



MATERNAL AND CHILD HEALTH

INTRODUCTION: Maternal and Child Health (MCH) care is the health care service provided to mothers and children. The targets for MCH are all women in their reproductive age-group, i.e., 15 - 49 years of age and 0-5 years children. Mothers and children make up over two-thirds of the whole population. Maternal mortality is an adverse outcome of many pregnancies. Miscarriage, induced abortion and other factors, are the causes for over 40 percent of the pregnancies in our country resulting in complications, illnesses, or permanent disability for the mother and/or child. About 80 percent of maternal deaths are the result of obstetric complications of the pregnant state (pregnancy, labour, and puerperium) from intervention, omissions, incorrect treatment, or from a chain of events caused by any of the above. More than 7 million newborn deaths are believed to result from maternal health problems and their mismanagement. Majority of perinatal deaths are associated with (maternal) complications, poor management techniques during labour and delivery, poor health and nutritional status of mother before and during pregnancy.

Ill-timed unwanted pregnancies carry high risks of morbidity and mortality as well as social and economic costs, particularly to the adolescent mother. Moreover, many unwanted pregnancies end in unsafe abortion. Poor maternal health hurts women's productivity, their families' welfare and socio-economic development. Nutritional problems are severe among pregnant mothers, and 60 to 70 percent of pregnant women are estimated to be anaemic. Women with poor nutritional status are more likely to deliver low-birth -weight (LBW) infants.

Majority of pregnancies that end in maternal deaths also result in fetal or perinatal deaths. Among infants who survive the death of the mother, fewer than 10 percent live beyond their first birthday.

Each year in India there are 1.34 million deaths of children aged under five; 1.05 million infant deaths; and 0.748 million newborn deaths. The country accounts for more than a quarter (26 per cent) of the world's neo-natal deaths.

The above mentioned facts show how vital MCH care is for the health of mothers and children. MCH care is an issue that has to be addressed in terms of national productivity and future of the country.

ANTENATAL CARE



Registered with the Health Centre and ICDS in the first trimester



At least 4 Antenatal Check-ups, after Registration



BP and Urine Examination at each visit 3 Ultra Sound Examinations



Regular Weight Monitoring

Guidelines for Community Health Volunteers (CHVs)

Care of a woman (medical examination, nutrition, rest, emotional well being, precautions) during the period of pregnancy is Ante Natal Care

Early Registration of Pregnancy. Registration is to be done immediately on confirmation, but definitely before the 12th week of pregnancy and has the following components:

- a. A confirmatory pregnancy test
- b. Registration
- c. Issuance of Mother and Child Protection (MCP) card, both in public & private sector

Antenatal Checkups (ANCs): Four antenatal checkups are essential for a pregnant woman:

First ANC Check up – As soon as the period is missed or within first three months of missing the period.

Second - Between 4th – 6th month of pregnancy.

Third - Between 7th – 8th month of pregnancy.

Fourth Check up- in 9th month of pregnancy.

Note: Regular ANC visits protect both mother and baby from complications.

- Get your hemoglobin, blood pressure(BP), urine, weight and abdomen checked at every visit. Ensure that you receive Iron Folic acid (IFA) tablets and 3 Ultrasound examinations.
- Abdominal examination is important to assess foetal growth and its well- being.

Components of ANC:

- a. Haemoglobin estimation b. B.P. measurement c. Urine testing
- d. Weight monitoring (Weight Check-ups: (i) Weight gain of at least 10-12 Kg during pregnancy is needed. (ii) gain of 1 Kg per month required during last six months of the pregnancy).

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ANTENATAL CARE



Take 2 T.T. Injections(1) at pregnancy confirmed(2) after one month



Iron and Folic acid, Calcium and Zinc tablets one's a day for at least 3 months



HIV Screening / Testing

For CHVs

Mother and new born are susceptible to some problems which one should be aware

- a. Get two doses of T.T. injection at one month's interval
- b. Iron Folic acid (IFA) tablets During pregnancy 100 tablets of iron and folic acid will be given. (One tablet of IFA is to be taken daily, starting from the fourth month of pregnancy. If you are anaemic, you will be advised to take two IFA tablets daily, one tablet in the morning and one in the evening.)
- c. Taking one IFA tablet a day keeps anaemia away in mothers and ensures delivery of a healthy baby
- d. Updating the Mother and Child Protection (MCP) card after each service delivery
- e. Health counselling which includes awareness-generation regarding general hygiene, exercise, diet, rest, breast care and danger signs during pregnancy.
- f. HIV Screening / Testing is mandatory It helps to detect HIV in the early stage and prevent transmission of HIV/AIDS from mother to Child. (If mother is found HIV-Positive, CHVs have to refer her to nearest PPTCT/ICTC/ART centre for ARV medicines).

GENERAL ANTENATAL CARE:

Don't overuse of antibiotics during pregnancy. If it is necessary to take the advice of a doctor

Stop domestic violence against pregnant women.

Check asthma in pregnancy, if it found consult your doctor and take medication

Hospitalization and bed-rest for multiple pregnancy

Antenatal breastfeeding education for increasing breastfeeding duration.

PROPER CARE DURING PREGNANCY



Consume good food & ¼ extra from regular diet Special Nutritional Pack from ICDS





Take at least 2 Hrs of rest a day in addition to 8 Hrs of rest in the night



Need Family Support



Use only adequate iodised salt



Not to lift any weight in the third trimester



Ensuring Institutional Delivery

For CHVs

Maternal Nutrition. :

- a. Nutrition counselling to be anchored by CHV with support of AWW / members of Village Health, Sanitation and Nutrition Committee (VHSNC) and particularly with help of ANM/ ASHA/SHGs/VOs. Focus will be on diet intake in terms of quantity and quality with proteins and iron-rich foods, and on consumption of IFA tablets
- b. Diet supplementation at Anganwadi Center (AWC)
- Need to eat one extra meal a day during pregnancy

Iron		Green leafy vegetables, wholegrains, cereals, dry fruits, nuts,meat, jaggery.
Calcium	MILK	Milk, milk products, sesameseeds, almonds, soya milk,turnip, egg.
Vitamins		Orange and dark-greenvegetables, citrus fruits, apple,tomato, amla, vegetables, meat,fish, egg, sunlight, milk andmilk products, soya products/ seasonal fruits.
Proteins		Paneer, milk and other milkproducts, combined grains,seeds, nuts, egg, meat, poultry,soya beans.
Fats		Butter, ghee, oils, nuts.

A well-balanced diet consisting of a variety of food helps in the adequate growth of the baby and prevents anaemia

DANGER SIGNS DURING PREGNANCY



Bleeding during pregnancy, excessive bleeding during delivery or after delivery



Severe anemia with or without breathlessness



High fever during pregnancy or within one month of delivery



Headache, blurring of vision, fits, swelling in legs and labour pains



Labour pains for more than 12 hrs



Rupture of water bag without labour pain

IF YOU FIND ANY OF THE ABOVE SYMPTOMS, TAKE THE PREGNANT WOMAN IMMEDIATELY TO HOSPITAL

If any complication	OR CHVS ns occur, seek help immediately Doctor in case of the following:
 Burning micturition. High-grade fever or any medical illness Vaginal bleeding. Excessive nausea and vomiting. Leaking per vaginum before onset of labour. High blood pressure detected during ANC. Fainting and/or pain in abdomen. Vaginal bleeding in advanced pregnancy. Decreased or no foetal movements. 	 Palpitations, shortness of breath. Swelling all over body and/or blurring of vision. High blood pressure detected during ANC. Fits. Labour pains or leaking before 9 month of pregnancy. Leakage for more than 12 hours without labour pains. Foul smelling leaking with or without fever. Labour pains more than 12 hours. Continuous abdominal pain.

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Seek timely help for management of complications – it saves your life as well as the baby's

Postpartum Care

- Post natal period is the period of six weeks immediately after delivery, which is important for the mother and the new born
- In this period, the changes, which have taken place in the organs/system during pregnancy in the woman come back to normal, except breasts
- It is important to stay in a health facility where you deliver for a minimum of 48 hours as most complications in mother and baby occur then.
- You and your baby should be seen by a health worker on the day of delivery, and on 3rd day, 7th day and 6 weeks after delivery at home.

- Baby should get vaccination for zero dose Polio, Hepatitis
 B (if recommended under routine immunisation) and BCG on the first day.
- You will also receive counselling on cord care, keeping the baby warm, respiratory infections, loose motions, nutrition and family planning during your stay.
- Take extra calories & fluids to fulfil requirements of breastfeeding.
- Take adequate rest.
- Take immediate medical help, if any complication occurs in you or your baby.



TAKE HOME MESSAGES

ANC/PNC CARE

- Majority of the Maternal deaths and child deaths are preventable with (Early registration / regular check-up and / proper delivery planning)
- At least 4 Antenatal Check-Ups after registration and 6 Post Partum Care/ Post Natal Care checkups after delivery are essential for women.
- ANC Visit ensures BP, Urine, Weight check-up, Ultra sound, TT Injection, Iron and Folic Tablets and HIV screening
- PNC Visit helps to avoid complications for mother and new born, ensure Nutrition counselling, Information on colostrums and vaccination to baby
- Care during pregnancy Take nutritious food, rest, Not to lift heavy weights and Plan for delivery(Money/Material/Transport and Nearest Facility with blood bank)
- Keep aware of 8 danger signs and report to the qualified service provider to avoid complications.(mention 8 signs)
- Advice and support for birth spacing/family planning
- Educate mother on recognition of new born danger signs and what to do, good cord care practices
- Promote birth registration and timely vaccination

CHILD HEALTH

Infant Feeding



Keep the child warm Give special care if baby weighs less than 2.5 Kgs at birth



Initiate breast-feeding (colostrum) within ½ hr of - birth for Normal Delivery and 4 hrs for Cesarean section. Do not bathe the child for first 48 hrs



Exclusive breast-feeding for 6 months. Do not give any other food or drinks including water Breast-feed on demand, day and night.



CHILD MCP Card



Weaning food after 6 months

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Monitor height and weight



Wash your breast, your own and baby's hands.

NEWBORN CARE

- 1. Keep the baby warm. (keep it properly covered according to weather conditions). Head and feet should be kept covered. Take the infant into your lap which would improve intimacy with you (Promote Kangaroo Mother care)
- 2. Initiate breast-feeding within ½ hr of Birth for Normal Delivery and 4 Hrs for Cesarean (Institutional delivery). Breast milk of first day (colostrum) is very vital for the newborn because it is nutritious and the antibodies in it protect the baby against common infections like measles.
- 3. Do not bathe the child for first 48 Hrs.
- 4. Give special care if child weighs less than 2.5 Kgs at birth
- 5. The baby to discharge stools at least once in first 24 hours and urine at least once in first 48 hours.
- 6. Burping should be done after every feed.
- 7. Cord stump should be kept clean and dry. <u>Apply nothing on the cord</u> <u>stump.</u>
- 8. Exclusive breast-feeding for 6 Months. Do not give any other food or drink including water. Breast feed on demand, day and night. Exclusive breastfeeding decreases the chances of diarrhoea and upper respiratory tract infections in the newborn; it decreases chances of pregnancy during that period.
- 9. Girls and boys need equal amount of food.
- 10. Wash your breast, your own and baby's hands with soap and water every time before feeding.
- 11. Use ORS in case of diarrhea.
- 12. Regular monitoring of baby growth in PHC/ICDS. If growth is not observed, refer to Health Care Provider

Cord Care:

- Keeping the cord dry and clean
- Keeping the cord uncovered

Infection prevention :

• hand washing, keep people with flu away

Weaning should be started at the 4th month:

- The aim is to expose the baby to a large variety of foods/ tastes.
- By the 6th month, your baby will generally accept foods 2 3 times/day.
- Foods should be of thin-enough consistency (smooth puree) to allow baby to suck.

- Salt should be avoided or added sparingly to weaning food as the child may get used to salty foods.
- Sugar should be used sparingly as the baby may get used to sweet foods and refuse other foods later. May lead to excessive weight gain, (therefore unsweetened cereals/curds should be encouraged.).
- You can begin by mixing a teaspoon of one of the following foods with breast or formula milk:
- Non-wheat cereals such as baby rice
 - o Mashed or puréed fruit: soft fruits such as banana or avocado, or cooked fruit such as pear or apple
 - o Mashed or puréed cooked vegetables such as carrot, potato, sweet potato, parsnip or yam
 - You can also try finger-sized pieces of soft/cooked fruit or cooked vegetables. The best finger foods are those that can be cut into pieces that are big enough for your baby to hold in its fist, and stick out of the top of it. Pieces about the size of your own finger work well.
- Shallow spoon should be used to allow the baby to suck.
- Food should not be forced on the baby

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Weaning too soon (before 4 months) can increase the risk of infections and allergies, as your baby's digestive system and kidneys are still developing. It is also important that weaning is not delayed beyond 6 months. This is because stores of essential nutrients such as iron need to be replenished. Your baby's increased requirements of these nutrients cannot be provided by milk alone. Also, delays in the introduction of new flavours and textures at this stage may make it more difficult for your baby to accept new foods.

Getting started : Place a small amount on a soft-tipped spoon and offer this to your baby before, in the middle of, or after, his or her usual milk feed. Wait for the baby to open the mouth first when food is offered and initially don't to give more than one or two spoonfuls. Remember that first foods will taste and feel different from breast or formula milk, so don't worry if your baby spits out the first few spoonfuls!

• Alternatively, your baby may like to hold the spoon, or pick up the food with the fingers and feed themselves.

What to avoid when weaning: Salt, sugar, honey, shark, marlin and swordfish, raw or undercooked eggs, and raw shellfish.

Malnourished children should be referred to ICDS for double nutritional food packets.

DANGER SIGNS IN CHILDREN



Weak sucking or refuses to breastfeed Baby unable to cry/ difficult breathing



Baby with jaundice



Yellow palms and soles Fever or cold to touch



Birth defects

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Blood in stools Convulsions, lethargic or unconscious



Seek doctor's advice in case of difficulty

For CHVs

Danger Signs in Newborn

Following conditions need instant attention of Doctor / ANM				
Difficulty in breathing	Fever			
Inability to suck	Diarrhoea			
Inability to pass urine and stools	Dull and lethargic baby			
Umbilical stump is red or has pus	Seizure			
More than 10 pustules overbody or one large boil	Eyes are red or infected			
Jaundice	Any birth defects are seen			

Seek advice of Doctor/ANM immediately if any complication is seen. Timely treatment saves life of the baby.

DEHYDRATION			PNEUMONIA		
SIGNS	CLASSIFY AS	IDENTIFY AND REFER	SIGNS	CLASSIFY AS	IDENTIFY AND REFERRAL
 Two of the following signs Lethargic or unconscious. Not able to drink or drinking poorly. Skin pinch goes back very slowly 	SEVERE DEHYDRATION	 If child has no other severe classifications: Give ORS for severe dehydration If child also has another severe classification: Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding. If child is 2 years or older and if there is cholera in your area, refer to hospital. 	 Any general danger sign or Indrawing of Chest Stridor in calm child 	SEVERE PNEUMONIA OR VERY SEVERE DISEASE	 Refer URGENTLY to hospital.
 Two of the following signs: Restless, Irritable Sunken eyes Drinks eagerly, thirsty. Skin pinch goes back slowly 	moderate DEHYDRATION	If child also has a severe classification: • Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way • Advise the mother to continue breastfeeding. • Advise mother when to return immediately. • Follow- up in 5 days if not improving.	Fast breathing	PNEUMONIA	 Soothe the throat and relieve the cough with a safe remedy. Advise mother when to return immediately. Follow-up in 2 days.
Not enough signs to classify as moderate or severe dehydration	NO DEHYDRATION	 Give ORS and food to treat diarrhoea at home Advise mother when to return immediately Follow-up in 5 days if not improving 	No signs of pneumonia o very severe disease	No pneumo- nia: couch or cold	 If coughing more than 30 days, refer for assessment. Soothe the throat and relieve the cough with a safe remedy. Advise mother when to return immediately. Follow-up in 5 days if not improving.



For CHVs

Immunization

Parents/CHVs should ensure to complete immunization of the baby as follows:

Infants are particularly vulnerable to infectious diseases; that is why it is critical to protect them through immunization. Each day, nearly 42,434 babies are born in India who will need to be immunized for preventable diseases. Immunization helps prevent the spread of disease and protect infants and toddlers against dangerous complications.

Immunization is one of the most important things parents can do to protect their children's health. Today we can protect children from serious diseases. Failure to vaccinate may mean putting children at risk for serious diseases.

Schedule	Immunization		
At birth	BCG, OPV - 0 dose, Hepatitis B - 0 dose*		
6 weeks	BCG (if not given at birth) DPT - 1st dose OPV - 1st dose Hepatitis B - 1st dose*		
10 weeks	eks DPT - 2nd dose OPV - 2nd dose Hepatitis - 2nd dose*		
14 weeks	14 weeks DPT - 3rd dose OPV - 3rd dose Hepatitis - 3rd dose*		
9 months	Measles, Vit-A - 1st dose		
16-24 months	DPT booster, MR OPV boosters Vit-A - 2nd dose		
2 to 5 years	Vit-A - 3rd to 9th doses at the interval of 6 months. (total of 7 doses)		
5 years	ears DPT booster		
10 years	T.T. booster		
16 years	T.T. booster		

* If recommended under Routine Immunisation

Note: Follow immunization schedule to protect babies from life-threatening and crippling diseases

ORAL REHYDRATION SOLUTION (ORS)

How to prepare ORS



How to prepare ORS at Home



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When we need Oral Rehydration Solution (ORS): In case of severe diarrhea or vomiting, the child will lose fluids, which can lead to dehydration. If your child has any of these symptoms - increased thirst, dry mouth, sleepiness, less frequent urination, dark yellow urine, headache, dry skin, and dizziness. If your child experiences any of these symptoms, **call your doctor**. You'll probably be told to feed the child ORS if the symptoms aren't severe. ORS (oral rehydration salts) is a special combination of dry salts that is mixed with safe water. It can help replace the fluids lost due to diarrhoea.

ORS is very commonly recommended for children with diarrhoea, and pregnant women with morning sickness. It is also appropriate for other people with moderate dehydration. ORS drinks are designed to replace lost salt content and improve absorption of water by the body. At the first signs of dehydration, you should take ORS. This mainly helps by re-hydrating the body. It is easier to prevent dehydration early on by drinking ORS drinks than to cure it. **Severe dehydration will require hospitalization and intravenous fluid administration. But, if caught early, ORS can be prepared at home to treat mild dehydration.*

Sip ORS drinks throughout the day. You can drink it along with eating meals. If you vomit, take a break from drinking ORS. Wait for 10 minutes, then drink the solution again. If you're nursing and treating a baby, you must continue breast-feeding while treating with ORS. You can keep using ORS until diarrhea has stopped. The following tells you how much ORS you must give:

- o Babies and toddlers: Give 0.5 liter of ORS every 24 hours. If diarrhea is severe, go to the clinic as soon as you can. Give your child more oral rehydration solution (ORS) or breast milk on the way.
- o Give 1 liter of ORS each day to children who have vomiting or diarrhea (Mothers can give newborns ORS slowly by the spoonful in between breast milk feedings. The newborn should drink about 5 to 10 spoonfuls of ORS every time he or she passes a watery stool.
- o Give 3 liters of ORS each day to adults who have vomiting or diarrhea.
- o **OR** fruit juice/ coconut water/ starch (rice water) can be used as ORS at home.

10 Things you should know about rehydrating a baby

- Wash your hands with soap and water before preparing solution.
- Prepare a solution, in a clean pot, by mixing Six (6) level teaspoons of sugar and Half (1/2) level teaspoon of Salt
 or 1 packet of Oral Rehydration Salts (ORS) 20.5 grams mix with One litre of clean drinking or boiled water (after cooled) Stir the mixture till all the contents dissolve.
- Wash yours and the baby's hands with soap and water before feeding solution.
- Give the sick baby as much of solution as it needs, in small amounts frequently.
- Give the baby other fluids alternately such as breast milk and juices.
- Continue to give solids if child is four months or older.
- If the child still needs ORS after 24 hours, make a fresh solution.
- ORS does not stop diarrhoea. It prevents the body from drying up. The diarrhoea will stop by itself.
- If child vomits, wait ten minutes and give it ORS again. Usually vomiting will stop.
- If diarrhoea increases and /or vomiting persists, take the child over to a health clinic.



GROWTH MONITORING

- It means keeping a regular track of the growth and development of the child with the help of key nutrition indicators related to their age
- A useful tool in many ways & enables an AWW / ANM to:
- Detect early growth faltering & Prevent under nutrition
- Identify underweight children who need special care & feeding at home
- Identify severely underweight children who need special care & feeding at home & referral
- Identify causes of weight loss or lack of growth & take corrective & timely action
- Educate, counsel & support mothers & families for optimal nutrition, health care & development of their children
- Tools required for growth monitoring: Weighing scales, MCP cards & growth monitoring chart register

TAKE HOME MESSAGES



TAKE HOME MESSAGES

NEW BORN CARE

- Promote Kangaroo care to keep new born warm, if the baby is less than 2.5
- Initiate breast feeding within ½ an hour for normal delivery and 48 hrs for Csection
- Do not bathe child for first 48 hrs
- Exclusive breastfeed for 6 months weaning should start from 4th month
- Weaning before 4th month increase risk of allergies and infections to child
- Shall spoon to be used to allow the baby to suck food easily
- Ensure all Immunization doses right from birth to 16 years on appropriate time
- ORS is recommended for children with diarrhoea and pregnant women with morning sickness
- Early detection of dehydration can be treated at home with ORS, severe dehydration will require hospitalization