



INDIA'S EXPERIENCE WITH MDG 4

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ABSTRACT

The Millennium Development Goals are spelt out in general terms, the targets under these Goals specifically outline the way to achieve the Goals in a specific time frame, and the indicators under each target are more focused and tell in concrete terms the expected level of achievements in well defined areas to be achieved in the given time frame. MDG 4 is to reduce by two-thirds, between 1990 and 2015, the under-five mortality rate. The **Under-Five Mortality Rate (U5MR)** is the probability (expressed as a rate per 1000 live births) of a child born in a specified year dying before reaching the age of five if subjected to current age specific mortality rates. U5MR stagnated in the nineties and then started declining again from the last decade. Given to reduce U5MR to 42 per 1000 live births by 2015, India tends to reach 49 by 2015, missing the target by 7. The major causes of death for children under five are: neonatal causes, pneumonia, diarrhea, malaria, measles and AIDS. People do not have access to improved sources of drinking water and roughly half are without adequate sanitation. Lack of Female illiteracy, advanced medical facilities, time interval between children prevents achieving the target of U5MR. Overall, it is impossible for India to achieve the target of U5MR unless the related socio-economic; maternal and demographic; and environmental determinants are urgently addressed. In this regard, Government of India has taken various policy decisions and implemented programmes for reducing U5MR. Various suggestions may further help in this direction of achieving MDG 4. This paper discusses in detail current status of U5MR, various causes of U5MR, policy initiatives taken by Government of India and suggestions which may help in achieving MDG4.

KEY WORDS: U5MR, nutritious diet, health awareness, socio- economic reasons, policy initiatives.

INTRODUCTION

Future generation's role in the process of development is very prominent for any country. Wellbeing of children is sine qua non for healthy and educated workforce. Infant Mortality rate and Child Mortality rate both are important global indicators of children's health and socio economic status of the population. India is increasingly recognized as a global power in key economic sectors. But Economic transformation since early 1990s is without corresponding positive change in social

development. There is uneven expansion of social opportunities with growing disparities across regions, castes, sex and other characteristics. Every second young child in India is malnourished. Rates of progress on many indicators were not sufficient to meet many of the child-related Millennium Development Goals (MDGs).

Millennium Declaration was done on 8th September, 2000 and was signed by 189 countries and included 8 goals called as Millennium Development Goals. The targets set under MDGs provide a framework for

monitoring progress in human development and deciding policy interventions for further goal achievements. Eighteen targets were set for attaining the eight development goals. India's Millennium Development framework is as per the UNDG's 2003 framework for monitoring eight MDGs. Out of 18 targets, 12 targets are relevant to India from the developmental perspective. Corresponding to 12 targets, there are 35 indicators.

8 Millennium Development Goals:-

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability
- Goal 8: Develop a global partnership for development

Target Description of Goal 4: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

The **Under-Five Mortality Rate (U5MR)** is the probability (expressed as a rate per 1000 live births) of a child born in a specified year dying before reaching the age of five if subjected to current age specific mortality rates.

REVIEW OF LITERATURE

According to the **India Philanthropy Report (2014)**, India's child mortality rate may worsen despite the government's efforts to lower it because of a dearth of funding. The lack of a comprehensive ecosystem of public, private and philanthropic stakeholders to help close the gaps in reproductive, maternal, new-born, child and adolescent (RMNCH+A) health are also critical hurdles. India will need an incremental \$12 billion over and above public health expenditure to meet its 2035 health objectives for women and children, including slashing the maternal mortality rate by 60% and the child mortality rate by more than 70%.

Damodar Sahu, Saritha Nair, Lucky Singh, B.K. Gulati & Arvind Pandey(2014) studied factors that were significantly associated with infant and child mortality among Scheduled Tribes in rural India during 1992-2006. His work indicated steady increase in child mortality with the birth order in economically disadvantaged population. The risk of infant mortality was higher in first order births. However, a study on utilization of maternal health services suggested that higher mortality risk among first order birth could be linked with the early childbearing trends and lower utilization of maternity services in developing

countries like India. There is a need for programmes to focus on delaying the age at first birth for younger women in tribal populations in rural areas. Such efforts would not only reduce the infant and child mortality but also help in reducing the morbidity conditions in children under five. His findings highlight the need for addressing socio-cultural norms towards eliminating gender based discrimination among Scheduled tribes.

Stephan Klasenb (2006) suggested that the undernourishment and childhood under nutrition indicators exhibit the most peculiar inter-regional patterns and speculated about the causes of these patterns, particularly emphasizing data and measurement issues. This leads to a number of important questions for research and policy. He mentioned some policy issues also. First, resolving the question about the relative severity of childhood under nutrition in different regions clearly is of some relevance. While it is undoubtedly the case that childhood under nutrition is a very serious issue in South Asia (and might be systematically underestimated using the cut-off for the Z-score of -2), Sub Saharan Africa should attract equal attention if it is the case that much of the difference in rates between the two regions is driven by measurement error. Second, it appears that the link between childhood under nutrition and child mortality is not as close as sometimes suggested. This would imply that one cannot hope that improvement in one indicator will necessarily lead to improvements in the other so that one might need policies that address each of the two issues separately. Particularly, the very high rates of child mortality in Sub Saharan Africa deserve much closer attention of policy-makers.

James A. Oloo(2005) states that reducing child mortality will require multiple, complementary interventions. These include access to safe water, better sanitation facilities and improvements in education, especially for girls and mothers. Also needed are programmes to sensitize people on how to prevent HIV/AIDS. Highly trained health staffs are more likely to be found disproportionately in urban areas where fewer people live. In addition to the urban-rural divide, there tends to be over-concentration of quality health staff in the private sector, as opposed to the public sector, catering for fewer people. Government should give incentives to attract and retain health care professionals in the rural areas.

GLOBAL STATUS FOR U5MR

At the global level, the MDG-4 target for 2015 has moved only a little, from a required U5MR of 31.3 deaths per 1000 live births at the time of the Millennium Summit in 2000, to 29 today. However, significant changes

in targets have occurred for some countries. Of the 184 countries with estimates published both in 2000 and 2010, 60% have seen their MDG-4 U5MR target reduced. The largest reduction in a MDG-4 target between 2000 and 2010 is 25 deaths per 1000 live births (Cambodia), and the largest increase in target is 17 deaths per 1000 live births (Azerbaijan). The difference is greater than 10 deaths per 1000 live births for 16 countries.

STATUS OF INDIA IN U5MR

Analyses of data from the Sample Registration System (1978-2010) and three rounds of National Family Health Surveys conducted in the years 1992-93, 1998-99 and 2005-06 indicates that following the rapid decline in the seventies, U5MR stagnated in the nineties and then started declining again from the last decade. It fell to a level of 118 in 1990 to 93 in 2000 and 59 in 2009. India has realized impressive gains in child survival over the last two decades. However, the country is unlikely to achieve the Millennium Development Goal (MDG) 4 -which aims to reduce Under-Five Mortality (U5MR) by two thirds between 1990 and 2015. Given to reduce U5MR to 42 per 1000 live births by 2015, India tends to reach 49 by 2015, missing the target by 7. However faster decline in recent years may narrow down the gap between Targeted IMR and likely achievement of IMR. U5MR has always been lower in urban than in rural areas, the decline in urban areas has been slower than in rural areas in the last two decades, narrowing the gap. Six states, namely Kerala, Tamil Nadu, Maharashtra, Punjab, Himachal Pradesh and West Bengal are likely to achieve the goal by 2015. But overall, it is impossible for India to achieve the target of U5MR unless the related socio-economic; maternal and demographic; and environmental determinants are urgently addressed. The proportion of one-year old (12-23 months) children immunized against measles is at 74.1% in 2009 (UNICEF & GOI- Coverage Evaluation Survey 2009) and as per the historical trend, India is expected to cover about 89% children in the age group 12-23 months for immunization against measles by 2015 and thus likely to fall short of universal immunization by about 11 percentage points. (Towards Achieving Millennium Development Goals India 2013). U5MR is 55 per thousand live births (SRS 2011), showing a 19 point decline since 2005-06 (NFHS 3). During 2008 - 2011, a 14 point decline was observed in U5MR. Neonatal mortality rate has declined by 6 point since 2005 to 31 per thousand live births (SRS 2011). The Reproductive and Child Health programme (RCH) II under the National Rural Health Mission (NHM) comprehensively integrates interventions that promote child health and addresses factors contributing to Infant and U5MR.

CAUSES OF HIGH CHILD MORTALITY IN INDIA

Infancy and childhood periods of human life are often threatened by major potential risks to survival due to a number of reasons. In India, a number of interlinked elements lead to the low rates of Under-five mortality:

- The major causes of death for children under five are: neonatal causes (36 per cent), pneumonia (19 per cent), diarrhea (17 per cent), malaria (8 per cent), measles (4 per cent) and AIDS (3 per cent).
- 1 in 5 people do not have access to improved sources of drinking water and roughly half are without adequate sanitation.
- The number of children dying from diarrheal diseases is estimated at nearly 2 million per year; or around 17 per cent of all under five child deaths.
- Educating and empowering women has positive impact on the survival, health and development of their children. But it is estimated that almost 1 in every 4 adults (defined here as those ages 15 and over) is illiterate, with women affected disproportionately.
- Conflict often leads to complex emergencies – a situation involving armed conflict, population displacement and food insecurity, with particularly lethal consequences for children. Presently, more than 40 countries (90 per cent of them low-income nations) are dealing with armed conflict.
- Most of major killers of children in complex emergencies are the same as the top killers of children in general: measles, malaria, diarrheal diseases, acute respiratory infections, malnutrition.
- Highest mortality rates among refugee populations tend to occur among children under five.
- Of the 11 countries where 20 per cent or more of children die before the age of five (Afghanistan, Angola, Burkina Faso, Chad, DRC, Equatorial Guinea, Guinea-Bissau, Liberia, Mali, Niger and Sierra Leone) – more than half have suffered a major armed conflict since 1989.

MDGs have helped in bringing a much needed focus and pressure on basic development issues, which in turn led the governments at national and sub national levels to do better planning and implement more intensive policies and programmes. In India the various development

programmes / schemes are formulated and implemented under the five years Plans (FYP). The 12th FYP (2012-2017) goal is to achieve "Faster, More Inclusive and Sustainable Growth" which is in conformity with the MDGs.

POLICY INITIATIVES IN INDIA FOR REDUCING U₅MR

Future programmes and policies for child care depend on the past and current policies performance evaluation. **Child Survival and Safe Motherhood (CSSM) program** was launched in 1990 to provide integrated services for mothers and children. This program was taken a step further in 1994 with the development of the **Reproductive and Child Health Services program**, following the recommendations of the Cairo Conference. The original national CSSM program focused on infant feeding, Vitamin A deficiency, Acute Respiratory Infection and diarrhea management. An evaluation of the CSSM in 1995 noted that the clinical aspects of ARI had been more difficult to implement than the other components and that there were evident gaps in case of management practices (Swedish International Development Agency (SIDA), 1995). The SIDA report strongly recommended a move forward in reproductive health by endorsing the inclusion of emergency obstetrics and neonatal care as well as continued capacity building.

The most interesting finding is the documented effectiveness of the Integrated Child Development Scheme's (ICDS) nutrition program (including growth monitoring and deworming of children and the promotion of micronutrients and supplemental feeding for women and children) on nutritional status with a consistent gradual decrease in the proportion of moderate and severe malnutrition over the period 1988-97.

The Government has implemented the world's largest and most unique and outreach programme of Integrated Child Development Services (ICDS) providing a package of services comprising supplementary nutrition; the Ministry in the recent past includes universalisation of an immunization, health check-up and referral services, pre-school non-formal education. There is effective coordination and monitoring of various sectoral programmes. Most of the programmes of the Ministry are run through non-governmental organizations.

The major policy initiatives undertaken by Kishori Shakti Yojana, launching a nutrition programme for adolescent girls, establishment of the Commission for protection of Child Rights and enactment of Protection of Women from Domestic Violence Act. GOI has adopted ambitious targets related to children that are in line with, and at times more ambitious than, the MDGs. Centrally-

sponsored schemes have increased public resources to key sectors like the Reproductive and Child Health Programme II, the National Rural Health Mission and the Integrated Child Development Services. The challenge remains to convert these commitments and resources into measurable results for all children, especially those belonging to socially disadvantaged and marginalized communities.

Janani Shishu Suraksha Karyakaram (JSSK) has been launched on 1st June, 2011, to eliminate any out of pocket expense for pregnant women delivering in public health institutions and sick newborns accessing public health institutions for treatment till 30 days after birth.

· Management of Malnutrition particularly Severe Acute Malnutrition (SAM) by establishing Nutritional Rehabilitation Centers (NRCs). As breastfeeding reduces infant mortality, exclusive breastfeeding for first six months and appropriate infant and young child feeding practices are being promoted in convergence with Ministry of Woman and Child Development.

· Universal Immunization Program (UIP) against seven diseases for all children. Government of India supports the vaccine program by supply of vaccines and syringes, cold chain equipments and provision of operational costs.

Over the last few years, the State Government, with support from UNICEF, has focused extensively on improving facility-based healthcare for new-born and mothers with new-born care corners (NNBCs), special new born care units (SNCUs) and labour rooms in first referral units across the state.

The 12th FYP (2012-2017) goal is to achieve "Faster, More Inclusive and Sustainable Growth" which is in conformity with the MDGs.

Important 12 th Plan programmes for addressing MDG 4:-

National Health Mission including NRHM by Department of Health and Family Welfare and

Integrated Child Development Schemes (ICDS) by Ministry of Women and Child Development.

The Government of India's newly adopted 'National Policy for Children, 2013', reaffirms the Government's commitment to the realization of the rights of all children in the country. The policy lays down the guiding principles that must be respected by the national, state and local Governments in their actions and initiatives affecting children. The Policy has identified survival, health, nutrition, education, development, protection and participation as the undeniable rights of every child, and has also declared these as key priority areas.

With huge efforts of Government programmes, India realized decline in U5MR. However, opposite view was expressed as, "Accelerating child survival calls for new approaches to child mortality that goes beyond disease-programme and sector-specific approaches," by Dr. V.M Katoch, Director General Indian Council of Medical Research and Secretary, Department of Health Research, Government of India.

SUGGESTIONS FOR REDUCING U₅MR

- 1) Reduce social and economic inequalities
- 2) Need to develop policies for more balanced development across states
- 3) Focus on states with high U₅MR and Develop state specific strategies including advocacy, incentives strategies, and increased commitment among stakeholders
- 4) Increase education of both genders and women empowerment
- 5) Providing balanced and nutritious diet at cheap rates
- 6) Provide supplemental feeding and basic health services to all children, with particular attention to young girls
- 7) Awareness programmes about health and hygiene using all latest technologies and also by personal visits in village and interior areas
- 8) Introduce more efficient, integrated strategies for prevention and management of childhood illness at the community
- 9) Change the beliefs regarding reproductive rights and child care
- 10) Introduce or expand a standard approach to the management of pregnancy and safe delivery; develop strategies for how to increase demand for and use of antenatal services and access to safe deliveries
- 11) More complaining regarding : Time interval between children should be minimum two years
- 12) Increase health infrastructure in village areas: More health centers and reduce the patient / doctor ratio
- 13) Use of health professionals for deliveries
- 14) Access to pure drinking water and improved toilet facilities
- 15) Affordable health facilities for poor
- 16) Improve involvement of private sector to increase the reach of quality healthcare services for the urban poor.

CONCLUSION

In India, a number of interlinked elements like poverty, malnutrition, mother's health, medical care etc in addition to the child's health conditions, lead to the persisting significant rates of Under-five mortality, infant mortality and its component viz., neo-natal mortality and post neo-natal, peri-natal mortality. Over the years, India has attained impressive achievements in the fields of child survival and a faster declining trend has been observed in the recent past in infant mortality rate and child mortality rate. However, the gravity of the problem varies significantly among the States. The strategies in India for child health intervention should focus on improving skills of the health care workers, strengthening the health care infrastructure and involvement of the community through behavior change communication. In addition to concentrating on health care facilities, the related socio-economic and environmental determinants are also to be addressed in order to prevent the child mortality to the maximum extent possible.

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Table: 1 U5MR in different states of India, 2012

India and Bigger states	Total
Assam	75
Delhi	28
Gujarat	48
Kerala	13
Rajasthan	59
Uttar Pradesh	68
Punjab	34
India	52

Source: SRS, Registrar general of India

Table: 2 Trends in U5MR in India

Year	U5MR
1990	125.0
1992	109.2
1998	94.9
2005	74.3
2009	64.0
2010	59.0
2011	55.0
2012	52.0
2015	49.0

Source: NFHS and SRS

Table 3: Infant Mortality rate, Neo-natal Mortality Rate and Under Five Mortality Rate by state, (SRS-2010)

	Infant Mortality Rate			Neo-natal Mortality Rate			Under Five Mortality Rate		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
India	47	51	31	33	36	19	59	66	38
Assam	58	60	36	33	36	13	83	88	42
Bihar	48	49	38	31	32	13	64	65	47
Delhi	30	37	29	19	17	19	34	42	33
Gujarat	44	51	30	31	36	19	56	65	39
Kerala	13	14	10	7	8	5	15	16	12
Madhya Pradesh	62	67	42	44	47	30	82	88	54
Maharashtra	28	34	20	22	27	15	33	39	23
Punjab	34	37	28	25	27	22	43	49	31
Rajasthan	55	61	31	40	45	23	69	76	42
Tamilnadu	24	25	22	16	18	13	27	30	24
West Bengal	31	32	25	23	24	19	37	40	28

Source: SRS 2010

Table 4: Infant Mortality Rate in different states of India (2012)

State	Infant Mortality Rate
India	42
Assam	55
Bihar	43
Delhi	25
Gujarat	38
Kerala	13
Madhya Pradesh	41
Maharashtra	25
Punjab	28
Rajasthan	49
Tamil Nadu	21
Uttar Pradesh	53

Source: MDG, Country report 2014

(NFHS: National Family Health Survey and SRS: Sample Registration System)