ASSESSING THE STATE OF REPRODUCTIVE AND CHILD HEALTH (RCH) PROGRAMME IN MEGHALAYA: AN EXPLORATORY ANALYSIS

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Abstract

There has been a growing attention towards maternal healthcare especially after the incidences of maternal mortality being high in India and select States in the country. North East States especially Meghalaya is a highly matrilineal state and it becomes interesting to understand the performance of maternal health outcomes considering the hilly topography and women empowered culture. The paper intends to understand the performance of the Reproductive and Child Health (RCH) Programme with focus on maternal health within the NRHM framework in the state of Meghalaya. The methodology involves mixed method approach. Secondary data sources is used from the Health Management Information System (HMIS) to retrieve data on the performance of vital maternal health indicators. Qualitative data in the form of semi-structured interviews is used to gain insights into the institutional framework of the RCH programme in the State and the challenges faced in the implementation of the programme. The objective of the paper is to assess the maternal health outcomes by analysing the performance of vital maternal health indicators from secondary data sources

Key words: maternal health, Reproductive and Child Health (RCH) Programme, maternal mortality, north east, Meghalaya

Introduction

Investment in the health of mothers is very crucial for a number of reasons. Good maternal health is crucial as it leads to a continuity of healthy future generation (Jowett,2000). If mothers are provided with good antenatal care (ANC) facilities it not only ensures a safe and happy delivery experience but also assures the birth of a healthy new born. Maternal health is considered as a crucial factor for Development. Policy makers and the Government has realised that timely and adequate maternal health facility is an important pre-requisite for sustaining the economy in the long run.

1.1 Meaning of Maternal Health and Reproductive Health

Maternal health is largely concerned with the health of a pregnant woman. It refers to pregnancy, childbirth and postpartum phase in a woman's life. (World Health Organization [WHO], 2018a).

It states that maternal health is the health care provided to women that includes family planning, pre-conception, pre-natal and post- natal care with the objective to ensure smooth pregnancy and delivery of the baby and to reduce maternal morbidity and mortality (WHO, 2018b).

The above definition clearly implies that maternal health is mostly concerned with the health of the woman during the reproduction phase. The above definition highlights the close association of maternal health with reproductive health. Reproductive health is a little complex but not gender specific as maternal health. Reproductive health is concerned with both males and females and is a broader term as compared to maternal health.

Definition of reproductive health by WHO:

Reproductive health is a state of complete, physical, mental and social well-being and not merely the absence of disease or infinity, in all matters relating to the reproductive system and to its functions and processes *(WHO, 2018c).*

1.2 Maternal Health and Development

Investing more in the health of women and children is imperative for the development of the country and nation. Women have the ability to take care of their homes and also contributes significantly to the economy. The women need to stay fit and healthy. Among many others one outstanding development economist, Amartya Sen has strongly recommended in his writings empowerment of women as an important factor for development (Sen, 2012).

- **It reduces poverty:** Healthy women work more productively and work throughout their lives. They have multiple roles to play which demands more responsibilities. If health services are provided free of cost to the children and the mothers, they can divert the spending of their limited income to other needs such as nutritious food, education, proper housing and sanitation facilities (Ki-moon, 2015).
- **It stimulates economic productivity and growth:** If women are healthy especially during pregnancy then the possibility for the children to be healthy after they are born is higher. If the mother is weak and under nourished during pregnancy, then that has an impact on the child's health as well. The new born child will constitute the economy's future workforce and will add to the Gross Domestic Product (GDP) of the country (Ki-moon, 2015).
- **It is cost- effective:** Essential health care is more cost effective because it provides the required treatment at the right time thus saving a lot of money that is spent later for treating illness and disability. In the case of the health of the mother and the fetus it has been observed that proper maternal care at the right time avoids later complications related to pregnancy which can be very costly. The care provided is a package of services from the time the mother becomes pregnant till the baby is born and takes care of post-delivery health of the mother as well (Ki-moon,2015).
- **Accessibility to maternal health is a human right:** Every woman is entitled to affordable, accessible and superior quality health care to avoid being victims of maternal deaths and morbidity. This empowers the women and children and makes them aware of their human right of attaining the highest standard of health. It makes them realize that they are entitled to have a healthy living. They become more responsible to take informed reproductive decisions, to prevent unintended pregnancies and to have access to treatment from HIV/AIDS and other such diseases. Women are free from gender discrimination. Government has an obligation to make provisions for the fulfilment of this human right and failure to do so will be considered a violation (United Nations Human Rights, 2018).

1.3 Maternal Health and the Sustainable Development Goals (SDGs)

The growing importance of maternal health can be assessed by the inclusion of maternal health requirements for health under the Sustainable Development Goals (SDGs). Health policy can be a contributor to sustainable development and poverty reduction with two effective tools: (i) effective channel of information dissemination related to best health practices, (ii) easy and affordable access to health care services. Creation of awareness and preventive health care measures will motivate the public to take care of their health and this will reduce the burden of out of pocket expenditure. With this objective in mind strategies have been adopted to provide access to maternal health to all segments of the population.

The framework of the SDG is so designed that progress in SDG Goal No 3 which is related to health depends on the performance of the other goals and in turn the performance of the other goals will enhance the progress of SDG Goal No 3. The SDG Goal No 3 on health is interlinked with the other SDG goals which are non-health goals (WHO), 2015).

Figure 1: Linkage between Health and other SDGs

Source: Author Inference

The above section throws light on the growing importance of maternal health in the health scenario. It gives us an idea of the evolution of the health sector and in particular maternal health in the recent years. The RCH programme is the nodal programme which is looking into maternal health services.

2. RCH status in Meghalaya

During the MDG era, the Government of India launched two important health initiatives- The National Rural Health Mission (NRHM) in 2005 and the National Urban Health Mission (NUHM) in 2013 which are now subsumed under the National Health Mission (NHM). The Government rolled out the NRHM in 2005 with an objective to revamp the health system in the rural areas and improve financing mechanisms for the same (MoHFW, 2005). The cause that triggered the adoption of the NRHM is that inspite of significant improvements

in the public health domain in India over the years, the performance of vital health indicators like the MMR, IMR and TFR has been very low especially in the rural areas.

The NRHM has been implemented in 18 states, Meghalaya being one of them. The 18 states have been selected on the criteria of either being one of the poor performing states in terms of health indicators or having inadequate health infrastructure. Among the many objectives, one of the primary objective of the NRHM plan is to improve access health to women and children in the rural areas. The study intends to have a detailed understanding of the performance of maternal health situation under NRHM in the state of Meghalaya.

Meghalaya is one of the North East states. Meghalaya is characterised by a hilly terrain and is quite inaccessible in terms of its location (Government of Meghalaya, 2018).

Meghalaya is the only state in the entire northeast of India which is matrilineal in nature. The females have a dominant role to play in a matrilineal society. The research is based on the study of the RCH programme in the state of Meghalaya mainly referring to maternal health. Firstly, since Meghalaya is characterised by a matrilineal society, it will be interesting to know if at all the ancestral lineage pattern in the state has empowered women to have better utilization of the maternal health services in the state. Secondly, Meghalaya is one of the high focus states under the NRHM. NRHM is a health mission plan that is dedicated solely to the development of the health sector in the rural areas.

Much of the studies around RCH within the NRHM is general pan India assessment with very few fine grained state specific study. Turning over to Meghalaya, it is observed that in the North East region the percentage of literature available is very scarce. This shows the dire necessity of creating knowledge in this region. In the region, there are hardly two or three papers published in Meghalaya. This clearly highlights the scarcity of literature available on maternal health in the North East and especially in Meghalaya.

The Government of India rolled out the RCH Programme as a flagship programme under the MoHFW to cater to the needs of the pregnant women and the new born babies. The RCH Programme gave the framework for Maternal and Child Health (MCH) services. The programme had its first phase initiated in 1998-1999 which is called the RCH I. The progress under the RCH I was not very promising. The RCH II was launched in the year 2000 after the declaration of the MDG goals. The Government of India felt that this was a very important time for the country to revamp the health system to meet the requirements of the MDG health goals. It launched the RCH II with an improved programme plan, revised targets and better implementation designs to enable the country to accomplish the MDG goal 5 targets related to maternal health.

Objectives of the Reproductive and Child Health (RCH) Programme (Ministry of Health and Family Welfare , 2000)

- Ensuring access to information regarding family planning and the availability, accessibility and affordability of the services for family planning to the population in a convenient manner.
- To enhance rationale decision making regarding reproduction and family planning.
- To meet changing reproductive health needs during the life cycle keeping in mind the diversity of requirements of local needs.

Existing literature highlights the fact that detailed understanding of the evaluation and the performance of the RCH Programme in all the states have not been captured extensively. Secondly, given that each state is peculiar in its characteristics may have different reasons for poor maternal health outcomes. The North East forms one such region that is peculiar in its characteristics. It is located on the map of India at a point which seems to be secluded and isolated. This region is surrounded by hilly terrain and landslide prone roads. Studies highlight that areas characterized by such geographical features are in a more critical condition with regard to access to maternal health care and requires more attention (Datta & Datta, 2013).

However, when it comes to the North East States in India although the degree of empowerment may be higher but the utilization of maternal health services including institutional delivery is quite low. The factors

responsible for this are firstly, people opting for ANC check-up have increased over time but the number of people who opt for full ANC are still low, a large proportion of the population still deliver at home and in most cases without the help of trained health workers. Therefore, the association between women empowerment and utilization of maternal health services seems to be weak in the North East region (Deb, 2010).

Cultural barriers have kept the unmet need for contraception high in the North East States. The reason for this is that in the Khasi society there is a strong preference for the girl child over the boy child. (Kharsyntiew, 2015). Evaluating the rate of MMR in Meghalaya, it has been observed that anaemia is one of the prime factors that lead to maternal mortality and morbidity. (Gogoi & Prustry, 2013).

In the backdrop of the above, this paper will analyse the performance of the crucial maternal health indicators in the State to understand if the performance is poor or good.

The objective of the paper is to have an understanding of the performance of the RCH Programme with focus on maternal health within the NRHM framework in the state of Meghalaya. The state of Meghalaya is one of the seven sister states in North East India. The paper analyses the performance of vital maternal health indicators that are considered crucial for maternal health well-being in the State. It highlights the role of the RCH in improving maternal health conditions.

Methodology

The methodology adopted in this study is primarily secondary data. The data for the performance of the vital maternal health indicators is retrieved from Health Management Information System (HMIS) from 2007 to 2016. Out of the various indicators only 11 indicators have been identified for the analysis based on WHO reports (WHO, 2018d) and expert consultation. Apart from this, few semi-structured interviews were also conducted with key informants who are involved in the implementation of the RCH programme at different levels to understand the mechanism of the program delivery. The secondary data was analysed in excel to understand the patters of the performance of the indicators over the years. The data analysis of the program was done through policy documents and key informant interviews.

Performance of Maternal Health in Meghalaya- Secondary Data Analysis

The implementation of the RCH programme focuses on ensuring a smooth and happy delivery phase for the mother and child and reducing the risk of maternal and infant mortality. One of the key requirements for this is to ensure that the quality of services provided by public health institution is within the desired standards laid down by policy directives. The performance of maternal health outcomes can be measured by assessing the performance of core maternal health indicators used for evaluation of maternal health.

The indicators have been spread across the reproductive age span into three categories- (i) Pre-Delivery Phase Indicators, (ii) Delivery Phase Indicators, and (iii) Post- Delivery Phase Indicators. 11 indicators have been selected based on expert consultation and WHO reports from 2007-2016.

4.1Pre-Delivery Phase Indicators

These are important indicators that are related to the health of the mother and the child in the initial phase of pregnancy till the time of delivery.

- **Percentage of Pregnant women who registered for Antenatal Care (ANC):** Antenatal Care refers to the regular medical and nursing care that is recommended for women during pregnancy.
- **Percentage of Pregnant women registered within first trimester:** It is important for the women who are pregnant to register as early as in the first trimester. Registering within the first trimester helps to trace congenital incongruities and helps to detect risks of health problems during pregnancy and after delivery.
- **Percentage of Pregnant women who received 3 ANC check-up:** This implies the percentage of women who use ANC provided by skilled health personnel for reasons related to pregnancy at least three times

during pregnancy at the desired intervals. Completion of 3 ANC is an indicator of continuity and use of health care during pregnancy and also of access.

- **Percentage of Pregnant women given 100 IFA tablets:** All pregnant women have to be supplied with a minimum of 100 IFA tablets during their phase of pregnancy.
- **Percentage of pregnant women who are given TT2 or Booster:** This is an important ANC indicator. Tetanus vaccinations are recommended to prevent the risk of tetanus to the mother and the unborn baby.

4.2 Delivery Phase Indicators

This includes deliveries conducted at public health institutes, private health institutes and at home to the total number of deliveries conducted. It also includes the number of home deliveries that have been conducted by SBA.

- **Percentage of Home Deliveries to Total Reported Deliveries:** The number of deliveries that take place in a non-institutional set up is known as home delivery. This is mostly conducted at home. The delivery at home is sometimes conducted by SBA and sometimes by Non Skilled Birth Attendants (Non SBA).
- **Percentage of Total Institutional deliveries (Public and Private) to Total Reported Deliveries:** It refers to the number of deliveries that are conducted at the institution which includes both the private health institutions and the public health institution.
- **Percentage of Deliveries conducted at Public Health Institution to Total Reported Deliveries:** This refers to the number of deliveries that take place only in the public health institution. It signifies the preference of the beneficiaries for delivery at the public institution.
- **Percentage of Home Deliveries attended by SBA (Doctor, Nurse, and ANM):** Home deliveries conducted by a professional who has been given some knowledge and training for conducting deliveries are known as SBA. It comprises of doctors, nurses and ANM. The risk of maternal mortality is less in home deliveries conducted by SBA.
- **Percentage of Home Deliveries attended by Non SBA Trained (Dai/ TB):** They are also known as Traditional Birth Attendant (TBAs). This implies a greater degree of maternal and infant mortality during pregnancy.

4.3 Post-Delivery Phase Indicators

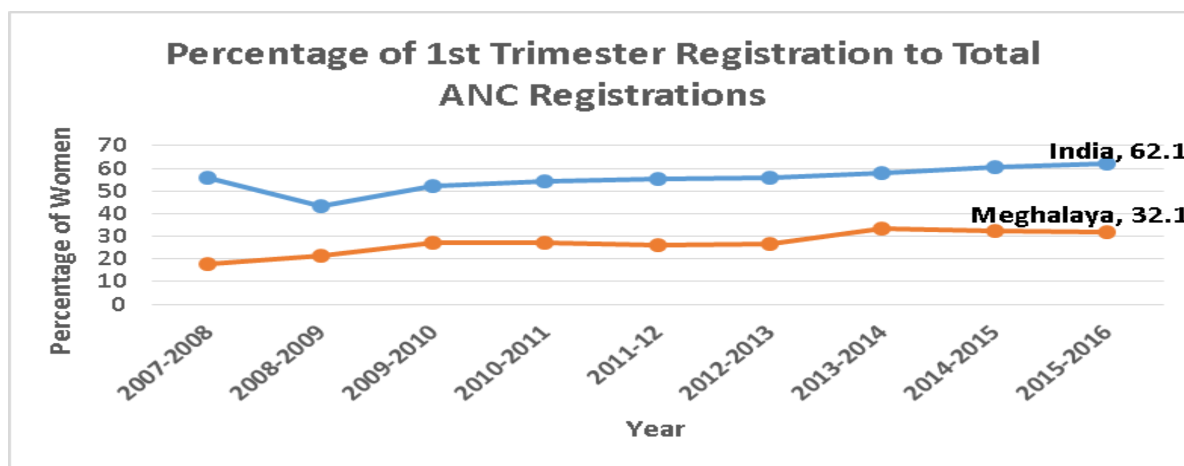
This group deals with the phase which is after delivery care.

Percentage of women who received post-partum care within 48 hours of delivery: Women should receive post-partum check-up and should be kept in hospital for at least 48 hours after delivery especially the ones who have undergone delivery with complications.

- **Percentage of women who received post-partum care between 48 hours and 14 days:** The successive visits for postnatal care continues and it is important for the mother and the baby to undergo the check-up.

Pre-Delivery Phase Indicators

Figure 2: Percentage of 1st Trimester Registrations to Total ANC Registrations in Meghalaya and India



Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

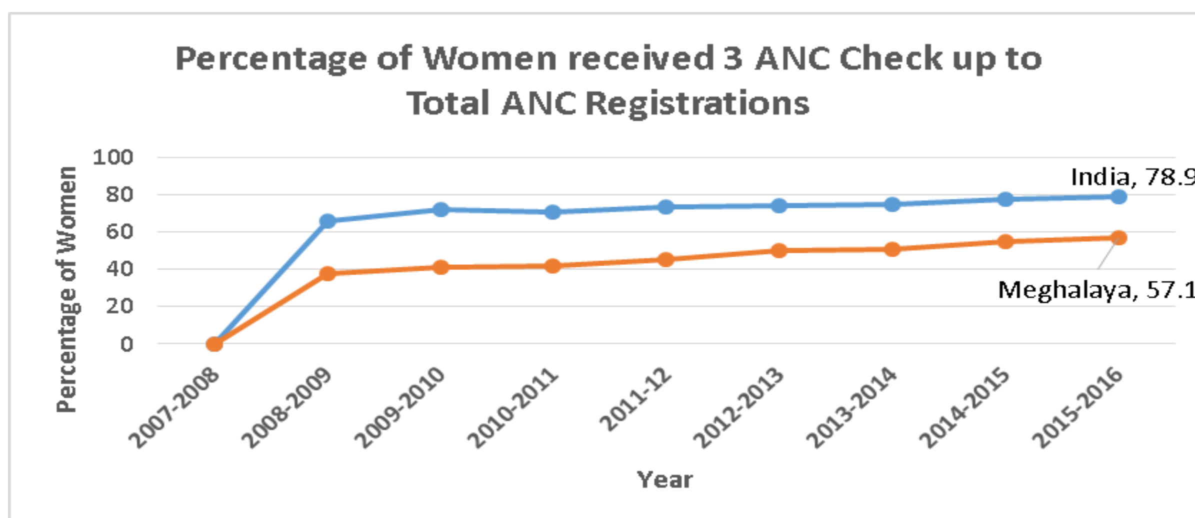
It is observed from Figure 2 that the percentage of respondents who registered within the first trimester in Meghalaya is half of what has been achieved at the national level.

In Meghalaya the percentage of respondents who registered within the first trimester in Meghalaya is 32.1% where as in India it is 62.1%. This indicates that respondents do not register early for ANC registrations in the State and this may not help in early detections of pregnancy related complications if any.

It is observed that there is progress made in Meghalaya but the pace of progress has been rather slow over the years. In 2007-2008 the percentage of respondents registered is 18% which increased to 32.1% in 2015-16 which is less than 50%.

In relation to other North East States, Meghalaya ranks the lowest among the sister states with Assam ranking the highest with first trimester registrations to total ANC registrations at 80.6%.

Figure 3: Percentage of Women who received 3 ANC Check-up to Total ANC Registrations in Meghalaya and India



Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

Figure 3 shows the percentage of respondents who have received 3 ANC check-up.

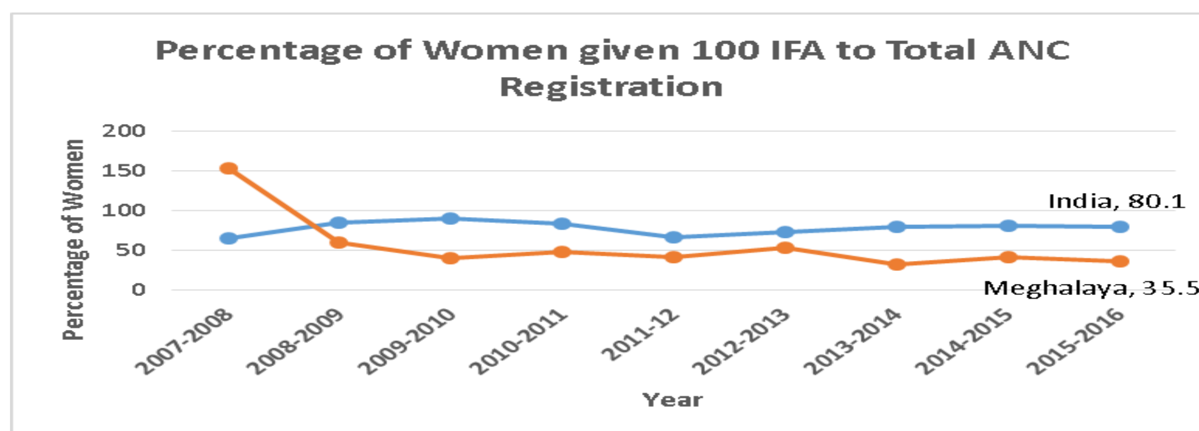
It is observed that in 2015-2016, in Meghalaya about 57.1% of respondents have completed 3 ANC check-up as compared to 78.9% in India.

Meghalaya ranks 5th among the North-East States only above the performance of Nagaland and Mizoram for ANC check-up.

In Meghalaya 57.15% of the respondents have completed 3 ANC. This indicates that nearly 40% of the pregnant women still have not availed the ANC services in Meghalaya.

Assam has the highest percentage of respondents at 86.9% who received 3 ANC check-ups to total ANC Registrations and the lowest is 32.2% which is recorded by Nagaland. Among the North East states, only Assam records performance above the national average which is 78.9%.

Figure 4: Percentage of Women who were given 100 IFA Tablets to Total ANC registration in Meghalaya and India



Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

Figure 4 shows the percentage of respondents who have been provided with 100 IFA tablets.

It is observed that in 2015-2016, in Meghalaya 35.5% of the respondents have been given 100 IFA tablets and in India 80.1% of the respondents have received it.

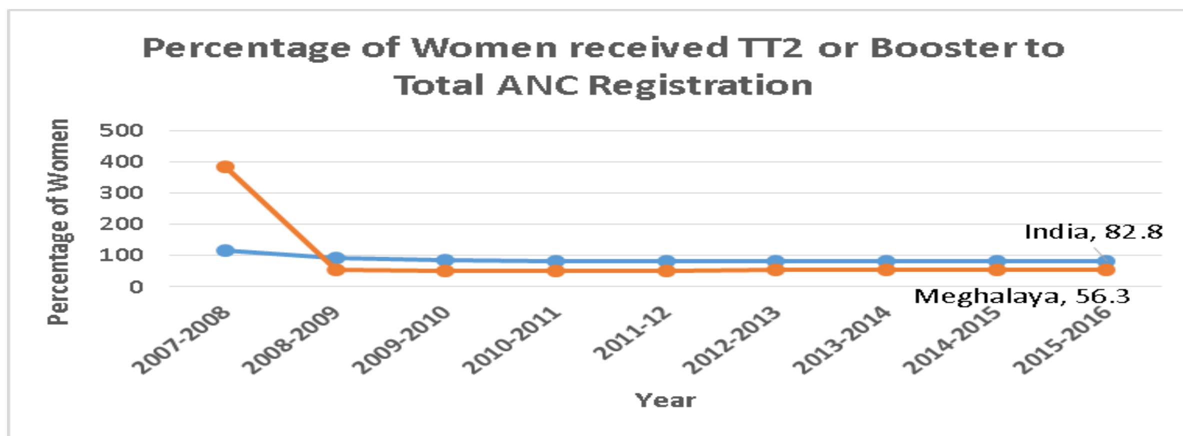
These tablets are important as it prevents the mothers from being anaemic and ensures a healthy baby at birth. The performance of this indicator is very poor compared to the national average.

Meghalaya ranks 5th among the North East states with 35.5% of the respondents receiving the tablets in 2015-2016.

Assam is the only state that ranks above the national average. Assam records 90.3% and the national average is 80.1%.

Nagaland shows the poorest performance in the case of this indicator. The growth in the case of figure 4 shows fluctuating trends. This can either imply two things- either the health of the respondents has been good or the supply of the IFA tablets have been erratic.

Figure 5: Percentage of Women who received TT2 or Booster to Total ANC registrations in Meghalaya and India



Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

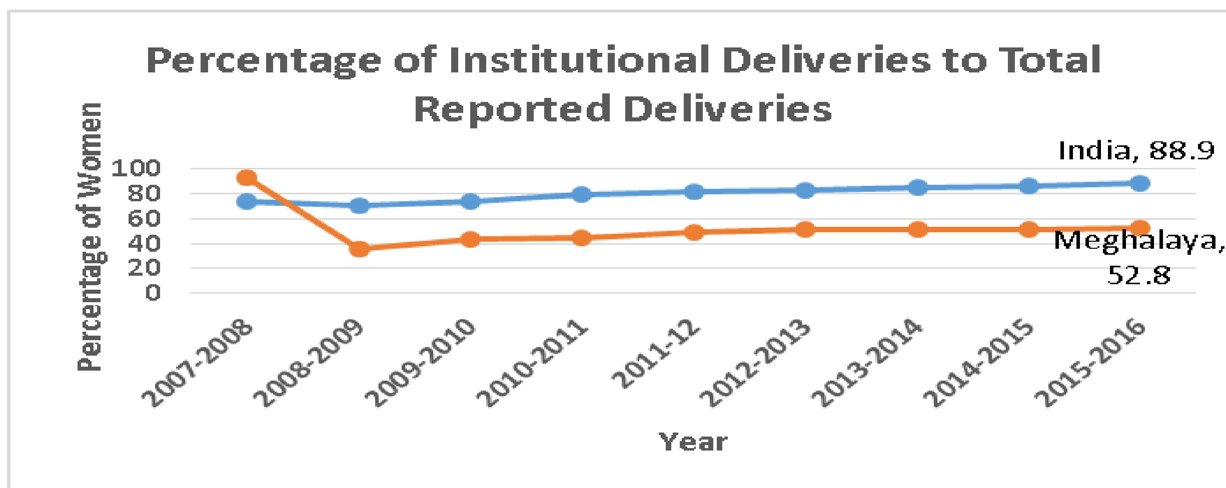
Similarly, TT2 or Booster is also an important input that is given to the pregnant mothers.

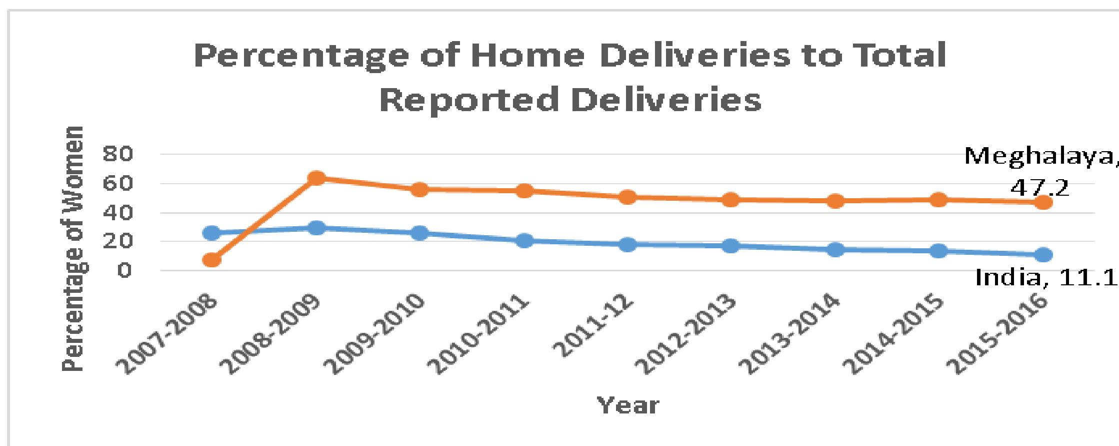
In the case of TT2 or Booster, in 2015-16, the percentage of respondents that have received TT2 or Booster in Meghalaya is 56.3%. Meghalaya ranks 4th in the list among other North East states. The national average is 82.8% and the performance of Meghalaya is below the national average.

Assam and Arunachal Pradesh are the only states performing above the national average. Assam and Arunachal Pradesh record 90.8% and 89.1% respectively.

Delivery Phase Indicators

Figure 6: Percentage of Institutional Deliveries Vs Home Deliveries to Total Reported Deliveries in Meghalaya and India





Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

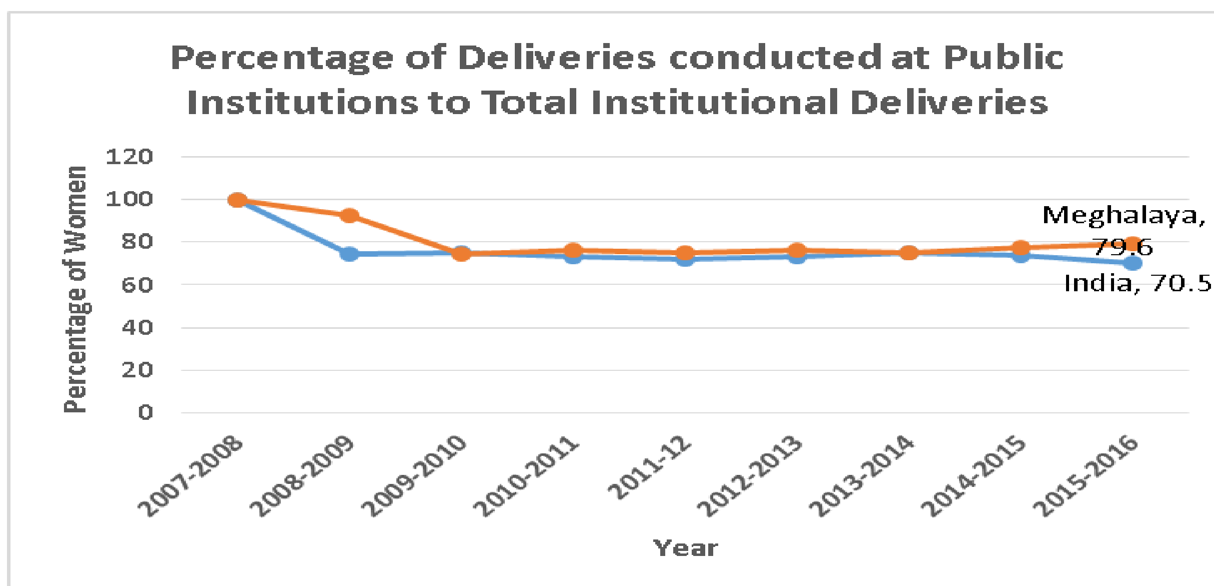
Figure 6 reveals that the percentage of institutional deliveries in Meghalaya is low as compared to the national average. In Meghalaya the percentage of institutional deliveries is 88.9% and in Meghalaya it is only 52.8%.

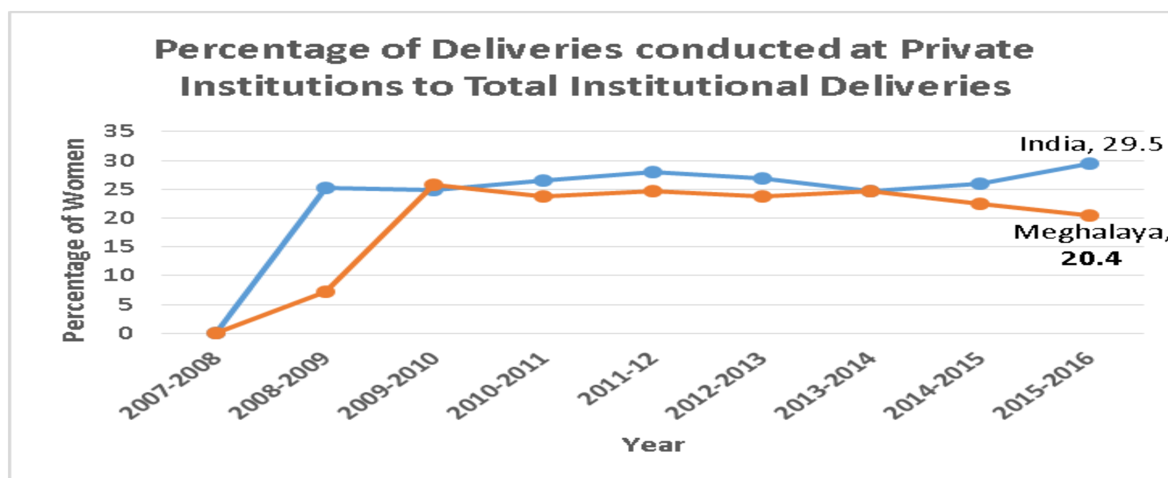
On the other hand, the percentage of deliveries conducted at home is higher in the State as compared to India. This gives an inkling that home deliveries still exist in Meghalaya on a large scale. 47.2% of the respondents in Meghalaya opted for home deliveries as against 11.8% in India.

Meghalaya shows the lowest percentage of institutional deliveries as compared to other North East states over the years from 2008-2016. Arunachal Pradesh shows the highest percentage of institutional deliveries at 92.1% which is also above the national average. The other states show a better performance as compared to Meghalaya between the ranges of 78.5% in Nagaland to 88.6% in Tripura.

Meghalaya shows the highest percentage of home deliveries at 47.2% in 2015-2016 and Arunachal Pradesh has the lowest percentage of home deliveries at 7.9%.

Figure 7: Percentage of Deliveries conducted at Public Institutions Vs Private Institutions to Total Institutional Deliveries





Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

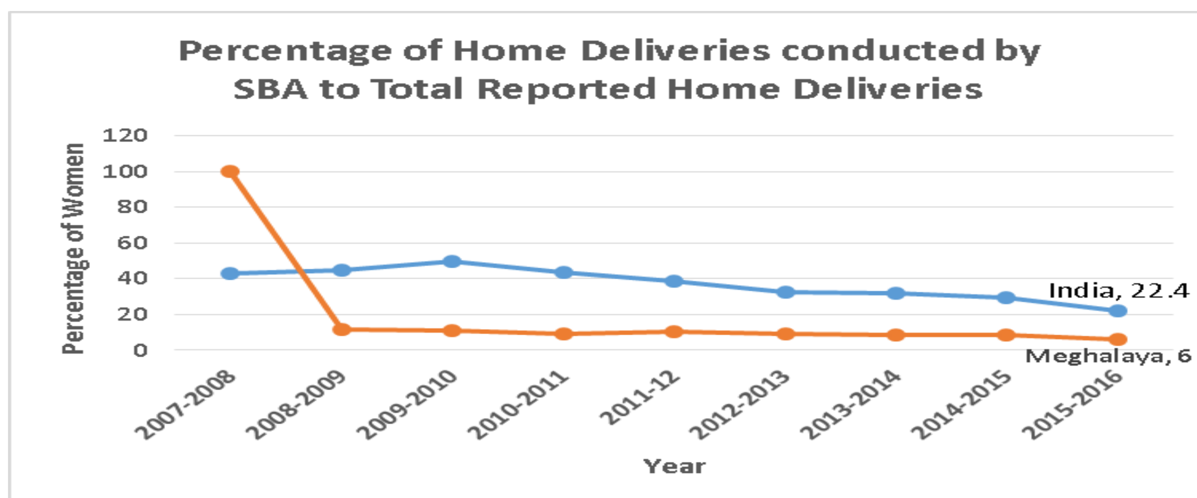
Out of the total reported institutional deliveries in Meghalaya 79.6% is conducted at public health institutions and the rest at private health clinics. The deliveries conducted at public health institutions is higher in Meghalaya as compared to India. In India the percentage of deliveries conducted at public institutions is 70.5%.

There has been a sharp increase in the percentage of deliveries conducted at private clinics in India in the last one year. It has increased from 26% in 2014-15 to 29.5% in 2015-16. Deliveries at the private health clinics is less in Meghalaya as compared to India which exhibits preference of public institutions over private institutions.

In 2015-2016 Meghalaya stands at 79.6% in terms of percentage of deliveries conducted at public health institutions which is the 2nd lowest percentage in the ranking among the North East states.

The performance of Meghalaya is higher than the national average which is 70.5%. The state showing the highest percentage of deliveries conducted at public health clinics is Tripura at 93.7% and the state showing the lowest percentage is Nagaland at 77.9%.

Figure 8: Percentage of Home Deliveries conducted by SBA to Total Reported Home Deliveries



Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

Figure 8 highlights the percentage of home deliveries that have been assisted by SBA.

Data analysis shows that the percentage of home deliveries conducted by an SBA has been very low in Meghalaya all through the years from 2007-2016. This implies that the deliveries conducted at home are mostly assisted by the TBA like the 'Dai' or family members and relatives.

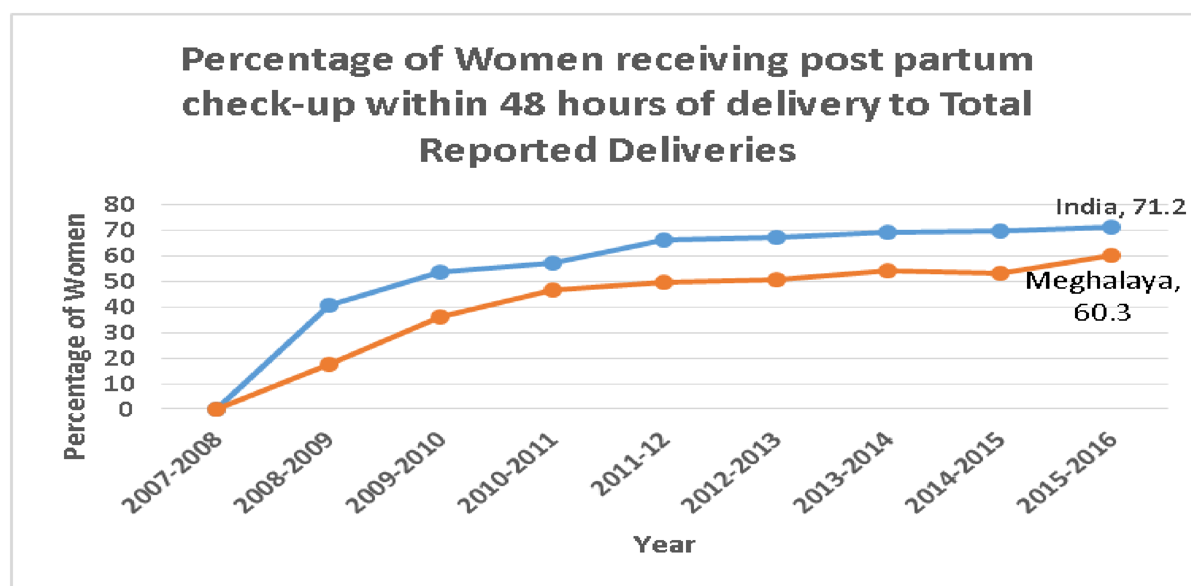
Meghalaya shows the 2nd lowest percentage of about 6% of home deliveries attended by SBA in 2015-2016 only better to Tripura which shows only 1.3% percent of the home deliveries conducted by SBA.

The highest percentage of home deliveries conducted by an SBA is recorded by Nagaland at 71.4%. The national average is 22.4%.

It is observed that out of the total home deliveries conducted only 6% of home deliveries is assisted by an SBA in Meghalaya. In the case of India 22.4% of home deliveries is conducted by an SBA.

Post- Delivery Phase Indicators

Figure 9: Percentage of Women receiving Post-Partum check-up within 48 hours of Delivery to Total Deliveries



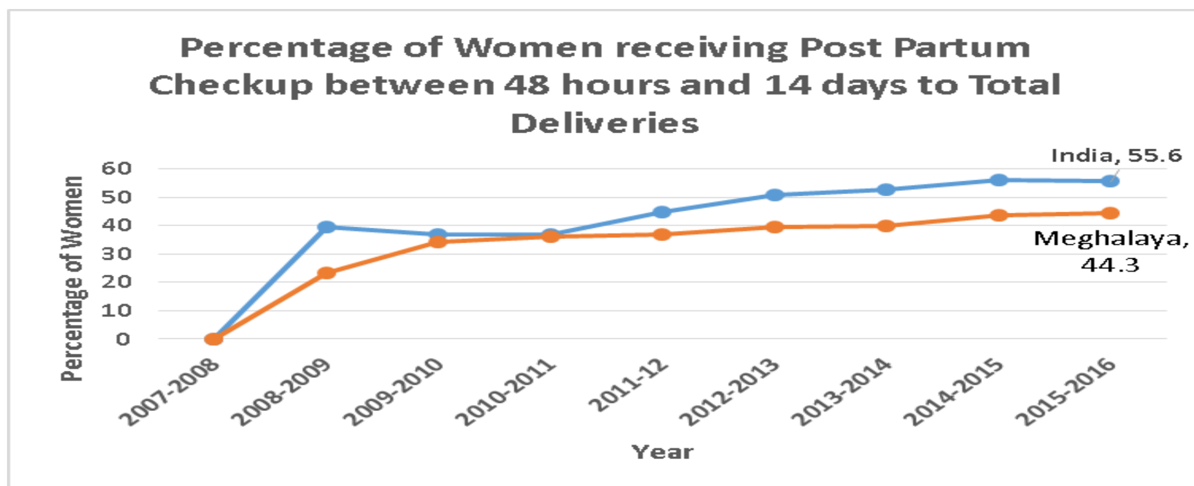
Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

Figure 9 shows the percentage of respondents receiving post-partum check-up within 48 hours of delivery.

In 2015-16, Meghalaya has 60.3% of respondents receiving post-partum check-up which is below the national average of 71.2%.

With regard to postnatal care, Meghalaya ranks the 2nd lowest among the North East states in terms of percentage of respondents receiving post-partum check-up within 48 hours of delivery to total reported deliveries. Arunachal Pradesh has the lowest percentage of respondents receiving post-partum check-up at 55.6%. The highest percentage is recorded by Tripura at 86.7%.

Figure 10: Percentage of Women receiving Post-Partum check-up between 48 hours and 14 days to Total Reported Deliveries



Source: (MoHFW, 2008); (MoHFW, 2009); (MoHFW, 2010); (MoHFW, 2011); (MoHFW, 2012); (MoHFW, 2013); (MoHFW, 2014); (MoHFW, 2015); & (MoHFW, 2016)

Figure 10 shows the percentage of respondents receiving post-partum check-up between 48 hours and 14 days to total reported deliveries.

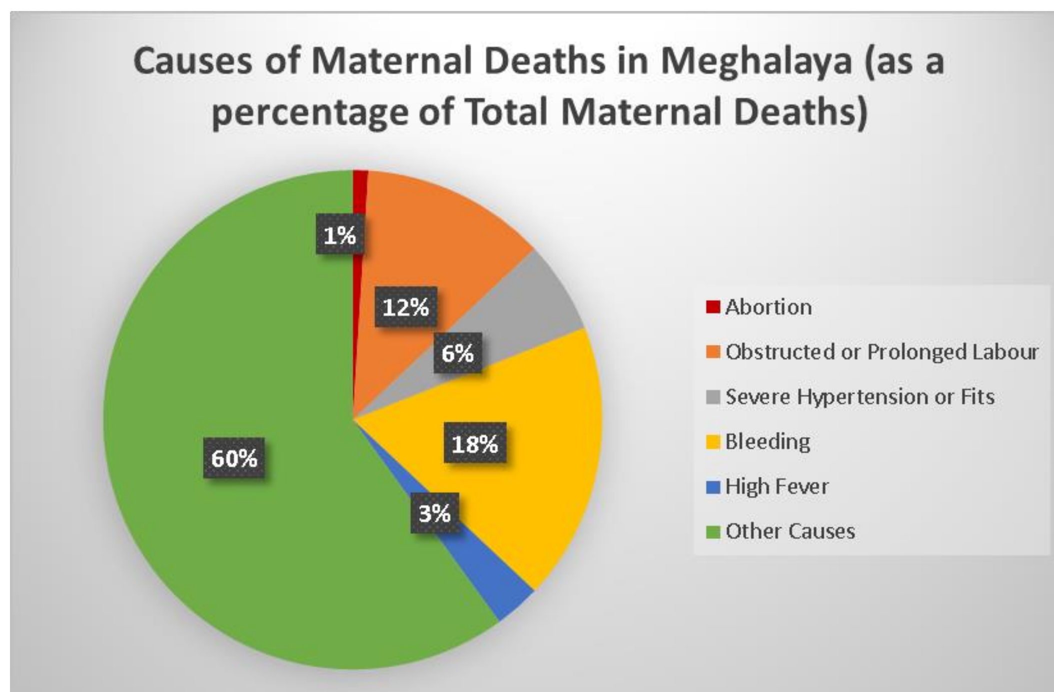
Although the performance of these two indicators is low in Meghalaya as compared to India, it shows progressive trends.

The percentage of respondents receiving post-partum check-up between 48 hours and 14 days to total reported deliveries in Meghalaya is 44.3% which is below the national average of 55.6% for the year 2015-2016. Mizoram shows the highest percentage at 75.9%.

4.4 Causes of Maternal Deaths in Meghalaya

There are a number of factors that attribute to maternal deaths in Meghalaya. Figure 11 highlights the reasons and the magnitude of each.

Figure 11: Causes of Maternal Deaths in Meghalaya (as a percentage of Total Maternal Deaths reported)



Source: (Ahuja, 2015)

Figure 13 highlights some of the important reasons for maternal deaths in Meghalaya. It is observed that 18% of the maternal deaths occur due to bleeding, 12% due to obstructed or prolonged labour and 6% due to severe hypertension. 60% of maternal deaths occur due to other causes which include unavailability of ambulance services, bad condition of roads, inability to bring the pregnant ladies to the hospital in time and rigid mindset of the villagers. All these factors make it cumbersome for the pregnant mothers to come to the health clinic. Further, ignorance and rigid mindset of the villagers keep them away from understanding the importance of being treated at a health institution. The villagers hesitate to visit the health institution even in the case of an emergency and are therefore deprived of the treatment that could save their lives.

Findings

The inferences drawn from the analysis are as follows:

- The performance of maternal health indicators in Meghalaya has improved from 2007-2008 to 2015-2016 but the pace of improvement has been slow. The performance for most of the indicators of maternal health in Meghalaya is below the national average as per data for 2015-2016.
- Percentage of respondents who registered for ANC in the first trimester in Meghalaya is only 32.1% where as in India it is 62.1% in the year 2015-2016. This indicates that the respondents do not register early for ANC registrations and this may not help in early detections of pregnancy related complications if any. In relation to other North East states, Meghalaya ranks the lowest below the national average and Assam shows the highest percentage of 1st trimester registrations to total ANC registrations at 80.6%.
- With regard to the indicator of completing 3 ANC check-up in 2015-2016, it is observed that Meghalaya ranks 5th among the North-East states only above the performance of Nagaland and Mizoram. In Meghalaya 57.15% of the respondents have completed 3 ANC. This indicates that nearly 40% of the pregnant mothers still have not availed the ANC services in Meghalaya. Assam has the highest percentage of respondents who have completed 3 ANC at 86.9% and Nagaland records the lowest percentage at 32.2%. Among the North East states, only Assam's performance is above the national average.
- With regard to the percentage of respondents that receive TT2 or booster, Meghalaya stands at 56.3% and ranks 4th among the North East states. The national average is 82.8% and the performance of Meghalaya is

below national average. Assam and Arunachal Pradesh are the only states whose performance is above the national average and record 90.8% and 89.1% respectively.

- With regard to the percentage of respondents who received 100 IFA tablets it is seen that the graph shows fluctuating trends from time to time in the case of Meghalaya. Meghalaya ranks 5th among the North East States with 35.5% of the respondents receiving the tablets in 2015-2016. The percentage of respondents who receive IFA tablets in India is 80.1%. Assam is the only state that ranks above the national average and covers 90.3% of respondents. Nagaland shows the poorest performance in the case of this indicator.
- It is observed that Meghalaya shows the lowest percentage of institutional deliveries as compared to other North East states over the years from 2008-2016. The total percentage of institutional deliveries to total reported deliveries is 52.8% in Meghalaya as against the national average of 88.9%. in 2015-2016. Arunachal Pradesh shows the highest percentage of institutional deliveries at 92.1% which is also above the national average. The other states show a better performance as compared to Meghalaya between the ranges of 78.5% in Nagaland to 88.6% in Tripura.
- Home deliveries constitutes almost 50% of the total reported deliveries in Meghalaya. This implies that respondents in Meghalaya are still dependent on the traditional system of giving birth at home. Meghalaya shows the highest percentage of home deliveries at 47.2% in 2015-2016 and Arunachal Pradesh has the lowest percentage of home deliveries at 7.9%. The national average is 11.1%.
- Further, data analysis shows that the percentage of home deliveries conducted by a skilled birth attendant has been very low in Meghalaya all through the years from 2007-2016. This implies that the deliveries conducted at home are mostly assisted by the traditional birth attendant like the 'Dai' or family members and relatives. Meghalaya shows the 2nd lowest percentage of about 6% of home deliveries attended by SBA in 2015-2016 only better to Tripura which shows only 1.3% percent of the home deliveries conducted by SBA. The highest percentage is recorded by Nagaland at 71.4%. The national average is 22.4%.
- It has been observed that all the North East states including Meghalaya shows a higher percentage of deliveries conducted at public institutions to total institutional deliveries from 2007-2016. In 2015-2016 Meghalaya stands at 79.6% which is the 2nd lowest percentage in the ranking among the North East states. The performance of Meghalaya is higher than the national average which is 70.5%. The state that shows the highest percentage of deliveries conducted at public institutions is Tripura at 93.7% and the state showing the lowest percentage is Nagaland at 77.9%.
- Regarding PNC, Meghalaya shows the 2nd lowest percentage of respondents receiving post-partum check-up within 48 hours of delivery to total reported deliveries at 60.3% for the year 2015-2016 which is below the national average of 71.2%. Arunachal Pradesh has the lowest percentage of respondents receiving post-partum check-up within 48 hours at 55.6%. The highest percentage of respondents for the same is recorded by Tripura at 86.7%.
- The percentage of respondents receiving post-partum check-up between 48 hours and 14 days to total deliveries in Meghalaya is 44.3% which is below the national average of 55.6% for the year 2015-2016. Mizoram shows the highest percentage at 75.9%.

5. Reproductive and Child Health (RCH) Programme in Meghalaya: Institutional Framework

The findings from the secondary data analysis reveals that the maternal health outcomes in the State has not been very satisfactory. The paper attempts to understand the institutional framework that supports the delivery mechanism for the RCH programme that caters to maternal health requirements.

Under the umbrella of the NRHM in 2005 the Government of India had improvised on the RCH Phase I programme which was upgraded to RCH Phase II programme. The RCH II comprised of new strategies to be used as effective means of interventions to fulfil the objectives of the programme. The ambit of the RCH Programme is broad which encompasses several areas pertaining to maternal health, child health, family planning, adolescent health, school health programme and urban RCH and programme management unit. All of these areas have inter-linkages in the RCH programme and the performance of one has an impact on the performance of the other. The primary objective of the RCH II is to reduce maternal and infant mortality rates in the State of Meghalaya.

The Government of Meghalaya has implemented the programme since its launch but in the initial years the pace of implementation has been slow due to factors like slow involvement of community participation, lack of awareness and difficulty of reaching out to people to inaccessible regions. This has resulted in shortfall of targets achieved as against targets projected. The Government of Meghalaya sought to various interventions in the successive years to strengthen the implementation of the programme objectives. Among the most crucial interventions, strengthening health systems in terms of improved infrastructure and recruitment of skilled human resources, capacity building which includes training programmes for ASHAs and ANMs, greater community involvement by reaching out to the local people with the help of ASHAs and better management of information system are some primary ones (State Health Mission MoHFW, 2011).

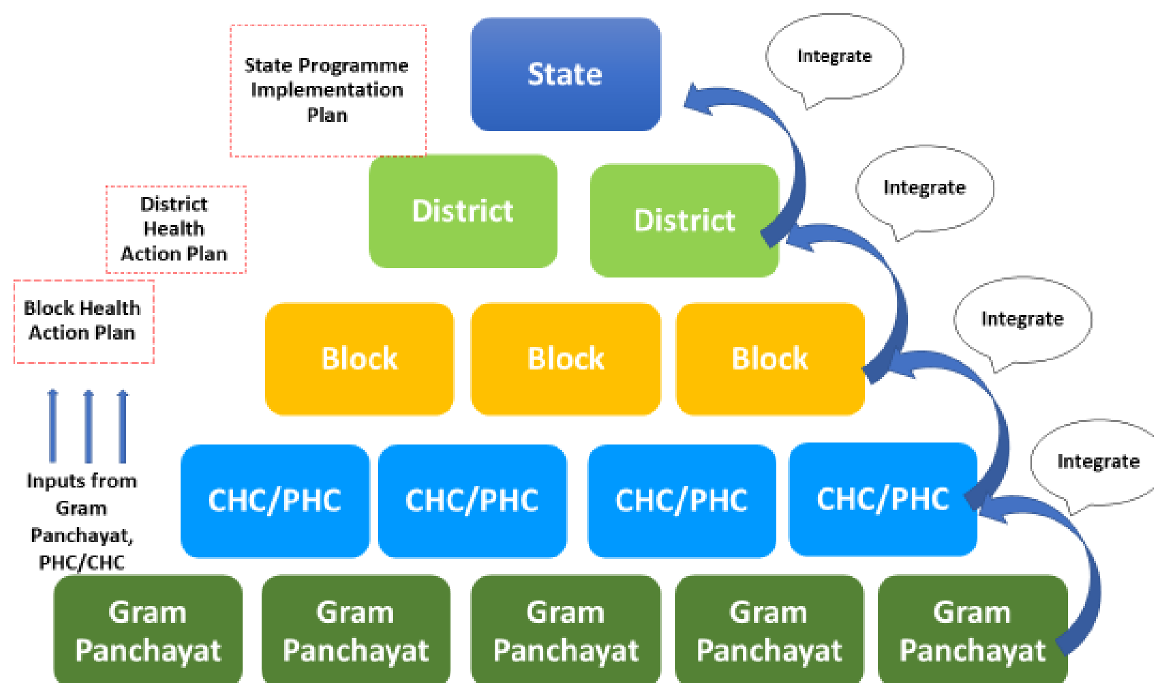
Figure 12: Institutional Framework of the RCH programme

Source: Author inference

Figure 5.16 projects the flow of the programme at different levels- state level, district level, block level and village level. Every level comprises of key actors that facilitate the implementation of the programme. The State is at the apex of the pyramid followed by the district, the block and the village.

The implementation of the RCH programme is based on the preparation of the State Programme Implementation Plan (SPIP). The SPIP is a decentralised way of implementing the programme which moves in a bottom up approach. The State PIP incorporates inputs received from the district and the village level in the form of the DHAP and the VHAP. It is an aggregate of all the individual district/city action plan. The SPIP is prepared after incorporating suggestions and demands from the district and the village level.

Figure 13: Institutional Framework under the State Level



Source: (Ministry of Health and Family Welfare, 2012a)

Committees are set up at different levels which looks into the planning of activities and monitors the ongoing activities at different levels- which includes representatives from the village level, the Gram Panchayat (SHC), PHC (Cluster Level), CHC/Block Level and District Level (State Health Mission MoHFW, 2011).

Interviews with key stakeholders has also brought to light that the Government has adopted many interventions from time to time to improve maternal health accessibility and enhance maternal health outcomes. Various interventions like health systems in terms of improved infrastructure and recruitment of skilled human resources, capacity building which includes training programmes for ASHAs and ANMs, greater community involvement by reaching out to the local people with the help of ASHAs and better management of information system have been adopted.

6. Conclusion:

- The performance of maternal health indicators in rural Meghalaya has improved from 2007-2008 to 2015-2016 but the pace of improvement has been very slow. The performance for most of the indicators of maternal health in Meghalaya is below the national average.
- Out of the 11 indicators, three indicators, namely, percentage of 1st trimester registrations to total ANC registrations, percentage of institutional deliveries and percentage of home deliveries conducted by SBA (Skilled Birth Attendant) is the lowest for Meghalaya as compared to other north east States. Even in the case of other indicators, Meghalaya occupies the 4th or 5th position.
- The Government of Meghalaya under the NRHM has adopted a number of interventions under the RCH programme to strengthen the delivery mechanism. Various interventions like health systems in terms of improved infrastructure and recruitment of skilled human resources, capacity building which includes training programmes for ASHAs and ANMs, greater community involvement by reaching out to the local people with the help of ASHAs and better management of information system have been adopted.
- Interviews with key stakeholders were conducted and the observations reveal that a deeper probing is required to understand the factors that attribute to the current scenario of maternal health. Although efforts have been taken by the Government of Meghalaya to adopt interventions from time to time, a detailed understanding is required to assess the impact of these interventions and to evaluate if the issues faced by this region of the country require different solutions to improve the maternal health outcomes.

Being a matrilineal State, it becomes imperative to understand the reasons behind the high rate of deliveries being conducted at home during pregnancy in the State..

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