



Research Article

Health Expenditures and Its Outcomes in India

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Abstract

The level of infant and child mortality is a useful indicator of development in any societies. High rates of maternal mortality contribute to excess female mortality in the reproductive years, the mortality rate being more than 50 per cent higher for females than for males. Maternal mortality rates in India are among the highest in the world, and more than 50 times the average for industrialized countries. In this context the present study based on secondary data collected between 2001- 2018 in Sample Registration System (SRS) Bulletins. Female education, empowerment, attitude of health care workers and distance of health facilities to the people in most communities are factors to be addressed in reducing child morbidity and mortality rates and improving maternal health, thus achieving the Millennium Development Goals (MDGs) 4 and 5. To get this done, policy makers, health personal and community at large should join hands.

Keywords: IMR, MMR and MRMB.

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1.1 Setting

The level of infant and child mortality is a useful indicator of development in any society. India has a high maternal mortality ratio - approximately 453 deaths per 100,000 births in 1993. This ratio is 57 times the ratio in the United States. India's maternal mortality ratio (MMR) is a cause for concern as it constitutes 15 percent of the total global maternal deaths. The MMR was 280 per 1,00,000 live births in 2005 and it came down to 174 per 1,00,000 live births in 2015 (WHO et al 2015). The trend of excess female mortality is pronounced till the age of 35. High rates of maternal mortality contribute to excess female mortality in the reproductive years, the mortality rate being more than 50 per cent higher for females than for males. MMRs in India (at 500 per 100,000 live births) are among the highest in the world, and more than 50 times the average for industrialized countries. Vora et al., (2009) estimated that of 5,36,000 maternal death occurring globally each year 1,36,000 take place in India. Estimates of the global burden of disease for 1990 also showed that India constituted 25 percent to disability Adjusted Life Year (DALY) lost due to maternal condition alone. Half of the pregnant mother still does not complete three Ante-natal Care (ANC) visits and a quarter does not receive Tetanus (TT) prophylaxis. Frequent pregnancies compound a woman's lifetime risk of dying from maternity-related causes. The absence of trained attendance at birth for the majority women contributes greatly to high rates of maternal mortality.

Recently, a number of economists have developed macroeconomic theories that integrate an account of the demographic transition with theories of long-run economic growth. However, in most cases these studies have concentrated on the fertility aspect of the demographic transition, while abstracting from mortality decline (Galor and Weil 2000, Greenwood and Seshadri 2002). Demographers, in contrast, have pointed out that in many countries mortality decline preceded fertility decline, which suggests a causal link from falling mortality to falling fertility. Falling mortality rates lower the cost of having a surviving child, hence net fertility actually increases, not decreases, as mortality declines (Boldrin and Jones 2002; Fernandez-Villaverde, 2001). Poor health has repercussions not only for women but also their families. Women in poor health are more likely to give birth to low weight infants. They also are less likely to be able to provide food and adequate care for their children. Finally, a woman's health affects the household economic well-being, as a woman in poor health will be less productive in the labor force. The present study focused on maternal and child health care expenditure and their outcome.

2.1 Review of Literature

Fernandes et al., (2021) noted that health insurance coverage reduces the rates of out-of-pocket payments associated with the use of MHC services utilization. Such payments may pose as financial barriers to women when accessing maternal healthcare services. Interestingly, women who were covered by health insurance were less likely to use skilled birth attendance during delivery. It is founded that evidence for education, marital status, wealth index and parity influencing respondents to completing the four recommended ANC visits. As observed with the first key maternal health service, educated women are more informed of pregnancy-related risks and will thus adhere to completing the required amount of ANC visits in comparison to lower and none educated women.

Mohanty and Kastor (2017) revealed that the NHM is effective in increasing in utilization, continuation of services in public health centres and reducing OOPE and CHS in public health centres on maternal care. We suggest that the cash incentive under NHM should continue and private health care providers should be regulated with respect to pricing and quality of care. The program should focus on improving the quality



of services in public health centres. Besides, we recommended that the forthcoming health survey (NSS) should integrate an abridged version of the consumption schedule, question on expenditure on home delivery and a separate code for caesarian and normal delivery is recommended.

Govil et al., (2016) explored that 66 percent of the women received incentives under JSY. Almost all women who delivered at public health facilities received JSY incentives (96 % had already received and 4 % were about to receive at the time of survey). More than half of the respondents (57 %) had received any postnatal care (PNC). All women reported the total cost on antenatal care, only 23 % could provide the expenditure incurred on various services during antenatal care. The share of medicine in OOOPE was 59 % followed by sonography (18 %), blood tests (8 %), transportation (8 %) and doctor consultation (7 %). It varied almost in the similar proportion among women who received antenatal care exclusively from public facility, private facility or from both public and private facilities.

Ahmed Shoukry Rashad and Mesbah Fathy Sharaf (2015), suggested that reducing reliance on OOP health expenditures, and increasing public health investments would not only increase access to healthcare, and subsequently improve citizens' health, but also would protect households from financial risks arising from health payments. This paper urges further research on the optimum amount of funds that are needed for achieving universal healthcare coverage in Egypt. The risk of catastrophic health expenditure was higher among rural households, those with no health insurance, households whose head was not employed, households with young children, and those with a chronically sick member. Anti-poverty policies in Egypt should target vulnerable households with high risk of experiencing catastrophic health expenditure.

Mukherjee et al., (2013) examined that the depth of catastrophic expenditure was higher among women belonging to households from lower MPCE quintiles compared to those belonging to higher consumption quintiles, both in rural and urban areas. The mean overshoot among women from Christian households in rural areas was highest (Rs.1182) followed by Hindus (Rs.575) and Muslims (Rs.499). The overshoot among women from Christian households was highest (Rs.1434) in urban areas as well, followed by women from Muslim households (Rs.1313). The poor people face the highest burden in relative terms despite the fact that they spend less in absolute terms and most of the maternal health care services in government health facilities are free of cost. The percentage share for catastrophic OOP expenditure was slightly lower for urban households than their rural counterparts. It may be due to better government health services and relatively higher income of households in urban areas.

Van Minh et al. (2013) examined the catastrophic and poverty impacts of OOP health expenditures in Vietnam, and found that between 2002 and 2010, 4 to 5% of households have incurred catastrophic health expenditure, and between 3 to 4% of households have been impoverished because of OOP payments for healthcare.

Tiziana Leone et al., (2012) considered 9,643 households where at least one woman used maternal health care services during the year preceding the survey. Of these, 26 % of the households had missing data on antenatal care (13 %), delivery (5 %) and postnatal care (8 %). The average indirect expenditure for delivery care is even higher than the direct expenditure, suggesting substantial OOOPE for delivery care in public health facilities. In contrast, the direct costs for delivery care in private facilities are much lower than the indirect costs. It is likely that the direct expenses in private health facilities also include accommodation costs. The expenditure for delivery care in public health facilities in poor states such as Bihar, Uttar Pradesh, Madhya Pradesh and Orissa is substantially higher than the national average. The use of maternal health care is also significantly low in these states. By contrast, the costs associated with delivery care in private



health facilities appear to be more in economically well-off states such as Goa, Himachal Pradesh, Delhi, Punjab and Kerala

3.1 Methods

The present study based on secondary data collected between 2001- 2018 in Sample Registration System (SRS) Bulletins. Apart from schemes under the National Health Mission (NHM), State specific land mark initiatives such as Dr.Muthulakshmi Reddy Maternity Benefit Scheme (MRMBS), Birth Companion Programme (BCP), 24x7 delivery care services in all Primary Health Centres (PHCs), Birth waiting rooms, Accessible blood bank and Storage Centres, Menstrual Hygiene Programme, Chief Minister's Comprehensive Health Insurance Scheme etc., have contributed significantly towards the improvement of health indicators. In addition to these schemes, strengthening of Basic Emergency Obstetric and Newborn Care (BEmONC), Comprehensive Emergency Obstetric and Newborn Care (CEmONC), Maternal and Child Health level-II centres apart from upgradation of facilities are pioneering schemes which have later been adopted by many other States in India particularly in Tamil Nadu. The inter district disparities and the intra district challenges are also being addressed by implementing need based local initiatives, like prior admission of high risk mothers in birth waiting rooms, hiring the services of Obstetricians and Anaesthetists etc. The State has also announced the two nutrition kits for the pregnant women and also announced that conditional grant is also extended to Higher Order Births (HOB) with a view to encourage them to accept contraception to prevent further pregnancies which is expected to result in improving outcomes on these critical indicators.

4.1 Analyses and Discussion

In Tamil Nadu, department of health has 1,806 Primary Health Centres (PHCs) in rural areas including 422 Upgraded PHCs, 320 Primary Health Centres in urban areas other than Chennai and 8,706 Health Sub Centres (HSCs). 140 PHCs are functioning in Chennai Corporation limits. Tamil Nadu is one state to provide health care free of cost. ANC, investigation, AN feeding, intranatal care, postnatal services including infant care, transport are provide as “cashless service and free drugs and consumables, free diet up to three days during normal delivery and up to seven day for C-section, free diagnostics and free blood wherever required. The state government has launched a revised MRMBS from 01-06-2011 by enhancing the maternity benefit to the poor pregnant women mothers from Rs.6000 to Rs.12000. The cash assistance is given in three installments on a conditional basis and restricted to two deliveries, from 1st October 2012 benefit the scheme are disbursed directly to the bank account of the beneficiaries through electronic clearing system.

Under the MRMBS aimed at reducing IMR and MMR, the State Government has already enhanced the assistance from Rs.12, 000/ to Rs.18, 000/- per beneficiary. An amount of Rs.4,000/- from this assistance will be used for providing “Amma Maternity Nutrition Kit” comprising iron tonic and nutrition supplements to reduce anaemia amongst the pregnant women and improve the birth weights of infants. In the Budget Estimates of 2018-19, Rs.1, 001.33 crore has been allocated for this flagship scheme. On an average, six lakh women benefit from the scheme every year. The following figures show that amount disbursed to beneficiaries through MRMBS in Tamil Nadu.



Figure -1: Amount Disbursed to Beneficiaries (Rs. In crore)

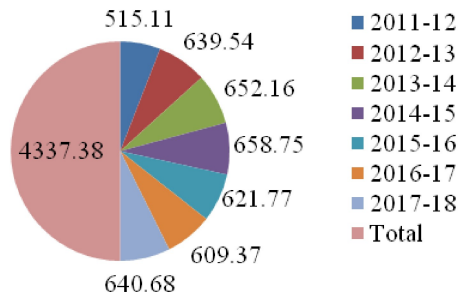
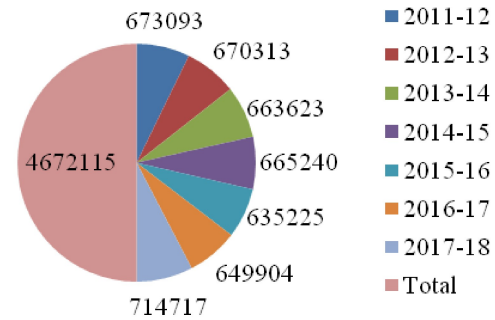


Figure - 2: No. of Beneficiaries

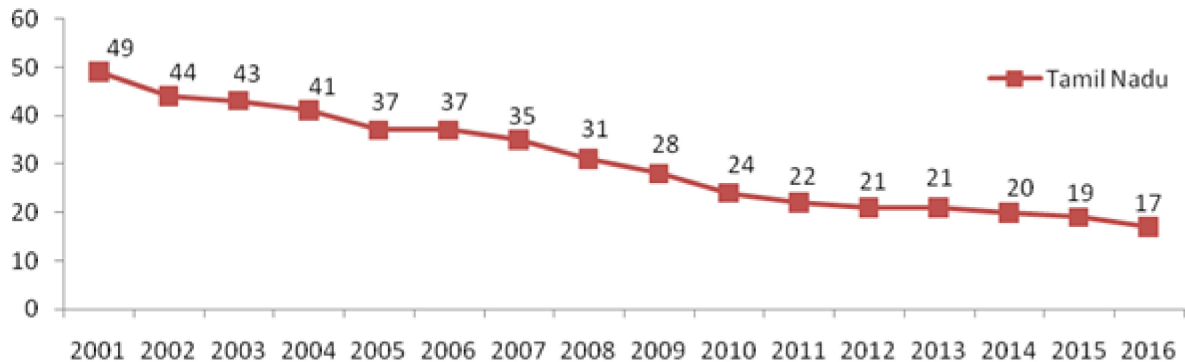


On an average, six lakhs women benefit from the scheme every year and six hundred crore spend for that. It can be understood that every year around six lakhs child are born in Tamil Nadu. It is one of the reasons for raising population in Tamil Nadu and India. At the same MRMBs protect the child from death and complicated. The above figures show that the Infant Mortality Rate (IMR) stood the least in the care of Tamil Nadu (49 per thousand) in 2001. It can be understood, it was declining continuously since 2002 (44 per thousand) until 2016 (17 per thousand). This conditional cash transfer scheme has a significant effect on the proportion of women seeking institutional delivery and has especially increased the use of public sector facilities for delivering. The ability of the household to spend on health care facilities is an indicator of enlarging the capability of household's member. Children in low-income countries face much higher risks of mortality compared to their counterparts in more affluent societies. The Counselling for health related issues need immediate attention to health project and keep improve the human health and development for overall economic development (Rajendran and Ramachandran (2015).

The current level of IMR in Tamil Nadu for the year 2016 is 17 per 1,000 live births as per the SRS (2016) survey. The State ranks as the second lowest among the major States in the country. The State is taking multipronged efforts to bring down the IMR by focusing on the components such as the Neo-natal Mortality Rate (NMR) etc. The goal is to ensure that all preventable causes of infant deaths are eliminated by appropriate interventions. Immunization is one of the most cost effective public health interventions since it provides direct and effective protection against preventable morbidity and mortality (Rajendran and Ramachandran, 2013). Immunization is largely responsible for reduction of under 5 mortality rate.



Figure - 3: Trend of IMR for Tamil Nadu



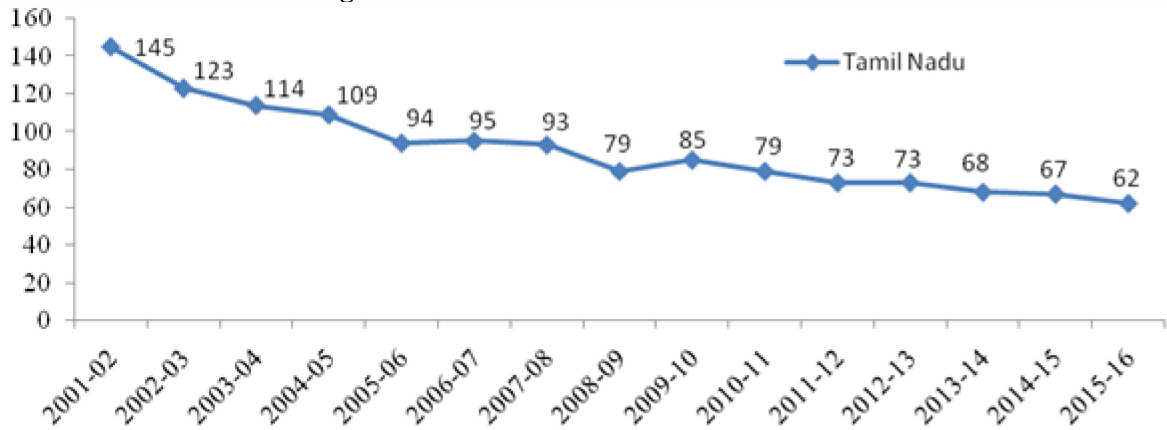
Source: Sample Registration System (SRS) Bulletins.

Based on the healthy states progressive India report, the state realizes that unless intensive efforts are taken to reduce Low Birth Weight (LBW) children and improve the nutritional status of pregnant women sustained improvements in these parameters would become tougher. Hence as part of the vision 2023, the public health policy has been focused on maternal and newborn health, with a multi-dimensional approach including addressing issues such as empowerment of women, improve nutrition which are the key factors behind the advances in maternal and child health in Tamil Nadu. In Tamil Nadu, as revealed by the National Survey (NFHS 3, 2005-06) mild to moderate malnutrition burden in children under three years of age in 29 percent. It can be a direct or indirect cause of child morbidity, thereby increasing the case fatality rate in these children is 5-20 times higher compared to well nourish children. The impact of the initiatives of the government is reflected in improved literacy, reduced incidence of early marriage, early pregnancy and frequent pregnancies and high level of public awareness on family planning and good nutrition. Low awareness among the clients is one of the major reasons of low utilization of services (Rajendran and Ramachandran (2016).

The Millennium Development Goal (MDG) aims at reducing the MMR by three quarters during 1990-2015. Though India has achieved some progress, this needs to be speeded up for a sustainable faster development (Dreze, 2015). In order to achieve this goal, all women need access to high quality of ANC. However, ANC services are available in developing countries including but utilization of these existing services is poor. India continues to lag behind in checking maternal mortality and child mortality to expected levels. MMR is calculated as the number of maternal deaths during a given year per 1,00,000 live births. Monitoring MMR helps to understand the obstetric risks associated with each pregnancy and the quality of the health care system in a country. Maternal Mortality Ratio represents the most sensitive and key indicator of women's health and their status in the society. The following figure shows that Trend of MMR for Tamil Nadu.



Figure - 4: Trend of MMR for Tamil Nadu



Source: Sample Registration System (SRS) Bulletins.

During DLHS-4 21 percent decreased in Blood Pressure (BP) taken, 38 percent decreased in Hemoglobin (HB) tested, 64 percent decreased in Abdomen examined and 58 percent decreased consumed 100/more Iron and Folic Acid (IFA) tablets. It can understand that only 32 percent of the pregnant women full checked ANC and other are not. Antenatal women are hesitant to avail IFA tablets as the tablets are bitter in taste and also feel sleepy/drowsiness. When they consume tablets, vomit immediately and become dull. After that women cannot go for their routine work. Educated women are aware of the utilities of the IFA and hence consume the tablets regularly unlike less educated counterparts (Rajendran and Ramachandran, 2013). Lack of health education is one of the reasons for low level of full ANC received. Not only this and also in BP taken, HB tested, Abdomen examined and consumed 100/more IFA tables. After introduction of MRMBBS in Tamil Nadu, it gives positive trend that MMR reduced from 145 per lakhs in 2001-02 to 62 per lakhs in 2015-16. The state of Tamil Nadu's MMR 93 is second best in the country after Kerala (81) and has improved from an already low base of 111 in SRS 2004-06. Now it is 63 as per department of public health records.

5.1 Conclusion

The MRMBBS is important intervention to promote institution deliveries. Its strength lies in the fact that the government has made budgetary allocation for the poorest. There is some evidence to suggest that institutional deliveries have increased, IMR and MMR reduced due to the MRMBBS. Female education, empowerment, attitude of health care workers and distance of health facilities to the people in most communities are factors to be addressed in reducing child morbidity and mortality rates and improving maternal health, thus achieving the Millennium Development Goals (MDGs) 4 and 5. To get this done, policy makers, health personal and community at large should join hands.

6.1 Suggestion

Providing health care to newborns and potential mothers are essential for reducing IMR and MMR, thereby improving the health status. All complicated maternal cases should be advised to stay in hospital itself and take care of their children's health after discharged from the hospital. Every woman must be utilizing their



MRMBS case only for their health not for household expenditure. The medical personal should focuses on emphasizing the hygienic practices not only to mothers but also to attendants.

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