER NUTRITION IN PRESCHOOL TRIBAL BOYS & GIRLS *

(A) GOMEZ CLASSIFICATION USING NCHS STANDARDS

| STATE | BOYS | | GIRLS | |
|---|---|---|---|---|
| | MODERATE | SEVERE | MODERATE | SEVERE |
| KERALA | 59.2 | 11.2 | 53.7 | 19.2 |
| TAMIL NADU | 49.3 | 9.7 | 53.9 | 8.6 |
| KARNATAKA | 48.9 | 31.7 | 50.6 | 34.2 |
| ANDHRA PRADESH | 57.2 | 18.6 | 49.9 | 19.2 |
| MAHARASHTRA | 59.9 | 15.6 | 58.0 | 14.9 |
| GUJARAT | 53.5 | 24.6 | 42.2 | 27.2 |
| ORISSA | 38.3 | 28.1 | 45.7 | 24.9 |
| WEST BENGAL | 55.6 | 13.3 | 52.5 | 15.0 |

(B) GOMEZ CLASSIFICATION USING HYDERABAD WELL-TO-DO CHILDREN STANDARDS

| STATE | BOYS | | GIRLS | |
|---|---|---|---|---|
| | MODERATE | SEVERE | MODERATE | SEVERE |
| KERALA | 40.8 | 8.0 | 35.8 | 1.9 |
| TAMIL NADU | 37.3 | 4.5 | 28.1 | 2.3 |
| KARNATAKA | 47.8 | 21.3 | 44.9 | 15.6 |
| ANDHRA PRADESH | 47.4 | 10.8 | 33.7 | 5.8 |
| MAHARASHTRA | 44.7 | 8.2 | 30.6 | 5.3 |
| GUJARAT | 42.2 | 16.3 | 31.3 | 10.7 |
| ORISSA | 38.3 | 18.7 | 30.8 | 10.1 |
| WEST BENGAL | 40.2 | 7.7 | 28.0 | 5.7 |

* SOURCE : TRIBAL SURVEY BY NNMB 1985-87

TABLE 18

# VITAMIN A DEFICIENCY SIGNS IN RURAL AREAS* OF FOUR STATES

| AGE GROUP | TAMIL NADU | ANDHRA PRADESH | ORISSA | GUJARAT |
|---|---|---|---|---|
| 1 - 4 | 9.9 | 4.9 | 6.0 | 0.7 |
| 5 - 11 | 13.8 | 10.5 | 8.4 | 13.1 |
| 12 - 20 | 5.9 | 8.8 | 2.1 | 1.0 |
| 21 - | 5.8 | 4.3 | 0.4 | 3.7 |

SOURCE : REPORT OF NNMB - NSSO LINKED SURVEY 83-84

TABLE 19.

# INFORMATION ON SELECTED COMMUNICABLE DISEASES COVERED BY NATIONAL PROGRAMMES

## T.B. OF LUNG

ESTIMATED PREVALENCE ( > 5 YEARS OF AGE )

(a) RADIOLOGICALLY ACTIVE 1.5 % (12.0 MILLON)
(b) SPUTUM POSITIVE 0.4 % ( 3.2 MILLON)

CASE DETECTION IN NATIONAL PROGRAMME

20 % INCREASE OVER 1985 DETECTION RATES. IN 7TH PLAN ON AVERAGE, ABOUT 16 LAKH NEW CASES/YEAR DETECTED

EFFECTIVENESS OF PROGRAMME
ON CONVENTIONAL ( 18 -24 MONTHS ) THERAPY

| | | |
|---|---|---|
| CASE DETECTION | 35 % | |
| CASE HOLDING | 35 % | 9.2 % |
| AMEST OF DISEASE | 75 % | |

SHORT COURSE THERAPY INTRODUCED IN 194 DISTRICTS.

DEATH RATES REDUCED BY 40 TO 60 % WHERE PROGRAMME IS EFFECTIVE

## LEPROSY

NO DISTRICT FREE OF DISEASE.

ENDEMIC ( > 5 CASES /1000 POPU. ) IN 196 DISTRICTS COVERING 430 MILLON

TOTAL ESTIMATED CASES 4.0 MILLON, 0.8 MILLON INFECTIOUS.

MULTI DRUG THERAPY INTORDUCED IN 112 DISTRICTS COVERING 200 MILLON WITH 2.2 MILLON LEPROSY CASES.

IN DISTICTS THAT HAVE COMPLETED MORE THAN 5 YEARS OF MDT FALL OF PREVALENCE BY 80 %

TABLE 21

# INFORMATION ON SELECTED NON COMMUNICABLE DISEASES

## IODINE DEFICIENCY DISEASES

CONSERVATIVE ESTIMATE :

| | | | |
|---|---|---|---|
| GIOTRE | : | 7.3 % | 58 MILLION CASES |
| CRETINISM | : | 0.3 % | 2.4 MILLION CASES |
| MINOR NEUROLOGICAL | : | 0.9 % | 7.2 MILLION CASES |

RESULTS OF ICMR TASK FORCE STUDY ( 1983 - 86 )

| | | | |
|---|---|---|---|
| STUDY AREAS | : | SUB HIMALAYAN | 5 DIST. |
| | | EXTRA HIMALAYAN | |
| | | HILLY | 3 DIST. |
| | | COASTAL | 2 DIST. |
| | | PLAINS | 4 DIST. |

PERSONS EXAMINED IN THE 14 DISTRICTS 4,09,923

| DISTRICTS | | % GOITRE | % CRETINISM |
|---|---|---|---|
| DIBRUGARH | SUB HIMALAYAN | 65.8 | 2.2 |
| SITAMARI | | 31.8 | 1.1 |
| BAHARAICH | | 20.2 | 0.2 |
| BASTI | | 20.0 | 0.4 |
| GORAKHPUR | | 18.6 | 0.1 |
| MANDLA | HILLY | 34.4 | 2.1 |
| WEST MANIPUR | | 19.8 | 6.1 |
| NILGRI | | 6.9 | 1.7 |
| SURAT | COAST | 22.7 | 0.4 |
| VISHAKAPATNAM | | 15.8 | 0.2 |
| MUZAFFARPUR | PLAINS | 33.7 | 1.7 |
| DHULE | | 16.5 | 0.1 |
| CENTRAL MANIPUR | | 10.4 | 3.0 |
| MIRZAPUR | | 6.2 | 0.3 |

TABLE 21

# INFORMATION ON SELECTED NON COMMUNICABLE DISEASES

## IODINE DEFICIENCY DISEASES

CONSERVATIVE ESTIMATE :

| | | | |
|---|---|---|---|
| GIOTRE | : | 7.3 % | 58 MILLION CASES |
| CRETINISM | : | 0.3 % | 2.4 MILLION CASES |
| MINOR NEUROLOGICAL | : | 0.9 % | 7.2 MILLION CASES |

RESULTS OF ICMR TASK FORCE STUDY ( 1983 - 86 )

| | | | |
|---|---|---|---|
| STUDY AREAS | : | SUB HIMALAYAN | 5 DIST. |
| | | EXTRA HIMALAYAN | |
| | | HILLY | 3 DIST. |
| | | COASTAL | 2 DIST. |
| | | PLAINS | 4 DIST. |

PERSONS EXAMINED IN THE 14 DISTRICTS 4,09,923

| DISTRICTS | | % GOITRE | % CRETINISM |
|---|---|---|---|
| DIBRUGARH | SUB HIMALAYAN | 65.8 | 2.2 |
| SITAMARI | | 31.8 | 1.1 |
| BAHARAICH | | 20.2 | 0.2 |
| BASTI | | 20.0 | 0.4 |
| GORAKHPUR | | 18.6 | 0.1 |
| MANDLA | HILLY | 34.4 | 2.1 |
| WEST MANIPUR | | 19.8 | 6.1 |
| NILGRI | | 6.9 | 1.7 |
| SURAT | COAST | 22.7 | 0.4 |
| VISHAKAPATNAM | | 15.8 | 0.2 |
| MUZAFFARPUR | PLAINS | 33.7 | 1.7 |
| DHULE | | 16.6 | 0.1 |
| CENTRAL MANIPUR | | 10.4 | 3.0 |
| MIRZAPUR | | 6.2 | 0.3 |

TABLE 21

# INFORMATION ON SELECTED NON COMMUNICABLE DISEASES

## IODINE DEFICIENCY DISEASES

CONSERVATIVE ESTIMATE :

| | | | |
|---|---|---|---|
| GIOTRE | : | 7.3 % | 58 MILLION CASES |
| CRETINISM | : | 0.3 % | 2.4 MILLION CASES |
| MINOR NEUROLOGICAL | : | 0.9 % | 7.2 MILLION CASES |

RESULTS OF ICMR TASK FORCE STUDY ( 1983 - 86 )

| | | | |
|---|---|---|---|
| STUDY AREAS | : | SUB HIMALAYAN | 5 DIST. |
| | | EXTRA HIMALAYAN | |
| | | HILLY | 3 DIST. |
| | | COASTAL | 2 DIST. |
| | | PLAINS | 4 DIST. |

PERSONS EXAMINED IN THE 14 DISTRICTS 4,09,923

| DISTRICTS | | % GOITRE | % CRETINISM |
|---|---|---|---|
| DIBRUGARH | SUB HIMALAYAN | 55.8 | 2.2 |
| SITAMARI | | 31.8 | 1.1 |
| BAHARAICH | | 20.2 | 0.2 |
| BASTI | | 20.0 | 0.4 |
| GORAKHPUR | | 18.6 | 0.1 |
| MANDLA | HILLY | 34.4 | 2.1 |
| WEST MANIPUR | | 19.8 | 6.1 |
| NILGRI | | 6.9 | 1.7 |
| SURAT | COAST | 22.7 | 0.4 |
| VISHAKAPATNAM | | 15.8 | 0.2 |
| MUZAFFARPUR | PLAINS | 33.7 | 1.7 |
| DHULE | | 16.5 | 0.1 |
| CENTRAL MANIPUR | | 10.4 | 3.0 |
| MIRZAPUR | | 6.2 | 0.3 |

TABLE 22

# INFORMATION ON SELECTED NON COMMUNICABLE DISEASES

## CANCERS

| | RATE/1,00,000 MALES | FEMALES |
|---|---|---|
| TRUNCATED INCIDENCE ( 1986 ) : ( 35 - 64 YRS: WORLD POPU.) | | |
| BANGLORE | 180.3 | 282.7 |
| BOMBAY | 181.3 | 226.4 |
| MADRAS | 202.7 | 333.1 |

LIFE-TIME INCIDENCE RATES (0 - 74 YRS) OF CANCER OF TONGUE, OESOPHAGUS, STOMACH AND CERVIX ARE HIGHER COMPARED TO DEVELOPED COUNTRIES. VERY PRONOUNCED DIFFERENCE SEEN IN CANCER OF CERVIX. THE LIFE-TIME RISK OF DEVELOPING CANCER OF CERVIX IN BANGLORE , BOMBAY AND MADRAS ARE 3.52 %, 2.07 % AND 6.84 % RESPECTVELY COMPARED TO LESS THAN 1 % IN DEVELOPING COUNTRIES.

---

## BLINDNESS

| | BOTH EYES BLIND* : PREVELANCE/1000 | | | |
|---|---|---|---|---|
| | MALE | FEMALE | URBAN | RURAL |
| ICMR STUDY (1971 - 74) | 11.02 | 17.10 | 11.14 | 16.44 |
| NATIONAL SOCIETY FOR PREVENTION ( 1986 - 88 ) | 14.20 | 16.00 | 10.10 | 18.30 |

* VISUAL ACQUITY < 6 / 60 IN THE BETTER EYE

CURRENT BACKLOG FOR SURGERY 21-5 MILLION EYES

TABLE 23.

# SELECTED INFORMATION ON INFRASTRUCTURE AND MANPOWER IN THE RURAL HEALTH SYSTEM*

INSTITUTIONAL INFRASTRUCTURE (31/3/90)

| | RURAL | | TRIBAL | |
|---|---|---|---|---|
| INSTITUTION | INPOSITION | REQUIRED | INPOSITION | REQUIRED |
| SUB CENTRE | 1,30,390 | 1,30,000 | 18,670 | 28,005 |
| PHC | 20,531 | 21,666 | 2,945 | 3,456 |
| CHC | 1,852 | 2,708 | NA | NA |

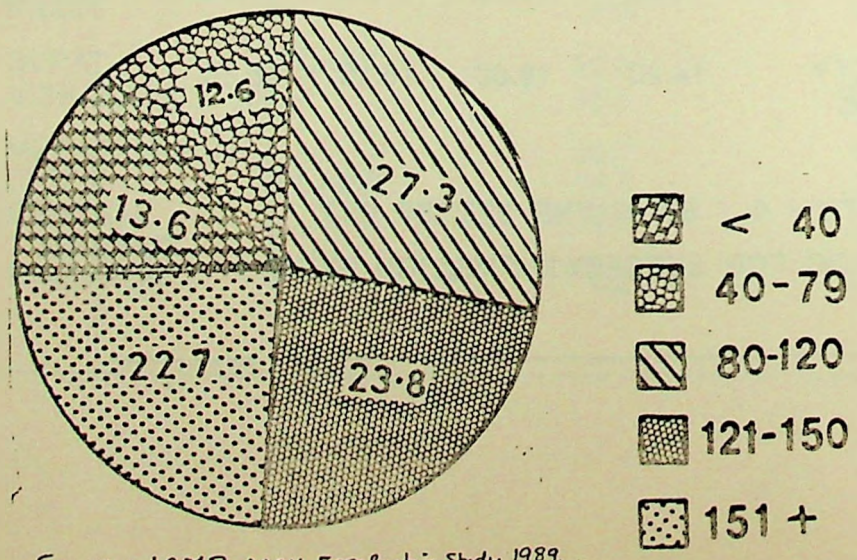
A CHC ON AVERAGE CATERS TO 3.24 LAKH PEOPLE

| AVERAGE POPU. SERVED | | RATIO OF MALE TO FEMALE MP |
|---|---|---|
| i) (MPW) MALE WORKER | : 7300 | 1:1.6 |
| ii) (MPW) FEMALE WORKER | : 4971 | |
| iii) 1 VILLAGE HEALTH CENTRE | : 1466 | |

* RURAL HEALTH STATISTICS IN INDIA, MARCH 1990 DGHS, NEW DELHI

## POPULATION (in 1000) COVERED BY PHC

n = 198




Source; ICMR MCH Evaluation Study, 1989.

Fig. 3.

TABLE 24.

# EXTRACTS FROM NATIONAL REVIEW OF IMMUNIZATION PROGRAMME

1. DISTRICTS WITH SUB CENTRES AS PER OR MORE THAN THE NORM — 45.2 %

2. SUB CENTRES WITH FEMALE RESIDENT IN THE AREA — 76.7 %

3. DISTRICTS ACHIEVING MORE THAN 50 % COVERAGE WITHOUT MEASLES(EXCLUDING URBAN UNITS) — 40.0 %

   DISTRICTS ACHIEVING MORE THAN 50 % COVERAGE WITH MEASLES(EXCLUDING URBAN UNITS) — 2.9 %

4. % DISTRICTS ACHIEVING STATED COVERAGES FOR DIFFERENT VACCINES(EXCLUDING URBAN UNITS)

| % COVERAGE | DPT | OPV | BCG |
|---|---|---|---|
| ≤ 50 | 20.0 | 23.0 | 40.0 |
| 51 - 75 | 62.9 | 60.0 | 54.3 |
| 76 - 85 | 8.6 | 8.6 | 2.9 |
| ≥ 86 | 8.6 | 8.6 | 2.9 |