NATIONAL RURAL HEALTH MISSION
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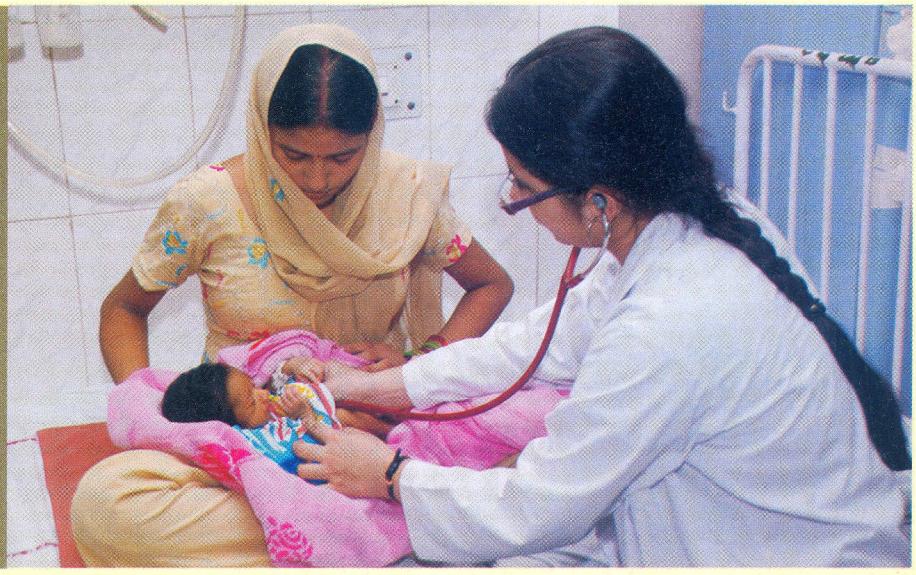
POLIO FREE YEAR

Special Issue on Newborn HEALTH



Progress under NRHM

ASHAs

8.61 Lakh ASHA/Link workers Selected.

725991 ASHA given orientation training up to 4th Module and 7.82 lakh ASHA have been positioned with kits.

Institutional Delivery

Janani Suraksha Yojana (JSY) is operationalised in all the State 7.34 lakh women are benefited in the year 2005-06, 30.73 lakh in 2006-07, 73.08 lakh in 2007-08, 90.80 lakh in 2008-09 and 100.6 in the year 2009-10, 2010-11, 113.38 lakh, 2011-12, 76.48 lakh.

Monthly H&N Days in Anganwadi

Over 52.49 lakh Monthly Health and Nutrition Days have been organized at the Anganwadi Centres in various states during 2011-12 (till Dec.).

Neo Natal Care

Integrated Management of Neonatal and Childhood illnesses (IMNCI) started in 461 districts. With the help of Neonatology Forum over 5,06,740 health care personnel training conducted in Newborn Care in the country. Module for Home based newborn care developed and ASHAs to be trained in Home based newborn care.

Immunization

Intense monitoring of Polio Progress-Services of ASHA useful.

JE vaccination completed in 11 districts in 4 states-93 lakh children immunized during 2006-07. JE vaccination has been implemented in 26 districts of 10 states in 2007. The 11 districts of 4 states where JE vaccination was carried out in 2006 have introduced JE vaccine in Routine Immunization to vaccinate new cohort between 1-2 years of age with booster dose of DPT.

House tracking of polio cases and intense monitoring.

Neonatal Tetanus declared eliminated from 7 states in the country.

Full immunization coverage evaluated at 43.5% at the national level (NFHS-III).

Accelerated Immunization programme taken up for EAG and NE states.

Village Health & Sanitation Committees

500295 Village Health and Sanitation Committees have been constituted by the States. They are being involved in dealing with health planning at grass root level.

Rogi Kalyan Samitis

Over 30,420 Rogi Kalyan Samitis set up in various health centres and hospitals.

Infrastructure

1.47 lakh Sub centres in the country are provided with untied funds of Rs. 10,000 each. 4,21,892 VHSC & 1,40,233 SC have operational joint accounts of ANMs and Pradhans for utilization of annual untied funds.

62,178 Sub centres are functional with second ANM.

Out of 4535 Community Health Centres, 2393 CHCs have been selected for upgradation to IPHS and facility survey has been completed in 2198 CHCs (includes other also).

30,420 Rogi Kalyan Samitis have been registered at different level of (Repeat) facilities.

17,999 Sub centres for new construction and 13,299 for renovation taken up under NRHM.

1517 Primary Health Centres taken up for new construction and 3441 for renovation under NRHM.

459 works at Community Health Centres for construction and 2051 works for renovation taken up under NRHM.

Manpower

8,722 Doctors and 2,941 Specialist, 69,662 ANMs, 33,413 Staff Nurses, 14,529 Paramedics, 10,995 Ayush Doctors have been appointed on contract by States to fill in critical gaps.

Management Support

1632 professionals (CA/MBA/MCA) have been appointed in the State, 634 District level Programme Management Units (PMU) and 4679 blocks to support NRHM.

Mobile Medical Units

1951 Mobile Medical Units operational under NRHM in States.

Emergency Transport System operational in 12 States with the assistance of 5221 Ambulances.

Another 7097 ambulances provided to States for working at PHC, CHC, Sub District and District Hospital.

Health Action Plans

35 State PIPs received in 2011-12.

The first cut of Integrated District Health Action Plans (DHAP) has been finalized for 636 district during 2011-12.

Mainstreaming of AYUSH

Mainstreaming of AYUSH taken up in the States. AYUSH practitioners co-located in 15,542 facilities. AYUSH part of State Healths Mission/ Society as members.

Trainings

Trainings in critical areas including Anesthesia Skilled Birth Attendance (SBA) taken up for MOs/ANMs. Integrated Skill Development Training for ANMs/LMVs/MOs. Training on Emergency Obstetrics care and No Scalpel Vasectomy (NSV) for Mos, Professional Development Programme for CMOs is on full swing.

ANM Schools being upgraded in all States.

New nursing schools taken up.

Mother NGOs

166 Mother NGOs appointed for 291 districts till date are fully involved in ASHA training and other activities.

Health Resource Centres

National Health Systems Resource Centre (NHSRC) set up at the National level.

Regional Resource Centre set up for NE.

State Resource Centre being set up by States.

Monitoring and Evaluation

Web based MIS operationalised.

NFHS-III & DLHS results desseminated.

Independent evaluation of ASHAs/JSY by UNFPA/UNICEF/GTZ in 8 States.

Ground work for community monitoring completed.

Financial Management

Financial Management Group set up under NRHM in the Ministry.

During the FY 2005-06, out of total allocation of Rs. 4633.39 crore for the Ministry, an amount of Rs. 4433.75 crore was released as part of NRHM.

Against Rs. 6997.05 crore for activities during 2006-07, Rs. 5774.3 crore released.

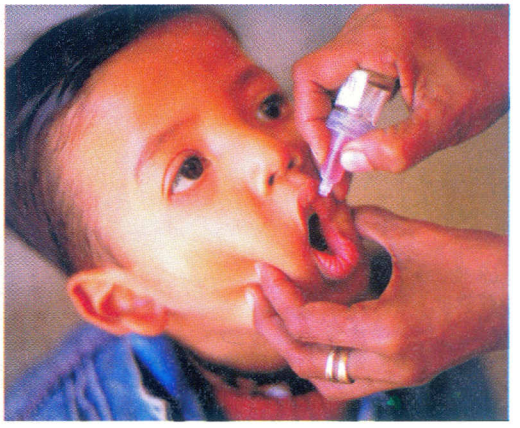
During the FY 2007-08, out of total allocation of Rs. 9023.35 crore for the Ministry, an amount of Rs. 8505.87 crore was released as part of NRHM.

During the FY 2008-09, out of total allocation of Rs. 10192.23 crore for the Ministry, an amount of Rs. 9625.09 crore was released as part of NRHM.

During the FY 2009-10, out of total allocation of Rs. 11581.30 crore for the Ministry, an amount of Rs. 11470.18 crore was released as part of NRHM.

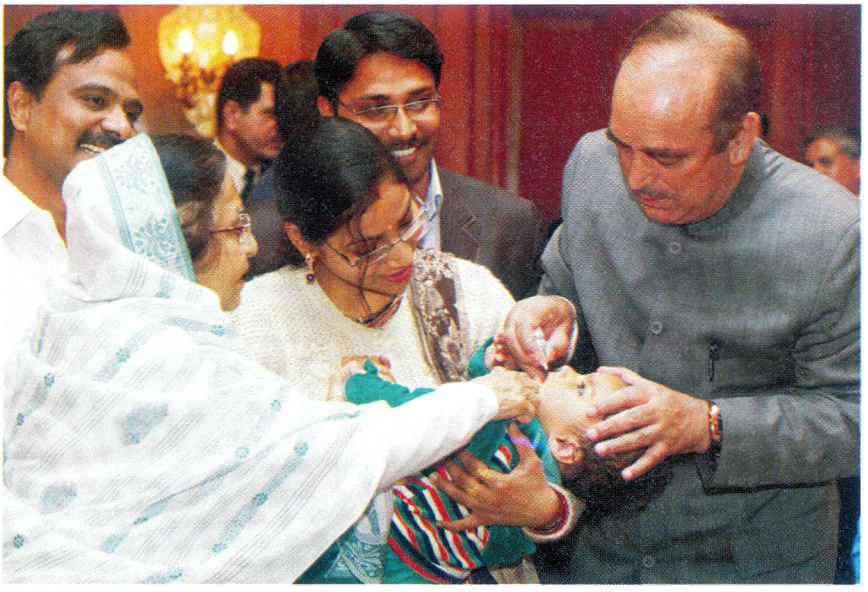
Cover Picture: *Prime Minister addressing Polio Summit in New Delhi on Feb 25.*

Celebrating A Polio free year



WHO has taken India's name off the list of polio endemic countries in view of the remarkable progress that India achieved by being polio free for the past one full year. The Union Minister for Health and Family Welfare Shri Ghulam Nabi Azad shared this important development in the presence of Prime Minister Dr. Manmohan Singh at the inaugural of the two day Polio Summit 2012 on Feb 25 in New Delhi.

The Polio Summit organised jointly by the Union Ministry of Health and Family Welfare and Rotary International also saw participation of Federal Minister for Interprovincial Coordination, Government of Pakistan, Mir Hazar Khan Bijrani; Minister of Health and Population, Government of Nepal Rajendra Mahato; Deputy Minister of Health, Government of Sri Lanka, Lalith Dissanayaka; Ministers of State for Health and Family Welfare, Shri Sudip Bandyopadhyay and Shri S Gandhiselvan, Secretary Health and Family Welfare Shri P K Pradhan, Rotary International President Mr. Kalyan Banerjee and The Rotary Foundation Chairman Mr. William Boyd as also subject experts from developing partners who have gathered at the Summit to renew and reinforce their commitment to eradicate polio in India.



HFM Ghulam Nabi Azad giving polio drops to a child in presence of Hon'ble President Smt Pratibha Singh Patil and MOS, S. Gandhiselvan at Rashtrapati Bhavan on 18th Feb.

Reaffirming the commitment of India to achieve full immunization, Dr. Manmohan Singh said "We must ensure that every Indian child, rich or poor, whether living in Ladakh or in Delhi has equal access to the best immunization. To this ambitious task I commit our government". He noted that the coordinated efforts of the Government of India with close partnership of States Governments,

Special booths have been established in the bordering areas like Wagah border and Attari train station in Punjab and Munnabao train station in Rajasthan, to ensure that all children under 5 years of age coming from across the border are given polio drops.

international organizations and groups including the Rotary International, the World Health Organization and UNICEF and the 23 lakh volunteers as also supervisors, has helped to rid our country of the terrible scourge of Polio. The Prime Minister said "it is a matter of satisfaction that we have completed one year without any single new case of polio being reported from anywhere in the country. This gives us hope that we can finally eradicate polio not only from India but from the face of the entire mother earth. The success of our efforts shows that teamwork pays".

Dr. Manmohan Singh also emphasized the need for nutritious food, safe drinking water, proper sanitation and education in addition to Universal access to safe vaccines. He said that we need to accelerate our efforts to achieve goal of providing universal access to health care at affordable cost for all our citizens. "The rising cost of health care is another key challenge. We are, therefore focusing our attention towards social security of the poor with regard to their health care. Public expenditure on health has increased from less than 1% of our GDP in 2006-07 to an estimated 1.4% of GDP by the end of the Eleventh Five year Plan. But we will need to work harder and do more if we have to reach our goal of increasing public expenditure on health to at least 2.5% of the GDP. Education and health will be the key priorities of the Twelfth Five Year Plan" he emphasized.

Recalling India's journey of combating Polio, the Union Minister for Health and Family Welfare Shri Ghulam Nabi Azad noted that the achievement of one full year without even a single polio case, which is being acclaimed worldwide, is the result of a strong political will at the highest levels making sure that there was never any shortage of resources or funds for the polio eradication initiative. He informed that 27 % of the global expenditure on polio eradication has come from India's domestic resources. More than 99 percent coverage of children in the two remaining endemic states of Bihar and Uttar Pradesh is unprecedented, not witnessed anywhere else in the world on such a large scale, Shri Azad said. The

aggressive mop up response against the polio virus has enabled us to stop further transmission of polio virus. He however added that we are highly mindful of the risks that persist not only on account of indigenous transmission but also importations from other endemic countries. "There is going to be zero tolerance for any new polio case and such a case will be declared as a public health emergency" he reiterated. All the states bordering the neighbouring countries have been alerted to strengthen surveillance for early detection of any imported polio virus. Special booths have been established in the bordering areas like Wagah border and Attari train station in Punjab and Munnabao train station in Rajasthan, to ensure that all children under 5 years of age coming from across the border are given polio drops, the Minister added. The Polio Programme in India is the most shining example of strong and effective partnerships, Shri Azad noted. Shri Azad urged that we should re-dedicate ourselves and resolve that we will continue our efforts with the same vigour, so that India can be declared Polio Free by the year 2014.

Over the two days, the Summit deliberated on how to build synergies to ensure that the present momentum against polio is maintained until the disease is eradicated. The Summit is expected to provide a platform for sharing and learning lessons for all the key players in the end game strategy for polio eradication – government, partners, donors and frontline workers. The battle has been won but the war against Polio is not yet over is the underlying sentiment of the 2-day Summit.

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Overview of Newborn Health in India

Like most developing countries, India has been able to reduce infant mortality, going from 80 deaths per 1,000 live births in 1990 to 47 per 1,000 live births in 2010 (SRS, 2010). However, most often, improvement has occurred mostly in the post-neonatal stage; neonatal mortality (within the first 28 days) remains high (Health Bulletin, PRB, 2006). Nearly 26 million babies are born in India each year; this accounts for 20% of global births. Of these, 1.0 million die before completing the first four weeks of life. This accounts for nearly 25% of the total 3.9 million neonatal deaths worldwide. In India there are one million neonatal deaths every year which implies 34 per 1000 live births (SRS, 2009) accounting for nearly two-thirds of infant mortality and half of under-five mortality, representing approximately a quarter of all global neonatal deaths. The current perinatal mortality (within the first seven days of life) and stillbirth (a fetal death beyond the gestation of viability) rates are 38 and 8 per 1000 pregnancies (SRS, 2009).

the rich – poor bias needs to be addressed with a comprehensive approach.

The neonatal period is recognized as a brief, critical time that requires focused interventions in order to reach the Millennium Development Goal of a two-thirds reduction in child mortality by 2015 which implies approximately 30 deaths per 1,000 live births for children under five. The National Rural Health Mission (NRHM) in India has set the objective of reducing IMR to 30 per 1,000 live births by 2012. Achieving this objective also requires a reduction in newborn deaths by over 50 per cent in less than a decade.

The fourth MDG and the goal set under NRHM cannot be achieved without substantial reduction in neonatal deaths. The rate of neonatal mortality varies widely among the different states ranging from 7 per 1000 live births in Kerala to about 45 in Uttar Pradesh and 47 in Madhya Pradesh (SRS,

2009).There are important rural-urban and socio-economic differences in the neonatal mortality rate (NMR). The NMR in rural areas is about one and a half times of that in urban areas (30 vs. 21 per 1,000 live births, SRS, 2009). Similarly, the NMR among the poorest 20 percent of the population is more than double the NMR of the richest 20% – 48.4% versus 22 per 1,000 live births (State of India's Newborn, Save the children, 2005). These state wide variations and the rich – poor bias need to be addressed with a comprehensive approach.

Health Worker's knowledge is one of the crucial aspects of health systems to improve the coverage of community based newborn health care programmes as well as adherence to essential newborn practices at the household level.

Causes of Neonatal Mortality

A review of ages at death during the first 28 days reveals that nearly 3/4th of neonatal deaths occur within 7 days of life. About 40% of neonatal deaths occur on the first day of life (Better Care, VHAI, 1998). The major causes of neonatal deaths are infections, complications of preterm birth (such as Low birth weight, hypothermia, respiratory problems, feeding) and birth asphyxia. A large proportion of neonatal mortality is contributed by infections, a largely preventable cause.

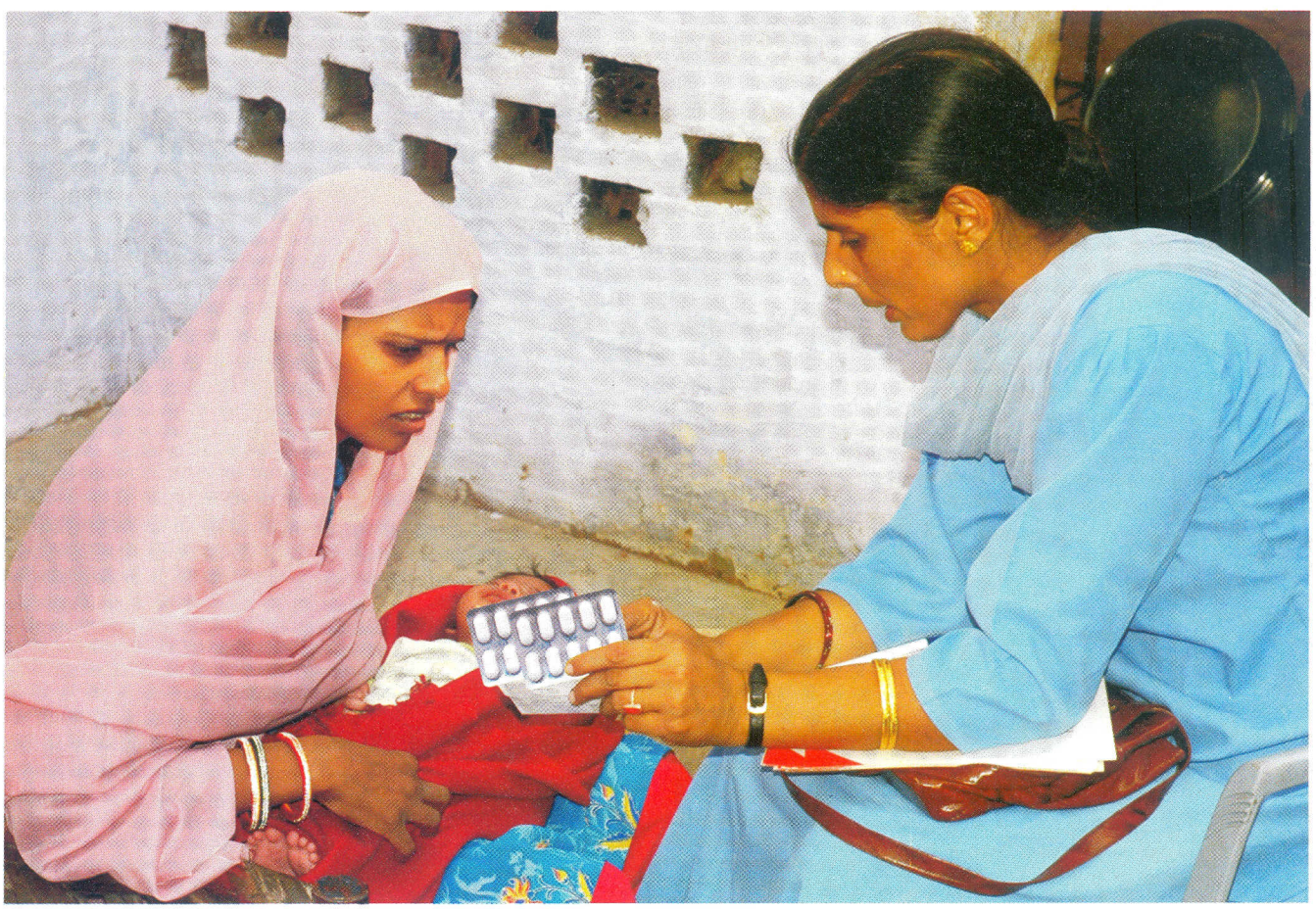
Most of these problems occur due to inadequate care during the antenatal period and during labour. Inadequate care immediately after birth and inadequate care of low birth weight (LBW) infants within the first 48 hours contribute to the rest. Although a significant proportion of women would be categorized as high-risk and identified for institutional delivery, yet over 75% of all births take place in the community and mostly in the hands of unskilled birth attendants with little postpartum care to either the mother or the newborn. Clearly, the intervention package must focus not only on the newborn alone but treat the mother–baby duo as one.

Many Solutions Exist

The slowing decline in the country's neonatal mortality rate calls for new approaches to the problem of child mortality. Government programs like the National Rural Health Mission and the Reproductive and Child Health Program seek to address this challenge, but in a country of India's size and poverty, gaps remain. One of the biggest challenges is the widespread lack of awareness about appropriate maternal and newborn health practices and about existing government schemes that can assist poor women and communities in accessing quality health care and services.

Future child health policies need to build on past lessons from child health programmes in India, sustain the achievements that have already been made, enhance quality and efficiency and address specific gaps in neonatal care with a wider involvement of the NGOs in service delivery.

There are several successful models in the country confirming that a high coverage of few simple and cost-effective interventions can reduce neonatal mortality. Interventions at the family and community level can save lives, especially where health systems are weak. Addressing neonatal mortality requires links within the continuum of care from maternal health through pregnancy, childbirth, and early neonatal care, and into child health programs, without losing impact. Such services can be delivered through a combination of care at the family-community level, outreach, and clinical care. In this continuum, health worker's knowledge is one of the crucial aspects of health systems to improve the coverage of community based newborn health care programmes as well as adherence to essential newborn practices at the household level.



II Core Issues in Newborn Health

With the launch of NRHM and JSY it is very clear that the Government is making serious effort to address the dire situation of high neonatal mortality rate. Some of the State governments have also shown interest by launching programmes to improve newborn health and incentivize deliveries in hospitals.

A Guide for the Health Workers

While the government efforts are commendable, the complications arise when the people are not aware of the situation or the problem for which they can use the available government services. Despite the continuous efforts to increase awareness about mother and child care, in many rural areas and even in urban settings, the health of mothers and their newborns is not given much importance. It is important to bridge these knowledge gaps through effective strategies at the grassroots. Here the health workers have a pivotal role to play. The following section details upon the essential aspects of newborn care as a ready to use guide for the health workers.

Since newborn care is part of a continuum of practices beginning in pregnancy. Care takes place over several phases:

1. Importance of Ante Natal Care for the Newborn
2. Care during Child Birth
3. Care of the Newborn
4. Complications of the Newborn and their Management

Only mother's care will lead to full-term safe pregnancy and the result will be a healthy newborn.

1. Importance of Ante Natal Care for the Newborn

Care for the newborn does not start after birth. New born has already spent over nine months in mother's womb, getting all the nourishment from the mother. Only mother's care will lead to full-term safe pregnancy and the result will be a healthy newborn.

Register every pregnant woman in the nearest health centre for the monthly/routine checkups to monitor progress and growth of the baby, detect complications at the earliest and treat them. It is more important in case of the first pregnancy to get registered in a PHC/CHC/Sub Centre for a safe delivery.

Important aspects to be kept in mind during the time of pregnancy are:

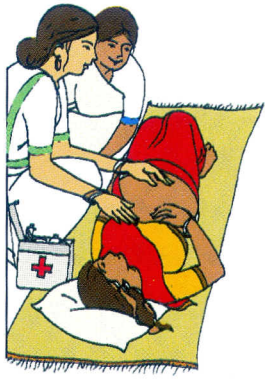
- Register every pregnant women in the nearest PHC/Sub Center/CHC/Hospital as soon as possible
- At least 4 visits are compulsory for a pregnant women during ANC i.e.,

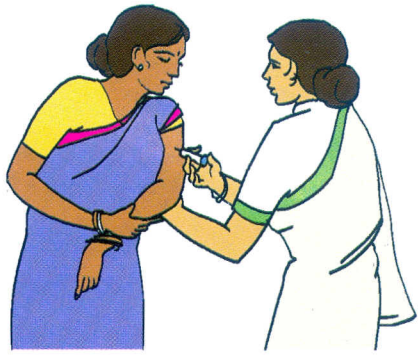
  1st visit: within 12 weeks (preferably as soon as pregnancy is suspected)

  2nd visit: between 14th and 26th weeks

  3rd visit: between 28 and 34 weeks

  4th visit: between 36 weeks and term





During the first checkup, complete history of present and previous pregnancy, if any, whether the woman had any medical/surgical problem in the past, needs to be taken. Also weight, height, blood pressure of the expecting mother is recorded in the history sheet. Also record the date of LMP during the first visit as this helps to calculate the EDD and prepare a birth plan. During these visits, blood test, HIV test, urine test, breast examination, abdominal examination, hemoglobin estimation is conducted to see if the woman falls under the category of "High Risk Mothers". If the results indicate the women in the High Risk category, necessary treatment is done as on the next page.

4 visits are compulsory for a pregnant women during ANC.

- 2 Tetanus Toxoid (T.T) injections are given in the first pregnancy with a gap of 4-6 weeks and 1 injection in case of second pregnancy, which is after 3 years of the previous one to protect the expectant mother and the newborn against deadly disease called tetanus. First dose is to be given at the time of registration of ANC and second dose is to be given one month after the first, preferably one month before EDD.
- 1 Iron tablet a day needs to be taken by every pregnant woman for at least 100 days, starting after first trimester, at 14 – 16 weeks gestation, which will reduce the risk of anemia. This dosage regimen is to be repeated for three months post partum. If the mother is anemic, then she needs to take 2 tablets a day for 100 days.
- A mother affected by HIV must take few medicines to reduce the risk of infection to the baby.

Health worker must counsel and enable pregnant women to register themselves at the nearest Sub Centre/CHC/PHC, or health facility.

Mothers with High Risk to Newborn

- Too young – less than 18 yrs
- Too old - more than 35yrs
- Too short – Height below 140cm
- Too close pregnancies – less than three years
- History of difficult previous child birth.
- Vaginal bleeding during pregnancy
- Twin pregnancy,
- Big size of abdomen, women with swelling on and around ankles/feet, anaemia, heart disease, high blood pressure, kidney disease, diabetes, T.B and an abnormal position of the baby, pain in the lower part of the stomach. headache, spinning of the head, blurred vision, size of abdomen, liver infection or anemia.
- Maternal infections like syphillis, malaria (endemic areas).

1.1. Balanced Diet during Pregnancy

- Diet of pregnant women should be nutritious and include iron, calcium, vitamin A and C and protein supplements like cereals, pulses (beans and nuts), green vegetables, milk and milk products (such as curd & paneer), eggs, meat and fish, poultry, groundnuts, ragi, jaggery and fruits (like mango, guava, orange, sweet lime and water melon). should Counsel expected mother and family that no foods should be forbidden during pregnancy.

no foods should be forbidden during pregnancy

- Educate pregnant women about care in pregnancy, especially on the importance of increased nutrition, rest (8 hrs in night and 2hrs in day), and complete ANC services.
- The woman should avoid taking tea, coffee, or milk within an hour after a meal, as these have been shown to interfere with the absorption of iron.
- The diet should be rich in fibre to avoid constipation.
- If a woman has pregnancy induced hypertension (PIH), she should be encouraged to take a normal diet with no restrictions on fluid, calories and/or salt intake. Such restrictions do not prevent PIH from turning into pre-eclapsia and may be harmful for the foetus.
- The woman should be advised to refrain from taking alcohol, tobacco in any form or addictive drugs as these have adverse effects on foetus.
- All pregnant women should be told to lie on their left side while resting and avoid the supine position (lying flat on the back), especially in late pregnancy, as it affects both the maternal and foetal circulation.
- The woman should be advised not to take any medication unless prescribed by a qualified health practitioner.

Anemia in Pregnancy: Lack of haemoglobin in the blood

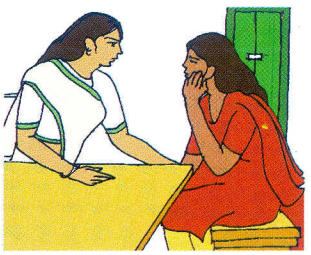
- It can be treated by the intake of iron tablets.
- 1 iron tablet a day after three months of pregnancy, keeps anemia away.
- If not treated, it can lead to complications and can result in the death of the baby or the mother.
- If a woman during the time of pregnancy has Hb level below 11g/dl, she is considered to be suffering from anaemia.
- Encourage women to take iron-richfoods such as green leafy vegetables, whole pulses, ragi, jaggery and meat .

Symptoms of Anemia : weakness, paleness in the tongue and nails, swelling in the body.

Avoid the following during pregnancy:

- Intake of any form of tobacco.
- Any medicines unless it is prescribed by a qualified doctor/physician
- Avoid X-rays and ultra sound on your own, it can be harmful.
- Avoid fasting during pregnancy.
- Avoid carrying heavy loads and hard work.

Health Worker must counsel the pregnant woman and her family for institutional delivery in PHC/CHC/Sub Centre or any other health facility



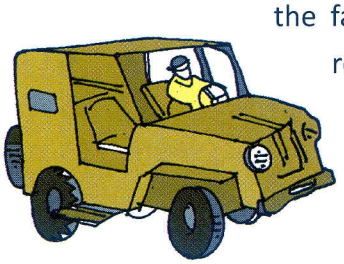
2. Care during Child Birth

2.1. Before the Child Birth

Before delivery it is important to make a Birth Preparedness Plan to ensure a safe and comfortable delivery and for care after delivery. Health worker must help the family to make this plan. The Plan includes:

- Identifying the nearest First Referral Units/Hospitals with obstetrician, anesthetist, pediatric, nursery, operation theatre, and blood bank.
- Mode of transport to reach health facility in case of any emergency.

Before the child birth it is important to do some preparations to ensure a safe and comfortable child birth and care after delivery. Health worker must help the family to identify a safe and clean place and some responsible member of the household should be aware of how to get a transport in case of any emergency and should have enough money during any kind of crisis.



Few things to be kept in mind at the time of child birth are:

- A trained birth attendant must be present at the time of child birth and she must ensure the 6-Cs are kept ready - Clean hands; Clean surface; Clean blade; Clean cord tie; Clean towel and soap and; Clean pieces of cloth and sheet.
- Keep the baby clothed from the very first day. In winter, keep the baby well covered specially the head with adequate and appropriate clothing
- Do not give bath to baby in first 24-48 hrs.
- Keep the room where the baby is kept warm.

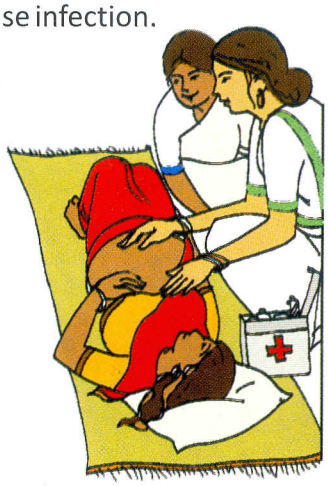
2.2. During the Child Birth

Child birth is a natural phenomenon and if there is no complication, a healthy mother should be able to deliver a healthy child.

As soon as the baby is delivered wrap the baby in a clean cloth and keep the baby aside, then tie the cord with clean hands and clean tie and then cut the cord with clean blade. In the meantime the placenta should also be out. The baby should be kept as near to the mother as possible.

2.3. After the Child Birth - Health Practices for Newborn

- In the first 5 seconds after the birth, the healthy baby will start breathing, move her arms and legs vigorously and starts crying immediately.
- Clean the baby properly.
- Do not put any type of material on baby's umbilical stump (holy water/ghee/curd/cow dung/crème/oil).
- Check if the baby is warm by feeling the baby's feet every 15 minutes, if it is cold check the auxiliary temperature, if it is below 36.5° C, place the baby under a radiant warmer.
- Wrap the baby immediately after birth in warm clothes.
- Examine the umbilicus for bleeding, redness or pus, provide treatment and refer the baby if there is no improvement in two days.
- Examine the baby for skin infection (pustules).If there are less than 10 pustules, provide treatment and refer only if there is no improvement after two days but if there are 10 or more pustules or a big boil, refer the baby.
- Look for discharge from the eyes or red and swollen eyelids, if any of these is present refer the baby.
- Check if the baby has passed urine/meconium with in 24-48 hours. If not, refer the baby.
- Do not feed the baby with anything except breast milk and put the baby to mother's breast with in first hour of birth. Do not put honey, holy water, water, ghee, curd, ghutti, charnamrit into the baby's mouth as it can cause infection.
- Record the baby's weight.



Child birth is a natural phenomenon and if there is no complication, a healthy mother should be able to deliver a healthy child.

3. Care of Mother and the Newborn

Care of the Newborn baby and mother by Health Worker needs to be done through regular home visits on 1st, 3rd, 7th, 14, 21st, 28th and 42nd day for home deliveries and 3rd, 7th, 14th, 21st, 28th and 42nd day for institutional deliveries. Health Worker should recognize postpartum complications in the mother and refer appropriately, and counsel the couple to choose an appropriate family planning method. Also immediate newborn care should be provided, in case of those deliveries that do not occur in institutions (home deliveries/deliveries occurring on the way to the institution).

3.1 Identifying the High Risk Baby

- Baby did not cry loudly
- Respiratory distress
- Baby did not pass stool
- Baby's colour is not pink/red
- No movements of hands and legs
- Pre mature baby, weighing less than 2.5kg (pregnancy of less than 8 months and 14 days)
- Baby not taking breast feed on day-1
- Jaundice
- Congenital Abnormality
- Central cyanosis (blue tongue and lips)
- Not breathing well

3.2 Role of a Health Worker in case of a High Risk Baby and Normal Baby

- Care for every newborn through a series of home visits by a trained health worker in the first six weeks of life.
- An examination of every newborn for prematurity and low birth weight.
- Extra home visits for preterm and low birth weight babies by the ASHA or ANM, and referred for appropriate care.
- Early identification of illness in the newborn and provision of appropriate care at home or referral.
- In case of a normal baby, once every three days until the baby is 28 days old, and if the baby is improving once on the 42nd day.
- Refer the baby who weighs less than 2300 gms on 28th day to hospital, as they are having higher risk of dying.
- Ensure proper latch and positioning in case of poor breastfeeding.
- Follow up for sick newborns after they are discharged from facilities.
- Information and skills to the mother and family of every newborn to ensure better health outcomes.
- Counselling the mother on postpartum care, recognition of postpartum complications and enabling referral.

High risk babies need immediate attention of a trained health worker and appropriate referral.

3.3 Maintenance of Warmth

Baby should not be given bath in the first 24–48 hrs. One of the vital needs of newborn is maintenance of body heat. It is maintained by wrapping the baby well and nursing him next to mother. Newborn should be quickly dried and his/her head should be covered for preserving the body heat. Also room temperature should be controlled accordingly. Kangaroo Care should be given to pre-term babies in which baby is kept between the mother's breast for skin to skin contact as long as possible as it stimulates intrauterine environment and growth. This helps the baby in two ways: a) the child gets the warmth of the mother body b) the baby can suck the milk from the mother's breasts as and when required.

3.4 Initiation of Breast Feeding

Immediate breast feeding within an hour after birth is vital for the baby. It provides nutrition and immunity against illness. Breast milk is the best food for the newborn till 6 months. No other feed including water is necessary. Initial thick, yellowish milk, called colostrum, is very good for the newborn and helps in preventing diseases. It should never be discarded.

Benefits of Breast feeding for the Baby

- Early skin-to-skin contact keeps the baby warm.
- It helps in early secretion of breast milk.
- Feeding first milk (colostrum) protects the baby from diseases like diarrhoea and pneumonia.
- Helps mother and baby to develop a close and loving relationship.
- Breast fed babies usually turn out to be more balanced and happy later on in life.

Benefits of Breast feeding for the mother

- All the organs and changes in the body of the mother come back to normal - helps womb to contract
- Mother feels relaxed and happy with the touch of the baby
- Emotional satisfaction for mother
- Reduces the risk of excessive bleeding after delivery.

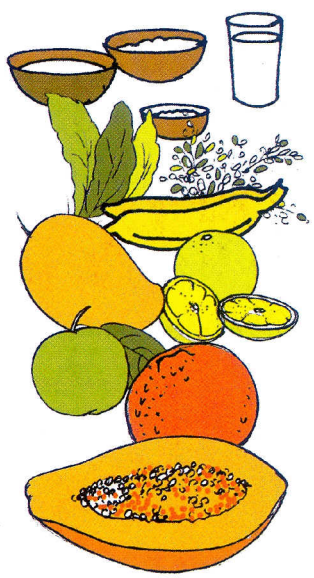
If the mother has pain while breast feeding or has sore or cracked nipples or engorgement, health worker should be contacted. If the problem still persists, mother needs to visit the nearby PHC/CHC/Sub Centre or any other health facility available.

Exclusive breast feeding for initial six months:

- Do not give anything else like tea, sugar solution, etc., to the newborn, it is not required and can be dangerous.
- Do not give water to newborn as breast milk has enough water content in it.
- Always wash both your breasts properly before and after breast feeding as it helps in prevention of infection to the newborn.
- The position of the child should be such that s/he is able to take the whole nipple in the mouth. Mother has to support the baby as well as the breast and make herself comfortable.
- She should have one-two glasses of water before feeding. Baby should be fed from the both breasts.

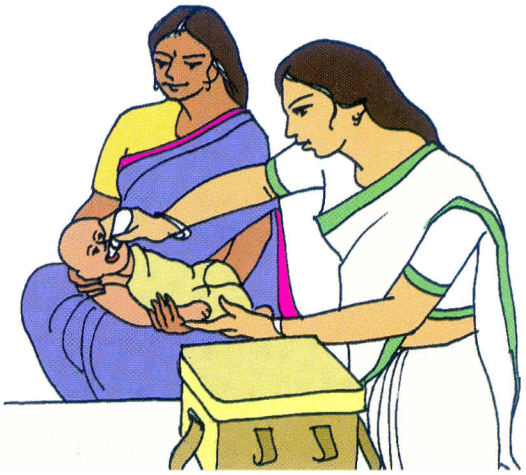
3.5. Counseling tips to be given to mother in post partum period:

- She should exclusively breast feed the baby for six months.
- She should feed the baby on demand
- Supplementary foods should be introduced at six months of age. She can continue breast feeding simultaneously.
- She should observe the baby while breast feeding and try to ensure proper/good attachment.
- If the mother is having difficulty in breast feeding, teach her the correct position.
- If the nipples are cracked or sore, she should apply hind breast milk, which has a soothing effect.
- If she continues to experience discomfort, she should feed expressed breast milk with a clean spoon from a clean bowl.
- If the breasts are engorged putting a warm compress on the breast may help to relieve breast engorgement.
- If an abscess is suspected in one breast, advise the other to continue feeding from the other breast and refer her to the FRU.
- Emphasize on balance diet and nutrition of mother and inform her that (during lactation period mother needs to eat more than her normal pre pregnancy diet to regain her strength and also for her baby to derive its full nutritional requirements from breast milk.
- Advise her to take foods rich in calories, proteins, iron, vitamins and other micro nutrients (milk and milk products, such as curd and cottage cheese, green leafy vegetables, seasonal vegetables, pulses, eggs, meat, including fish and poultry, groundnuts, ragi, jaggery, fruits such as mango, guava, orange, sweet lime and water melon)
- Taboos on food imposed by family and community must be enquired and cleared.
- Advise the mother to take proper rest and refrain from doing any heavy work.



3.6 Growth Monitoring

Weight of the baby should be recorded as soon as possible after birth. Baby weighing less than 2.5 kg are more at risk than the babies weighing normal. The less the baby weight the more the risk.



3.7. Immunization

One of the most important and vital aspect which affects the health of the child through the entire life span is Immunization. It is a protector against diseases like tuberculosis, diphtheria, pertussis, tetanus, measles, and polio.

Name of the Vaccine	Time at which it needs to be given	Dosage
BCG	At birth or any time upto1year	1
Hepatitis B – First Dose	At Birth or within 24 hrs	1
Polio-0	At birth or within 15 days	1
Polio-1+DPT+ Hepatitis B	6 weeks	1
Polio-2+DPT+ Hepatitis B	10 weeks	1
Polio-3+DPT+ Hepatitis B	14 weeks	1
Measles + Vit. A	9 to 12 months	1

BCG prevents Tuberculosis; OPV prevents Polio; DPT prevents Diptheria, whooping cough and tetanus.

Health worker should guide the mothers regarding the side effects of immunization to avoid any kind of panicking. These are:

- Mild fever after DPT injections
- Mild rash after measles immunization
- Pain tenderness and swelling at the injection site

Immunisation is a protector against diseases like T.B, diptheria, pertusis, tetanus, measles and polio.

All these can be managed by giving 1/4th tablet of Paracetamol

Baby should be immediately referred to PHC/ FRU, if any of the following problems persist:

- High grade fever
- Baby is drowsy, convulsing or unconscious

4. Complications of the Newborn and their Management

Complications of the Newborn

4.1. Pre-term Births / Low Birth weight

4.2. Birth Asphyxia

4.3. Neonatal Sepsis

4.4. Acute Respiratory Infection

4.5. Congenital Abnormalities

4.6. Neonatal Tetanus

4.7. Diarrhoea

4.1. Management of Preterm births/ Low Birth Weight Babies

A normal healthy newborn should weigh 2.5kg or more. Babies less than 2.5kg are known as Pre-term or Pre-mature babies. A full term baby with 2000gm weight has more chances of survival than pre term baby. The less the weight of baby the more difficult it is for the baby to survive.

Causes of Pre-term or Pre-mature babies

- Poor nutrition of the pregnant mother.
- Complications during pregnancy like eclempsia, severe anemia, vaginal bleeding, fever or any other illness during pregnancy.

To prevent Pre-term or Pre-mature babies we must ensure good care of pregnant mothers, by registering them in time and taking care of their nutritional health during antenatal period. Only a healthy mother can give a birth to a healthy baby.

To manage Pre-term or Pre-mature babies we must understand that the mechanism of body temperature control of these babies is not well developed. Therefore we must ensure.

- Increase in number of home visits.
- Monitoring weight gain.
- To keep them warm at normal temperature not too hot or too cold. Do not expose them to cold or hot winds.
- Teaching the mother to express breast milk and feed baby using cup and spoon, if required.
- When on breast be careful that the newborn do not suffocate. Mother should be told how to hold the baby, and feed him/her only in sitting position.
- Do not give bath to Pre-term or Pre-mature babies for at least 15 days.
- Supporting and counseling the mother and family to keep the baby warm and enabling frequent and exclusive breast feeding.

4.2. Birth Asphyxia

Asphyxia in case of a newborn is due to lack of oxygen or lack of perfusion to various organs. There are many reasons for a baby not being able to take in enough oxygen before, during, or just after birth. A mother may have medical conditions that can lower her

When on breast be careful that the newborn do not suffocate. Mother should be told how to hold the baby, and feed him/her only in sitting position.

oxygen levels; there may be a problem with the placenta that prevents enough oxygen from circulating to the fetus; or the baby may be unable to breath after delivery.

If baby indicates any one of the following symptoms at the time of birth, she is asphyxiated:

- No or weak cry
- No or weak breathing

Consequences of Asphyxia (at birth)

- Still birth
- Dies within few days
- Unable to suckle

(Long Term)

- Mental retardation
- Epilepsy (seizures and fits)
- Spasticity (difficulty in or walking or moving arms and hands)

Management of Asphyxia

If a baby has asphyxia, it is a crisis situation. A life can be saved or lost in these five minutes. If there is no doctor or nurse available at the time of birth, health worker can't do much to save the newborn life. It is important for a health worker to motivate expected mother and family members for institutional delivery to avoid this kind of crisis situation which is not in the purview of health worker.

Resuscitation of babies is very difficult, still one must try. Support the chin and neck of the baby in a way to improve the airway and try to breathe in baby's mouth and nose.

Clean the mouth and throat with a gentle clean finger covered with a cloth. Make sure that you are not touching the back of the throat.

Press the chest of the baby gently after laying him on a firm surface and then press in the mid part of the chest.

4.3. Neo Natal Sepsis

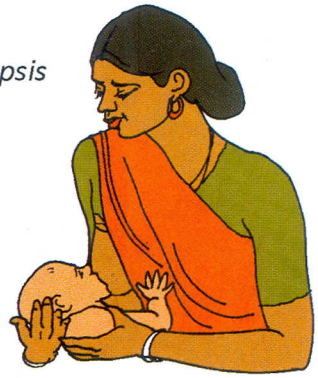
Sepsis refers to any serious infection in the baby whether in lungs, brain or blood. It is the common killer of newborns in the first month of life.

Causes of Neo Natal Sepsis

- Infection during pregnancy or delivery.
- Usage of unclean techniques during delivery (use of unclean blade or cord ties).
- Premature baby or with low birth weight i.e., less than 2000gm
- Not giving breast milk early and exclusively.
- Baby exposed to cold after delivery.
- Baby gets infected by some other person, who is sick.

Symptoms of Neo Natal Sepsis

- Weak limbs
- Stops feeding
- Chest indrawing
- Fever
- Cold to touch



Neo Natal Sepsis can be prevented with exclusive breast feeding, keeping baby warm, good hygiene and keeping umblical cord clean.

Prevention of Neo Natal Sepsis

- Good Hygiene: frequent hand washing, clean instruments during delivery, clean clothes.
- Keeping the baby warm during the cold season.
- Exclusive breast feeding (early initiation and on demand).
- Keeping the umbilical cord clean and dry.

Management of Sepsis

In treatment of Sepsis two antibiotics are used Cotrimoxazole and Gentamicin. You can start the treatment of Sepsis with Cotrimoxazole:

Cotrimoxazole syrup is to be given,

- 1/4th twice a day for seven days if the baby is full term
- 1/4th twice a day for 10 days if the baby is pre-term

Gentamicin injection is to be given once a day. You can refer the child to nearest PHC where there is a doctor available.

When to refer the baby to health facility

- Baby has breastfeeding problems and is not solved by health worker Counselling and home management.
- Baby has danger signs:
- Not responding – after antibiotic treatment for 24 hour
- Becomes yellow (jaundice) on the first day or jaundice persists after 14 days.
- Bleeding from nose, mouth or anus
- Convulsions
- Body temperature of baby continues to remain less that 95° F even after re-warming the baby for 24 hours.
- Tetanus (stiffness after the fourth day), unable to suckle or open mouth.

If Baby shows any of the signs, make sure that the baby is properly fed and keep the baby warm and try to take the baby to FRU.

4.4. Acute Respiratory Infection (ARI)

It is an important cause of mortality and morbidity in newborn. If not treated in time it can turn into pneumonia, which can result in death.

Symptoms of ARI

- Cough
- Running nose
- Fever
- Difficulty in breathing
- Difficulty in breastfeeding and continuous cry

Symptoms of Pneumonia

- Chest in-drawing with cough or difficult breathing
- 50 breaths per minute or more-if the child age is 2 months upto 12 months
- 40 breaths per minute or more-if the child age is 12 months upto 5 years

Artificial Ventilation for Newborn

Newborn should be given artificial ventilation at twice the rate used for adults and children, using the mouth

to mouth and nose technique. Health worker should make a tight seal around the baby's mouth and nose with his/ her mouth and breathe into the lungs until the chest rises. Let chest fall, continue giving breaths at a rate of 20 per minute.

Chest Compression

Lay the baby on a firm surface. To locate the correct position, imagine a line joining the baby's nipples. Place the tips of two fingers just below the mid point of this line, and press at a rate of 100 compressions per minute, to a depth of 1.5-2.5cm (1/2-1inches). Combine with artificial ventilation, giving five compressions to one breath.

Sometimes pneumonia can be very severe and in that case the baby should be taken to the nearest health centre and seek doctor's advice.

Neonatal tetanus can be prevented if the antenatal mother is covered with tetanus toxoid regime during pregnancy.

4.5. Congenital Abnormalities in Babies

a) External that can be seen.

b) Internal that are inside the body of the baby, not so obvious.

External abnormalities

- Imperforated anus
- Having lip cleft palet
- Dislocation of both or one hip
- Any missing fetal parts like fingers, hands, legs

Internal abnormalities can only be diagnosed in hospital by doctors. If baby survived for a week or ten days , should be taken to health centre for diagnosis

- Crooked fetal (talpis)

Internal abnormalities are easy to diagnose, difficulties in breathing or blue babies may have defects/problems in their heart or lungs.

The obvious or external abnormalities can be treated in time.

- If imperforated anus has only the skin covering the part from where the stool comes, one can make a small notch in any case baby needs to go to a health centre,
- Have lip and cleft palet bodies find difficult to suck the breasts or needs to be fed by spoon.

For other abnormalities also we need to go to health care facilities but as the baby grows it becomes easier for mothers to accept such babies.

Internal abnormalities can only be diagnosed in hospital by doctors so if baby survives for a week or ten days should be taken to the health care for diagnosis.

4.6. Neonatal Tetanus

The incidence of neonatal tetanus has declined a great deal because of the care of pregnant women during child birth.

Management of Neonatal Tetanus: To prevent neonatal tetanus make sure that the pregnant woman is covered with tetanus toxoid regime during pregnancy.

Tetanus germs usually enter through wounds,

therefore

- Ensure to cut the cord of the baby with a clean blade.
- Do not apply any mud or cow dung on it.
- Tie a clean thread.
- Do not tie a bandage or dressing.
- Leave it exposed to air.
- Keep it dry.

Once the Tetanus is set in, it is difficult for the baby to survive. Take the baby to the nearest health center as soon as possible.

4.7. Diarrhoea

Three to four yellow colour stools in the newborn are normal but if more and watery then it needs attention. Diarrhoea in newborn can be fatal due to loss of water and salts from the body in stools. It is important to maintain hygienic surroundings and incorporate practices like use of safe drinking water, washing hands with soap after defecating or after in contact with faeces, before touching the baby and and preparing the feed for baby. Focus our attention on preventing dehydration and replacing lost fluids and salts at the earliest and maintaining good nutrition for the baby. Mother is to be encouraged to continue breastfeeding, longer at each feed if the baby has diarrhoea.

Diarrhoea can be classified into three types:

- Acute watery diarrhoea persists for not more than 14 days.
- Dysentry (diarrhoea with visible blood in stools)
- Persistent diarrhoea begins acutely, it lasts for more than 14 days.

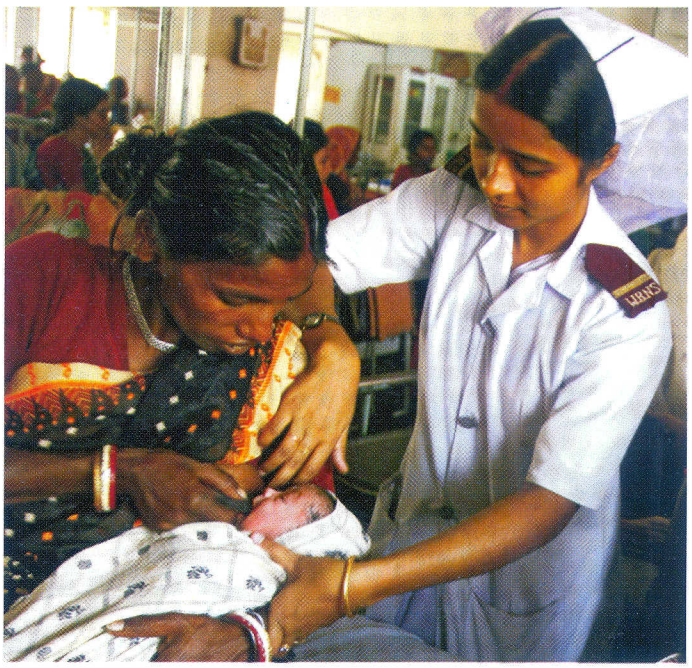
Management of Diarrhoea

- As soon as the baby starts having loose motions, don't wait for anything. Immediately start giving O.R.S ("Jeevan Rakshak Ghol")
- For each stool passed, give 50-100 ml of Oral Rehydration Solution (ORS) to the baby or as much as baby can drink.

If the baby with diarrhoea is less than six months

- Only give ORS and boiled water in addition to breast milk.
- No other fluid or food should be given.

For the newborns who are not breast fed, 100-200 ml of water can be given during this period



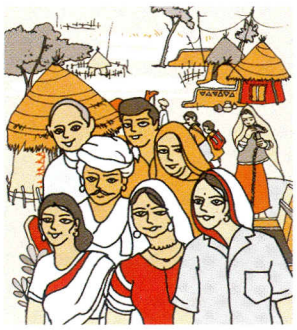
Diarrhoea in newborn can be fatal due to loss of water and salts from the body in stools.

III Govt. Schemes and Programmes Promoting Newborn Health

The Indian government has come up with schemes such as NRHM to address the dire situation. The programme gives high priority to the issue of maternal and newborn health for the marginalized communities and seeks to improve the availability and access of health care services. There are several other innovative schemes like Janani Suraksha Yojana (JSY) and Integrated Management of Newborn and Childhood Illness (IMNCI) at the central level and similarly at the state level. The following section briefly shares some of these schemes and programmes aimed at promoting newborn health in NRHM.

National Rural Health Mission

NRHM was launched by GOI in April, 2005. NRHM is one of the biggest ever integrated health initiatives in the Health Sector. NRHM is not a project, but an overarching umbrella integrating all on going vertical health programmes and addressing issues related to the determinants of health, like sanitation, nutrition, safe drinking water.



Some of the new initiatives under NRHM promoting Newborn Health are, introducing ASHAs (Accredited Social Health Activists), Mobile Medical Units (MMUs) and bringing about Intersectoral Convergence.

Care of the Newborn

3.1. Integrated Management of Newborn and Child Health (IMNCI) - Children presenting with any illness often suffer from more than one disease. For instance a child with diarrhoea may also have signs of malnutrition, and may not have received immunisation as per schedule. To address newborn mortality and improve overall health care, the Indian government added a newborn component to its existing IMCI program to form an IMNCI program, adding the 'N' for newborns. IMNCI is a key strategy within the RCH-II program.

Activities – Under IMNCI package:

- Care of newborn and Young Infants (Under 2 months) - Three home visits are to be provided by ANM, AWW, ASHA to every newborn on day 1, 3 and 7. For LBW babies 3 more visits are undertaken.
- Care of Infants and children (2 months – 5 yrs) - Management of diarrhoea, respiratory track infection, eye & ear infection, malaria, malnutrition, anaemia and other diseases.

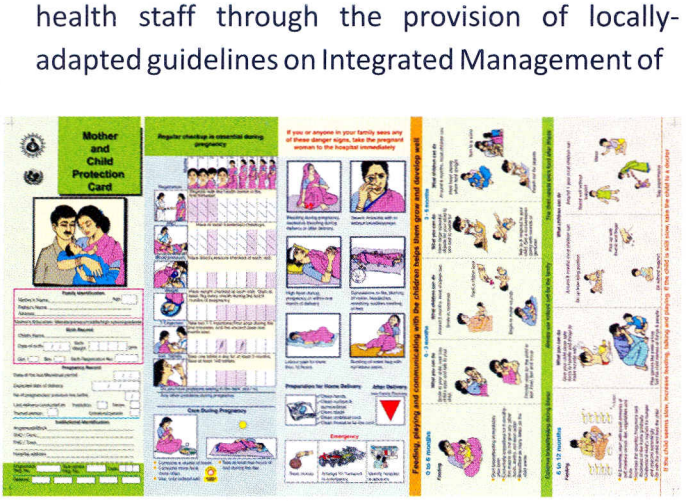
- Counselling for breast feeding and supplementary feeding.
- Immunization
- Recognition of risk conditions, management / referrals.

Training under IMNCI:

IMNCI is a skill based training in both facility and community settings. It includes broadly two categories of training: for the Medical Officers and for front line functionaries including ANM and AWW. Training under IMNCI focuses on skill development. It provides hands on training through visits to hospitals, field vists and visits to homes of sick children. Training is given at two levels: In service training for existing staff and; Pre-service training. Two different types of training are provided: Clinical skills training and Supervisory skills training. Follow up training are conducted for 6-8 weeks. Training is done at both state and district levels.

The strategy includes three main components:

- Improvements in the case-management skills of health staff through the provision of locally-adapted guidelines on Integrated Management of Neonatal and Childhood

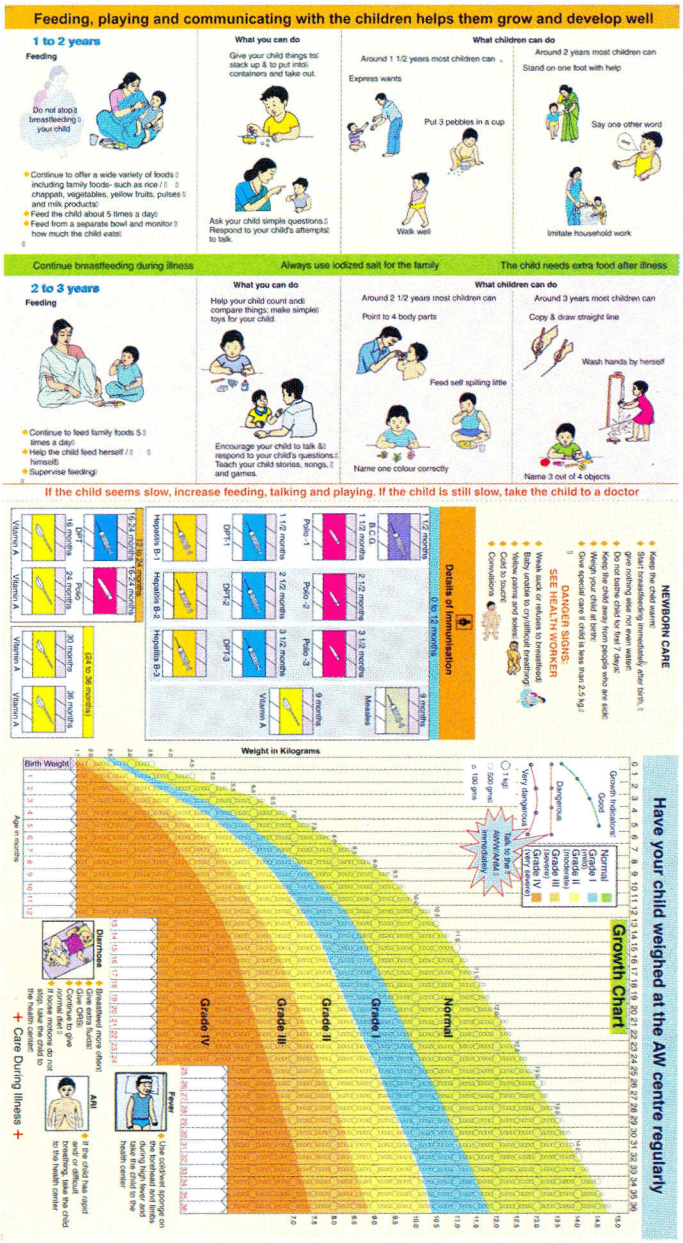


- Illness and activities to promote their use. Improvements in the overall health system required for effective management of neonatal and childhood illness;
- Improvements in family and community health care practices.

Mother and Child Protection Card (MCP Card)· - The Mother and Child Protection Card has been developed as a tool for families to learn, understand and follow positive practices for achieving good health of pregnant women, young mothers and children. It helps families to know about various types of services which they need to access for the health and well being of women and children. It empowers families to make decisions for improved health and nutritional status and development of young children on a continual basis.

Its beneficiaries are pregnant women and families with children under 3 years of age. The Card is kept by pregnant women and mothers of children under 3 years of age. The content and skills can be easily mastered after continuous practice. In order to make the guide user friendly, it has been colour coded. Colours in the guide are matched with the colours of the card.

Components of the card are - Family identification; Birth record; Date of birth; Pregnancy record; Institutional identification; Registration; Care during pregnancy; Rest; Preparation for home delivery; Emergency and; Feeding, Playing communicating with the children.



3.2. Navjat Shishu Suraksha Karyakram (NSSK) was launched in 2009 under the NRHM framework to reduce the neonatal mortality, constituting 45% of under-5 mortality in the country. It focuses on four main aspects i.e., prevention of hypothermia, prevention of infection, early initiation of breast feeding and basic newborn resuscitation.

Training - A simple and scalable training module on Basic Newborn Care and Resuscitation has been developed for this programme. The training manual has been prepared with the help of Indian Academy of Pediatrics and the pediatrics department of AIIMS. It encompasses important evidence based procedures in a simple language. The health provider after training will furnish all the required care at birth, identify and manage common complications, stabilize (if necessary) and refer/transfer newborns needing additional interventions. It is estimated that this skill based training can prevent approximately 1 lakh newborn deaths every year.

The components of NSSK training module are: Resuscitation of the newborn baby, Care of the baby at birth, Prevention of infection, Thermal protection, Feeding of normal and low birth weight babies, Transport of neonates.

3.3. Janani Shishu Suraksha Karyakram (JSSK) was launched on 1 June, 2011. This government initiative assures free services to all pregnant women and sick neonates accessing public health institutions. The scheme envisages free and cashless services to pregnant women including normal deliveries and caesarean operations and also treatment of sick newborns (up to 30 days after birth) in all Government health institutions across the State/UT.

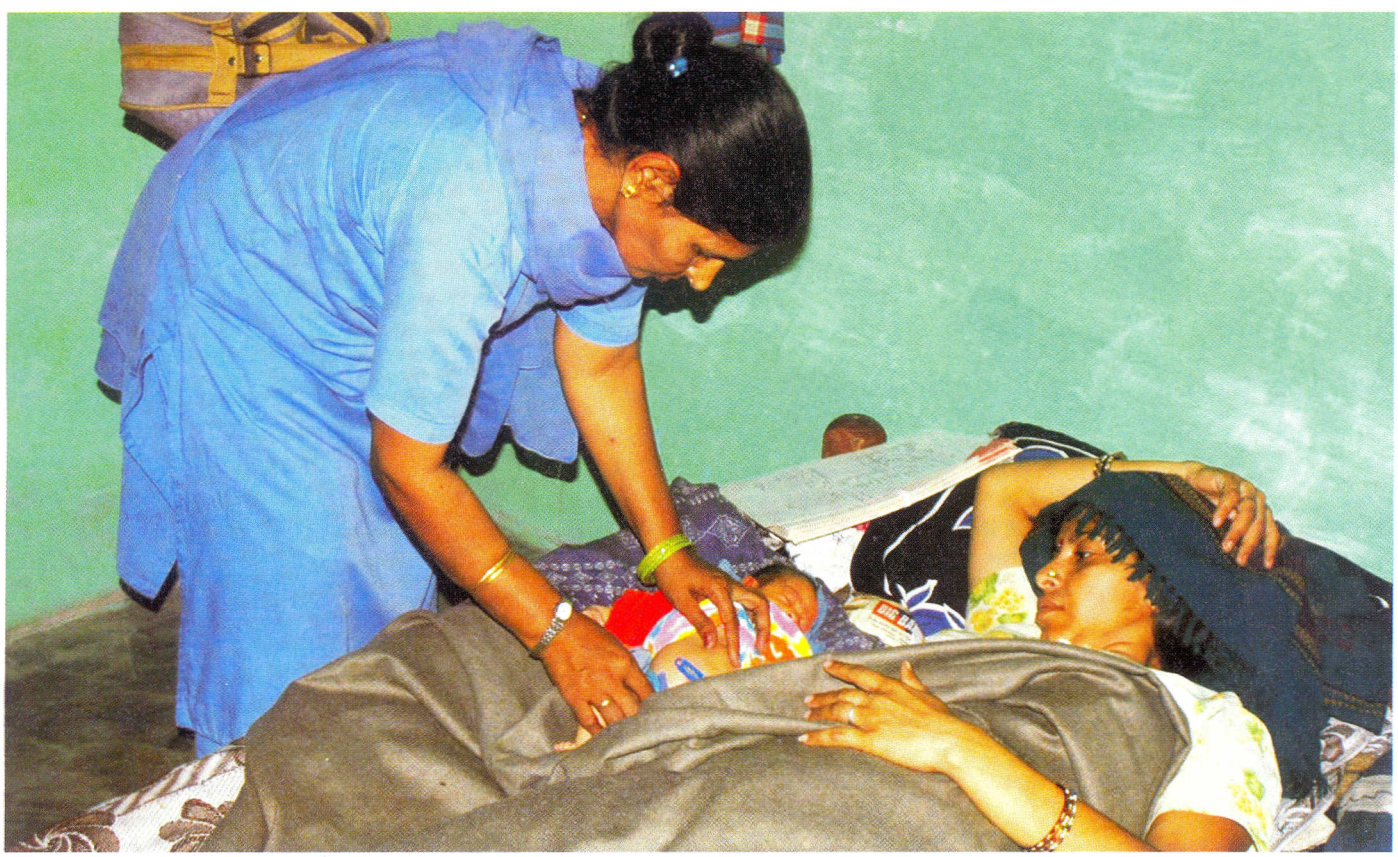
The components of NSSK training module are: Resuscitation of the newborn baby, Care of the baby at birth, Prevention of infection, Thermal protection, Feeding of normal and low birth weight babies, Transport of neonates.

Entitlements for Pregnant Women under the scheme:

- Free and zero expense delivery and caesarean section
- Free drugs and consumables such as iron folic acid, etc.
- Free essential diagnostics (blood, urine tests and ultra–sonography, etc)
- Free diet during stay in the health institutions
- Free transport from home to health institution
- Free transport between facilities in case of referral
- Drop back from institutions to home after 48hrs stay
- Exemption from all kinds of user charges

Entitlements for sick Newborn till 30 days after birth:

- Free and zero expense treatment
- Free drugs and consumables
- Free diagnostics
- Free provision of blood
- Free transport from home to Health institution
- Free transport between facilities in case of Referral
- Drop back from institutions to home
- Exemption from all kinds of user charges



IV Good Practices and Some Success Stories

Anganwadi Workers Promoting Breastfeeding in Assam

Since 2006, over 1.7 million infants in Assam have been exclusively breastfed. This has protected them against under-nutrition, disease and given them the best start in life. The progress was achieved by joint efforts of Government, UNICEF and local NGOs. As an essential component of this coordinated strategy, Anganwadi workers like Durowpadi Bedia conduct meetings to teach new and expecting mothers about the importance of exclusive breastfeeding for six months.

In each village, women who are in their last trimester of pregnancy or nursing an infant are visited by Anganwadi workers at their home three to four times a month.

From her mother, Monika learned the tradition of throwing away the first milk. The Anganwadi and ASHA workers, who she calls 'baideo' (elder sister), told her about the nutritional value of colostrum and the importance of exclusive breastfeeding. 'Before, I didn't know it was so important and is so good for baby,' says Monika. Her baby has grown from 3200 grams at birth to 4700 grams today and has suffered no bouts of diarrhoea.'

Anganwadi workers are the health workers under the Integrated Child Development Services (ICDS), a centrally sponsored scheme in India. Major provisions for newborns under ICDS include health care of children less than six years of age, recording of weight, immunization, management of malnutrition, treatment of diarrhoea, distribution of simple medicines, antenatal care of expectant mothers and postnatal care of nursing mothers.

SUCCESS STORIES

Source: http://www.unicef.org/india/6290.html

SUCCESS STORIES

A change called ASHA in Bihar

Mamta Kumari, a 8th class pass out from village Saini in the Eastern Indian state of Bihar is a village ASHA. For the past three years Mamta has been pivotal in bringing as many as 60 women in their advanced labour to the nearest Primary Health Centre (PHC) for institutional delivery. Be it night or day, Mamta accompanies the women for their safe deliveries conducted by trained doctors at the nearest PHC which is about twelve kilometers from her home. Mamta gets Rs 200 for every delivery. "Had Mamta not taken the initiative of bringing the mothers to the PHC, half of the mothers' and infants' lives would have been risked," says Mahanand Singh, incharge of PHC in Vaishali.

There are about 71,350 ASHA health workers in Bihar, who have ensured safe delivery of about 1.1 million women in the state. The strong network of ASHA workers in the state has resulted in increase of institutional deliveries and decrease in both infant and maternal mortality. "In 2005, only 44,000 deliveries took place in hospitals or PHCs. With the implementation of NRHM and the recruitment of ASHAs, the there has been substantial increase in the number of institutional deliveries in the state," says Dr Shirin Varkey, Health Specialist, UNICEF Bihar.

New vistas in Newborn Care (Kochi), Kerala

State Government's National Neonatology Forum (KOCHI) started "Kudumbashree" project in Thrissur, with a grant of Rs 2 lakhs from UNICEF. It involves teaching women to spread awareness regarding essentials of newborn care, benefits of breast-feeding. Women in the age group of 20-50 from panchayats are trained as community volunteers. Working women are advised to take leave for proper breast-feeding of the baby. Women are told about danger signs of any disease and how to handle and take care of infections found in the newborn.

Project has a component of 'Continuous Positive Airway Pressure (CPAP)' in the ventilatory care for the newborn which provides immediate relief to respiratory problems in babies. Since ventilators are not available in all hospitals because of the cost factor, availability of CPAP in all rural hospitals would be an achievement in the State towards newborn care. While one ventilator would cost Rs. 5-8 lakh, one CPAP unit can be made available at about Rs. 25,000-30,000. Ventilator care is available in only about 10 hospitals in the entire State.

Source: http://www.hindu.com/lf/2003/06/10/stories/2003061001010200.htm

feedbacks

Dear Sir,

I am presently working as a Senior Resident Doctor in the Department of Community Medicine in North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong. The NRHM news letter is very helpful and informative to us since we are attached with the health centres and also take classes for the undergraduate students. Kindly put me on your mailing list for the NRHM newsletter. (English version).

Dr. Himashree Bhattacharyya
Senior Resident Doctor
Department of Community Medicine, NEIGRMS
Mawdiangdiang, Shillong, Meghalaya.

Dear Sir,

I am working as a District Leprosy Officer C1-I, Navsari in Health & Family Welfare, Gujarat. I read NRHM Newsletter regularly. I am very much impressed with the news published in NRHM Newsletter because it updates my knowledge. I will be grateful to you, if you kindly include my name and e-mail address in your mailing list.

Dr. Dileep H. Bhavsar,
District Leprosy Officer C1-I,
502, Maharaja Agrasen Appt.,
Shantadevi Road,, Opp. Railway Station,
Navsari - 396445, Gujarat

Dear Sir,

I am working as an Assistant Professor in the Department of Community Medicine at Shri Guru Ram Rai Institute of Medical & Health Sciences, Dehradun. I have read your NRHM Newsletter and found it to be very informative and useful. Kindly include my name in the mailing list for sending NRHM Newsletter regularly.

Dr.Kajal Jain
60, Raja Road,
Dehradun - 248001

Dear sir,

We have read NRHM Newsletter and found it very useful for our Medical students to update their knowledge. As we are running MBBS & PG courses at our ASRAM Medical College, Eluru, West Godavari Dist, Andhra Pradesh. Please enroll us in your mailing list.

Dr.P.Sudarsini, MD, D Ch,
Professor & HOD Pediatrics,
ASRAM Medical College, ELURU - 534005
West Godavari District, Andhra Pradesh

Dear Sir,

I am retired District Surgeon and my wife is retired Joint Director. We both are involved in social activities, creating awareness about family planning services available at Government Hospitals and visit some rural places. I have ready NRHM Newsletter and the topics covered in the Newsletter are useful and informative. I am interested in knowing more about the NRHM programme as it is useful for us. So I request you to kindly enroll my name in the mailing list.

Dr. V.D. Karpurmath, MS (Gen. Surgery)
Retired District Surgeon, HIG-16, 1st Main Road,
Navanagar, Hubli - 580 025, Karnataka State

Dear Sir,

I am working as Additional DM&HO (AIDS & Leprosy), Visakhapatnam. I had an opportunity to read NRHM newsletter, which is very useful in my day to day field visits (primary health centres, sub centres) as I am also Programme Officer. Kindly include my name in your mailing list.

Dr.Ramesh.Ronanki,
Flat no. 403, Trishulvilla, Old C.B.I.Road,
Pedawaltair, Visakhapatnam ,
Andhra Pradesh

Dear Sir

I am so delighted to read the News letter of NRHM and to know about the new initiatives being taken in the health scenario of our big country. These information s are very vital especially for those in the field in rural areas. I am happy the qualty of the News Letter is improving with each issues. Congratulations. Looking for the next issue with lot more of valuable information.

Dr. K.N. Panicker
Emeritus Professor, Community Medicine
Amrita Institute of Medical Sciences
Kochi , Kerala

Dear Sir,

I am working as Health Supervisor at CHC Arunoottimangalam, Kottayam District, Kerala. I am a regular reader of NRHM Newsletter and it is found very informative & resourceful. It helps to provide information about the various programs of NRHM across the country. Kindly include my name in your database for the web edition of the News letter in English. My mail id : stephenkm999@gmail.com

Stephen K M
Health Supervisor
CHC Arunoottimanaglam, Kottayam Dist. Kerala

Dear Sir,

I am the Principal of Shri Gajanan Maharaj Nursing School & Research Centre, Jawhar, Distt. Thane, Maharashtra. As we are running RANM/RGNM courses and as this Newsletter is very useful for our students and faculty members, I request you to send English and Hindi version of NRHM Newsletter to our Institution.

The Principal
Shri Gajanan Maharaj School of Nursing
& Research Centre, Neharu Chowk, Opp. Urban Bank, Jawhar,
Tq. Jawhar, Distt. Thane, Maharashtra - 401 603

Dear Sir,

I, Dr. C. Srinivas, working as Medical Officer (Homoeopathy) in Damera (PHC) in the Distt. Warangal, A.P. I have gone through your NRHM Newsletter. It is very informative to me. I will be obliged if you kindly put my name in your mailing list.

Dr. C. Srinivas, Medical Officer,
Govt. Homoeo Dispensary, Damera (PHC),
Distt. Warangal, Andhra Pradesh

Dear Sir,

I would like to get your NRHM Newsletter. It will be useful for our Community Health Nursing Programme.

The Principal, Mar Ivanios School of Nursing,
Assisi Atonement Hospital, Perumpuzha, P.O. Kollam - 691 504

Dear Sir,

I am working as Jr. Health Inspector at Idukki District, Kerala State. I read the Newsletter regularly and found the same very informative and useful. Kindly include my name in the mailing list.

Shri Girish Kumar G, Girish Bhavan, Nr. Sri Sivan Jn.,
Vellimon P.O. Kollam Distt. Kerala - 691 511

Dear Sir,

I am Purnima Paik, B.Sc. (Hons.) Nursing, attached with West Bengal Health Services. I have read NRHM Newsletter and found that it is informative and useful. So I would like to include my name in the mailing list to send the NRHM Newsletter.

Ms. Purnima Paik, C/o. Pronob Sardar
Paschim Para, B-54, P.O. Panchasawar
Koklata - 700 094, West Bengal

Dear Sir,

I am serving as Consultant (Medical) - NRHM / RCH-II Project through CTI,CINI, Pailan, Distt. South (24) Prgs. West Bengal. NRHM Newsletter is proving very useful to me. I shall be obliged if you kindly send NRHM Newsletter to me regularly at my mailing address.

Major (Dr.) S.S. Jha, 16/2, S.P. Colony East
New Alipore, Kolkata - 700 053

Dear Sir,

I am a State Government employee - working as Medical Officer since 7 years and in charge of five NRHM Ayurvedic Dispensaries. I would like to request you to enroll my name in your mailing list for sending NRHM Newsletter.

Dr. Wasia Nuzhath, Government Unani Dispensary,
APVVP Hospital, CHC, Mahadevpur, Distt. Karimnagar (A.P)

Dear Sir,

I recently read your NRHM Newsletter and found that it is an excellent and updated Newsletter. Kindly include my name in your mailing list.

Dr. Sunita Thapa, Rajgram, Namchi
Distt. Namchi, South Sikkim - 737126

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- Pentavalent vaccine has been introduced in Kerala & Tamil Nadu on a pilot basis to give children additional protection against Haemophillus Influenza-B.

BCG (Bacillus Calmette Guerin) given at birth (upto 1 year if not given earlier)	DPT (Diphtheria, Pertussis and Tetanus Toxoid) primary three doses at 6,10,14 week and two booster dose at 16-24 month and 5 years of age	OPV (Oral Polio Vaccine) Birth dose for institutional deliveries within 15 days, Primary three doses at 16-24 month of age	Hepatitis B - Birth Dose for hospital deliveries within 24 hours, Primary three doses at 6,10,14 week of age	Measles - two dose at 9-12and 16-24 months of age	JE vaccine given at 16-24 months of age	TT (Tetanus Toxoid) 10 years and 16-24 months of age
						

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