# Handbook on improving maternal and child health through RMNCH+A approach

# **National Rural Health Mission**

Ministry of Health and Family Welfare Government of India

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# **Foreword**

I am pleased to present this handbook on improving maternal and child health which provides a summary of the keyactivities to be carried out as a part of the reproductive, maternal, new born, child and adolescent health (RMNCH+A)approach in India. RMNCH+A approach essentially focuses on the major causes of mortality among women and children as well as the delays in accessing and utilising health care and services. This document has been developed for the program managers to provide an understandingof the concept of 'continuum of care' and to ensure required focus on the various stages of life. Priority interventions for important thematic areas have been included in this document to ensure that the linkages between them are contextualised for immediate attention and action.

This handbook aptly directs the key stakeholders to focus their efforts on the most vulnerable population and disadvantaged groups in their geographical areas. This handbook also emphasizes on the need to strengthenenergies in those low performing districts that have already been identified as the high priority districts in the country. This handbook will also serve as a ready reckoner for ProgramManagers in planning, implementation and monitoring of the new and existing RMNCH+A interventions.

With the current pace of state level consultations and district level activities done by the state governments with the support of the development partners, I am confident that we will take India closer to achieving its national health goals and achieve the Millennium Development Goals 4 & 5.

I'd like to especially thank all the contributors for their tireless work in developing such an excellent piece of work and urge all the key stakeholders to make sufficient use of this document in their respective areas.

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# **About the Handbook**

The Handbook on improving maternal and child health through RMNCH+A approach provides a summary of the key elements described in the **Strategic Approach to Reproductive maternal newborn, child and adolescent health (RMNCH+A) in India**, published by the Ministry of Health & Family Welfare in February 2013.

State level consultations are being held across the country to discuss the adoption of RMNCH+A approach in the implementation of the on-going programme. A lot of interest has been generated and commitment mobilised from the national and state level leaders and policy makers and key decision making authorities in the districts.

This broad range of stakeholders including Ministers, District Collectors, District Magistrates, Principals & faculty from mentoring institutions and Chief Medical Officers, who are all leading this initiative from the front, must be informed about the most critical elements of this approach. Besides them, the medical officers and programme managers at different levels of implementation would benefit by having access to a ready reckoner on the various sets of RMNCH+A interventions across the continuum of care described in the strategic approach document.

It is expected that this Handbook will be disseminated widely amongst various stakeholders and will facilitate better understanding of the seemingly complex set of interventions required to make an impact on the maternal and child health in India.

# Context

Improving the maternal and child health and their survival are central to the achievement of national health goals under the National Rural Health Mission (NRHM) and the 12th five year plan (2013-17). Maternal and child health outcomes are a sensitive indicator of the country's health system and also show how a society treats its most vulnerable members. Health of the mothers determines the health of the next generation and thus the adult human capital. Improved maternal, newborn and child health saves money in many ways and benefits individuals, families, communities and society. For instance, households with healthier and better nourished mothers and children spend less on healthcare. They also generate huge economic returns, because healthy people can work more productively and thus improve their own lives and contribute positively to the wider economy.

India has launched many flagship programmes on health and nutrition. These investments made in public health over decades have led to improvement in the health of mothers and children and their survival, as reflected in the health indicators. However, the goal has not yet been fully achieved and requires combined effort of central and state government, civil society organisations, development partners and private sector.

About 56,000 mothers and 14.5 lakh children under five years, including 8.2 lakh newborns die in our country every year, which significantly contributes to the overall burden of maternal and child mortality. The most common causes for death of mothers are the complications related to pregnancy and child birth while, newborns die because of prematurity, birth asphyxia and infections. At a later stage and before their 5th year is over, children most often die from common infections that include diarrhoea and acute respiratory infections. The interventions that can save the lives of mothers and children and reduce their malnutrition are well known and are part of the national health programme. India already has in place an extensive community based programme and a three tier health system (primary, secondary and tertiary levels of health facilities), which provides a strong platform for delivery of health and nutrition services. What is required is a monitoring system that brings

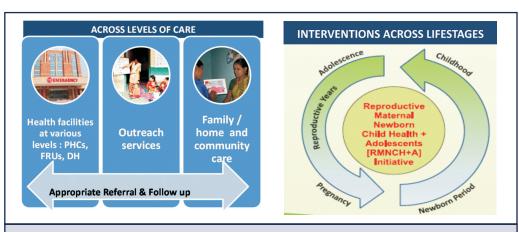
evidence to prioritise improvement in coverage, equitable reach and good quality of facility based and community outreach services.

An important aspect of improving maternal and child health is the understanding that health and nutrition of the mother has a direct bearing on the health of the baby, who if nurtured well during child hood and adolescence will grow into a healthy adult. A woman's nutritional status and age at childbearing affect the outcomes of pregnancy. So does the interval between two pregnancies and total number of births per woman during her reproductive years. More frequent and multiple pregnancies result in higher morbidity and deaths in newborns and mothers. Therefore, any effort to improve the survival of mothers and children requires intervention at various stages of life including the adolescence phase, pre pregnancy period, during pregnancy and delivery, after childbirth and then in the newborn period and childhood.

Therefore a lifecycle approach has been adopted under NRHM and is referred to as RMNCH+A approach. RMNCH+A stands for reproductive, maternal, newborn, child and adolescent health. The 'Plus' is included here for two reasons:

- 1. The approach brings focus on adolescence as an important stage of life, where key interventions should be made.
- 2. It also means that services provided in the homes/ community should be linked to those provided in health facilities. Also health facilities at primary (PHC), secondary (CHC) and tertiary level (District Hospital) should have adequate linkages for referrals to be made both ways.

RMNCH+A approach to improving maternal and child health describes the most essential health preventive, promotive and curative interventions and packages of services across various life stages which when delivered to scale will provide maximum gains in terms of saving lives and improving overall health status of the community.



Three important components of the RMNCH+A are the continuum of care across: 1. Critical life stages; 2. Preventive, promotive and curative services and 3. Various levels of health facilities and the community.

The RMNCH+A approach is expected to accelerate progress across states and districts by bringing more cohesiveness in the programme, linking various programme components together and allowing for integrated planning, implementation and monitoring. The key maternal and child health goals to be achieved are given in the box below.

# Health outcome goals established in the 12<sup>th</sup> Five Year Plan relevant to maternal and child health outcomes:

- 1. Reduction of Infant Mortality Rate from 44 to 25 per 1,000 live births by 2017
- 2. Reduction in Maternal Mortality Ratio from 212 to 100 per 1,00,000 live births by 2017
- 3. Reduction in Total Fertility Rate from 2.4 to 2.1 by 2017
- 4. Prevention and reduction of under-nutrition in children under 3 years of age to half of NFHS-3 levels
- 5. Raising Child Sex Ratio in 0-6 years age group from 914 to 950

The key components required improving the health of the mothers and children are given in the box below. Each of these components is described briefly in the following sections.

Heath System Strengthening: Infrastructure, Human resources, drugs & commodities, patient transport Packages of interventions for various stages in life cycle that include high impact interventions

Convergence, partnerships with flagship programmes of GOI in other sectors, development partners, civil society organisations, media and private sector

Prioritisation of investments in High Priority Districts (including tribal blocks & districts), remote, difficult to reach areas & urban poor

Integrated monitoring through HMIS, MCTS. Score Cards

# Prioritisation of investments for improved maternal and child health

Health outcome indicators from various states and districts show that the progress is uneven across the country. There are states, districts and blocks that have higher burden of maternal and child mortality. Even states that are performing relatively well have pockets where the women and children are relatively disadvantaged in terms of the health status. Therefore populations in certain geographical locations (like the hilly and remote places, tribal areas and desert) and those disadvantaged in terms of social and economic status (like the scheduled castes and tribes, urban poor) need special focus and differential planning so as to ensure that they are not left out from the receiving the benefits from the investments made in the public health system. Also because they suffer the highest burden of mortality and morbidity, maximum gains in reducing ill health and improving survival will come from reaching these groups and achieving greater coverage of health interventions amongst them.

# Intervention packages across lifestages

# **Adolescence**

#### **Key indicators:**

- Reduce anaemia in adolescent girls and boys (15–19 years) at annual rate of 6% from the baseline of 56% and 30%, respectively (NFHS 3)
- 2. Decrease the proportion of total fertility contributed by adolescents (15–19 years) at annual rate of 3.8% from the baseline of 16% (NFHS 3)

### **Priority interventions:**

- National Iron + Initiative, including Weekly Iron & Folic Acid Supplementation (WIFS) Program
- 2. Adolescent friendly health services
- Promotion of menstrual hygiene practices among adolescent girls (10-19 years) in rural India

# **Priority Interventions:**

#### 1. National Iron + Initiative

This initiative brings together existing programs for IFA supplementation among pregnant and lactating women, adolescents and children. The initiative aims to ensure provision of IFA supplements and therapeutic management of mild, moderate and severe anemia in the most vulnerable groups viz. children (6 months to 10 years), adolescents (10-19 years) both in and out of school, pregnant and lactating women and women in reproductive age group (15-45 years). This includes:

- screening and tracking of under nutrition & anaemia in homes, schools, and anganwadis;
- bi-weekly iron supplementation to preschool children (6 months to 5 years) in home settings, under direct observation of ASHAs;
- weekly IFA supplementation to 1st- 5th grade children in Government and Government aided schools;

- weekly IFA supplementation to out of school children (5-10 years) at anganwadi centers;
- weekly IFA supplementation to adolescents (10-19 years) in schools (for out
  of school adolescents through Anganwadi Centers). IFA tablet [500mcg] for
  adolescents is colored blue ('Iron ki nili goli') to distinguish it from the red IFA
  tablet [400 mcg] for pregnant and lactating women.

The Weekly Iron and Folic Acid Supplementation (WIFS) program covers adolescents enrolled in class VI-XII of government, government aided and municipal schools as well as 'out of school' girls. The program envisages:

- Supervised administration of weekly IFA supplement of 100 mg elemental iron and 500mcg folic acid;
- Screening of target groups for moderate and severe anemia and referral to an appropriate health facility;
- Bi-annual deworming (Albendazole 400 mg) and
- Information and counseling for improving dietary intake and preventive actions for intestinal worm infestation.

### 2. Adolescent Friendly Health Services

The adolescent friendly health services address reproductive and sexual health concerns of adolescents, both married and unmarried through information and counselling and those related to nutrition and mental health. Besides this, there is an outreach component which, in addition to above issues, addresses injuries and violence, substance misuse and non-communicable diseases.

Community based health promotion of adolescent health is mainly through engagement of peer educators, PRI, VHNSC, Teen Clubs and educational institutes. Community based interventions and demand generation initiatives are to be further linked with facility based services across all levels of health care. Services in adolescent health clinics are available as:

 Walk in services at sub-center level by ANM which includes a minimum package of preventive and curative services (Iron folate, contraceptive counselling and commodities, menstrual hygiene).

- Weekly dedicated Adolescent Clinic at PHCs by Medical Officer.
- Speciality clinics for referral care at the CHC, District Hospital / Sub District / Taluk Hospital and Medical Colleges. A dedicated counsellor is available on an everyday basis at higher level facilities.

# 3. Schemeforpromotionofmenstrualhygieneamongadolescentgirls (10-19 years) in rural India

This scheme aims to increase awareness among adolescent girls on Menstrual Hygiene, increase access to and use of high quality sanitary napkins to adolescent girls in rural areas and ensure safe disposal of sanitary napkins in an environment friendly manner.

Under this scheme sanitary napkins (NRHM brand 'Free days') are being sold to adolescent girls at Rs. 6/- for a pack of 6 napkins in the village by the ASHA worker.

# **Pregnancy and Childbirth**

#### **Key indicators:**

- 1. Increase proportion of pregnant women receiving antenatal care at annual rate of 6% from the baseline of 53% (CES 2009)
- 2. Increase facilities
  equipped for
  comprehensive
  RMNCH+A services
  (designated as 'delivery
  points')
- 3. Increase proportion of deliveries conducted by skilled birth attendants at annual rate of 2% from the baseline of 76% (CES 2009)
- 4. Increase proportion of all births in government and accredited private institutions at annual rate of 5.6 % from the baseline of 61% (SRS 2010)
- 5. Increase proportion of mothers and newborns receiving postnatal care at annual rate of 7.5% from the baseline of 45% (CES 2009)

#### **Priority interventions:**

- 1. Antenatal care package (including 4
  ANCs, 100 IFA, 2TT/Booster, monitoring
  foetal growth, screening and tracking
  for complications like anaemia, preeclampsia, counseling for birth & emergency
  preparedness, newborn care, breast feeding
  etc.)
- 2. **Skilled obstetric care** (including use of partograph, AMTSL, corticosteroids for premature labour and antibiotics for PROM), essential newborn care and resuscitation
  - a. Operationalizing delivery points
  - b. Janani Suraksha Yojana (JSY) for demand generation for skilled obstetric care
  - Janani Shishu Suraksha Karyakram
     (JSSK)scheme to reduce out of pocket expenses
  - d. Navjaat Shishu Suraksha Karyakram (NSSK) for essential newborn care
- 3. Emergency obstetric and newborn care
  - a. 24×7 services and establishing "Maternal and Child Health (MCH) Wings"
  - b. Multi-skilling of doctors
- 4. Postpartum care for mother and baby
- 5. Postpartum IUCD insertion
- 6. Implementation of Preconception & Prenatal Diagnostic Techniques Act
- 7. Preventive use of folic acid in periconception period (currently optional)

### **Priority Interventions:**

#### 1. Antenatal care package

Antenatal care package provides relevant services for monitoring the progress of foetal growth and well being of the mother. It includes screening of high risk/complications like pre-eclampsia, anaemia, etc. so that it can be managed timely. These services are available universally through public health system, both at outreach and health facility level. The package includes counseling for birth/emergency preparedness, preparation for newborn care, breast feeding, nutrition, family planning counseling, and information about post-partum family planning methods.

The provision of testing for early pregnancy is available under this package. Pregnancy testing kits ('Nishchay') should be made accessible to all women in reproductive age group including adolescent girls (unmarried and married). Early diagnosis of pregnancy has many advantages: it facilitates early registration for antenatal care as well as safe termination of unintended pregnancies.

Minimum 4 antenatal visits are advised. During each visit Blood pressure, weight, urine for protein and sugar are checked and fundal examination for assessing foetal growth is done and recorded in Mother & Child Protection card.

Pregnant and lactating women are provided daily IFA supplementation for 100 days starting at 14-16 weeks of gestation for prophylaxis against anemia, provided during VHND or at the health facility. This is repeated for 100 days post-partum. The package also includes TT immunization as per recommended schedule, which is helpful in reducing neonatal tetanus. Women with anemia detected by Hb testing are treated in accordance with the National Iron + Initiative guidelines.

Management of severely anemic women: ANM and PHC Medical Officer in charge are then odal officers for line-listings everelyanemic women, tracking and management of these pregnant women during and after pregnancy and child birth. In malaria end emic areas, there is provision for providing long lasting insecticide treated nets (LLINs) under the NVBDCP

Under **Prevention of Parent to Child Transmission (PPTCT)** Programa II pregnant women who are diagnosed with HIV are linked with HIV services for prevention of HIV transmission to newborn babies.

#### 2. Skilled obstetric care and essential newborn care and resuscitation

**Skilled obstetric care:** It is considered to be the single most critical intervention for ensuring safe motherhood and improved perinatal mortality. It is helpful to recognize problems early, when the situation can still be controlled, to intervene and manage the complication, or to stabilize the condition and refer the patient to a higher level of care, if needed. For this, trainings include:

- 10-days for medical officers in Basic Emergency Obstetric Care (BEmOC); and
- 3-weeks for ANM/LHV/Staff Nurses in Skilled Birth Attendance.

**Essential newborn care and resuscitation:** Essential New born care and resuscitation is very important in preventing neonatal deaths and illnesses. It improves access to quality emergency care for the sick child. Newborn Care Corners are being established at all delivery points, which will have Skilled Birth Attendants who are also trained on Navjaat Shishu Suraksha Karyakram (NSSK).

#### **Operationalizing delivery points:**

Health facilities located across the health system are now assessed against a minimum benchmark of performance (number of deliveries conducted per month as one of the parameters of service utilization>3 deliveries/month in SC;>10/month in PHC,>20/month in CHC,>50/month in SDH/DH)and designated as 'Delivery Points'. Number of deliveries conducted per month is considered as one of the parameters of service utilization. Norms have been relaxed in North Eastern States, Himachal Pradesh and Jammu & Kashmir. The delivery points are to be prioritized for the allocation of resources (infrastructure, human resources, drugs and supplies, referral transport etc.) in order to make available comprehensive RMNCH+A services at these facilities.

**Demand generation for skilled obstetric care:** Janani Suraksha Yojana (JSY) scheme has provision of conditional cash transfer to a pregnant woman for institutional care during delivery and the immediate postpartum period. Other features related to the scheme are:

• Promotion of 48 hour stays at the health facility for the wellbeing and survival of the mother and the newborn.

- Focus on motivating mother/family for the adoption of postpartum family planning method and counseling on exclusive breast feeding, immunization and child care practices.
- Direct cash payments to JSY beneficiaries through AADHAR enabled payment system (introduced in 43 districts). This requires enrolment of all potential JSY beneficiaries on the MCTS portal, facilitating registration for AADHAR and opening/linking bank accounts.

Service guarantees and elimination of out-of-pocket expenses: Janani Shishu Suraksha Karyakram (JSSK) scheme implemented across the country entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery, including caesarean section. Other features of this scheme include:

- Absolutely free treatment for all sick newborn (first 30 days of life) in public health institutions, now benefits have been extended till one year of life.
- Entitlements to pregnant women include free drugs and consumables, diagnostics, diet and transport. Benefits also extended for complications during antenatal, intranatal and postnatal periods
- Free assured transport (ambulance service) from home to health facility, interfacility transfer in case of referral and drop back.

Ambulances with basic life support are to be ensured to transport pregnant women for delivery to institutions..Vehicles with provision for advanced life support, trained staff and equipment are to be made available to manage obstetric emergencies during transit. For routine drop back facilities, a low-cost transport network working either through the government mechanism or through outsourcing is to be established.

- A centralized call center a long-with a toll free number is to be mandatorily established for ensuring patient transport services to pregnant women and neonates.
- Grievance redressal mechanisms inform of help desk, suggestion/complaint boxes and helpline numbers are to be established at government health facilities and at district and state levels.

#### 3. Emergency obstetric and newborn care

**24×7** basic and comprehensive obstetric and newborn care services are available at delivery points (sub-centers and PHCs, CHC (FRU) and District Hospitals). Comprehensive obstetric care also includes surgical intervention like Caesarean-section and facilities for blood transfusion.

Maternal and Child Health (MCH) Wings are being established at high case load facilities in order to expand the public health care infrastructure and quality of care for mothers and newborns

**Multi-skilling of doctors in the public health system** is being under taken to address the shortage of specialists through:

- 18-week training of MBBS qualified doctors in Life Saving Anesthetic Skills (LSAS); and
- 16-week training in Emergency Obstetric Management Skills including Caesarean section(EMOC).

#### 4. Postpartum care for mother and baby

Provision of 48-hour stay at the health facility in case of institutional delivery, with dietary services is being actively promoted so that both the newly delivered mother and the newborn are under medical observation during the critical period when most neonatal and maternal deaths take place.

Postnatal home visits to both mother and baby are made by frontline workers mostly ASHAs, irrespective of the place of delivery (home or public health facility),

- In all cases—atleast 3 postnatal visits to them other and 6 postnatal visits to the newborn within 6 weeks of delivery/birth.
- Incase of home delivery—An additional first visit within 24 hours of birth (a total of 7 neonatal visits and 4 postnatal visits to mother).

### Hygiene during pregnancy, delivery and postpartum

Observing strict hygiene protocols through out provision of care is important to prevent illness and complications for mothers, newborns and children. All facilities should have mechanisms to ensure hygiene and sanitation including practices during pregnancy (hand washing be fore examination), delivery (5 cleans: clean place; clean surface; clean hands; clean cord and dressing; and clean cordtie), postpartum(cord care, washing hands before examination and advising mother to wash hands prior to initiating breast feeding). Infection prevention protocols should be followed while providing services to mothers, new borns and children.

#### 5. Postpartum IUCD insertion

There has been a shift in the family planning approach to promote spacing rather than just terminal method of family planning (sterilization). Inter pregnancy interval of at least 36 months is known to improve pregnancy outcomes in terms of birth weight and overall survival of the newborn and also ensures that mother has had a chance to build up the necessary reserves to bear another baby. Steps to promote IUCD for spacing include:

- Placement of trained providers for post-partum IUCD (PPIUCD) insertion at district and sub-district hospital considering high institutional delivery load in these facilities.
- Expansion of PPIUCD services to health facilities up to sub-centers that have high delivery load.
- Placement of dedicated RMNCH counselors at public sector health facilities for increasing awareness, motivate women to adopt modern or terminal family planning methods, ensure healthy timing and spacing between pregnancies and provide counseling on breast feeding and other infant and young child feeding and childcare practices.

# 6. Implementation of Preconception & Prenatal Diagnostic Techniques (PC & PNDT):

Declining sex ratio is of major concern across states in India. Census 2011 data shows that except for Haryana and Punjab that are reversing the trend of decline, all other states are showing a downward trend and the male: female sex ratio at birth and in the age group of 0-6 years continues to be unfavorable. MOHFW is responsible for implementation of some of the components of the PC-PNDT Act. Key areas for action include:

- Formation of dedicated PC & PNDT cells at state/district level.
- Establishing statutory bodies under the PC & PNDT Act including State Supervisory Board, State & District Appropriate Authority and State and District Advisory Committee.
- Strengthening of monitoring mechanisms, including the State Inspection and Monitoring Committees.
- Online maintenance, analysis and scrutiny of records mandated under the Act and digitalization of registration records with periodic evaluations.
- Sensitization and mobilization of self-help groups and communities.

# 7. Preventive use of folic acid in peri-conception period

Promoting use of folic acid (400 micrograms) in planned pregnancies during the periconception period (3 months before and 3 months after conception) for prevention of neural tube defects and other congenital anomalies may be adopted by states as a preventive measure against certain birth defects (neural tube defects).

# **Newborn and Childcare**

#### **Key indicators:**

- Increase exclusive breast feeding rates at annual rate of 9.6% from the baseline of 36% (CES 2009)
- Increase coverage of three doses of combined diphtheria-tetanuspertussis (DTP3) (12–23 months) at annual rate of 3.5% from the baseline of 71.5% (CES 2009)
- 3. Increase use of Oral Rehydration Salts (ORS) in under-five children with diarrhoea at annual rate of 7.2% from the baseline of 43% (CES 2009)

### **Priority interventions:**

- 1. Home based newborn care
- 2. Facility based care of the sick newborns
  - a. Newborn Stabilization Unit (NBSU)
  - b. Special Newborn Care Unit (SNCU)
- 3. Child nutrition
  - a. Essential micronutrient supplementation (Vitamin A, IFA)
  - b. Management of children with severe acute malnutrition
- 4. Integrated management of common neonatal & childhood illnesses (pneumonia, diarrhea and malaria)
- 5. Immunization
- Child Health Screening and Early Intervention Services (Rashtriya Bal Swasthya Karyakram )

### **Priority Interventions**

### Home based newborn care (HBNC)

Most neonatal deaths take place in the first week and the first month of life. In order to ensure that there is a continuum of care from health facility to home during the most vulnerable period, the HBNC scheme was launched.

The scheme has provision for essential newborn care to all newborns up to 42 daysof life including counselling of mothers on exclusive breastfeeding, appropriate infant & young child feeding practices, and hygiene.

Training and incentives are provided to ASHA to undertake home visits and to identify children with danger signs and promptly refer them to appropriate health facilities for further medical support.

Follow up of newborns discharged from the Special Newborn Care Units at home is also to be undertaken by frontline workers through home visits. This will ensure that investments made into saving sick newborns do not go waste.

#### 2. Facility based care of the sick newborns

It is estimated that about 10% of all newborns require care higher level of medical services on account of being sick or preterm or low birth weight. Therefore provision has been made for providing care for sick newborns at secondary and tertiary level of health facilities.

Four-bedded **Newborn Stabilization Units (NBSU)** are established at Community Health Centers/First Referral Units for providing first level of care to sick newborns.

**Special Newborn Care Units (SNCU)** are established at District Hospitals and sometimes at medical colleges to provide secondary level of care to sick newborns for neonatal sepsis, premature and low birth weight newborns. These units are well equipped and have trained doctors and staff nurses to manage these newborns round the clock. Guidelines have been issued by the MOHFW, and all SNCUs are opertaionalized as per the guidelines.

As a part of Janani Shishu Suraksha Karyakram (JSSK) all sick newborns admitted to public health facilities are entitled to:

- Free diagnostics, drugs and treatment.
- Free emergency referral transport from home/community to the health facility and between health facilities in case a referral is made.

Follow up sick newborn after discharge from newborn facilities can be taken up at District Early Intervention Centers that are proposed under Rashtriya Bal Swasthya Karyakram (RBSK), a newly announced scheme which will be implemented this year.

# 3. Child nutrition and essential micronutrients supplementation

Child nutrition is one of the most important determinants of child health. It has been shown that children who are malnourished are more susceptible to infections like diarrhea and respiratory infections and have a high mortality. The key interventions to improve overall nutrition status of children are as follows:

- Promotion of Infant and Young Child Feeding (IYCF) Practices for early and exclusive breast feeding and complementary feeding, including growth monitoring.
- Line listing of babies born with low birth weight by the frontline workers (ANMs and ASHAs) and their follow up for early detection of growth faltering.

To reduce prevalence of anemia among children

- Providing iron and folic acid tablets or syrup (as appropriate) for 100 days in a year to all children between the ages of 6 months to 5 years.
- As part of national Iron + initiative to provide bi-weekly iron and folic acid supplementation for preschool children of 6 months to 5 years.
- Providing weekly supplementation of IFA for children from 1st to 5th grades in government and government aided schools.
- Providing weekly supplementation for 'out of school' children (6-10 years) at anganwadi centers.
- Incentives to ASHAs for making home visits and providing at least one dose per week under direct observation and educating mothers about benefits of iron supplementation.

Establishing 'Nutritional Rehabilitation Centers (NRC)' for providing medical and nutritional care to children with Severe Acute Malnutrition (SAM):

- NRCs are established at District Hospitals or FRUs, depending upon the availability of infrastructure and human resources, as well as the accessibility of the facility to the surrounding areas.
- NRCs are to be linked to community based programs and to ICDS for identification, referral and long term nutritional rehabilitation of severely undernourished children.
- Tribal areas and high focus districts with high prevalence of wasting are to be prioritized for setting up NRCs.
- Community level follow up of the discharged children will be done by the front line workers.

4. Integrated management of common childhood illnesses (pneumonia, diarrhea and malaria)

**Integrated Management of Neonatal and Childhood Illnesses (IMNCI)** is being implemented for prevention of neonatal and child deaths.

- IMNCI is provided at all levels of care: at community by ASHA (ASHA modules), first level care by ANM (IMNCI training package) and referral level care by staff nurse (F-IMNCI training package).
- IMNCI components include improvement in the case-management skills of health staff, improvements in the overall health system required for prevention and management of neonatal and childhood illnesses, and improvements in family and community healthcare practices including hygiene and sanitation.

#### **Prevention and Management of diarrhea:**

- Hand washing practices at home/family level to prevent diarrhea.
- Exclusive breastfeeding and complementary feeding for all eligible children.
- Continued breastfeeding and complementary feeding for children with episodes of diarrhea.
- Ensuring availability and use of ORS and Zinc at all sub centers, health facilities and with all frontline workers.
- Breast feeding, continued feeding, increased fluids and use of antibiotics if necessary should be ensured.
- Promotion of hand washing, protected water and use of sanitary facilities.

# Management of Pneumonia:

- Non-severe pneumonia: Ensuring use of recommended antibiotics (based on national guidelines) in children aged 2 months to 5 years through frontline workers (ASHA, ANM) and at all levels of health facilities.
- Pneumonia with fast breathing and/or lower chest in-drawing: timely and prompt referral to higher level of facilities.
- Emergency management is included in facility based IMNCI trainings.

Guidelines established by **National Malaria Control Program** to be emphasized as child health interventions for prevention and treatment of malaria among children.

#### 5. Immunization

India has one of the largest immunization programme in the world, reaching a cohort of 26 million children each year.

Under Universal Immunization Programme, all infants receive vaccines against seven vaccine preventable diseases (Tuberculosis, Polio, Diphtheria, Pertussis, Tetanus, Measles and Hepatitis B). Newer vaccines such as for Hib have been introduced in some states while, Japanese Encephalitis vaccination is being provided in endemic districts. Second dose of measles has been introduced across the country.

Some of the important aspects of the immunization programme is to:

- Ensure that there is no stock-out of vaccines or logistics.
- Ensure quality of vaccines with proper cold chain management.
- Alternate vaccine delivery system.
- Incentive to ASHA for mobilization of children to immunization session sites and completion of full immunization by one year of age as well as booster doses of DPT.
- Updating MCTS for tracking service delivery by generating due lists for ANMs, sending SMS alerts to beneficiaries.

High level of vigilance to maintain 'polio free' status in light of constant threat of the import of polio virus from neighboring countries requires maintaining of high coverage of oral polio vaccine (OPV) and a good surveillance system.

# 6. Child Health Screening and Early Intervention Services (Rashtriya Bal Swasthya Karyakram)

This is a new scheme launched in 2013, covering individuals in age group 0-18 years.

Screening of newborns at health facilities for birth defects, screening of children in the age group of 0-6 years at anganwadi centers at least twice a year through the District Medical Mobile Teams for deficiencies, diseases and development delays including disabilities Screening of children and adolescents 6-18 years will be undertaken in schools by the same District Mobile Medical Teams.

Identified children will be managed free of cost at District Early Interventions Centers through comprehensive package of services provided for care, support and treatment.

As the Block level health teams reach out to adolescents in Classes VI –XII in government and government aided schools through RBSK, it provides an important entry point for this team to engage with adolescents on a range of relevant health issues. These can include responding to common sexual and reproductive health queries and concerns, identifying and addressing mental health conditions such as depression, discussing about healthy lifestyle practices such as nutrition, physical activity and avoiding substance misuse (alcohol, tobacco, gutka among the most common ones). The visit of the Block Team is an opportunity to discuss the iron folic acid supplementation- its benefits and necessity to maintain compliance with recommended dosages and weekly schedule, informing children about the dietary sources of iron and calcium and locally feasible options for dietary diversification.

# **Reproductive Years**

#### **Key indicators:**

- Reduce unmet need for family planning methods among eligible couples, married and unmarried, at annual rate of 8.8% from the baseline of 21% (DLHS 3)
- 2. Increase met need for modern family planning methods among eligible couples at annual rate of 4.5% from the baseline of 47% (DLHS 3)

#### **Priority interventions:**

- Doorstep distribution of contraceptives by ASHAs
- 2. Promotion of spacing methods
- 3. Comprehensive abortion care
  - a. Medical Termination of Pregnancy (MTP) services
- 4. Management of sexually transmitted and reproductive tract infections
- 5. Sterilization services
- 6. Balanced energy protein supplementation in undernourished women and weekly IFA supplementation

Family Planning should not be seen as means to achieve population stabilization but as an important component of RCH that can contribute hugely towards reducing maternal mortality as also infant and child mortality. A target-free approach based on the unmet needs for contraception; equal emphasis on spacing and limiting methods; and promoting 'children by choice' are the key family planning approaches.

### **Priority family planning interventions:**

# 1. Doorstep distribution of contraceptives by ASHAs

ASHAs are entrusted with the task of delivery of contraceptives at the doorstep of households for improving access to contraceptives and use by eligible couples. ASHA provide them at nominal charges (Rs. 1/- for pack of 3 condoms, Rs. 1/- for a cycle of OCP and Rs. 2/- for an ECP). This needs to be backed up by capacity building of ASHAs on counseling skills, ensuring provision of contraceptives up to the village level through improved logistic management system and appropriate IEC and BCC tools at community level.

#### 2. Promotion of spacing methods (interval IUCD as well as Postpartum IUCD)

In order to improve spacing:

- IUCD 375 (providing protection for over 5 years), 380A (providing protection for over 10 years) and 'fixed day services' are being made available at all levels of health facilities.
- ASHAs are incentivized to encourage the delay of the first birth in newly married couples by 2 years (Rs. 500/-), ensure spacing of 3 years between the first and second child births (Rs. 500/-) and ensure permanent limiting method up to 2 children (Rs. 1000/-).
- RMNCH counsellors are being placed in district hospitals and at the facilities with high case load in order to improve the uptake of spacing methods.
- Health personnel are trained in interval IUCD insertion and post-partum IUCD insertion.

#### 3. Comprehensive Abortion Care (CAC)

Unsafe abortions are a leading cause of maternal deaths in India. The MTPAct, 1971, provides for safe and legal abortion services in India. However availability and accessibility to safe abortion services has been the main challenge.

- Strategies for making CAC Services available at 24\*7 PHCs, FRUs including DHs
  are provision of drugs and equipment for medical abortions, MVA and EVA, the
  last two being surgical methods, with a priority to provide services at Delivery
  Points.
- · Capacity building of:
  - Medical Officer/son skills to provide comprehensive abortion care services at PHC level and above
  - ANMs, ASHAs, field functionaries and RMNCH counselors to provide confidential counseling for MTP and post abortion counseling including family planning.
  - Obstetrician Gynaecologist faculty of medical colleges in the latest technology as well as non-clinical aspects of comprehensive abortion care.
- Spreading awareness in the community about legality and availability of safe abortion services through appropriate IEC and BCC messages.

 Private and NGO sector hospitals/clinics may be approved to provide quality MTP services (certification and regulation to be done through the district level committees within the framework of MTP Act).

# 4. Management of sexually transmitted and reproductive tract infections (RTI & STI)

Untreated STI/RTI poses a risk both to the health of the mother and the baby. It is possible for some of the infections to be transmitted from pregnant woman to the baby, and result in congenital birth defects, low births weight and still births.

STI/RTI management and counseling about HIV prevention and reproductive health isprovided at CHCs and FRUs, and at 24X7 PHCs. These services are legally available across the entire reproductive age group including adolescents, youth and adults.

**Syndromic Management of RTIs/STIs** is the approach adopted for management of STI/TRI which includes colour coded kits, RPR testing kits for syphilis and also whole blood finger prick testing for HIV at the delivery points, at various levels of facilities and with service providers trained in syndromic management. Partner counseling and testing is also an important element of syndromic case management approach.

**National AIDS Control Program (NACP)** has made provision for safe blood, HIV testing laboratory services, HIV counseling services, anti-retroviral drugs for pregnant women and their babies.

#### 5. Sterilization services

Male and Female sterilization are promoted as a terminal method for family planning for those who have achieved the desired family size.

Under "Compensation Scheme for Sterilization Acceptors", compensation is provided for loss of wages to the beneficiary and also to the service provider (and team) for conducting the sterilization procedure.

Under "Family Planning Indemnity Scheme", compensation is provided in case of failure of sterilization, medical complications or deaths resulting from sterilization, and indemnity cover to the doctor/health facility performing sterilization procedures.

#### Other initiatives:

- Operationalization of fixed day centers for sterilization.
- Promotion of Minilap tubectomy services.
- Training of service providers on Minilap, Laparoscopic sterilization and NSV.
- Promotion of non-scalpel vasectomy (NSV) for increasing male participation.
- Accreditation of private providers and NGOs for service delivery.

# 6. Balancedenergyproteinsupplementationinundernourishedwomenandweekly IFA supplementation (15-45 years)

Iron deficiency anemia and low body mass index (<18.5 kg/m²) in women of reproductive age group adversely affects the health of women during the period before first pregnancy, between pregnancies & throughout the reproductive age group. Women of lower socioeconomic status and young age are at higher risk of being anemic and underweight.

Screening for anemia and undernourishment in women of reproductive age and ensuring adequate supplementation of iron folic acid and balanced energy protein is essential for reducing the risk of fetal, maternal & newborn complications in subsequent pregnancies.

- Increase community awareness about balanced protein energy diet and nutrition in women of reproductive age group.
- Provision of balanced energy protein supplementation in undernourished pregnant and lactating women (through ICDS and any other state run/ supported scheme for nutrition supplementation).
- Screen for anemia (by checking hemoglobin levels) and undernutrition(by calculating Body Mass Index)in women of reproductive age groups.
- Make provision for iron folic supplementation for women in age groups 15-45
  years through community based service delivery platforms, under National Iron
  Plus Initiative, which ensures provision of IFA supplements and therapeutic
  management of mild, moderate and severe anemia.
- Iodine supplementation: Universal Salt Iodization.

# Continuum of Care across life cycle and different levels of health system

	Reproductive & adolescent health care	Pregnancy care & childbirth	Newborn and child care
Family and community	<ul> <li>Weekly IFA supplementation</li> <li>Information and counselling on sexual reproductive health and family planning</li> <li>Community based promotion and delivery of contraceptives</li> <li>Menstrual hygiene</li> </ul>	<ul> <li>Counselling and preparation for newborn care, breast feeding, birth preparedness</li> <li>Demand generation for pregnancy care and institutional delivery (JSY, JSSK)</li> </ul>	<ul> <li>Home-based newborn care and prompt referral (HBNC scheme)</li> <li>Antibiotic for suspected case of newborn sepsis and referral</li> <li>Care for premature and low birth weight babies</li> <li>Infant and Young Child Feeding (IYCF), including exclusive breast feeding and complementary feeding</li> <li>Hand washing and hygiene practices</li> <li>Child health screening and early intervention services (0–18 years)</li> <li>Use of ORS and Zinc in case of diarrhoea, and antibiotic in pneumonia</li> <li>Early childhood development</li> </ul>
Outreach/sub center	<ul> <li>Family planning (including IUCD insertion, OCP and condoms)</li> <li>Prevention and management of STIs</li> <li>Peri-conception folic acid supplementation</li> <li>Screening and tracking of malnutrition &amp; anaemia</li> </ul>	<ul> <li>Full antenatal care package (4 ANC, TT2/Booster/100 IFA &amp; anemia tracking/monitoring of weight gained during pregnancy, supplementary nutrition, balanced protein energy nutrition counseling</li> <li>Screening for preeclampsia</li> <li>Screening for HIV / PPTCT</li> <li>Antenatal Per-abdominal examination, assessment of foetal wellbeing</li> <li>Counselling for birth preparedness, Institutional delivery and breastfeeding, family planning</li> </ul>	<ul> <li>First level assessment and care for newborn and childhood illnesses and nutrition</li> <li>Immunization</li> <li>Micro-nutrient supplementation (Vit. A, IFA)</li> <li>Deworming</li> </ul>

	Reproductive & adolescent health care	Pregnancy care & childbirth	Newborn and child care			
Clinical	<ul> <li>Comprehensive abortion care</li> <li>RTI/STI case management</li> <li>Postpartum IUCD and sterilisation; interval IUCD procedures</li> <li>Adolescent friendly reproductive &amp; sexual health services</li> </ul>	<ul> <li>Skilled obstetric care including 5 cleans, partograph, AMTSL and immediate newborn care (Asphyxia, suction/resuscitation, cord care Temperature management, early initiation of breast feeding</li> <li>Emergency obstetric care (corticosteroids for threatened premature labour; antibiotics for PROM, MgSulfate for pre-eclampsia, PPH management)</li> <li>Preventing Parent to Child Transmission (PPTCT) of HIV</li> <li>Postpartum sterilisation</li> </ul>	<ul> <li>Essential newborn care including thermal care, cord care, expressed breastfeeding for premature and low birth weight babies</li> <li>Full supportive care of sick newborn (SNCU, NBSU): management of neonatal sepsis, premature and low birth weight babies</li> <li>Facility-based care of childhood illnesses (IMNCI), including diarrhoea (ORS-Zinc) and pneumonia management</li> <li>Immunization</li> <li>Micronutrient supplementation (Vit. A, iron folic acid)</li> <li>Care of children with severe acute malnutrition (at Nutrition Rehabilitation Centres)</li> </ul>			
	Intersectoral: Water, sanitation, hygiene, nutrition, education, empowerment					