# MATERNAL AND CHILD HEALTH

PAPER 2 BA I HONS

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## **Definition:**

Maternal and child health (MCH) refer to a package of comprehensive health care services which are developed to meet promotive, preventive, curative, rehabilitative needs of pregnant women before, during and after delivery and of infants and pre-school children from birth to five years.

# **Objective of MCH**

- \* Reduce maternal mortality and morbidity.
- \* Reduce per natal and neonatal mortality and morbidity.
- \* Regulate fertility so as to have wanted and healthy children when desired.
- Provide basic maternal and child health care to all mother and children.
- Promote and protect health of mothers.
- Promote and protect physical growth and psycho-social development of children.

## **Components of MCH**

- ☐ Maternal Health
- ☐ Child Health
- ☐ Family planning

#### Maternal health care:

Maternal health care include care of women during pregnancy, child birth and after child birth. It also includes treatment of child-less couples.

#### **Maternal risk Factor:**

Maternal risk is defined as the probability of dying or experiencing serious injury as a result of pregnancy or child birth.

#### 1 Young primi i.e. below 19 years:

There is grave risk to both mother and the child because the teenage mother: Is still growing and is not adequately equipped to cope the pregnancy and labour & is not psychologically prepared for the responsibilities of marriage.

- **2 Elderly primi i.e. 30 years and over:** having babies too late in life, leads to increased risk of complications in pregnancy and labour.
- **3.Having too many babies:-** When the mother bears more than tree babies, she is at high risk of developing problems due to repeated pregnancies and labour. This is due to weakening of tissues, depletion of nutrients and over all poor physical health of the mother.

4. Having too close pregnancies: When the interval between the two pregnancies is less than three years, it can create problems during the pregnancy. It is because mother did not get enough time to recover completely and fully from the stress and strain of the previous pregnancy.

#### 5. Other conditions of mothers: These include:

- Mothers with short height i.e. less than 145 cm, having a small and inadequate pelvis.
- ☐ Mothers having less than 40kg of weight: usually under weight mothers are malnourished and anemic and have high risk of developing complications pregnancy.
- □ Mothers having more than 70kg of weight have difficulty during child-birth.
- ☐ Mothers having malnutrition and anemia. These mothers are weak and find it difficult to tolerate the stress and strain of pregnancy and child birth.
- **6.Associated medical conditions:** These include; heart disease, high blood pressure, kidney disease, tuberculosis, diabetes, repeated attacks of malaria, hepatic disorder etc.

## **Maternal healthcare component**

Maternal healthcare component include :-

- Antenatal care
- Natal care
- Postnatal care

#### Antenatal care

Antenatal care is care during pregnancy.

OBJECTIVES OF ANTINATAL CARE:-

- To promote, protect and maintain health of mother during pregnancy.
- To ensure the birth of mature and healthy baby.
- To identify high risk mothers and give them appropriate attention to prevent complication.
- To prepare the mother for confinement.
- To prepare the mother to care for her baby.

#### Essential Antenatal care services

- 1)registration of pregnant women:- the mother must be registered within 12 weeks of pregnancy.
- 2) Antenatal visit:-ideally the mother should attend the antenatal clinic once a month during the first 7 months, twice a month during the second month, and thereafter, once a week, if everything is normal.
- 3) care during first contact:-
- -taking health history.
- -physical examination.
- -General medical examination.
- -Obstetrical examination.
- -Laboratory examination
- 4) Immunization against Tetanus:-2doses of tetanus toxoid should be given. 1st dose at 16-20 weeks and 2nd dose at 20-24 weeks of pregnancy.
- 5 Iron and folic acid tablet:-mother is given one tablet of iron and folic acid twice a day for at least 100days to prevent anemia in mother & to promote proper growth of fetus.
- 6 Health education during pregnancy: Diet during pregnancy: A well balanced diet is required during pregnancy for the proper growth and development of fetus & for optimum health of mother.
- A pregnant women should be educated regarding personal hygiene.

- Smoking and drinking:-Mother should be advised to avoid smoking and drinking alcohol. It lead to low birth weight and retardation.
- -Drugs:- the mother should be advised not to take any medicine unless it is prescribed by the Doctor.
- -Radiation:-the mother should be advised to avoid abdominal X-ray it predisposes child to the risk of leukemia and other cancers
- -protection from infections and illnesses:-An expected mother should be instructed to protect herself from the risk of infection especially measles & syphilis because these infection can cause spontaneous abortion, malformation, mental retardation, still birth etc.
- Sexual activities:-Avoid coitus during the first & last trimester.1st trimester it increases the risk of abortion & last trimester it predisposes to infection
- - Travel: Avoid travel during first and last trimester
- -Reporting of untoward sign and symptoms:-the mother should be instructed to report to health personal if there is unusual pain, bleeding from vagina, swelling in the feet, hand or face, headache, blurred vision, dizziness, high fever baby's movement not being felt.
- -Child care: the mother should be educated on various aspects of child care.
- -Follow up visits:-mother must be educated about the need for regular visit and proper care during pregnancy.

- 7) Preparing for confinement:-The preparation for safe delivery is very important. It should be done well in advance to avoid any type of difficulty or emergency which might occur at the time of delivery.
- 8) Psychological preparation of the mother: The expectant mother, especially the primary Para mother has fear and anxiety about child birth, its outcome, complications etc. It is very important to discuss various aspects of pregnancy and delivery. This helps in overcoming their fears and anxieties.
- 9) Family planning:- when the mother is pregnant she is more receptive because she is experiencing the impact and burden of child birth. The mother should be educated and motivated for small family norm and spacing of children

### **Natal Care**

Natal care refers to care during confinement/delivery/ birth of a child.

- Objective:-
- The objectives of natal care:
- 1. To prevent infection,
- 2. Prevent injury to both mother and baby,
- 3. To detect and deal with any complications e.g. ante partum and post-partum hemorrhage, prolonged labour, Malpresentation, prolapse cord etc.,
- 4. To resuscitate the baby and to provide immediate care to baby.

# **Care during Natal**

- Preparation of place and surroundings of confinement.
- Preparation of equipment and supplies required during delivery.
- Physical and psychological preparation of the mother.
- Examination of mother's physical condition abdominal palpation, monitoring fetal heart sound, observation of vital signs, labour pain and uterine extraction etc.
- Conducting delivery, watchful about any problem and helping mother in taking pains.
- Referral of mother immediately in case of any such problem.
- Giving immediate care to mother and baby after delivery.
- Giving instruction to the mother and family members.
- Maintaining record and reporting of birth to authority.

## **Post Natal Care**

It refer to care which is rendered to both mother and the baby after delivery. objectives:-

- > To restore, promote and maintain health of mother and baby.
- > To promote breast feeding.
- To prevent complications.
- To establish good nutrition's of the baby.
- > To prevent infection and identify any health problem/disorder in the baby.
- > To support and strengthen the parents confidence and their role within their family and cultural environment.
- > To motivate for planed and small family norms.
- > To educate mother and family on various aspects of mother and child care.

## Immediate care of the new born baby

Clearing of airway:-Immediately after birth the baby should cry and breathe. In order to promote breathing the airway needs to be cleared of mucus and any other secretions.

Maintenance of baby temperature:-The new born baby has the risk of hypothermia because of immature heat regulating system. The risk of hypothermia is greatly reduced if the new born baby is immediately and carefully dried with towel or clean cloth, wrapped in a clean cloth, kept close to the mother for skin to skin contact and breast fed as soon as possible preferably within an hour of birth.

Care of the eyes:-The care of eyes include, wiping of each eye from inside to out side with boil cooled swabs, one for each eye as the child is born before he opens the eyes.

Care of the umbilical:- the cord should be legated in two places, 6cms and 9cms from the umbilicus and cut in between with sterilized scissors/blade and tied with sterilized cord tie to prevent tetanus. The cord should be kept dry. Special instructions should be given to the mother and family not apply anything e.g. any oil, ash, or cow dung on the cord. Such customs increase the danger of tetanus infection.

**Apgar scoring:-** Apgar scoring is a device to monitor physical condition of the baby. It is determined by immediate observation of the heart rate, respiration, muscles tone, reflex response and colour of the infant. The observation is done at 1 minute and again at 5 minutes after birth.

Care of the skin:- The care of the skin is very important to protect the child from any infection and keep the baby clean and warm. The vernix on the baby's body is protective in nature. Therefore if culturally acceptable, the bathing soon after can be postponed for 12-24 hours.

**Physical examination:**- the physical examination of the baby should be done by health worker assisting mother in delivery soon after the birth to identify any birth injury, malformations and general health condition of the baby.

**Breast feeding:-** The breast feeding should be started as soon as possible preferably within an hour of the birth.

#### Immediate care of the mother

After the baby is born and placenta is delivery, it is very important that mother is made comfortable and watched for any complication.

- The fundus is palpated, clots are expressed, and fundal height is measured.
- The perineum is inspected for any laceration or tear, perineal care is given, napkin fixed.
- ullet Mother is made comfortable by removing the soiled linen, thorough cleaning and by keeping her warm ulletct.
- Hot drink is given thereafter.
- The vital signs are recorded.

The following instructions are given to mother and family:-

**Regarding mother:-** To rest, to watch for bleeding, to maintain perineal hygiene, to take normal diet, to report incase there is any problem.

**Regarding baby:-** To let the baby sleep and handle as little as possible, watch for bleeding from cord, to breast feed the child, not to give any thing else even the water, not to apply anything on the cord, to report, in case there is any problem.

## Post Natal visit Care

It is very important to give regular and frequent visit to post-natal mother when the delivery is conducted in home.

The health worker is expected to follow the under mentioned schedule:-

- 1<sub>st</sub> visit within 24 hours (on the 2<sub>nd</sub> of delivery was conducted by her )
- 2nd visit 5th or 6th day
- 3rd visit 10th day
- 4th visit 2nd to 4th week
- 5th visit -6th to 8th week (the visit is done in the clinic).

During these visits, both mother and baby are given care to meet their health needs.

## Care of Mother

During each visit the following actions are generally performed.

- > General observation of the mother and the surrounding to assess overall health status of mother, cleanliness etc.
- Observation temperature, pulse and respiration.
- Examination of breast, involutions of uterus, lochia, perineum for any kind of abnormality.
- > Observation of any abnormality in the abdomen likes painful and hard abdomen.

#### It should be seen that the mother:

- Takes adequate nutritious diet.
- Takes sufficient rest and sleep.
- Keeps herself clean and protects from infections
- Breast feeds her baby.

# Care of new born baby

During each postnatal visit the following actions are generally performed to take care of the newborn baby.

- ☐ General observations of the baby and how is he/she.
- □ Observation of temperature, heart rate and respiration.
- □ Observation of eyes for any kind of abnormality such as watering of eyes or any discharge etc.
- Observation of skin for change in colour.
- Observation of cord stump.
- ☐ The weight is checked and recorded.
- □ Observation of any sign of abnormality of abdomen such as distension, tenderness etc.
- It should be seen that the baby is.
  - Adequately clothed, kept clean.
  - Breast fed on demand.
  - Allowed to sleep and rest most of the time and handled only when necessary.
  - Not given bottle feeds.
- Mother should be enquired about any problem regarding baby

## Child health care

Child health care refer to care of children from conception to birth till the age of five. **OBJECTIVE:-**

- Every child receives adequate care and proper nourishment.
- Every child is immunized and protected from diseases.
- To monitor growth and development.
- To identify ailments and treated without delay.
- To educate the mother and family members to give proper care to their children.
- Personal care of children:- every child must get proper personal care to protect the child from any kind
  of injury. It include maintenance of personal hygiene, maintenance of body temperature, rest and sleep,
  exercise, training of child regarding healthy habits etc.

#### Feeding of the child:-adequate and proper feeding is very important.

Breast feeding:-For the first few month(6 month)of life, breast feeding is best food which is made available by nature for healthy growth and development.

**Supplementary food:**-for the first six month, breast feed alone is sufficient for normal growth and development. Beyond six month baby require additional food to meet body requirements. therefore it is necessary to introduce various other food items suitable for the age of the child. These are called supplementary food.

#### MONITORING OF GROWTH AND DEVELOPMENT:

It is very important to monitor growth and development of children regularly. It indicates health and nutrition status of the child. It helps in identification of any deviation from normal. Ideally weight is measured and recorded once in a month up to one year, once in two months up to two years and once in three months up to five years.

Immunization of children: The child needs to be protected from six infectious and vaccine preventable diseases. There diseases include tuberculosis, tetanus, diphtheria, whooping cough, measles and poliomyelitis.

It is very important that health workers must educate all the mothers about the importance of immunization and must explain them about the immunization schedule so that they will bring the child for immunization according to schedule.

Safety and security of children:-Safety and security can be ensured by providing clean, safe and comfortable physical environment. The water, milk, and food supply must be free from infectious agents and/or toxins. Disease carrying insects must be controlled. Accidents hazards need to be removed or controlled in order to prevent accidents such as falls, burns, poisoning, drowning, aspiration of foreign objects, cuts and abrasions etc.

Early recognition and treatment of ailments:-There are number of ailments which can occur in children from one month to five years and cause morbidity and mortality. The most common ailments includes diarrheal diseases, acute respiratory infection, vaccine preventable diseases, nutritional deficiency problems. It is very important to recognize these ailments as early as possible so that timely treatment and care can be taken at the family and health center level.

# The package of service

#### For the mothers

- TT immunization
- Prevention and treatment of anemia
- Antenatal care and early identification of maternal complication
- Deliveries by trained personnel
- Promotion of institutional deliveries
- Management of obstetric emergencies
- Birth spacing

#### For the children

- Essential newborn care
- Exclusive breast feeding and weaning
- Immunization
- Appropriate management of diarrhea
- Appropriate management of ARI
- Vitamin A prophylaxis
- Treatment of anemia

# For eligible couples

- Prevention of pregnancy
- Safe abortion

#### RTI/STD

Prevention and treatment of reproductive track infection and sexually transmitted disease.

# **Delivery of MCH services**

The MCH services are rendered to both urban and rural area RURAL AREA:-

Village health post:-village health post is at the village level. It is manned by village health guide and trained dai. Village health guide is trained in primary health care for a period of 3 month to render simple mother -child and family planning services. The dais are trained for one month to provide safe hygienically services during antenatal, natal and postnatal period. they can also provide family planning services.

Sub center level:-sub center is manned by multipurpose health worker (male & female). The maternal and child health function carried out at sub center level include:-

- contacting eligible couples and motivating for small family norms.
- Registration of all pregnant women.
- providing essential antenatal & postnatal care
- immunization of mother and children.
- Nutrition & health education.
- ensure safe delivery through trained birth attendant.

## Primary health centre level:- MCH & Family planning services rendered from PHC are:-

- > It rendered all those services which are rendered from sub Centre.
- > Planning, organizing and implementing MCH prog. & services.
- Coordinating the work of all sub Centre's.
- > Collecting & compiling performance reports of MCH activities from sub-centres.
- > Ensuring intersect oral coordination.
- Training and continuing education prog. Of maternal and child health teams.
- Community Health Centers:-The Centre is manned by four specialists and 21 health personnel (including 7 nurse Midwives) and other staff. It serves first referral unit & provide specialists services for mother and children.

#### **Urban** areas

In urban areas the MCH services are available through:-

- District Family welfare units/centres.
- District and state level Hospital.
- Urban MCH centers, clinics, Maternity homes, Hospitals.
- > Urban Family welfare centers. The non-government organization for MCH are:-
- Nursing homes and Hospital.
- Voluntary organizations & Charitable Trust.
- Private practitioners of all systems.

# THANK YOU