# **Original Research Paper**



# Healthcare

# COMMUNITY PARTICIPATION FOR HEALTH SYSTEMS STRENGTHENING: IMPLICATIONS FOR NEO NATAL HEALTH CARE IN ODISHA

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**ABSTRACT** 

natal health care.

Community participation essentially useful in strengthening of Health Systems as executed actively under the rolling out of National Rural Health Mission and at present known as National Health Mission in India. The present study discusses responsive community participation in strengthening health systems while addressing most critical period of child health and development - neo

The neonatal period is the most vulnerable time for the growth of a child. After the institutional care at the facility level, the care at the community level holds the key to the survival, growth and development of the new born. So investment in involving the community for neo natal care owes an utmost significance. Realising the importance of the community participation and involvement in neo natal care, a number of interventions have been implemented under NHM, Odisha. The article discusses the relevance and implications of the community participation in health systems strengthening for neo natal health care. It also ascertains interventions at the community level like HBNC (Home Based Neo Natal Care) through ASHA, which plays a significant role in improving the community level care for the new born. The article throws light on best practices and the areas of improvement in implementation of community level interventions in general and ASHA facilitated HBNC programme in particular for sustaining improvement of neo natal care.

KEYWORDS: Community Participation, Health Systems Strengthening, Neo-Natal Health Care, ASHA Facilitation and Sustainability of National Health Mission

#### INTRODUCTION

Across the life span, a human being faces the greatest risk of mortality during birth and the first 28 days of life-the neo natal period, which is considered as the most vulnerable time for a child's survival. Children face the highest risk of dying in their first month of life. Around three quarters of neo natal deaths take place in the first seven days - the early neo natal period. Ironically enough, most of these are preventable. India contributes to one fifth of the global live births and more than a quarter of the neo natal deaths. Nearly, 0.75 million neonates died in India in 2013, the highest for any country in the world. The current Neonatal Mortality Rate (NMR) is 28 per 1000 live births. Given the infant, and under-five child mortality rates of 40 and 49 per 1000 live births respectively, 70% of total infant deaths, and more than half of under-five deaths fall in the neonatal period. Indeed, with the early NMR of 22 per 1000 live births, deaths in the first week alone account for 45% of total under-five deaths. Globally, 2.6 million children died in the first month of life in 2016 – approximately 7,000 newborn deaths every day - most of which occurred in the first week, with about 1 million dying on the first day and close to 1 million dying within the next six days.

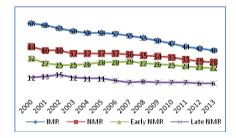
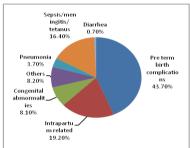


Fig 1: Trend of IMR and NMR in India

The Figure 1 above indicates that NMR has declined from 44 per 1000 live births in 2000 to 28 per 1000 live births in 2013. But this rate of decline has nevertheless lagged behind that of infant mortality rate. The Average Annual Rate of Reduction (AARR) of NMR was only modest—at 3.5%—in this period, compared with the rate of reduction of Infant Mortality Rate (IMR) during the same period (4.0%). The higher AARR of post-neonatal infant deaths, that is, deaths in infants aged 1-12 months, compared with deaths during the neonatal period is the reason for this discrepancy. The slower decline in NMR has led to increasing contribution of neonatal mortality to infant mortality. Among neonatal deaths, the rate of decline in the ENMR was much lower than in the late NMR—AARR of 2.8% and 5.8%, respectively.

#### CAUSES OF NEO NATAL MORTALITY



There are a number of factors that contribute to neo natal mortality. A systematic analysis of global, regional and national causes of child mortality in 2013 identified preterm birth complications and infections to be the two major causes of neonatal deaths in India. The other causes includes intrapartum related, sepsis pneumonia etc. (Figure 2) The review, which included the data from the Million Death Study from India, found perinatal asphyxia and malformations to be the other two significant causes of neonatal mortality. These findings are very similar to the overall global pattern.

## When Do New Born Die Off

Studies on the timing of neonatal deaths indicates that about threefourths (3/4) of total neonatal deaths occur in the first week of life. The first 24 hours account for more than one-third (36.9%) of the deaths that occur in the entire neonatal period.

A recent prospective study by Baqui et al. provided data on the timing of cause-specific neonatal deaths: almost all deaths (97.8%) due to asphyxia occur in the first week of life, with 70% of them occurring within the first 24 h (day 0). About three-fourth of deaths due to prematurity (74.8%) occur in the first week of life, with 30% in the first 24 h (day 0) < 50% of neonatal deaths secondary to sepsis occur in the first week of life. About 30% of sepsis-related deaths occur in the second week, whereas around one-fifth in weeks 3-4. Three-fourth of the deaths due to malformations occur in the first week of life, with day 0 alone contributing to nearly half of these deaths.

#### Why Neo Natal Care

The country recognises that neo natal survival is a national priority and improved and correct neo natal care practices hold the key to neo natal survival.

Neonatal care refers to that care given to the newborn infant from the time of delivery through about the first month of life. The term

"neonate" is used for the newborn infant during this 28 days period. Essential Newborn Care (ENC) is care that every newborn baby needs regardless of where it is born or its size. ENC should be applied immediately after the baby is born and continued for at least the first 7 days after birth.

The World Health Organization (WHO) guidelines for essential newborn care include clean delivery, keeping the newborn warm, early initiation of breastfeeding, exclusive breast feeding, care of the eyes, care during illness, immunization and care of low birth weight newborns.



(MOTHER WITH A NEW BORN BABY)

#### Key Aspects Of Neo Natal Care

Essentials of neo natal care are a combination of care that is provided both at facility and community level. The essential new born care includes clean delivery, keeping the new born warm, early initiation of breast feeding, exclusive breast feeding, care of the eyes and identification of danger signs, care during illness, immunization and care of the low birth weight baby.

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## Neo Natal Care: An interface of community and facility level care

Neo natal care is a combination of facility and community level interventions. So it is important to focus on community level interventions in order to improve the status of neo natal health care along with the facility level care. While the facility level care is more structured, based on protocol and handled by skilled personnel, the community level care is dependant upon the caregivers including mother as the primary caregiver. The secondary level care providers, back up of the community members, linkage with the facility are also the important players and parts of the community level care in improving the status of the neo natal care.

Now with the increase is institutional delivery, the immediate care of the new born is taken care of at the health facility level. However, the stay at the facility level though prescribed for 48 hours after birth, is not happening in reality. The new born are going back to their home as per the convenience. So the care given to the new born at the home and community level becomes crucial for the survival, growth and development of the new born. Participation of the community is the key for providing right care for the new born at the household and community level. Community participation is defined as "a process by which people are enabled to become actively and genuinely involved in the defining the issues of concern to them, in making decisions about factors that affect their lives, in formulating and implementing policies, in planning, developing and delivering services and in taking action to achieve change" (WHO, 2002, p.10).

Every new born requires basic care which has to be provided by mother at home, supported by the secondary care givers and community. This includes warmth, feeding, basic hygiene and identification of danger signs and seeking help from health personnel whenever required. Therefore, all new born gets home based new born care as per the perception, practices and socio cultural behaviour of the society for which community plays an important role.

#### Community based interventions for neo natal care

Community-based interventions are those interventions that can be

delivered by a community health worker in close proximity to one's home, including services delivered at home or to the family and through outreach sessions. There are several documented interventions to reduce mortality caused by sepsis, asphyxia and preterm birth complications. Packaging of interventions is a cost effective and practical way of delivering them at scale. Community-based interventions broadly consist of two approaches: delivery of packages through home visits, and community mobilization. Several studies have demonstrated the effect of home visits and community mobilization in isolation and also in combination. The population-level effect or impact, however, depends on the baseline neonatal mortality rate (NMR), the effect of the intervention and the population coverage of the interventions. The effect of community-based interventions declines as the baseline NMR decreases, especially when it falls below 50.

# There are a number of factors that influences the neo natal care at community level. The important among them are

- Knowledge and skill of facilitator (ASHA) on neo natal care
- Rapport and acceptance of the facilitator (ASHA) with the community members
- Educational level of the mother and secondary care givers
- Prevailing traditional practices on neo natal care, its extend and deep rootedness in the community.
- Health seeking behaviour for neo natal care
- Knowledge and role played by Traditional Birth Attendant for neo natal care
- Effectiveness of the Institutional and facility linkage for treatment of the sick new born

# Interventions to promote community participation for improved neo natal care

Realising the importance of community participation for neo natal health care, a number of interventions were taken up to promote community participation in improving the neo natal health care. With the implementation of National Health Mission (NHM), a number of efforts were taken up not only to involve community in health care activities but also make the community be the owner of its health problems, issues



and solutions in Odisha. The most important one is the Home Based New Born Care (HBNC) by the Community Health Worker, ASHA, involvement of community based groups like SHG, GKS, awareness at the community level service delivery platforms like Mamta Diwas, RIP etc. The focus is given on investing and engaging with the community, ensure their participation, empower them in the decision making process pertaining to the health of their new born. These efforts have contributed for the improvement in the neo natal care.

# Community Based New Born Care

Community Level Health Volunteers known as ASHAs as a part of NHM are the prime movers of the community processes. They have played a pivotal role in mobilizing the community around health issues, raise awareness, facilitate improvement in neo natal care, identification of danger signs and facilitate referral of those identified new born having danger signs to the health facility. A total of around 47000 ASHAs are in place in the State of Odisha catering to around 1000 population each.



ASHA weighing new born during home visit

In order to bring improvement in the neo natal care, a strategic step was taken up in implementing the Home Based New Born Care (HBNC) through ASHA. It was a tested intervention at SEARCH, Gadchiroli which brought significant reduction in neo natal death. Based on the success of the programme, HBNC through ASHA was expanded all across the country as a part of National Health Mission (NHM). This programme has brought in significant changes in mobilizing the community for improved neo natal care.

Home Based Newborn Care (HBNC) is defined as family oriented services that support self care, including the adoption of improved care practices and appropriate care seeking for illness. It also involves community mobilization and the empowerment of individuals and communities to demand quality services that respond to their needs. The main emphasis of home based new born care lies in preventive, promotive and curative services to the new born as well as theirs mothers at home. Refer (Darmstadt GL article)

#### Hbnc Programme In Odisha

As a part of ASHA HBNC programme, ASHAs in Odisha are trained for 20 days in 4 rounds, each round is of 5 days duration and residential in nature. The training was conducted with the support of the NGOs in a PPP mode. The content of the training includes basic knowledge about neo natal care, home visit details, examination of the new born, demonstration of the skills like weighing, taking measurement, hand washing, wrapping, identification of neonates having danger signs, facilitation of referral to the health facility. They have been provided with HBNC kit which consists of Weighing scale, Thermometer, stop watch. ASHAs get an amount of Rs.250/- to conduct the home visits to the neonates during the neo natal period. ASHAs conduct the home visit to the new born 7 times in case of home delivery (on Day 1, 3, 7, 14, 21, 28 and 42 days of birth) and 6 times in case of institutional delivery (on Day 3, 7, 14, 21, 28 and 42 days of birth). They identify the danger signs in the new born, report it to the HW (F) and facilitate referral of the sick new born to the hospital for treatment.

(ASHA taking weight of a new born)

#### Asha Hbnc Training Status, Odisha

Rounds of HBNC training	Round 1	Round 2	Round 3	Round 4
No. of ASHA trained	45260	45289	45241	42505

Source: Nhm Report, March, 2018

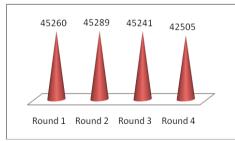


Fig 3: Asha Hbnc Training Status Source: Nhm Report, March, 2018

Around 8800 Health Workers (Female) in Odisha were also trained on HBNC in order to facilitate the role played by the Community level. They provide the handholding support to the ASHAs in enhancing the knowledge of ASHA on HBNC, reinforce the skills practised by ASHA during the home visit, support to identify and treat the new born having

danger signs and facilitate their referral to the health institutions. 30 District and 314 Block Resource Groups were also trained on HBNC to monitor the programme and provide required support at the field level for effective field level activity implementation. Around 2300 ASHA Facilitators (called as ASHA SATHI in Odisha) were trained in HBNC in order to facilitate activities in a peer learning process to support ASHA in her work on neo natal care.



ASHA conducting home visit for new born care

ASHAs are being the torch bearers of the community process practises the knowledge that they have acquired during the HBNC training. It makes the availability of a knowledgeable community level worker (ASHA) at the doorstep of the community to look after of the new born. In the process of home visit, ASHA shares and transmits her knowledge on right neo natal care practice to the mothers of the new born. She has not only percolates the knowledge but also demonstrates the skills to the mothers of the new born.

Year		No. of new born visited by ASHA	, ,	No. of LBW/high risk babies reported out of those visited		No. of sick new born referred to hospital for treatment
2016-17	610612	481824	79	51700	11	18801
2017-18	608034	511816	84	63634	12	22279

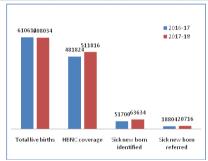


Fig 4: HBNC implementation status in Odisha Source: NHM, Odisha data

An analysis of the last two year of HBNC programme implementation in Odisha reflects that 79% and 84% new born were covered by ASHA in HBNC programme respectively during the year 2016-17 and 2017-18. During the year 2016-17, 11% new born were identified with danger signs, out of which 36% were referred to the health institution for treatment. During the year 2017-18, 12% new born were identified with danger signs, out of which 35% of the new born were referred to the hospital for treatment. (Figure 4). An amount of around Rs.13.6 crores incentives paid to ASHA for HBNC programme in the State of Odisha during the financial year 2017-18.

Home Visit of the new born by ASHA has potentially helps to improve in the following areas

- Regular follow up of the new born
- Provision of timely care for the new born
- Timely check up of the temperature to manage the issues related to temperature, weight of the new born to ascertain the right growth of the new born
- Improved hand washing practices by the mother which benefits the new born
- Improved knowledge and practise of the breast feeding practices and management of the problems related to breast feeding

- Care to be taken for pre term and low birth weight baby.
- Develop understanding of the mothers on right neo natal care practices
- Identification of danger signs and its management by ASHA
- Seek timely advice of HW (F) for the new born with danger signs
- Facilitate timely referral of the sick new born to the health institution for treatment

Mothers are the primary care givers of the new born. Improving the knowledge of the mother on correct neo natal care and its application was one of the key focus of areas of HBNC. Regular home visit by ASHA to the new born has potentially helps to improve the following

- Mother's Knowledge on neo natal care is better
- Their neo natal care practice improved
- It has influenced on the secondary care giver's care practices
- Mothers are aware about the signs and symptoms of the danger signs in the new born, though not fully
- They are aware about the importance of the referral of the new born for treatment when new born is identified with danger signs
- They seek immediate support of ASHA at the time of need.

ASHA plays also a pivotal role in the mobilising the community to promote improved neo natal care. She shares her knowledge with the secondary care givers like father, mother-in-law and other members of the society. She shares her knowledge on neo natal care in the community level platforms like Gaon Kalyan Samiti (GKS), Women Self Help Groups (WSHG). She also uses the community level service delivery platforms like VHND, Immunization Day to share the information with the community. ASHA mobilises the new born babies to the VHND sessions, HW (F) checks the health status of the new born at the VHND sites. She also visits to the household of the new born, who is identified having danger signs or sick. She has also facilitates referral of the sick newborn to the hospital for treatment. The community level efforts are well supported by the facility level supports like NBSU, SNCU, trained health providers work force on

Overall, it could be said that ASHA being the pivot of the community mobilization process plays as important role in mobilising the community in order to improve the neo natal care. With the improvement in the knowledge of the mothers and secondary care givers, the quality in the neo natal care improves. This facilitates withering away of the age old traditional practices like discarding the cholestrum, lack of initiation of breast feeding within one hour of birth, giving early bath to the new born to clean, unhygienic cutting of the umbilical cord and cord care, adopting traditional means of treating the diseases through traditional healers, Jhada phunka, branding of baby for treatment (chenka), budu pila etc. These practices were the hindrances against the neo natal care and were affecting the health of the new born in a negative way. Besides, the health seeking behaviour relating to the neo natal care, identification of the new born with danger signs and their referral to the health institutions improves as a result of the involvement of the community

## CONCLUSIONS

It is often said that an empowered community is an effective watchdog of its health. The efforts put for improving the neo natal care with community participation is encouraging. Support systems in facilitation of ASHAs need to be further nurtured with a better community interface in order to bring improvement in the status of neo natal care. Availability of HBNC forms at the community level, monitoring of the home visits by ASHA, need based handholding support to ASHA, availability of the HBNC support kit with ASHA are some of the critical health systems strengthening efforts in building effectiveness in community participation, which are addressed in order ensure that ASHA plays improved role to involve local community for neo natal care with their active participation. Involvement of community level platforms and service delivery mechanisms like GKS, SHG, VHND, Immunization sessions are essential factors of Health Systems Strengthening to sustain the impact of child health and child development in order to ensure a better future of neonates with community empowerment.

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