



MATERNAL HEALTH IN EAG STATES OF INDIA

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ABSTRACT :

Maternal health is the health of women during pregnancy, childbirth and the postpartum period. In India, just after independence maternal and child health has been given consideration in the Family Welfare Programme of India as this has remained fundamental part of the programme from the time when the phase of the initiation of the First and Second Five-Year Plans (1951-56 and 1956- 61) started. Health of mother, health of children, and nutrition availability for both mother and children were integrated with the services relating to family planning under the "Minimum Needs Programme" introduced in the period of Fifth Five-Year Plan (1974-79).

KEYWORDS : Maternal health , independence maternal and child health.

INTRODUCTION:

During the year 1992-93, quite a lot of significant child survival intrusions along with safe motherhood and family planning activities under the banner of "Child Survival and Safe Motherhood Programme" constantly included in the programme (**MoHFW, 1992**). During 1996, Reproductive and Child Health Programme (RCH) was added in the list of welfare programmes initiating with the aim of providing safe motherhood and healthy childhood. Then one major step regarding government's commitment to safe and successful motherhood programmes in the wider perspective of reproductive health is the "National Population Policy" implemented by the "Government of India" during 2000 (**MoHFW, 2000**). However, India's attention for reducing maternal mortality and upgrading maternal health care facility was based on the international conferences which aim to reduce maternal mortality from those countries which have high rates of maternal and child deaths. At the global level attention for reducing maternal mortality initiated mainly since the Safe Motherhood Conference held in Nairobi in 1987. Then the next crucial step regarding maternal care was the International Conference on Population and Development (ICPD) in 1994 and subsequently the Millennium Development Goals (MDGs) millennium summit of the year 2000 aimed to reduce maternal mortality to less than 100 between the years 1990 to 2015. India was one member countries to adopt MDGs. The vital significance of health of women during pregnancy and post pregnancy phase was laid emphasis in the 5th goal of the 'United Nations Millennium Development Goals' with the objective to achieve the reduction in number of maternal deaths primarily caused to inaccessibility of the services relating to nutrition, required check-ups for reducing complications needed during the phase of attaining motherhood (**MDG report, 2015**). The goal of MDG, is to lessen the MMR to 109 per 1, 00,000 live births by 2015 which about four times i.e. 437 mothers die out of 1, 00,000 live births in 1990, but the exact figure could not be achieved, however, a continuous decline has been recorded. In 1946, the Bhone

Committee report, was a Government's Health Survey and Development Committee report, provides the earlier mentions of maternal death in India. The Committee established that the MMR in India was nearly 2,000 deaths per 100,000 live-births. Another report by Health Survey and Development Committee, Government of India in 1959, the Mudaliar Committee estimated that the MMR had decreased to 1,000 in 1959. During 2010, 56, 000 mothers and 1.3 million infant deaths were recorded in India, the extreme for any country. India's MDG objective four is to shrink IMR by two-thirds stuck between 1990 and 2015, i.e., from 80 infant deaths in 1990 to '28' per 1000 live births by 2015. Other goal is of MDG four, is to reach universal immunisation label over measles in 2015 in children below one year of age from 42% in 1992-1993. India's foremost MDG goal five is to lower MMR by 75% in 25 years between 1990 and 2015 which is about reducing from 437 maternal deaths per 100 000 live births to '109 maternal deaths (Manju Rani, 2008)

EAG States in India: In India, the eight socio-economically regressive states recording high label of fertility and mortality have been stated by a term called as the "**Empowered Action Group**" (EAG) states as established by the Ministry of Health and Family Welfare, Government of India, in 2001. The states are namely Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttaranchal and Uttar Pradesh; they also lag behind in the demographic transition as compared to the southern states and have the highest infant mortality rates in the country. They have been given different category to give special focus by observing and assisting the achievement of national health goals in which these EAG groups are demographically lagging behind. along with EAG states, Assam is also included in NRHM as high focus states of India. The EAG states and Assam account for about fifty percent of country's population, sixty percent of birth, seventy one percent of infants death, seventy two percent of under five deaths and sixty two percent of maternal heaths (AHS, 2013).

Table 1 : Demographic indicators of EAG states and India

INDICATORS	EAG –STATES	INDIA
Crude Birth Rate (CBR)*	21.8	21.4
Crude Death Rate (CDR)#	7.07	7
Infant Mortality Rate (IMR)	51.7	40
Neo-Natal Mortality Rate	69.1	28
Under Five Mortality Rate	42	48
Maternal Mortality Ratio	308	212

*Source – *World Bank, 2015 and #SRS 2013, AHS 2013*

NRHM:

Health is base for any progress. Noticing the fact that maternal mortality is high in India and particularly in EAG states, National Rural Health Mission (NRHM) was launched by Government of India on 2nd April 2005. The mission was initiated with the aim to refining access to 'ante natal care' during prenatal period, trained attention from ASHA workers or trained personnel all the way through birth of child besides care and maintenance in the weeks when baby is delivered. The mission is aimed to deliver effective attention to health of mother and infant especially among the rural residents of the country in addition to major emphasis in the states having deprived health consequences and insufficient community health arrangement and less engagement of human skills.

The mission was operated all over the country by aiming on 18 sates of India comprising eight 'Empowered Action Group' and Assam which are called as high focused state in NRHM are "Assam, Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Uttar Pradesh, Uttaranchal, Orissa and Rajasthan", rest comprises the states from north east and two mountainous states of North India " Himachal Pradesh, Jammu & Kashmir".

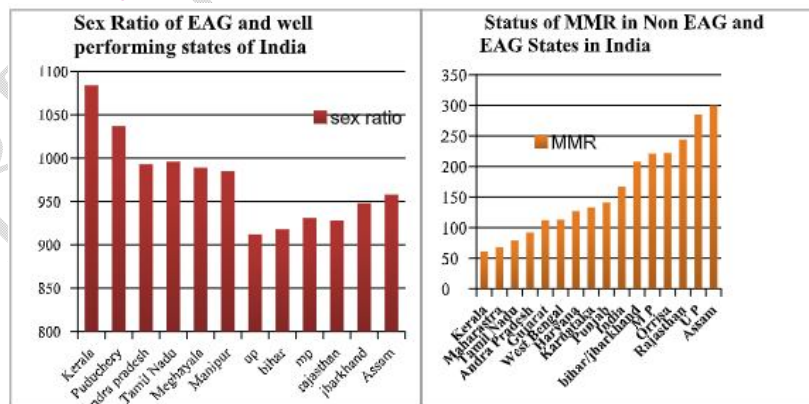
The foremost target of "NRHM" is to **deliver** easily reached, **inexpensive**, responsible, in effect along with consistent primary health care accommodations made **specifically** for deprived and BPL families of rural areas and helpless sections of the residents. Under the initiative of NRHM, ASHA has been included to make

the rural mission more accountable, effective and easily accessible for those women who are in need of emergency care or who wants to avail the services in a proper and right manner. ASHA workers are particularly helpful for those women who have been relying on untrained personnel but want to take guidance from properly trained person and find difficulty in accessing any health services from health centre. ASHA helps women in knowing about her health, family planning methods, and guide mother in taking proper care of infants. Advising women on all aspects of obstetric care, accompanying expecting females and children requiring treatment, first aid medical care for minor weaknesses, in addition to all these ASHA arrange for figures relating to births, deaths and gestations, etc. Basically ASHA is trained to help women of rural areas in making them aware about taking care in main aspects of basic health so that maternal health of rural India especially of EAG states should be brought back on track. The major stress of the task is to reach to rural poor families people, specifically to women and children, for an fair and inexpensive “primary health care”. The key end of ‘NRHM’ is to lessen both infant and maternal deaths via encouraging infant care , vaccination, care during pregnancy, institutional delivery and care after baby delivery, post-partum care as the condition of maternal health is pathetic in EAG states.

The work mainly focuses on the maternal health care condition in EAG states and compares it with well performing states of India. The condition of MMR in the EAG states as Bihar/Jharkhand (312), Madhya Pradesh/Chhattisgarh (335), Orissa (303), Rajasthan (388) and Uttar Pradesh/Uttarakhand (440) per lakh respectively. In terms of TFR, value is varying in the range of 3.0 to 3.9 in these states (**MoHFW report 2010**).

The data from various sample surveys states that MMR was very high just after independence; however, it is declining but the interstate variation in decline of MMR differs for EAG states and for well performing states in India, as from the graph it can be noticed that MMR is low i.e less than 100 in southern states of India. It is lowest in Kerala followed by Maharashtra, while maximum maternal death per lakh happens in Assam followed by Uttar Pradesh. Assam has highest MMR in the country (**SRS report 2012**). The huge gap in figure of Kerala and Assam points towards the wider regional, socio-economic and condition of women in both these states. On evaluating the health situation, 61% to 70% of women in Assam are found to be anaemic (**Arnold et al 2004 cited in Anurima Deka, 2014**), of the total 51.5% women with gynaecological symptoms only 26.7% sought treatment (**Rani and Bonu 2003 cited in Anurima Deka, 2014**). The depressing picture of maternal health situation in the state is further authenticated by studies pointing to the inequalities in the healthcare and nutritional status across the states and the inefficient healthcare system and outcomes ((**Roy et al 2004 cited in Anurima Deka, 2014**).

Graph1: Status of MMR and Sex Ratio in EAG states in India



Source-MDG report 2015

Table 2: Table showing maternal mortality ratio for the past 50 years of various surveys

Figure on “maternal mortality ratio” from various bases concluded for the past 50 years can be seen from the table below.

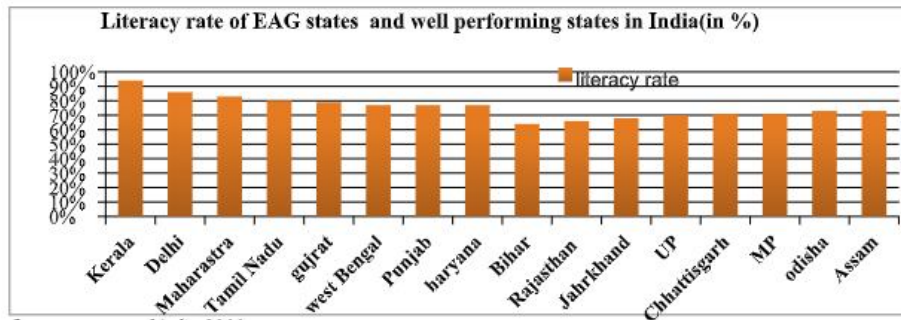
NSS, 14 th Round	1957	1287
NSS, 16 th Round	1960	1355
NSS, 19 th Round	1964	1174
SRS	1976	892
SRS	1981	844
SRS	1986	568
World Health Report, 1999	1990	570
NFHS 1	1993	437
1997-98 retrospective MMR surveys	1998	398
SRS	1997	407
SRS	1998	408
SRS prospective household reports	2001	327
World Health Report, 2005	2000	540
SRS special survey of deaths using RHIME	2003	301

(RHIME=“Routine, representative, resampled household interview of mortality with medical evaluation”, a method used in SRS; SRS=Sample Registration System), Source-SRS 2011-13

Demographic profile of EAG states and some well performing states of India

EAG states differs from others states of India because they have low socio economic conditions, high population, high total fertility rate, wide gender literacy gap, low status of women besides many other factors which are responsible for high mortality and infants deaths in these states. These states have high population, low literacy, low sex ratio and more rural population than non EAG states of India. The graph-1 shows sex ratio in EAG groups of states and well performing states in India. Four EAG states have sex ratio below national average i.e 940; these states are namely U P (912), Bihar (918), MP (931) and Rajasthan (928). Jharkhand (948) and Assam (958) have sex ratio above national average along with Orrisa (979) and Chhattisgarh (991). However, sex ratio of these two EAG states is worth mentioning here as these two states have high sex ratios are compared to other EAG states and even better than many non- EAG states of India. Maternal deaths have regional variations of it. For instance, states in north of India have higher population and contributes much in maternal deaths. On one side, “Uttar Pradesh” and “Rajasthan” have high rates of fertility and maternal mortality while on other side, southern states of Kerala and Tamil Nadu show figures similar with “middle-income countries”. Unevenness in performance is due to greater variations in the culture, ethnicity, religion, customs, race, class along with difference in many other background characteristics of India. except in the southern and eastern states, position of women is exceptionally bad in northern states. Label of education is low in these EAG states which points towards their subordinate role in the household affairs which results in women lacking empowerment to take decisions, including decision to use reproductive health services.

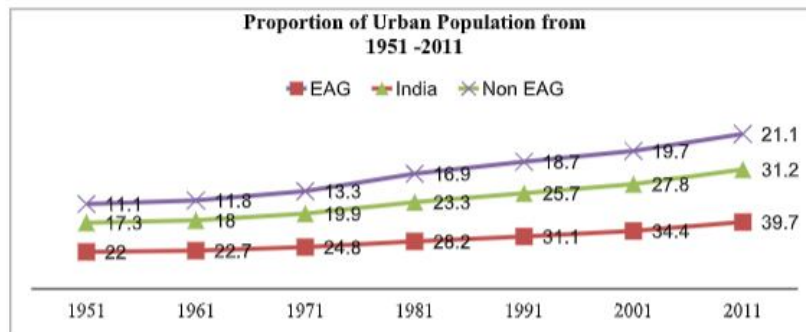
Graph 2 : Graph showing literacy rates in EAG and well performing states of India



Source- census of India 2011

Literacy is one of the important determinants of social progress of any society. Many developed nation of the world have all their population literate. Literacy can also be included as one of the indicator of development. As in developed countries or well performing states within countries have high literacy. For instance Kerala tops the list when it comes to literacy in the states of India. EAG state of Bihar lies last in the list of literacy, another EAG state of Rajasthan has lowest female literacy in India. Both these states need special attention for their development in addition with other EAG states. From the graph the difference in literacy rates of EAG states and well performing states could be noticed. Literacy rate in these states ranges 60 % to 70% whereas Kerala has literacy of 93%. There is huge gap in literacy between EAG states and the non EAG states.

Graph 3 : Percentage of urban population from 1951 to 2011



The line graph shows the urban population of EAG states, non EAG states and of India. EAG states have the lowest proportion of urban population when compared to rest of the two groups.

MATERNAL CARE : CONCEPT AND DEFINITION

“The maternal mortality ratio is the number of women who die from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births”.. MDG 2015

Under “ANC” is combination of many check-up relating to body mass index, blood pressure check-ups, urine test, and analysis of stomach and breast. 4. Despite the fact that maternity is frequently a optimistic and pleasing sense of accomplishment, but the case is not even always for all women, like for several mothers motherhood is linked with pain, bad health and sometimes death also is not unusual. The most important straight reasons of maternal indisposition along with death consist of internal bleeding, contamination, high blood pressure, many abortions, and clogged labour (WHO, 2010). Major indicators of maternal health are ANC, Institutional Delivery Care and PNC.

Numerous country-wide ‘socio-demographic goals’ for 2010 stated in policy concern to safe maternity.

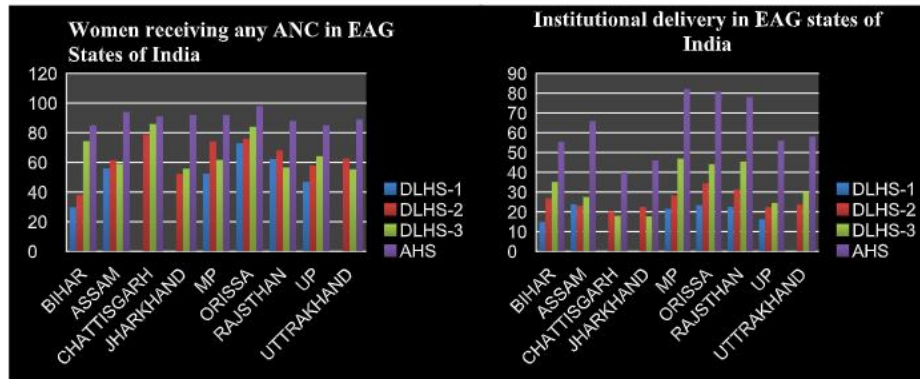
Graph 3: Trends in maternal mortality ration in India



Source- Computed from report of MDG 2015

Indicators impacting health of mothers are supervised on a regular basis by ‘Health Management Information System’ (HMIS) and also from time to time by “District Level Household Surveys” (DLHS), “National Family Health Surveys” (NFS) and “Annual Health Survey” (AHS). In a survey it was founded that approx. 830 females passes away mostly because of difficulties of pregnancy including child birth. Most of these deaths happen in deprived sections of women with scarce resource in hand. Main reasons for the loss of life are “bleeding”, ‘hypertension”, “infections”, besides all these secondary grounds are commonly because of communication among preceding health situations including phase of pregnancy. Probability of women losing their life primarily because of pregnancy linked causes are 33% more in developing economies of the world than women of developed countries. Deaths during maternal phase of life is an important health indicator which points towards wider gaps among various groups distinctively separated mainly on the basis of wealth index and residence both among the country and within the country(Das,Sibabrata 2005).

Graph 4 showing women receiving any ANC and Institutional Delivery in EAG states.



Source –DLHS2,DLHS-3.

INSTITUTIONAL DELIVERY

From the graph it is clear that institutional delivery has not increased much in UP, Chhattisgarh, Jharkhand and in Assam from DLHS- 2 to DLHS-3, whereas it has shown a remarkable increase in MP, Rajasthan, Bihar, Orissa from DLHS-1 TO DLHS-3. The reason could explain as the implementation of government’s policies in programmes like “jhanani suraksha yojana”, special attention given by NRHM programmes in these states. Less than half of birth in India happens in health centres either in private or government. And the births which are happening not in institutions takes place in women’s in laws home

and only about 9% births occur in parents' home. Residence wise deliveries one out three deliveries happen in hospitals in urban areas where as about 29% of babies are delivered in hospitals in rural areas. (NFHS -3).

Table 3 Showing various maternal Health Indicators

Status	DLHS 2	DLHS 3
Mothers who had received any ANC (%)	73.6	75.2
Mothers who had 3 or more ANC (%)	50.4	49.8
Mothers who had full ANC checkup(%)	16.5	18.8
Intutional Delivery (%)	40.9	47
Safe Delivery (%)	48	52.7
IFA consumed for 100 days	20.5	46.6
Mothers who received PNC within 2 weeks of delivery (%)	N A	49.7

Goal four in the MDGs is to lessen child mortality ie reducing by two thirds the mortality rate among children under five, while, Goal five aims to improve maternal health aiming.

The number of antenatal care visits and the timing of the first visit are important for the health of the mother and the outcome of the pregnancy. The World Health Organization recommends that all pregnant women should have at least four antenatal care (ANC) assessments by or under the supervision of a skilled attendant (**WHO, 2006**).

From the graph it is clear that in Bihar Ante- natal care has increased substantially from DLHS- 1 to DLHS-3 period of just ten years. Undernourished girls have greater likelihood of becoming undernourished mother as they have a greater chance of giving malnourished children (**Ghosh,A.2011**).

CONCLUSION

All these states are lagging behind in India's overall socio-economic and demographic development. Concerning the fifth Millennium development goal, India has been trying to improve the maternal health care services but the maternal mortality rate is still high, this type of death is higher about 300 per year in EAG (Empowered Action Group) states of India. However the number has declined but has not reached the desired level notwithstanding its programmatic exertions and swift economic progress done in the past two decades. Considering the fact that India has vast areal extension and home to the people of varied cultures, languages, races and ethnicity, thus, even execution of reforms at a time in the health sector is not possible. It is a fact that maternal deaths in India is declining, as it was high at the time when "MDG" goals were set for India in 1990. Data indicates that 600 women lose their life while giving child birth of one lakh live births, thus pointing that just about one and a half lakh women die every year (AHS, 2014). But the encouraging fact is that against this figure, MMR declined to 178 per one lakh live births in 2011 in India (**AHS, 2014**). In developed countries, MMR ranges between 2 to 9, which is recognised to almost universal utilisation of amenities relating to health care of mothers which takes in minimum of one antenatal care, delivery assisted by a skilled birth attendant and at least one postnatal care is 97 percent, 99 percent and 90 percent respectively. This figure shows that there is large disparity in level of maternal deaths and health care facilities between developed and developing countries (**WHO, 2010**). So India still has to travel a long way to attain the required figure.

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