Maternal and Child Health for Tarang Members (AYUSH)

Participant's Manual
2008

Uttar Pradesh Social Franchising Project

A project supported by USAID & SIFPSA. Implemented by HLFPPT

Preface

HLFPPT is an organization committed to work with various partners pioneering innovations for bettering health outcomes for the poor. Merrygold Health Network is one of such innovations in the field of Social Franchising.

Merrygold Health Network, aims towards achieving an objective of improving Maternal and Child Health through increased access to low cost – high quality healthcare services, for rural and urban working poor in Uttar Pradesh. In U.P. Social Franchising Project (supported by USAID and SIFPSA), HLFPPT as an implementing agency, will be establishing 70 fully franchised Merrygold Hospitals at district level, 700 partially franchised Merrysilver Clinics at block level and will be working with more than 10,000 Tarang partners (ASHAs, Chemists, Fare price shop owners, Tarang health committee members, Opinion leaders, Anganwadi workers, Depot holders) and AYUSH practitioners at the village level by 2010. Two model hospitals are already established in Kanpur and Agra focusing on maternal and child health care.

In our endeavour to make this a successful model, it was felt that training of AYUSH members will be a key component as AYUSH serve as the first point of contact for any health related problems among rural masses and enjoy a wide reach and credibility.

Equipped with the necessary skills, AYUSH can serves as a promoter and provider of maternal and child health services, healthcare products through social marketing and also establishes a strong referral network in his/her village by linking up the people with quality services in the government healthcare settings and Merrygold health network.

This manual on ***"Maternal and Child Health for Tarang Members (AYUSH) -2008"*** has been designed as a reference guide for AYUSH at the village or tehsil level. It has been pre-tested with AYUSH at Kanpur and Agra. The inputs and feedbacks from them and comments of review committee members from SIFPSA and ITAP, has given this manual the present shape.

We have taken great care to make this manual as comprehensive, unambiguous and relevant as possible and hope this would serve as a ready reckoner and enabling tool in skilling the AYUSH practitioners.

HLFPPT

Acknowledgement

In order to build the skills of AYUSH practitioners as promoters, providers and communicators of healthcare issues, especially meternal and child health issues in their villages at village levels, I present this Participant's Manual on ***"Maternal and Child Health for Tarang Members (AYUSH) -2008".*** This manual is the result of sincere intent, aspirations and hard work of all those who are an integral part of the Merrygold Health network.

I am grateful to Mr. G. Manoj, (CEO, HLFPPT) who has shown faith in my entire team to undertake the task of preparing this manual.

My sincere thanks to Mr. Rajeev Kapoor I.A.S. (Executive Director - SIFPSA & Mission Director - NRHM), Mr. S. Krishnaswamy (General Manager Private Sector - SIFPSA), Dr. M. K. Sinha (General Manager Public Sector – SIFPSA), Ms. Savita Chauhan (Dy. General Manager Private Sector - SIFPSA), Dr. Lovleen Johari (Senior Reproductive Health Advisor, USAID) and Ms. Shuvi Sharma (Manager - Social Marketing & Franchising, ITAP) for their support and encouragement for developing this manual.

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The manual has been pre tested with AYUSH practitioners at Kanpur and Agra. Efforts made by Mr. Ajay Goel, Mr. Shashi Sharma, Mr. I.B. Srivastava, Mr. N.K. Pandey from HLFPPT in identifying Tarang members and organizing trainings for them was commendable.

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About this Manual

This manual has been designed for Ayurveda, Yoga, Unani, Siddha and Homeopathy (AYUSH) doctors, practicing in the interiors of Uttar Pradesh .This Manual can provide insight on protocols and increase the technical knowledge of the AYUSH doctors. It can be used as a reference guide about protocols on Maternal Care &New Born Care and Family Planning.

The manual has been divided into three modules and further into units. The modules are –

1. Maternal Care
2. New Born Care
3. Family Planning

Case studies and examples have been incorporated in modules, wherever required for the better understanding of the participants.

MODULE 1

Maternal Care

About this Module

This module will increase the knowledge and skills of AYUSH doctors about the various protocols for maternal care. It consists of six units explaining about protocols during Antenatal, delivery and postnatal care.

Unit 1.1 Antenatal Care

Learning Objectives:

- Understand the importance of Antenatal care
- Learn history taking of pregnant women.

1.1.1 Introduction

Pregnancy is not a disease but every pregnancy is at risk. Ensure that Antenatal care (ANC) is used as an opportunity to detect and treat existing problems. Effective ANC can provide healthy mother and healthy baby as an outcome. However, you must realize that even with the most effective screening tools available, one can not predict which woman will develop complications related to pregnancy.

Table 1: Maternity care (for the births in the last 3 years) for UP from NFHS-3, (2005-06)

Indicators	UP			India		
	Total	Urban	Rural	Total	Urban	Rural
Mothers who had at least 3 antenatal care visits for their last birth (%)	26.3	40.9	22.6	50.7	73.8	42.8
Mother who consumed IFA for 90 days when they were pregnant with last child (%)	8.7	16.4	6.7	22.3	34.5	18.1
Births assisted by doctor/nurses/LHV/ANM/other health personnel (%)	29.2	50.5	23.8	48.3	75.2	39.1
Institutional births (%)	22.0	39.9	17.5	40.7	69.4	31.1
Mothers who received postnatal care from a doctor/nurses/LHV/ANM/other health personnel (%)within 2 days of delivery for their last births.	14.2	31.1	9.9	36.4	60.7	28.1

Every minute, at least one woman dies from complications related to pregnancy or child birth-that means 529,000 women die in a year. Women need not die .These deaths could be prevented if women have access to information and services for Antenatal care.15% of pregnancies and child birth needs emergency obstetric care because of risk that are difficult to predict.

(Source: WHO)

1.1.2 Objectives of Ante Natal Care

- To diagnose pregnancy during first visit (before 12 weeks) using urine pregnancy test kit (NISCHAY TEST KIT)
- To identify any complications during previous pregnancies that may have a bearing on the present one;
- To identify any medical or obstetric condition(s) that may complicate the present pregnancy.

1.1.3 Early registration/ First visit

The first visit or registration of a pregnant woman for ANC should take place as soon as the pregnancy is suspected. Ideally, first visit should take place in the first three months of pregnancy (first trimester). However, even if a woman comes late, she should be registered and given care according to the gestational age. Various community based functionaries like Accredited Social Health Activist (ASHA), Anganwadi worker (AWW), members of Mahila Mandals, Self–help groups should be encouraged to identify pregnant women in the community and motivate them for ante-natal care and subsequent institutional delivery.

Importance of early registration

- Assessment of the health status of the mother to assess base line information on blood pressure, weight etc.
- Help the woman to recall her LMP.
- Screen the complications early and manage them locally or to refer them to the appropriate institution for further management (L0/L1).
- Give first dose of Inj. Tetanus Toxoid (Inj. TT) (after 12 weeks of pregnancy).
- Provides plenty of time to counsel the woman and her family.
- To start Iron and Folic acid tablets at least for 100 days starting from 14-16 weeks of pregnancy.

1.1.4 Institutional requirements

- Instruments like stethoscope, sphygmomanometer, weighing scale, and inch-tape and preferably facility for Haemoglobin estimation, urine routine examination should be available.
- A cordial and friendly behavior.
- Listen to the woman's problems with attention, offer advice where ever possible or refer to the next level i.e.L-2/ L0/L1 hospital.
- Maintain privacy during conducting abdominal palpation.
- Record all details in the antenatal card and the antenatal register.

1.1.5 History taking

Ask for date of 1st day of the last menstrual period (LMP)

Case study

Lady named Sudha came to the clinic of Dr M Kushwaha . Dr Kushwaha asked the date of her last menstrual period. She was not able to recall the exact date. Dr Kushwaha helped her by asking when did she wash her hair (Pichlee baar baal kab dhoye) . She did not remember the exact date, but she recalled that it was on the day of Raskha bandhan The doctor can see the calendar and find out the date of her LMP as 15 of August, since Raksha bandhan was celebrated on that day.

Q-1 What is the Expected date of delivery?

Calculate the Expected Date of Delivery (EDD) = LMP+9months and 7 days.

Note

LMP refers to the first day of the woman's last menstrual period. Please ensure that the woman is not referring to the date of her first missed period. This mistake will give a wrong gestational age and EDD by 4 weeks.

If the woman is unable to remember the exact date, encourage her to remember some major event/festival, etc. which she might link with her LMP. A calendar of Indian system of months, dates and local festival might be helpful. If the exact date of LMP is not known and it is late in the pregnancy, ask for the date when the fetal movements were felt first. This is known as "Quickening" and is felt around 20 weeks of gestation. Also assess the fundal height to estimate the gestational age. Calculate the EDD based on these, and make a special note in the records of such cases.

If the woman has undergone a test to confirm her pregnancy, ask her the approximate date when it was done, and also after how many days of amenorrhea. This will also help in estimating her LMP.

Ask for regularity of the menstrual cycle and the duration of the menstrual cycle. The calculation of gestational age given above is based on the assumption that the menstrual cycle was regular and it was a 28-30 days' cycle. Age of the woman below 16 years or above 35 years have greater chances of having pregnancy related complications.

Order of the pregnancy: Primigravida and those who have had 4 or more pregnancies are at higher risk of developing complications during pregnancy and labour.

Birth interval of less than 2 years from the previous pregnancy or less than 3 months from the previous abortion increases the chances of anaemia in mother.

1.1.6 Antenatal card

Antenatal card should be duly filled in for every woman registered, and handed over to the pregnant woman with the instruction that she should bring the card for all her subsequent visits/check-ups and also carry it along at the time of delivery.

1.1.7 Number and timing of visits

Ensure that every woman makes at least 4 visits for ANC, including the first visit/registration. In cases of pregnancy without complications, these visits should be sufficient. Ideally, the first visit should be as soon as the pregnancy is suspected and second visit should be scheduled between 4^{th} and 6^{th} month (around 26 weeks). The third visit should be planned in the 8^{th} month (32 weeks) and the fourth visit in the 9^{th} month (36 weeks).

1.1.8 Possible symptoms

- Nausea and vomiting
- Heartburn
- Constipation
- Increased frequency of urination.

1.1.9 Danger Signs

- Fever
- Palpitations, easy fatigability and breathlessness at rest
- Generalized swelling of the body, puffiness of the face
- Passing smaller amounts of urine
- Vaginal discharge
- Vaginal bleeding
- Leaking of watery fluid per vaginam(P/V)
- Decreased or absent fetal movements

Ask for-

The total number of earlier pregnancies and deliveries

- Abortion(s)
- Premature birth(s), twins or multiple pregnancies
- Stillbirths(s) or neonatal loss
- Hypertensive disorder of pregnancies(if not know, ask for a history of convulsion in previous pregnancies)
- Prolonged labour
- Obstructed labour
- Malpresentation, such as breech delivery

- Ante partum hemorrhage
- Postpartum hemorrhage
- Assisted delivery (forceps application or vacuum extraction)
- Delivery by caesarean section
- Birth weight of previous baby
- Any surgery on the reproductive tract (e.g. uterine surgery, cone biopsy, uterine perforation during an MTP, etc.)
- Iso-immunization (Rh-ve) in the previous pregnancy (ask her for the history of any costly injection given to her within 72 hours of her previous delivery)
- History of drug intake or allergies or if she is taking any drug that might be harmful to the foetus.
- Any treatment taken or drugs taken for infertility. If yes, then these women have a higher chance of having twins and other multiple pregnancies.
- History of intake of habit-forming or harmful substances
- If she takes tobacco (chewing or smoking) and/or alcohol. If yes, she needs to be counseled to discontinue them during pregnancy, as they harm the developing foetus. Even after the delivery, the woman should be advised to continue to abstain from taking alcohol and tobacco because it may cause other complications such as addiction and/or cancer.

Refer the women to the nearest L-2 or L0/L1 if her obstetric history reveals any of the following

- previous stillbirth or neonatal loss
- history of three or more spontaneous consecutive abortions
- birth weight of the previous baby<2500gm
- birth weight of the previous baby >4500gm
- hospital admission for hypertension or pre-eclampsia /eclampsia in the previous pregnancy
- pervious surgery on the reproductive tract/operative delivery
- iso-immunization (Rh negative) in the previous pregnancy

1.1.10 History for systemic illness (es)

- Hypertension
- Diabetes
- Breathlessness on exertion, palpitation
- Chronic cough, blood in the sputum, prolonged fever (tuberculosis)
- Renal disease
- Convulsions (epilepsy)
- Attacks of breathlessness or dama (asthma)
- Rashes
- Jaundice

1.1.11 Family history of systemic illness

If the woman does not have any of the above-mentioned systemic illness, ask for a family history of hypertension, diabetes and tuberculosis. If present, such a history predisposes the woman to developing the same herself during pregnancy (e.g. hypertensive disorders of pregnancy, diabetes during pregnancy, etc.). As pregnancy is a physiologically stressful period, it can unmask the underlying tendency to develop these disorders.

- **In addition ask for family history of**

  Delivery of twins and/or the delivery of an infant with congenital malformation, as the presence of such a history in the family increase the chances of the woman giving birth to a child with the similar defect

Unit 1.2 Examination

Learning Objectives:

- Develop skills for various exams during pregnancy

1.2.1 Physical Examination

The activities will remain same for all the visits, but the readings of the first visit is to be taken as baseline and compared with the later readings.

A) Weight

Normally, a woman should gain 09 to 11 kg during her pregnancy. After the first trimester, a pregnant woman gains around 2 kg every month or 0.5 kg per week. To calculate the expected weight gain since her previous visit, multiply the number of weeks elapsed since the previous visit by 0.5 kg. This should be compared with the actual weight gained.

If the weight gain is only 05 to 06 kg during her pregnancy, probably the diet is not enough, with less than the required amount of calories. Inadequate dietary intake can be suspected if the woman has gained less than 2 kg per month. She needs to be put on food supplementation. You should do the counseling for Diet and Rest. A low weight gain usually points towards intrauterine growth retardation (IUGR) and results in a low birth-weight baby.

Excessive weight gain (more than 3 kg in a month) should arouse the suspicion of pre-eclampsia/twins (multiple pregnancies). Take the woman's BP, and test her urine to check if she has proteinuria. **Refer the woman to L0/L1.**

The following points should be kept in mind while taking the weight

- The weighing machine should be checked for "Zero error" before taking the weight.
- The woman should be wearing light clothing.
- She should stand erect on the weighing machine, in such a way that her weight is evenly distributed on the platform.
- The weight must be measured to the nearest 100 gm.

B) Blood Pressure

Measure the BP of pregnant women AT EVERY VISIT. This is important to rule out hypertensive disorders of pregnancy. . If the BP is high (more than 140/90 mmHg; or diastolic more than 90 mmHg), check the BP again after 1 hour. If it is still high, check the woman's urine for the presence of albumin, as the combination of a high BP and proteinuria is sufficient to categorize the woman as having pre-eclampsia. **Refer her to nearest Merrysilver or Merrygold hospital.**

If the diastolic BP of the woman is above 110 mmHg, it is a danger sign pointing towards imminent eclampsia. Such a woman must be **referred to nearest Merrysilver /Merrygold hospital/ FRU IMMEDIATELY.**

A woman if developed hypertension in pregnancy (PIH)/pre-eclampsia requires hospitalization at Merrysilver /Merrygold hospital/ FRU IMMEDIATELY.

C) Pallor

Look for pallor at the lower conjunctiva, palms and nails, oral mucosa and tongue of the woman for anaemia.

D) Respiratory rate (RR)

Important if the woman complains of breathlessness. If RR is >30/min and anaemia is present, the woman may be having severe anaemia and need to be **referred to Merrysilver /Merrygold hospital/ FRU IMMEDIATELY**

In case of RR>30/min associated with other associated medical problems, she may be **referred to Merrysilver /Merrygold hospital/ FRU IMMEDIATELY**

E) Oedema

Presence of pedal oedema with breathlessness may be due to anaemia. Presence of generalized oedema or puffiness of the face arises suspicion of pre-eclampsia .Pedal edema can be clinically assessed by pressing the tibial shin with thumb for 30 seconds & look for pitting at the site.

1.2.2 Abdominal Examination

Abdominal examination is done to monitor the progress of pregnancy and foetal growth and to check the foetal lie and presentation.

A) Fundal height

This indicates the progress of the pregnancy and foetal growth. The uterus becomes an abdominal organ after 12 weeks of gestation. The gestational age (in weeks) can be estimated from the fundal height (in cm) after 24 weeks of gestation.

If there is any disparity between the fundal height and the gestational age as calculated from the LMP, the woman should be **referred to Merrysilver /Merrygold hospital**. If there is a difference of 3 cm or more, or if there is no growth compared to the previous check-up, these are considered significant signs, and the woman requires further investigations.

If the height of the uterus is more than that indicated by the period of amenorrhea, the possible reasons could be:

- Wrong date of LMP
- Full bladder
- Multiple pregnancies
- Excessive amount of liquor
- Molar pregnancy
- Pregnancy with a pelvic tumor

If the height of the uterus is less than that indicated by the period of Amenorrhoea, the possible reasons could be:

- wrong date of LMP
- IUGR (Intra-uterine growth Retardation),
- Missed abortion
- Intrauterine death (IUD)

Measuring the Fundal Height

- Ask the woman to empty her bladder completely immediately before proceeding with the abdominal examination. This is important as even a half full bladder might result in an increase in the fundal height
- Ask the woman to lie on her back with the upper part of her body supported with pillows or a rolled bed sheet. Never make a pregnant woman lie flat on her back for a prolonged period as the heavy uterus may compress the main blood vessels returning to the heart and cause fainting (supine hypotension syndrome). Ask her to partially flex her hips and knees.
- Stand on the right side of the woman to examine her in a systematic manner.
- The attention of the woman may be diverted by conversation.
- Your hand must be warm and should be placed on the abdomen till the uterus is relaxed before you begin palpation. Poking the abdomen with the fingertips should be avoided at all costs.
- To measure the fundal height, place the ulnar (medial) border of the hand on the woman's abdomen, parallel to the symphysis pubis. Start from the xiphisternum (the lower end of the sternum) and gradually proceed downwards towards the symphysis pubis, lifting your hand between each step down, till you finally feel a bulge/resistance, which is the uterine fundus.
- Mark the level of the fundus. Using a measuring tape (a tailor's tape made of non-stretchable material), measure the distance (in cm) from the upper border of the symphysis pubis to the top of the fundus. After 24 weeks of gestation, the fundal height (in cm) corresponds to the gestational age in weeks (within 1-2 cm deviation). ***Remember, at the time of measuring the fundal height in cm, the legs of the woman should be straight and not flexed.***
- The supine position in late pregnancy and labour has also been shown to be associated with higher fundal height readings; therefore, this can give rise to false readings and an

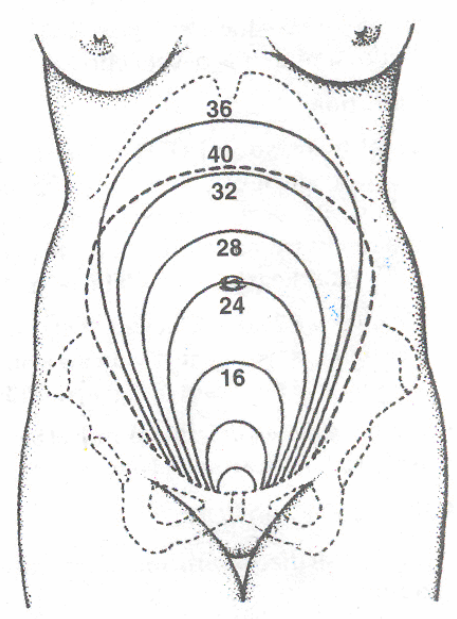
inaccurate estimate of the gestational age. It is therefore recommended that the woman lies down in a semi-recumbent position when measuring the fundal height.

- When the same operator is measuring the fundal height at each visit, this technique has been shown to have good predictive value, especially for identifying major intrauterine growth retardation and multiple pregnancies.
- The normal fundal height varies at different weeks of pregnancy. To estimate the gestational age through the fundal height, the abdomen is divided into parts by imaginary lines. The most important one is the one passing through the umbilicus. Then divide the lower abdomen (below the umbilicus) into 3 parts with 2 equidistant lines between the symphysis pubis and the umbilicus. Similarly, divide the upper abdomen into three parts, again with two imaginary equidistant lines, between the umbilicus and the xiphisternum.

Note the fundal height and judge as given below

- At 12th week: just palpable above the symphysis pubis
- At 16th week: lower one-third of the distance between the symphysis pubis and umbilicus
- At 20th week: two-thirds of the distance between the symphysis pubis and umbilicus
- At 24th week: at the level of the umbilicus
- At 28th week: lower one-third of the distance between the umbilicus and xiphisternum
- At 32nd week: two-thirds of the distance between the umbilicus and xiphisternum
- At 36th week: at the level of the xiphisternum
- At 40th week: sinks back to the level of the 32nd week, but the flanks are full, unlike that in the 32nd week.

Fig 1: Fundal Height at different weeks



B) Foetal lie and presentation

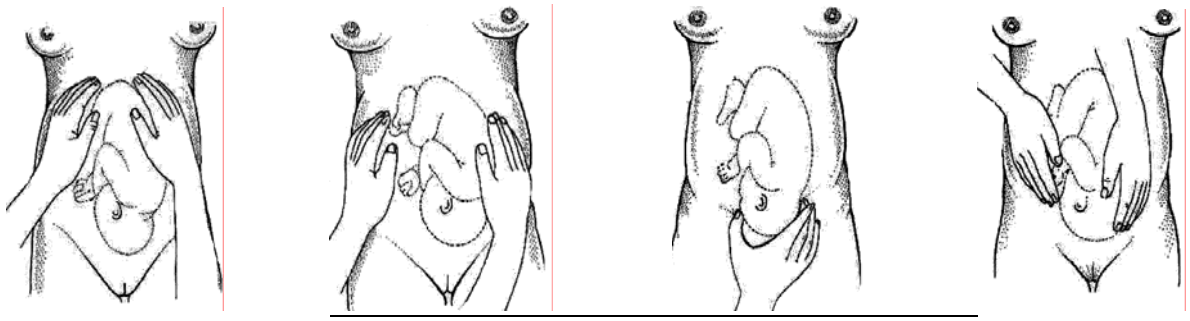
Palpate for the foetal lie and assess whether it is longitudinal, transverse or oblique. Remember, even if a mal-presentation is diagnosed before 36 weeks, no active management or intervention is recommended at that point of time. You should be able to recognize a transverse lie. Missing it can be disastrous because there is no mechanism by which a woman with a transverse lie can deliver normally/vaginally. This woman needs a caesarean section, and hence should be referred to L0/L1, having the facility for a caesarean section. Failure to do a timely caesarean section in this woman can lead to obstructed labour, rupture of the uterus and death of the woman. The foetal presentation should be checked, especially in the case of a longitudinal lie, to see whether the presenting part is the vertex (normal) or any other part of the cephalic end (face, brow), or a breech.

Determining the Foetal Lie and Presentation

- The pelvic grips (4 in number) are performed to determine the lie and the presenting part of the foetus.
- Ask the woman to lie down on her back. Ask her to partly flex her legs at the knees and hips and keep them slightly apart.

Fig 2: Pelvic Grips

Fundal Grip Fig.1 | **Lateral Grip** Fig.2 | **Superficial Pelvic Grip** Fig.3 | **Deep Pelvic Grip** Fig.4



Fundal palpation / Fundal grip-

- Fundal palpation helps to determine the lie and presentation of the foetus.
- Palpate the uterine fundus gently by laying both hands on the sides of the fundus to determine which pole of the foetus (the breech or the head) is occupying the uterine fundus. The head feels like a hard globular mass which is ballotable (moves between the fingertips of the two hands), whereas the breech is of a softer consistency and has an indefinite outline.
- In the case of a transverse lie, the fundal grip will be empty.

Lateral palpation / lateral grip -

- This palpation is used to locate the back of the foetus to determine the position.
- Place the hands on either side of the uterus at the level of the umbilicus and apply gentle pressure. The back of the foetus is felt like a continuous hard, flat surface on one side of the midline and the limbs are felt as irregular small knobs on the other side.
- In the case of a transverse lie, the back is felt transversely, i.e. stretching across both sides of the midline.

The first pelvic grip / superficial pelvic grip -

- The third maneuver must be performed gently, or it will cause pain to the woman. Spread you right hand widely over the symphysis pubis, with the ulnar border of the hand touching the symphysis pubis. Try to approximate the finger and thumb, putting gentle but deep pressure over the lower part of the uterus. The presenting part can be felt between the fingers and the thumb. Determine whether it is the head or the breech (in the case of a longitudinal lie).
- The mobility of the presenting part can also be determined by gripping the presenting part and trying to move it. If it can be moved, it indicates that the presenting part is free and not "engaged". The foetal head is said to be engaged if the widest diameter of the foetal head has passed through the brim of the pelvis, and only one pole of the head or only two finger-breadths are felt above the pelvic brim.
- In the case of a transverse lie, the third grip will be empty.

The second pelvic grip/deep pelvic grip -

- To perform this grip, you must face the foot end of the mother. Keep both the palms of your hand on the sides of the uterus, with the fingers held close together, pointing downwards and inwards, and palpate to recognize the presenting part.
- If the presenting part is the head (felt like a firm, round mass, which is ballotable, unless engaged), this maneuver, in experienced hands, will also be able to tell you whether it is in a state of flexion.
- If the woman cannot relax her muscles, tell her to flex her legs slightly and to breathe deeply. Palpate in between the deep breath

1.2.3 Fetal heart sound (FHS) and rate

Auscultation of the Foetal Heart Sound (FHS)-

- Use a fetoscope or the bell of the stethoscope to auscultate for the FHS. Remember, the FHS is best heard on the side where the spine/back of the fetus is. For a normal vertex presentation, the FHS is best heard midway between the line joining the umbilicus and the anterior superior iliac spine, on the side where the back is.
- In a breech presentation, the FHS is usually heard above the umbilicus.
- Count the fetal heart rate for one full minute.

- If the fetal heart rate (FHR) is between 120 and 160 beats per minute, it is normal. Both fetal bradycardia (FHR less than 120 per minute) and fetal tachycardia (FHR more than 160 per minute) indicate fetal distress.

Note

- A normal fetal heart rate may slow during a contraction but usually recovers to normal as soon as the uterus relaxes.
- A very slow FHS in the absence of contractions or persisting after contractions is suggestive of Foetal Distress.
- A rapid FHR may be a response to maternal fever, drugs causing rapid maternal heart rate (e.g. terbutaline), hypertension or amnionitis. In the absence of rapid maternal heart rate, a rapid FHR should be considered a sign of Foetal Distress.
- Remember that the FHR is not heard before 24 weeks of pregnancy; hence checking for the FHR should start only from the second visit.

Remember, all fetal distress cases should be referred to L0/L1

1.2.4 Multiple Pregnancies

This must be suspected if the following are present on examination:

- An unexpectedly large uterus for the estimated gestational age
- Multiple foetal parts are felt on abdominal palpation

If a multiple pregnancy is suspected, refer the woman to the next level i.e. Merrysilver clinics or Merrygold hospital for confirmation, and advice place of delivery accordingly.

Breast examination

Observe the size and shape of the nipples for the presence of inverted or flat nipples. Try and pull out the nipples to see if they can be pulled out easily. Flat nipples that can be pulled out do not interfere with breastfeeding. Truly inverted nipples might create a problem in carrying out successful breastfeeding. If present, the woman must be advised to pull on the nipples and roll them between the thumb and the index finger.

The breasts need to be palpated for any lumps or tenderness. If present, **refer the woman to the Merrysilver clinics or Merrygold hospital.**

Remember it is not advisable to give a pregnant woman any medication during the first trimester, unless absolutely essential. Even then it must be ensured that the drugs given are proven to be safe when taken during pregnancy, and do not have effects on the fetus which cause disability (teratogenic).Further information has been provided in subsequent pages and prescribed by trained gynecologist.

Unit 1.3 Laboratory investigations

Learning Objectives

- Know about various laboratory tests and their importance during pregnancy.

The following laboratory investigations should be available at Merrysilver and Merrygold hospitals

1.3.1 Hemoglobin (Hb) Estimation

1. Estimation of the level of hemoglobin is essential for the following:

- For the presence of anaemia and, if present, to what degree;
- For the further management, prevention and/or treatment of anaemia, in so far as the administration of IFA tablets is concerned. If the anaemia is severe, the woman may need **referral to nearest Merrysilver clinic or Merrygold hospital.**
- For the diagnosis of postpartum hemorrhage (PPH) in an anemic woman, in whom a smaller amount of blood loss is taken as PPH. Estimate the Hb levels of pregnant women at the initial antenatal visit and again at around 28 weeks (2^{nd} visit).

2. The initial Hb level will serve as a baseline to compare with the later results at 28 weeks. An Hb level below 11g/dl at any time in pregnancy is considered to be anaemia; an Hb level of 7 to 11 g/dl as moderate anaemia, and less than 7 g/dl as severe anaemia.

3. If the woman is found to be anemic, start her on the therapeutic dose of IFA. Estimate the Hb level again after 1 month. If there is no rise in the Hb level, **refer the woman** to a higher facility with a good laboratory infrastructure and trained personnel (L0/L1) to find out the cause of anaemia.

1.3.2 Blood group & Rh factor

Encourage the woman to get her blood tested for blood group and Rh factor. In case of haemorrhage, precious time will be saved and, if required, blood transfusion can be started much earlier and save the life. It is also an essential pre-requisite in case the woman requires D & C. In case of deliveries with mother being Rh-ve, cord blood sample has to be taken for knowing the blood group and Rh of the baby.

1.3.3 Urine testing for Albumin

Urine testing for albumin (protein) is essential for diagnosis of pre-eclampsia and eclampsia.

1.3.4 Urine testing for Sugar This test is used to diagnose gestational diabetes. If a woman's urine is positive for sugar, she should be **referred to the specialist (L0/L1)**

Unit 1.4 Interventions

Learning Objectives

- Learn various interventions and their importance during pregnancy.

1.4.1 Folic Acid Tablets

All women, from the moment they begin trying to conceive until 12 weeks of gestation, should take a folic acid supplement.

Aim

- Increase the birth weight of child
- To prevent NTDs (Neural Tube defect) and other congenital malformations in the fetus.

Advise women trying to conceive to take a dose of 400 µg folic acid daily, starting two months before the planned pregnancy.

Advice women who have not been supplementing their diet and who suspect themselves to be pregnant to begin taking 400 µg folic acid daily and to continue until they are 12 weeks pregnant.

Counsel pregnant women who have previously had a baby with NTD or who have diabetes or who are under anticonvulsant treatment about the increased risk of a future baby being affected, and advise them to take 5 mg folic acid daily and increase their food intake of folate.

Source: World Health Organization 2006

1.4.2 Iron & folic acid (IFA) supplementation

Emphasize the need for increased requirements of iron during pregnancy and the dangers of anaemia to pregnant women.

Prophylaxis

For prevention of Anemia, IFA should be given to all pregnant women.

Dose: 1 Tablet of IFA (containing 60 mg of elemental Iron & Folic Acid once in a day for 100 days).

Treatment - If women is anemic Hb<11gm% then 2 tablets of 60 mg of elemental iron &Folic Acid for 100 days.

Women with severe anemia (Hb <7 g/dl) or those who have breathlessness and tachycardia due to anemia, should be started on the therapeutic dose of IFA and also referred to the next level (L0/L1) for further management.

Note that many women do not take IFA regularly due to some common side effects. The necessity of taking IFA and the dangers associated with anemia should be explained to the mother.

Educate her:

- Though the tablets should be taken preferably early in the morning on an empty stomach, she may take the tablets with meals or at night. This will help avoid nausea.
- She should not worry if she passes black stools. This is normal while taking IFA tablets.
- If she has constipation, she should drink more water.
- These side-effects are not serious.
- She should avoid taking the tablets with tea or coffee as they reduce the absorption of iron.
- Tablets containing IFA may make her feel less tired than before. However, despite feeling better, she should not stop taking the tablets.
- She should return to you if she has problems taking IFA tablets. **Refer such women to the specialist at nearest Merrysilver clinic or Merrygold hospital for further management**.

1.4.3 Injection Tetanus Toxoid (Inj. TT) administration

Administration of two doses of Inj. TT to a pregnant woman is an important step in the prevention of neonatal tetanus (tetanus of the newborn). The first dose of TT should be given just after the first trimester, or as soon as the woman registers for ANC, whichever is earlier. The second dose is to be given one month after the first dose, but at least one month before the EDD. [Please refer to the Govt. of India's National Immunization Schedule for the same.]

Either ANM, Nurse or under direct supervision of trained doctor Inj .of TT is to be given as 0.5 ml per dose, deep IM in the upper arm.

Inform the woman that there may be slight swelling, pain and/or redness at the injection site for a day or two.

1.4.4 Malaria in pregnancy

Each year, approximately 50 million women living in malaria-endemic countries throughout the world become pregnant, of whom over half live in tropical areas of Africa with intense transmission of Plasmodium falciparum. An estimated 10,000 of these women and 200,000 of their infants die as a result of malaria infection during pregnancy, and severe anaemia due to malaria contributes to more than half of these deaths

Malaria in pregnancy increases the risk of maternal anaemia, stillbirth, spontaneous abortion, low birth weight and neonatal death. WHO recommends a package of interventions for the prevention and control of malaria during pregnancy:

1. Use of insecticide treated nets (ITNs) to prevent infection

2. Intermittent Preventive Treatment (IPT) to prevent asymptomatic infections among pregnant women living in areas of moderate or high transmission of *P. falciparum*
3. Effective case management for malaria illness and anaemia.

Anti malarial Drugs

Quinine and chloroquine remains the first line of treatment and may be safely used throughout pregnancy. Where ever available, Artesunate IV or Artemether I/M are the drugs of choice in the second and third trimester.
(Source IMPAC)

A pregnant woman, with suspected case of Malaria should be referred to Merrysilver / Merrygold hospital immediately.

Unit 1.5 Birth preparedness

Learning Objectives:

- Learn about birth preparedness and its importance for maternal care.

1.5.1 Birth preparedness and complication readiness

Four out of ten pregnant or postpartum women will experience some complication related to their pregnancy; for about 15% of these women, the complication will be potentially life-threatening and will require immediate emergency obstetric care. Since most of these complications cannot be predicted, every pregnancy necessitates preparation for a possible emergency.

All pregnant women and her family should be helped to reach a decision regarding conducting their delivery by a Skilled Birth Attendant in an institution and not by any unskilled one at home. (Note that TBAs, trained or untrained, do not fall into the category of a Skilled Birth Attendant).

Other factors such as the condition of the pregnancy (complicated or uncomplicated), the distance to the nearest delivery place, transport facilities, financial situation, etc. all need to be kept in mind before finally reaching a decision about the choice of birth attendant.

ALL PREGNANT WOMEN MUST BE ENCOURAGED TO OPT FOR AN INSTITUTIONAL DELIVERY.

Under National Rural Health Mission(NRHM) government is promoting institutional delivery In NRHM, women delivering their baby in hospital will get some incentive under Janani Suraksha Yojna(JSY).Merrygold Health Network is in a process to enroll their network hospitals as JSY hospital.

Explain to the woman why delivery at a health facility is recommended. Tell her that

- Any complication can develop during delivery; complications are not always predictable; they can cost the life of the mother and/or the baby.
- A health facility has staff, equipment, supplies and drugs available to provide the best care, if needed. It even has a referral system should the need to refer arise.

1.5.2 Identify support people

These people are needed to help the woman care for her children and/or household, arrange for transportation, and/or accompany the woman to the health facility in an emergency. Seek help from either the close relatives of the woman or community-based health functionaries such as the AWW and the TBA.

1.5.3 Finances

The woman and her family should be given an estimate of the expected expenses for the delivery and related aspects (such as transport, etc.). They should also be advised to keep some emergency fund, or have a source for emergency funding, should a complication arise and more money is required than initially anticipated. You should also be aware of the existing schemes that provide funds for maternal health, and any other schemes that may be launched from time to time. Help the women and their families access these schemes and receive the allocated funds to pay for the delivery.

1.5.4 Preparedness for blood donation

Haemorrhage, both antepartum and postpartum, is an important cause of maternal mortality. Blood transfusion can be life-saving in such cases. As blood cannot be "bought" one needs voluntary donors to replace the blood before it is issued for transfusion. Such donors (2-3 in number) must be ready, should the need arise.

The woman should be advised to eat more than her normal diet throughout her pregnancy. Remember, a pregnant woman needs about 300 extra kcal per day compared to her usual diet. She should be told that she needs these extra calories for:

- Maintenance of her health as a mother
- The needs of the growing foetus
- Successful lactation.

1.5.5 Special categories of women

Special Categories of women have been identified who should be given priority for additional nutrition during pregnancy. They include the following:

- Women with a reduction in the dietary intake below habitual levels during pregnancy
- Women who have an increased level of physical activity above the usual levels during pregnancy
- Women with a combination of both the above-mentioned factors
- Adolescent girls who become pregnant
- Women who become pregnant during lactation
- Women who become pregnant within two years of the previous delivery.
- The woman's food intake should be especially rich in proteins, iron, vitamin A and other essential micronutrients.
- The other members of the family, especially those who take decisions regarding the type of food brought home and/or given to the pregnant woman, such as her husband and mother-in-law, should also be taken into confidence and counseled regarding the recommended diet for the pregnant woman. Ask for their assistance to help ensure that the woman eats enough and avoids hard physical work.

1.5.6 Dietary recommendations

Some of the recommended dietary items are cereals, milk and milk products such as curd, green leafy vegetables and other vegetables, pulses, eggs and meat, including fish and poultry (if the woman is a non-vegetarian), nuts (especially groundnuts), jaggery, fruits, etc. Give example of the type of foods, suggest preparations, if possible, and how much to eat.

- Tell her about the locally available foods rich in iron such as groundnuts and jaggery. Tell the woman to avoid taking tobacco, tea, coffee or milk, especially within one hour of a meal, as they have been shown to interfere with the absorption of iron. Also advise her to take foods rich in proteins and vitamin C (e.g. lemon, amla, guava, oranges, etc.) as both help in the absorption of iron.
- The diet should be rich in fiber so that she does not have constipation.
- The diet should be advised keeping in mind the socioeconomic conditions, food habits and taste of the individual.
- Food taboos must be looked into while counseling the woman regarding her dietary intake. If there are taboos about nutritionally important foods, the woman should be advised against these taboos. In certain communities, food taboos exist for sex selection of the foetus. These, especially omission of certain foodstuffs from the diet, should be strongly discouraged.
- If a woman has PIH, she should be encouraged to eat a normal diet with no restrictions on fluid, calorie and/or salt intake; such restrictions do not prevent PIH from converting into pre-eclampsia, and may be harmful to the foetus.
- The woman should be advised to refrain from taking alcohol or smoking during pregnancy.
- The woman should be advised NOT to take any medication unless prescribed by a qualified health practitioner.

1.5.6 Sleep

The woman should be advised to sleep for 8 hours at night and rest for another 2 hours during the day. She should be advised to refrain from doing heavy work, such as construction work and full-time farm labour work, as it can adversely affect the birth weight of the baby. The other members of the household should be taken into confidence and advised to help the woman in carrying out her routine household chores.

All pregnant women should be told to avoid the supine position, especially in late pregnancy, as it affects both the maternal and the foetal physiology. During pregnancy, the pressure exerted by the uterus on the main pelvic veins results in a reduced quantity of circulating blood reaching the right side of the heart. This causes reduced oxygenation to the brain and can therefore lead to a fainting attack, a condition referred to as the supine hypotension syndrome. It can also result in abnormal FHR patterns, and may also cause a reduction in the placental blood flow. If the supine position is necessary, a small pillow under the lower back at the level of the pelvis is recommended.

1.5.8 Sex during Pregnancy

- It is safe to have sex throughout the pregnancy, as long as the pregnancy is "normal".
- Sex should be avoided during pregnancy if there is a risk of abortion (h/o previous recurrent spontaneous abortions), or a risk of a preterm delivery (h/o previous preterm labour).
- Some women experience a decreased desire for sex during pregnancy. The husband should be informed that this is normal and the woman's consent should be sought before engaging in sex. This is extremely important as forced and unsafe sex can have adverse consequences on the health of the mother and the foetus, resulting in an abortion or preterm labour.
- Some couples find engaging in sex uncomfortable during pregnancy. The comfort of the woman should be ensured by her husband during sex.

1.5.9 Signs of labour

Advise the woman to come to the Merrysilver clinic or contact the Merrysilver doctor, if she has any one of the following signs which indicate labour:

- A bloody, sticky discharge Pervaginum
- Painful abdominal contractions every 20 minutes or less
- The bag of waters has broken, **and she has clear fluid coming out P/V ("leaking").**

1.5.10 Complication Readiness

Refer/Advise the woman to Merrygold / Merrysilver hospital immediately if she has any of the following conditions:

- Any bleeding Pervaginum during pregnancy, and heavy (>500 ml) vaginal bleeding during and following delivery
- Severe headache with blurred vision
- Convulsions or loss of consciousness
- *Labor (first stage) lasting for more than 12 hours
- Failure of delivery of the placenta within 30 minutes of delivery
- Preterm labour (onset of labour before 34 weeks of gestation)
- Cases with leaking Pervaginum (PROM)
- Continuous severe abdominal pain
- All cases of medical illnesses associated with pregnancy, such as diabetes mellitus, heart disease, asthma, etc. at the onset of labour pains

*Labor is considered to be prolonged if combined duration of the first and second stage is more than the arbitrary time limit of 18 hours.

Table 2: Cervical dilatation during labour

Stage of labor	Duration of labor		Rate of cervical dilation	
	Primi para	Multipara	Primi para	Multipara
First stage	>=12 hrs	>=6 hrs	< 1cm/hr	<1.5cm/hr*
Second stage	>2 hrs	>1 hrs.		
Third stage	<=30 min	<=30 min		

Note: If the cervical dilation arrests more than 2 hours, it is considered abnormal

1.5.11 Infant feeding

Pregnancy is the ideal time to counsel the mother regarding the benefits of breastfeeding her baby. Though breastfeeding is almost universal in India, a few points need to be emphasized to the would-be-mother.

Counsel the mother that breastfeeding should ideally be initiated within half an hour of a normal delivery (or within two hours of a caesarean section, or as soon as the mother regains consciousness, in case she undergoes a caesarean section).

It is common practice in India to delay initiation. Colostrum (the first milk) is thrown away, and pre-lacteal feeds are given instead. This has obvious disadvantages. One, the pre-lacteal feed may not be hygienic and can cause an intestinal infection in the baby. Second, the baby is deprived of Colostrum, which is very rich in protective antibodies.

Most importantly, the sucking and rooting reflexes in the child, which are essential for the baby to successfully start breastfeeding, are the strongest immediately after delivery, making the process of initiation much easier for the mother and the baby. These reflexes gradually become weaker over the span of a few hours, thus making breastfeeding difficult later on.

1.5.12 Exclusive breastfeeding for 6 months

Emphasize to the mother that only breast milk and nothing but breast milk should be given to the baby for the first 6 months, not even water. Assure the mother that breast milk contains enough water to quench the baby's thirst (even in the peak of summer) and satisfy its hunger for the first 6 months. Take special care in the case of a female child to ensure that she is adequately breastfed and not discriminated against because of her sex.

Demand feeding: This refers to the practice of breastfeeding the child whenever he/she "demands" it, as can be made out by the child crying. The practice of feeding the child by the clock should be actively discouraged. After a few days of birth, most children will develop their own "hunger cycle" and will feed every 2-4 hours. Remember that each child is different as far as the feeding requirements and timings are concerned.

The practice of giving night feeds should be actively encouraged. Often, there is a misconception that breastfeeding the baby at night disturbs the mother's sleep, thus denying her of adequate rest. Inform the woman and her husband that this is not so. Night feeds help the baby to sleep more soundly.

Unit 1.6 Post delivery care

Learning Objectives

- List warning signs of serious postpartum problems that must be referred to a clinic or hospital.

1.6.1 Introduction

In the entire world, half of all maternal deaths take place within day one of delivery and 70% of maternal deaths occur within the first week. During the National Health Survey (NFHS-II) it has been recorded that only 16.5% women received a post-delivery check up within two months of delivery. Of these, less than one third were seen within the first 7 days after giving birth to the baby - a very critical period for the survival of both mothers and newborns. In unserved / underserved areas, these figures will be still lower.

As a large proportion of births especially among the poor may continue to occur at home and even the institutionally –delivered babies and their mothers are likely to be discharged within a day or so after delivery.

Case study-1

Vimla's story

Vimla delivered her first baby two weeks ago and had no problems at delivery. Her mother-in-law told her to stay in bed until the vaginal bleeding stopped. Vimla stayed in bed, and her husband brought her food and water. Now Vimla is worried because one of her legs is swollen, hot and tender.

Questions

1. What do you think is Vimla's problem?
2. What may have caused this problem?
3. How could this problem have been prevented?
4. If you were caring for Vimla's, what would you do?

Case study -2

Fatima's story

Fatima delivered her first baby two weeks ago. Her mother helped her deliver the baby. It took a long time for the placenta to be delivered, and her mother pulled on the cord to make it come out. Fatima has felt fine but continued to have heavy and constant bleeding.

Two weeks after delivery when the AYUSH visits, she finds that Fatima is still having heavy bleeding one week after delivery.

Questions

1. What do you think is Fatima's problem?
2. What may have caused this problem?
3. What could have been done to prevent this problem?
4. If you were caring for Fatima's, what would you tell her?

1.6.2 Protocol for Postpartum care

AYUSH should visit the women on

1. First day and within the first 24 hours after delivery

2. With in the first 7-10 days

During these visits the women will be asked the following questions:

- Details of delivery and who conducted the same.
- The number of pads or cloth pieces getting soaked with blood. If a woman bleeds heavily, she will soak a pad or cloth in less than 5 minutes- this amount of bleeding is a serious threat to her life**. She will require urgent management and referral to nearest Merrysilver clinic or Merrygold hospital.**
- **Any fever, foul smelling discharge, abdominal pain or convulsions, she will require urgent management and referral to nearest Merrysilver clinic or Merrygold hospital.**

Some enquiries will be made about the newborn baby

In the second visit, AYUSH will repeat the above questions and also ask the mother about her general well being and happiness. The AYUSH should again check the mother for:

- Continued bleeding (delayed PPH)
- Foul smelling discharge from the birth canal
- Swelling of breasts or engorgement of the breasts
- Pain or problem while passing urine

Counsel the women and families about the need for

- Extra intake of 550 kcal in a day for the first six months (An extra meal consisting of 2 chapattis or 1 cup rice, 1 cup dhal, 1 cup cooked vegetables, 1 glass milk and 1 cup tea is equivalent to taking 550 K Calories). This intake can be reduced to 400 kcal for the next six months.
- Adequate rest after delivery to regain her strength.

Contraception

Remind the mother that whenever she restarts her menses and or stops exclusive breastfeeding she can conceive even after a single act of unprotected sex. The various choices of contraceptives available should be told to the couple so that they can make an informed choice.

MODULE 2

New Born Care

Unit 2.1 Care at Birth (or within 1 hour of birth)

About this Module

This module will update the AYUSH doctors on routine new born care, recognizing danger signs in new born and timely referrals and advice to mothers.

Unit 2.1 Care at Birth (or within 1 hour of birth)

Learning objectives

- Counsel mothers and her family for routine care at birth for all newborns
- Identify danger signs in new born and able to refer to the next level of Merrygold Network

2.1.1 Why care at birth is important?

- A baby's survival is totally dependent on the caregivers and the mother.
- It is important to provide the right care at birth to reduce the risk of complications

2.1.2 Basic Needs at birth

The four basic needs of ALL newborns at the time of birth and for the first few weeks of life are:

- To be protected
- To breathe normally
- To be warm
- To be fed

2.1.3 Immediate Newborn Care

The order in which we carry out immediate care of baby is important. The carry out actions are given below:

Table 3: Immediate Newborn Care – Carry out actions

1. Call out /note the time of birth	
2. Deliver the baby onto a warm, clean and dry towel or cloth on a warm dry surface.	***A baby should be delivered onto its mother's abdomen, If this is not possible or not acceptable, then on to a clean, warm, safe place close to the mother.***
3. Immediately dry the baby with a warm clean towel or cloth.	- ***Bathe baby after 24 hours*** - ***Thoroughly dry the baby to prevent it getting cold.*** - ***Wipe away any blood or meconium.***

Wipe eyes.	- ***Do not wipe off the white greasy substance covering the baby's body (vernix). This helps to protect the baby's skin and gets reabsorbed very quickly.***
4. Assess the baby's breathing while drying.	
5. Clamp and cut the umbilical cord.	
6. Examine the baby quickly for malformations/birth injury	- ***If there is a major malformation/severe birth injury refer the baby to a newborn unit*** - ***Ensure warmth during examination***
7. Leave the baby between the mother's breasts to start skin-to-skin care	***If not possible , place the baby under a radiant warmer***
8. Place an identity label on the baby	***At wrist / ankle***
9. Cover the baby's head with a cloth. Cover the mother and baby with a warm cloth.	***Cover the mother and baby with a blanket if the room is less than 25^0C and use room heater***
10. Encourage the initiation of breastfeeding	

2.1.4 The baby's need to breathe normally

- To 'breathe normally' was identified as one of the baby's immediate and basic 'needs'. A baby can die or become brain damaged very quickly if breathing does not start soon after birth.
- Oxygen is needed to keep the baby's brain and other vital organs healthy. When the umbilical cord is cut the baby no longer receives oxygen via the placenta.
- Once a baby is born, and while it is being dried, assess baby's breathing. If a baby is breathing normally, the chest will rise and fall equally at around 30 to 60 times a minute.

Does the baby need any help with its breathing?

- The majority of babies do not have problems with their breathing after birth. Therefore, it is vital to recognize those babies who do need immediate help.

- **The following babies need help with their breathing**
  - Babies who are not breathing/ gasping
  - Babies who do not have good muscle tone
  - Babies with breathing rate >60/minute
  - Babies with blue discoloration

If a baby is not breathing well after birth refer baby to nearest Merrygold network hospital.

2.1.5 Keep the Baby Warm

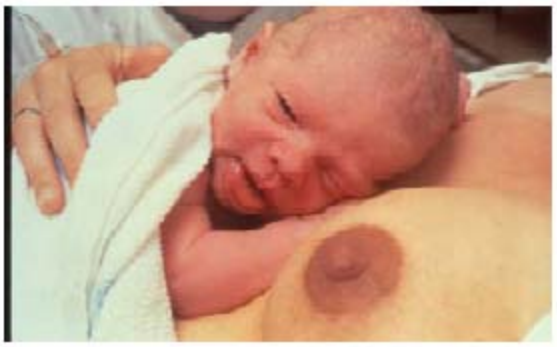
- Provide a warm, draught free room for delivery at 25-28^{o}C
- Immediately after birth dry baby with a clean, warm, dry cloth. Put the baby on the mother's abdomen or under a radiant warmer between the mother's breasts/radiant warmer. Cover the baby with a clean cloth.
- Cover the baby's head with a cloth.
- Put the naked baby between the mother's breasts to start skin-to-skin contact. Cover the mother and baby with a warm and dry cover. *
- **Encourage breast feeding as soon as possible after birth**

If mother and baby's separation is necessary, do the following.

- Wrap the baby in a clean dry warm cloth and place under a radiant warmer. If warmer is not available ensure warmth by wrapping the baby in a clean dry warm cloth and cover with a blanket.
- **Delay the first bath to beyond 24 hr period.**
- Skin-to-skin contact can re-start as soon as mother and baby do not need any medical care
- Skin-to-skin contact can re-start at any time if the mother and baby have to be parted for any treatment or care procedures.

***kangaroo mother care is generally after baby has been shifted to wards or at home.**
All babies should not be bathed in first 24 hours and low birth weight babies after first week,

Fig 3: Naked baby between the mother's breasts for skin-to-skin contact



2.1.6 Immediate Cord Care

- Clamp and cut cord with a sterile instrument (if mother is Rh negative than cord blood should be taken and sent for blood group Rh of the baby)
- Tie the cord above 2 to 3 cm from the base and cut the remaining cord.
- Observe for oozing blood. If blood oozes, place a second tie between the skin and first tie.
- DO NOT apply any substance to stump.
- DO NOT bind or bandage stump.
- Leave stump uncovered.

2.1.7 Care of the eyes

- The eyes should be cleaned with sterile normal saline soaked swabs, using one swab for each eye.
- DO NOT APPLY any medication to eyes.

2.1.8 Help the mother to initiate breastfeeding within 1 hour

After birth, let the baby rest comfortably on the mother's chest in skin-to-skin contact.

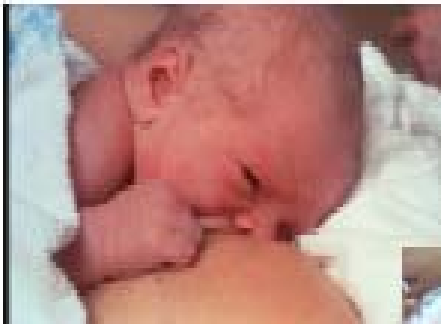
- Do NOT give artificial teats or pre-lacteal feeds to the newborn; no water, sugar water or local foods.
- Tell the mother to help the baby to her breast when the baby seems to be ready, usually within the first hour. ***Signs of readiness to breastfeed are***:

1. Baby looking around/moving
2. Mouth open
3. Searching

Fig 4: Initiating breast feeding with baby's on mother's abdomen

- Check position and attachment are correct at the first feed. Offer to help the mother at any time.

Fig 5: Baby attached well and sucking on breast



The baby's first feed of Colostrum is very important because it helps to protect against diseases

- The baby can feed from its mother whether she is lying down or sitting; baby and mother must be comfortable
- There is NO NEED to ROUTINELY separate babies born by Caesarean section or Instrumental delivery from mother

2.1.9 Weighing the baby

All babies should be weighed. The normal weight of the new born is 2500gm at the time of birth.

How to weigh a baby

- Cover the pan of scale with clean cloth
- Check and adjust zero of machine
- Remove all clothing of baby including diaper (if any).
- Weigh baby naked
- Wait till baby stops moving
- Read and record weight
- Wrap baby

2.1.10 Danger signs in New Born

- Has birth weight less than 1500 gm
- Has Major congenital malformation
- Is breathing <30/min,
- Has severe chest in-drawing
- If umbilicus is red or discharging pus
- If there are 10 or more pustules or a big boil/abscess at skin
- If Jaundice
- Dark urine with light/clay colour stool

Jaundice may be normal in newborns.

- BUT Jaundice is NOT NORMAL if, it has appeared < 24 hrs palms and soles are yellow or if it is still visible after 14 days.
- If the baby is not alert and/or has poor cry, the infant is **lethargic/unconscious**.
- If the baby's movements are less than normal or movements are not seen on one side (due to birth injury such as Erb's palsy.
- If there is a sharp expiratory sound (grunting) made by the baby?
- If baby have the following conditions
- Any temperature < 36.5^0 C (**hypothermia)**
- Any temperature > > 37.5 ^oC (**fever)**

Recording temperature

Axillary temperature is recorded by placing the bulb of thermometer against the roof of dry axilla, free from moisture. Baby's arm is held close to the body to keep thermometer in place. The temperature is read after 5 minutes.

Feeling the skin with dorsum of hand- Warm and pink feet of the baby indicate that the baby has abnormal temperature. When feet are cold and abdomen is warm, it indicates that the baby is in cold stress. If both feet and abdomen are cold to touch, the baby has moderate-severe hypothermia.

Bulging fontanels is NOT NORMAL. It could be a sign of meningitis.The fontanelle is the soft spot on the top of the young infant's head, where the bones of the head have not formed completely. Hold the young infant in an upright position. The infant must not be crying. Then look at and feel the fontanelle. If the fontanelle is bulging rather than flat, this may mean the baby has meningitis

Note: If chest moves in and abdomen moves out during inspiration, it is chest in drawing.

Take the baby to the nearest referral facility, by the shortest route, using the fastest possible mode of transport

2.1.11 What to do before transporting the baby?

1. **Assess :** Make sure that there is a genuine reason for referral and baby is going to get better care than available in your facility
2. **Communicate :** Use good communication skills to explain the need for referral to the family and if possible inform the referral facility
3. **Stabilize :** Maintain the airway and breathing, Correct hypoglycemia if present Administer first dose of antibiotics if needed
4. **Correct hypothermia:** If baby is hypothermic, correct it by providing warmth either by skin to skin contact (Kangaroo mother care) or by radiant warmer.
5. **Referral note:** Write a detailed referral note for the providers at the referral facility giving all the details of need for referral and treatments given to the baby.

   Write

   - The name and age of the patient
   - The date and time of referral
   - Description of the patient's problems
   - The reason for referral
   - Treatment that you have given
   - Any other information that the doctor at the hospital needs to know in order to care for the infant, such as earlier treatment of the illness or immunizations needed your name and the name of your clinic.

6. **Encourage mother to accompany :** Encourage the mother to accompany the baby to provide supportive care on the way and in the hospital

2.1.12 What to do during transport?

- **Ensure an open airway :** Do not cover the baby's mouth and nose and gently wipe the secretions from the nose and mouth
- **Check breathing :** Watch baby's breathing and if baby stops breathing, provide tactile stimulation to the soles to restore it or give bag and mask ventilation
- **Maintain temperature:**

(a) The best way to maintain temperature on the way to the hospital is by skin to skin contact (Kangaroo mother care). Avoid using hot water bottles. The baby should not remain wet and immediately wipe if baby passes urine or stool

(b) Maintain blood sugar: Maintain the blood sugar by continued breastfeeding during transportation, if baby can breastfeed. If the baby is not breastfed, give animal milk or sugar solution by cup and spoon.

MODULE 3

Family Planning

Unit 3.1 Counseling

Unit 3.2 Contraceptive Methods

About this Module

This module will enhance the knowledge of AYUSH doctors about the various methods of Family planning choices. This Module consists of two unit explaining counseling and protocols on various contraceptive methods.

Unit 3.1 Counseling

Learning Objectives

- Able to know counseling as a concepts
- Able to practice GATHER protocols of counseling
- Learn tips for effective counseling

3.1.1 Introduction to counseling

Service provider must ensure that the clients make free, informed and well – considered decision about their own contraceptive practices, child bearing and spacing during counseling session.

Counseling is a two – way process of exchanging information that involves listening to client and providing them accurate information, option and understanding of the matter. It has six basic elements, commonly known as **GATHER** steps (each letter stands for one-steps)

G- Greet Clients

A-Ask Clients about Their needs and desires

T-Tell Clients about their Choices to make an informed choice

H-Help Clients Choose the method in terms of her own needs and circumstances

E-Explain how to use the method

R-Return for Follow- Up

3.1.2 Tips for effective counseling

An effective counselor understands the client's feeling and needs by actively listening to them. With this the counselor adapts counseling to suit each client. He/she can perform well if they,

- Show that you understand and care about them. Maintain eye contact with the client. Build Rapport.
- Listen attentively to what the client has to say, using non- verbal gestures, such as nodding to encourage her.

- Are patient and never forces client to finish speaking.
- Give clients useful, accurate information. Help them understand what this information means to them.
- Create a two-way interaction with clients by listening attentively and encouraging clients to ask questions and express concerns.
- Help clients to make their own choices, based on clear information and their own feelings, situation, and needs.
- Help them remember key information.
- Privacy and confidentiality should be maintained during counseling

Family planning counseling can be divided into three phases

General family planning counseling- based on information on a range of methods and to assist in choosing a method that is appropriate for her.

Method specific counseling- the client is provided more information about the method, as well as instructions on how to use it safely and effectively.

Follow- up counseling (during each visit) - The client's satisfaction with the product is assessed, and any problems or concerns are discussed.

Unit 3.2 Contraceptive Methods

Learning Objectives

- Able to understand various methods of Family planning
- Understand how to use these methods
- Able to know checklist before advising for a particular methods
- Understand the choices for special groups of people.

Spacing Method of Contraception

3.2.1 Combined Oral Contraceptive Pills (COCs)

Client Screening Guidelines for COCs

Combined Oral Contraceptive Pills can be given to all women except in the following conditions

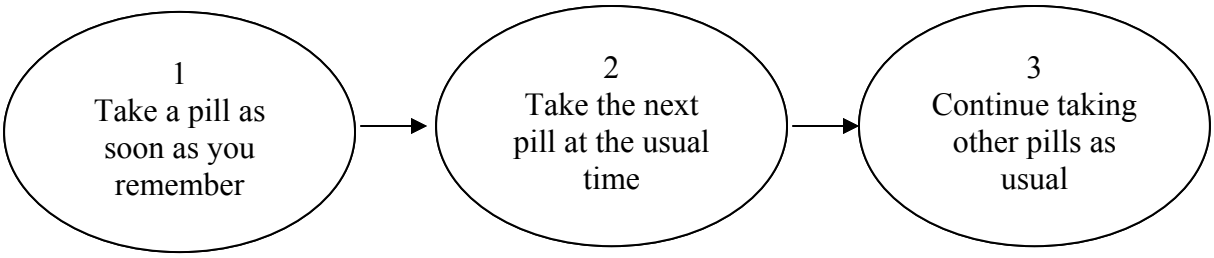
1. Pregnancy (suspected or confirmed)
2. Breastfeeding infant less than six months
3. Heavy smoker whose age is 35 years or more
4. High blood pressure _> 140/90 mm Hg
5. Vascular Disease
6. Current or history of Deep Vein thrombosis or Pulmonary Embolism
7. Current or history of Ischaemic Heart Disease or complicated Valvular Heart Disease
8. History of Stroke
9. Migraine with aura or without aura
10. Current or past history of Breast Cancer
11. Diabetes of more than 20 yrs duration or complicated with nephropathy/retinopathy/neuropathy
12. Current Gall Bladder Disease
13. Active viral hepatitis/ benign or malignant liver tumors/severe cirrhosis
14. Taking medicines like rifampicin, phenytoin, carbamezine and barbiturates.

Source: WHO Medical Eligibility Criteria for Contraceptive Use, 2004, category 3 and 4
How to use the 28 pills packet

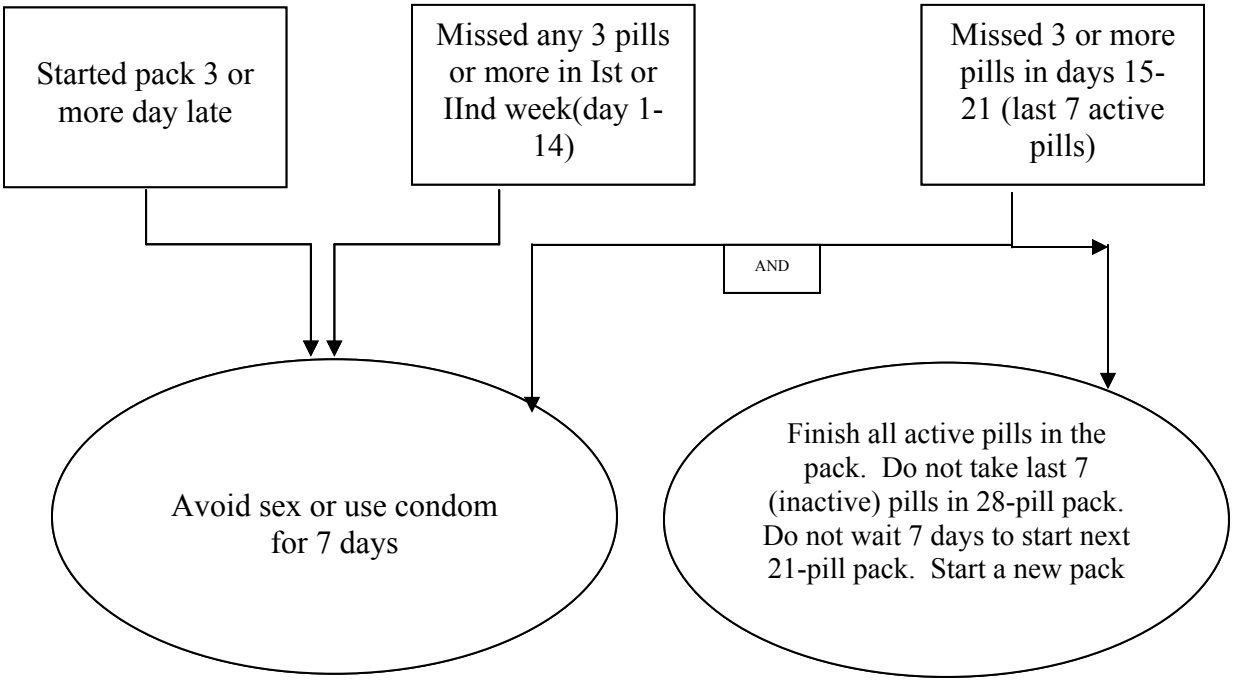
- Advise he client to follow the direction or arrows on the packet, one each day. Taking the pill at the same (fixed) time of the day might help her to remember taking them.
- With the 28-pill packets, last 7, dark coloured pills (Reminder Pills) do not contain hormones. Even if she forgets to take the reminder pills she is still protected from pregnancy.
- When she finishes one pack, she should take the first pill from the next pack on the very next day.

- Instruct her on what to do in case she misses a pill (see the protocol for missed pill given below).
- She should be told that COC does not protect her from HIV/STD

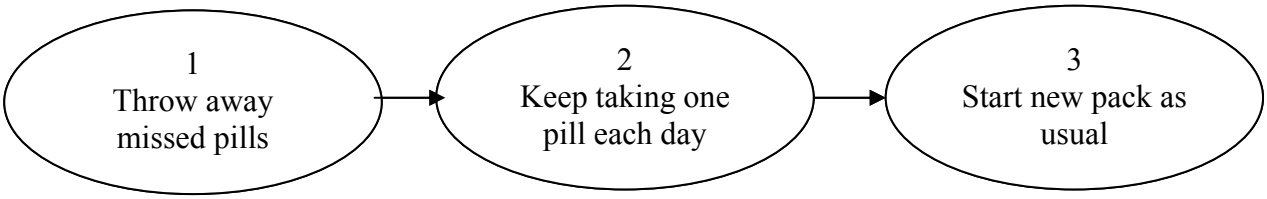
Missed pill : If one or more active pills (1-21) is missed:



In these special cases, ALSO follow these special rules.



If any of the 7 inactive pills is missed (in a 28 pill pack only):



When to Start Pills

Table 4: When to start combined oral contraceptives

Phase	Recommended Guidelines
Having a menstrual cycle	• Within 5 days after the start of her menstrual bleeding.
Amenorrhoea	• Any day if she is reasonably certain that she is not pregnant
Breastfeeding	• For women who are less than 6 months postpartum and primarily breastfeeding, use of COCs is usually not recommended. • **If not breastfeeding**, she can start COCs at any time, if she is reasonably certain that she is not pregnant. She will need to abstain from sex or use additional contraceptive protection for the next 7 days. • If she is more than 6 months postpartum and having amenorrhea, she can start COCs as advised above. • If she is more than 6 months postpartum and her menstrual cycles have returned, she can start COCs as advised for other women with menstrual cycles
Switching to another hormonal method	• Women using the hormonal method consistently and correctly, who are reasonably certain that they are not pregnant, can, start COCs immediately. There is no need to wait for the next menstrual period. • If her previous method was an injectable, she should start COCs when the repeat injection would have been given. No additional contraceptive protection is required.
Switching from non-hormonal method	• She can start COCs within 5 days after the start of her menstrual bleeding. She can also start immediately or at any other time, if it reasonably certain that she is not pregnant. If it has been more than 5 days after the menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 7 days

Switching from IUD (including hormonal)	• She can start COCs within 5 days after the start of her menstrual bleeding. No additional contraceptive protection is required. The IUD can be removed at that time. • She can also start immediately or at any other time, if it reasonably certain that she is not pregnant. If she has been sexually active during this menstrual cycle, and it has been more than 5 days since menstrual bleeding started, it is recommended that IUD should be removed at the time of her next menstrual period.

Common Side- Effects and their Management

- Changes in bleeding patterns including:
  - Lighter bleeding and fewer days of bleeding
  - Irregular bleeding
  - Infrequent bleeding
  - No monthly bleeding
- Headaches
- Dizziness
- Nausea
- Breast tenderness
- Weight change Mood changes
- Acne (can improve or worsen, but usually improves)

Other possible physical changes:

Blood pressure increases a few points (mm Hg). When increase is due to COCs, blood pressure declines quickly after use of COCs stops.

Managing Any Problems

- Problems Reported as Side Effects or Problems With Use May or may not be due to the method.
- Problems with side effects affect women's satisfaction and use of COCs. They deserve the provider's attention. If the client reports side effects or problems, listen to her concerns, give her advice, and, if appropriate, treat.
- Encourage her to keep taking a pill every day even if she has side effects. Missing pills can risk pregnancy and may make some side effects worse.
- Many side effects will subside after a few months of use. For a woman whose side effects persist, give her a different COC formulation, if available, for at least 3 months.
- Offer to help the client choose another method—now, if she wishes, or if problems cannot be overcome.

Table 5: Dealing with common problems of COCs

Problem	Remedies
Nausea	Suggest taking pills at night or with food
Minor Headaches	Suggest taking ibuprofen, aspirin, paracetamol, or other non/steroidal anti-inflammatory drug
Amenorrhea (no monthly bleeding period) common, not usually a sign of pregnancy	• Ask is she is having any bleeding at all. (She may just have a small stain on her underclothing and not recognize it as vaginal bleeding). If so, reassure her. • Ask if she is sure she has been taking the pill every day. If she has, reassure her that she is not likely to be pregnant. She should start the next packet of pills on time. If she is unsure: • Ask her if she might have missed the 7-day break between the 21-day packets. This may have caused period. Reassure her that she is probably not pregnant. • Ask is she has missed 3 or more active hormone pills in a row. If so, assess whether or not she is pregnant. If she may be pregnant, tell her. Ask her to stop taking oral pills. Offer her condoms. She can use them until her next period or until clear about whether or not she is pregnant. • Ask if she has recently stopped taking pills - If she is not pregnant, her periods may take a few months to return. - Ask if she had irregular periods before she starting the COCs. If so, her periods may be irregular again after the stops the pills.
Spotting or bleeding between monthly periods over several months	• Ask is she has missed any pills. Explain that missing pills can cause bleeding between periods, even when taking pills every day • Ask if she has had vomiting or diarrhoea. • Ask is she is taking rifampicin or medicines for seizure, which may make COCs less effective. Encourage her to use condoms.
Very bad headaches (migraines)	A woman who develops migraine while using COCs should switch to an alternative method. She should not choose a POP (progesterone only pill) method if she has blurred vision, brief loss of vision, sees flashing lights or has brief trouble in speaking or moving before, during or after the headaches.
Breast tenderness	• Recommend that she wear a supportive bra (including during strenuous activity and sleep). • Try hot or cold compresses. • Suggest aspirin, ibuprofen, paracetamol or other pain reliever. • Consider locally available remedies.

Weight Change	• Review diet and counsel as needed
Mood changes or changes in sex drive	• Some women have changes in mood during the hormone-free week. • Ask about changes in her life that could affect her mood or sex drive, including changes in her relationship with her partner. Give her support as appropriate. • Clients who have serious mood changes such as major depression should be referred for care. • Consider locally available remedies.
Acne	• Acne usually improves with COC use. It may worsen for a few women. • If she has been taking pills for more than a few months and acne persists, give her a different COC formulation, if available for at least 3 months. • Consider locally available remedies

New Problems That May Require Switching Methods may or may not be due to the method.

1. **Unexplained vaginal bleeding-** Evaluate to diagnose and treat as appropriate. If bleeding is caused by sexually transmitted infection or pelvic inflammatory disease, she can continue using COCs during treatment.
2. **Starting treatment with anticonvulsants or rifampicin** -They make COCs less effective. If using these medications long-term, she may want a different method, such as monthly injectables, progestin-only injectables, or a copper-bearing IUD. If using these medications short-term, she can use a backup method along with COCs.
3. **Migraine headaches** -Regardless of her age, a woman who develops migraine headaches, with or without aura, or whose migraine headaches become worse while using COCs should stop using COCs. Help her choose a method without estrogen.
4. **Circumstances that will keep her from walking for one week or more:** e.g. major surgery, or her leg is in a cast, or for other reasons, she should:

- Tell her doctors that she is using COCs.
- Stop taking COCs and use a backup method during this period.
- Restart COCs 2 weeks after she can move about again.

5. **Certain serious health conditions** (suspected heart or liver disease, high blood pressure, blood clots in deep veins of legs or lungs, stroke, breast cancer, damage to arteries, vision, kidneys, or nervous system caused by diabetes, or gall bladder disease). Tell her to stop taking COCs. Give her a backup method to use.
6. **Suspected pregnancy** Assess for pregnancy. Tell her to stop taking COCs if pregnancy is confirmed. There are no known risks to a fetus conceived while a woman is taking

3.2.2 Centchroman (Saheli)

- Nonsteroidal, highly effective, safe and easy to use oral contraceptive.
- It is free of the side effects commonly associated with contraceptives containing both estrogen and progestin.

- However, it should be avoided in polycystic ovarian disease, liver and kidney diseases and tuberculosis.

How to Use

It is taken orally twice a week for the first three months and then once-a-week.

3.2.3 Injectable Contraceptives

They are of two types:

- Progestin - only injectables. They do **not** contain estrogen. They are **3-monthly**-DMPA (Depo-Provera ,Depot Progestin, Khushi) and **2-monthly**-Noristerat(Net-En)
- Combined injectables containing **both** estrogen and progestin. They are **one-Monthly Injectables.**

3.2.4 DMPA

Client Screening Guidelines for DMPA

DMPA can be given to all women except in the following conditions

1. Pregnancy (suspected or confirmed)
2. Breastfeeding infant less than six weeks
3. Multiple risk factors for arterial cardiovascular disease(age above 35 years, smoking, diabetes and hypertension)
4. High blood pressure _> 160/100 mm Hg
5. Vascular Disease
6. Current Deep Vein thrombosis or Pulmonary Embolism
7. Current or history of Ischaemic Heart Disease
8. History of Stroke
9. Migraine with aura
10. Unexplained Vaginal Bleeding(suspicious for serious condition) before evaluation
11. Current or past history of Breast Cancer
12. Diabetes of more than 20 yrs duration or complicated with nephropathy/retinopathy/neuropathy
13. Active viral hepatitis/ benign or malignant liver tumors/severe cirrhosis

Source: WHO Medical Eligibility Criteria for Contraceptive Use, 2004, category 3 and 4

When to start DMPA

- Any day between first to seventh day of menstrual cycle or any day the provider is reasonably sure that the client is not pregnant.
- Immediately after abortion or within seven days post abortion, even if infection is present.

After delivery - after six weeks if breastfeeding; after three weeks if not breastfeeding. DMPA becomes effective immediately.

Key messages about DMPA

- DMPA should be taken once in three months.
- DMPA causes change in menstrual pattern, mainly absence of period.
- It usually takes 5-6 months after the effect of last injection is over for the woman to become pregnant.
- Women of all ages and parity may use it.
- Women who cannot use pills due to oestrogen-related precautions can use DMPA e.g. breastfeeding women, smokers.

Do not take injection with unclean syringes or from an untrained person.

3.2.5 Copper Bearing Intra Uterine Contraceptive Device

Client Screening Guidelines for Intra Uterine Contraceptive Device (IUCD)

IUCD can be given to all women except in the following conditions

1. Pregnancy (suspected or confirmed)
2. Nulliparity
3. Immediate post septic abortion
4. Unexplained vaginal bleeding (suspicious for serious condition) before evaluation
5. Benign or malignant trophoblastic disease
6. Cervical cancer , Endometrial cancer or ovarian cancer
7. Uterine fibroids with distortion of uterine cavity
8. Current Pelvic Inflammatory Disease
9. Increased risk of OR Current STI (purulent cervicitis , Chlamydia or gonorrhea) or AIDS
10. Known Pelvic Tuberculosis

Source: WHO Medical Eligibility Criteria for Contraceptive Use, 2004, category 3 and 4

Women can begin using IUDs:

- Without STI testing
- Without an HIV test
- Without any blood tests or other routine laboratory tests
- Without cervical cancer screening
- Without a breast examination

When to start an IUCD- See the table given below-

Table 6: When to start IUCD

The Scenario	When to start

Having menstrual cycle	• **Any time during the menstrual cycle**
	  • If she is starting within 12 days after the start of her monthly bleeding, no need for a backup method.
	  • If it is more than 12 days after the start of her monthly bleeding, she can have the IUD inserted any time it is reasonably certain she is not pregnant. No need for a backup method.
	• During menstruation, possible advantages: -
	  - Pregnancy is ruled out
	  - Insertion may be easy
	  - Any minor bleeding caused by insertion is less likely to upset
	  - the client
	  - Insertion may cause less pain
	Possible disadvantages during menstruation: -
	  - Pain from pelvic infection may be confused with pain of menstrual period. IUD should not be inserted if the woman has a pelvic infection. –
	  - May also be harder to identify other signs of infection

Switching from another method	• Immediately, if she has been using the method consistently and correctly or if it is otherwise reasonably certain she is not pregnant. No need to wait for her next monthly bleeding. No need for a backup method. • If she is switching from injectables, she can have the IUD inserted when the next injection would have been given. No need for a backup method.
Breast feeding	• If her menstruation has not returned. She can have IUD inserted after 6 weeks of delivery or more, when it is reasonably certain that she is not pregnant. No need for a back up method. • If her menstruation has returned, she can have the IUD inserted as advised for woman having menstrual bleeding.
After miscarriage or abortion	• Immediately, if the IUD is inserted within 12 days after first- or second-trimester abortion or miscarriage and if no infection is present. No need for a backup method. • If it is more than 12 days after first- or second trimester miscarriage or abortion and no infection is present, she can have the IUD inserted any time it is reasonably certain she is not pregnant. No need for a backup method.

	• If infection is present, treat or refer and help the client choose another method. If she still wants the IUD, it can be inserted after the infection has completely cleared. • IUD insertion after second-trimester abortion or miscarriage requires specific training. If not specifically trained, delay insertion until at least 4 weeks after miscarriage or abortion.
No monthly bleeding (not related to child birth or breastfeeding)	Any time if it can be determined that she is not pregnant. No need for a backup method.
For Emergency Contraception	Within 5 days after unprotected intercourse.
After taking emergency contraceptive pills	The IUD can be inserted on the same day that she takes the ECPs. No need for a backup method.

Explaining how to use the IUD

1. Plan with the client for a **Post Insertion Follow - Up visit in 3 to 6 weeks** – for example, after a menstrual period - for check up and pelvic examination, to make sure that her IUD is still in place and that no infection has developed. The visit can be at any time convenient to the client when she is not menstruating. After this one return visit, **no further routine visits are required.**
2. Make sure she knows:
   - Exactly what kind of IUD she has and how it looks like
   - When to have IUD removed or replaced (for TCu-380A IUD, 10 years after insertion).
   - Discuss how to remember the year to return. If she wants a new IUD, it can be inserted as soon as the old IUD is removed.
   - When she visits health care providers, she should tell them that she has an IUD.

Important: Provide the client with a written record of the month and year of IUD insertion and the month and year of when it should be removed.

Give specific instructions

- About the common side effects.
- How and when to check the IUD

Explain specific reasons to see a health care provider

- Missed menstrual cycle
- If she thinks that she might have been exposed to STIs or has HIV/AIDS.
- Strings missing or strings seen shorter or longer
- Something harder in her vagina at the cervix. It may be part of the IUD.

- Increasing or severe pain in the lower abdomen, especially if there is also fever and/or bleeding between menstrual periods.
- Heavy or prolonged bleeding
- IUD has reached the end of its effectiveness
- She wants the IUD to be removed for any reason.
- She has questions.
- She wants to opt for another family planning method.

Possible reasons for removal:-

- Client's request
- Any side effects that make client want her IUD
- Any medical reason e.g. Pregnancy, Acute PID, Perforation of uterus
- IUD has come out of place (partial expulsion)
- When the effective lifespan is finished
- When the woman reaches menopause (at least 1 year after her last period)

MerryTarang will send the clients to nearest Merrysilver or Merrygold hospital for IUD insertion

3.2.6 Male Condoms

All men can use condoms. If the client complaints of severe allergic reaction after using it then only, condoms are not recommended.
But if the client is at risk of STIs or HIV, she/he should continue to use condoms during sexual intercourse despite the allergy.
How to use condoms

1. Demonstrate the client how to put on and take off a condom by using a model or 2 fingers.
2. The condom is fitted on the erect penis before intercourse.
3. Hold the pack at its edge and open by tearing from a ribbed edge.
4. Hold the condom at the tip, so that the air is expelled from the teat end to make room for the ejaculate.
5. Unroll the condom all the way to the base of erect penis. The condom should unroll easily. If it does not, it is probably backwards. If more condoms are available, throw this one away and use a new condom.
6. Most of the condoms are already lubricated; hence there is no need to apply any additional lubricant .This may damage the condom.
7. After sexual intercourse (ejaculation), hold the rim of the condom to the base of the penis so it will not slip. The man should pull his penis out of the vagina before completely loosing his erection.
8. Move away from vagina and take off the condom without soiling semen on the vaginal opening.
9. Tie a knot at the rim of the condom. Dispose it off by burying or burning it

3.2.7 Female Condom

How to Use Female Condom

- FC is a strong, loose-fitting polyurethane sheath that is 17 centimeters long (about 6.5 inches) with a flexible ring at each end.
- While holding the sheath at the closed end, grasp the flexible inner ring and squeeze it with the thumb and second or middle finger so it becomes long and narrow.
- With the other hand, separate the outer lips of the vagina.
- Gently insert the inner ring into the vagina. Feel the inner ring go up and move into place.
- Place the index finger on the inside of the condom, and push the inner ring up as far as it will go. The outer ring should remain on the outside of the vagina.
- The female condom is now in place and ready for use with your partner. Now gently guide your partner's penis into the sheath's opening with your hand to make sure that it enters properly – be sure that the penis is not entering on the side, between the sheath and the vaginal wall. It has special advantages in that it does not require an erect penis to insert the female condom into the vagina.
- To remove the condom, twist the outer ring and gently pull the condom out. It need not be removed immediately after ejaculation.
- Wrap the condom in the package or in tissue, and throw it in the garbage.

- FC comes pre-lubricated with a non-spermicidal, silicone-based lubricant that is needed for ease of insertion and for easy movement during intercourse.
- Lubrication reduces noise during sexual intercourse and makes sex smoother.
- Additional lubricant, either oil-based or water-based, can be used.

3.2.8 Lactational Amenorrhoea Method (LAM)

A temporary family planning method based on the natural effect of breastfeeding on fertility. Effectively prevents pregnancy at least 6 months and maybe longer if a woman keeps breastfeeding often, day and night.

The only conditions that limit use of LAM are conditions that make breastfeeding difficult or that rule out breastfeeding.

LAM requires 3 conditions. All 3 must be met:

- The baby is less than 6 months old
- After last childbirth mother's menstrual period has not returned
- The baby is fully or nearly breastfed and is fed often, day and night i.e. at least 8-10 times a day, at least once in 4 hours, and at least once at night (night feeding regularly not more than 6 hours apart), and at least 85% of her baby's feeding should be from breastfed milk.

A woman must switch to another method as soon as any of the 3 LAM criteria no longer applies.

3.2.9 The Standard Days Method (SDM)

- Natural family planning method,
- Useful for women with menstrual cycles ranging between 26 and 32 days
- Advice on avoiding unprotected sexual intercourse from day 8 to 19 of menstrual cycle.

How to use SDM

- For easy and correct use of SDM a device called **Cycle Beads**- a string of colour coded beads is given to client
- On the first day of menstrual period, start moving the rubber ring onto the first red bead.
- Each day, move the rubber ring onto the next bead, moving in the direction of the arrow.
- Avoid sexual intercourse or use condoms on the days when the rubber ring is on any of the white beads.
- **Picture is to be inserted from global hand book**

Terminal Methods of Contraception

3.2.10 Male Sterilization

- Vasectomy, especially no-scalpel vasectomy (NSV), is one of the safest, permanent and most effective contraceptive methods
- Simple, minor surgical procedure that takes 5-15 minutes to perform, after 5-10 minutes of pre-operative preparation and administration of local anaesthesia.

Table 7: Eligibility of providers for performing Male Sterilization

Service	**Basic Qualification requirement of Provider**
Conventional vasectomy	Trained MBBS doctor
No-scalpel vasectomy (NSV)	Trained MBBS doctor

The state has a district-wise panel of doctors for performing sterilization operations in government institutions and government-accredited private/NGO centres based on the above criteria. Only those doctors whose names appear in the panel are entitled to carry out sterilization operations in government and/or government-accredited institutions. The panel is updated quarterly.

Medical eligibility

- Most men can have a vasectomy in routine settings.

- **DELAY** the vasectomy and refer the client to treatment if he has:

  - Active sexually transmitted infection
  - Inflamed (swollen and tender) tip of penis, ducts or testicles
  - Scrotal skin infection or mass in the scrotum
  - Acute systemic infection or significant gastroenteritis
  - Filariasis or elephantiasis

- If he has any of the following, refer him to a centre with experienced staff and equipment that can handle potential problems:

  - Hernia in the groin (provider if able, can perform vasectomy at the same time as repairing hernia. If this is not possible, the hernia should be repaired first)
  - Undescended testicles on both sides
  - Current AIDS-related illness
  - Coagulation disorders

If he has any of the following, use **CAUTION**:

- previous scrotal surgery or injury
- Large varicocoele or hydrocoele (swollen veins or membranes in the spermatic cord or testes, causing swollen scrotum)
- Undescended testicles on one side only (vasectomy is performed on the normal side only. Then if any sperm remains in the semen after 3 months, vasectomy must be performed on the other side too.
- If he has diabetes.

Requirements for a safe procedure

1. **Counseling**

- It should be provided only to men who have decided on their own that they do not want children any more.
- Clients should be counseled about other available methods of contraception before deciding on sterilization.

2. **Client assessment**

- **Medical history**
- **Physical examination**-including genital examination; the penis, scrotum and the inguinal region should be inspected visually; and the scrotum should be palpated.
- **Laboratory tests-** Reserved for specific cases in which a condition that would make it necessary to make extra preparation is suspected.

3. **Informed consent:** The form should be signed after confirming that the client has made an informed choice.
4. **Infection prevention:** Proper aseptic technique is essential. Shaving or clipping the hair at the operation site is no longer recommended.
5. **Anaesthesia:** Both, conventional and no scalpel vasectomy are done under local anaesthesia. General anaesthesia may be necessary when there are scrotal abnormalities (such as large varicocoele, large hydrocoele or cryptorchidism).
6. **Instructions to the client:** After the procedure, the man should-
    - Put a cold compresses on the scrotum for 4 hours to lessen swelling
    - Rest for 2 days. He should not do any heavy work or vigorous exercise for a few days.
    - Keep the incision clean and dry for 2-3 days. He can use a towel to wipe his body clean but should not soak in water.
    - Wear snug underwear or pants for 2-3 days to help support the scrotum.
    - Take paracetamol or another pain-relief medication as needed. He should not take aspirin or ibuprofen, which slow blood clotting.
    - Use condoms or another effective family planning method for 3 months after the procedure.
    - He can have sex within 2-3 days after the procedure. Vasectomy does not affect man's ability to have sex.

7 Return to the clinic for a **follow-up** and for any of these reasons:

A health worker should visit all clients who undergo a vasectomy within 48 hours.
First follow-up: seven days after the surgery for removal of stitches (in cases of conventional vasectomy), to have the wound examined and to have his questions answered.

Second follow-up: the client should undergo semen analysis after three months.
Emergency follow-up: this can be done at any time after the surgery if:

- His wife misses her menstrual period or thinks she is pregnant.
- He has questions or problems of any kind.
- If he has high fever (greater than 380C) in the first 4 weeks and especially in the first week, or
- If he has bleeding or pus from the wound, or
- If he has pain, heat, swelling, or redness at an incision that becomes worse or does not stop (signs of infection)
- If the clinic cannot be reached quickly, he should go to another doctor or health care provider at once.

MerryTarang will send the clients to Merrygold hospital for male sterilization

3.2.11 Female Sterilization

Female sterilization is one of the safest operative procedures that involves permanently blocking the fallopian tubes to prevent fertilization.

Table 8: Eligibility of providers for performing Female Sterilization

Service	**Basic Qualification Requirement of Provider**
Minilap services	Trained MBBS doctor
Laparoscopic sterilization	DGO, MD (Obst. & Gynae.), MS (Surgery) (Trained in Laparoscopic sterilization)

The states constitute a district-wise panel of doctors for performing sterilization operations in government institutions and accredited private/NGO centre based on the above criteria. Only those doctors whose names appear on the panel are entitled to carry out sterilization operations in the government and/or government-accredited institutions. The panel is updated quarterly.

Medical eligibility for female sterilization

In general, most women who want sterilization can have safe and effective procedures in routine settings. With proper counseling and informed consent, sterilization can be used in any circumstances by women who:

- Just gave birth (within 7 days)
- Are breastfeeding

Also, women with the following conditions can have sterilization in a routine setting in any circumstances:

- Mild pre-eclampsia
- Past ectopic pregnancy
- Benign ovarian tumours
- Irregular or heavy vaginal bleeding patterns, painful menstruation
- Vaginitis without purulent cervicitis
- Varicose veins
- HIV positive or high-risk of HIV or other STIs
- Malaria
- Non-pelvic tuberculosis
- Caesarean delivery (surgical delivery) at same time.

In the following conditions, use the instructions below:

1. Gynecological / obstetrical conditions:

If the woman has any of the following, **DELAY** female sterilization and treat as appropriate or refer:
Pregnancy

- Postpartum or second trimester abortion (7-42 days)
- Serious postpartum or post-abortion complications
- Unexplained vaginal bleeding that suggests a serious condition
- Severe pre-eclampsia, eclampsia
- Pelvic inflammatory disease within past 3 months
- Current STI
- Pelvic cancers
- Malignant trophoblastic disease

If she has any of the following, **REFER** her to a centre with experienced staff and equipment that can handle potential problems:

- Fixed uterus due to previous surgery or infection
- Endometriosis
- Hernia (umbilical or abdominal wall)
- Postpartum uterine rupture or perforation or post abortion uterine perforation

If she has any of the following, use **CAUTION**:

- Past PID since last pregnancy
- Current breast cancer
- Uterine fibroid

2. Cardiovascular conditions

If she has the following, **DELAY** female sterilization:

- Acute heart disease due to blocked arteries
- Deep vein thrombosis or pulmonary embolism

If she has the following, **REFER** her to a centre with experienced staff and equipment that can handle potential problems:

- Moderate or severe high blood pressure (160/100 or higher)
- Vascular disease including diabetes-related
- Complicated vulval disease

If she has any of the following, use **CAUTION**:

- Mild high blood pressure (140/90 – 155/99 mm)
- History of high blood pressure where blood pressure can be evaluated, or adequately controlled high blood pressure where blood pressure can be evaluated
- Past stroke or heart disease due to blocked arteries.
- Vulvular heart disease without complications.

3. Chronic disease conditions:

If she has any of the following, **DELAY** female sterilization:

- Gall bladder disease with symptoms
- Active viral hepatitis
- Severe iron deficiency anaemia (haemoglobin below 7g/dl)
- Acute lung disease (bronchitis or pneumonia)
- Systemic infection or severe gastroenteritis
- Abdominal skin infection
- Abdominal surgery for emergency or infection at time sterilization is desired or major surgery with prolonged immobilization.

If she has any of the following, **REFER** her to a centre with experienced staff and equipment that can handle potential problems:

- Severe cirrhosis of liver
- Diabetes for more than 20 years
- Hyperthyroid
- Coagulation disorders
- Chronic lung disease
- Pelvic tuberculosis

If she has any of the following, use **CAUTION**:

- Epilepsy Or taking medicines for seizure
- Taking antibiotics or griseofulvin
- Diabetes with vascular disease
- Hypothyroid
- Mild cirrhosis of liver, liver tumors or schistosomiasis with liver fibrosis
- Sickle cell disease
- Inherited anaemia
- Kidney disease
- Diaphragmatic hernia
- Severe lack of nutrition
- Obese (Is she extremely overweight?)

- Elective abdominal surgery at time sterilization is desired. Be sure to explain the health benefits and risks and the side effects of the method that the client will use. Also, point out any conditions that would make the method inadvisable when relevant to the client.

Requirements for a safe procedure

Counseling:

Clients should be counseled about all available methods of contraception before deciding on sterilization. It should be provided only to women who have decided on their own that they do not want children any more.

Client assessment:

- **History** (medical and obstetrics and gynecological history)
- **Physical examination** (vital signs, heart, lungs, abdomen, and pelvic and speculum examination).
- **Laboratory tests:** To screen for anaemia and to rule out current pregnancy.

Criteria to minimize the chances of pregnancy, one should perform the procedure:
- within 7 days of the menstrual period
- within 7 days of abortion
- within 7 days of term delivery
- in women using reliable method of contraception e.g. IUCD, Injectable hormonal method.

- **Informed consent**: The form should be signed after confirming that the client has made an informed choice.

- **Infection prevention**: Proper aseptic technique is essential. Shaving or clipping the hair is no longer recommended.

- **Anaesthesia**: Three choices of anaesthesia regimen—local, general, or regional. Factors to be considered in the choice of anaesthesia include the type of surgical technique, the skill of surgeon, the availability of appropriate drugs, and the safety and conformity of the client, and the ability of the surgeon to manage complications, should they occur.

- **Explaining self-care** for minilaparotomy or laparoscopy

- Before the procedure, the woman should:
  - Not eat or drink anything for 8 hours before surgery;
  - Not take any medication for 24 hours before surgery (unless the doctor performing the procedure tells her to do so);
  - Bathe thoroughly the night before the procedure, especially her belly, genital area, and upper thighs;
  - Wear a clean, loose fitting clothing to the health facility if possible;

- If possible, bring a relative to help her go home.

- After the procedure, the woman should:

  - Rest for 2 or 3 days and avoid heavy lifting for a week;
  - Keep the incision clean and dry for 2-3 days;
  - Be careful not to rub or irritate the incision for 1 week;
  - Take paracetamol or another safe, locally available pain-relief medicine as needed. She should not take aspirin or ibuprofen which slow blood clotting.
  - Not have sexual intercourse for at least one week. If pain lasts for more than one week, do not have sex until all pain is gone.

Specific reasons to see a doctor or nurse

A woman should return to the clinic for any of these reasons:

- For a follow-up, if possible, within 7 days or at least 2 weeks and to have stitches removed, if necessary. Follow-up can also be done at home or at any other suitable facility.
- She has questions or problems of any kind.
- Return at once if she has: -High fever (more than 38 degrees C) in the first weeks and especially in the first week or -Pus or bleeding from the wound, or -Pain, heat, swelling, or redness of the wound that becomes worse or does not stop (signs of infection), or
- Abdominal pain, cramping, or tenderness that becomes worse or does not stop, or -Diarrhea, or -Fainting or extreme dizziness

If the clinic cannot be reached quickly, she should go to another doctor at once.

- She thinks that she might be pregnant. First symptoms of pregnancy are:-Missed periods
- Nausea, and
- Breast tenderness

She should come to the clinic at once if she also has any one of the signs of possible ectopic pregnancy:

- Lower abdominal pain or tenderness on one side-Abnormal or unusual vaginal bleeding,
- Faintness (indicating shock)

Pregnancies among users of voluntary sterilization are few. But when pregnancy occurs, it is more likely to be ectopic than average pregnancy. Ectopic pregnancy is life-threatening. It requires immediate treatment.

Two methods can be used to prevent failures:

- The incidence of unintended pregnancy can be decreased by scheduling this procedure within the first 7-10 days of the start of a menstrual cycle.

- The fallopian tubes can be identified properly by tracing it to the fimbrial end prior to occlusion.

Meticulous attention should be paid to technique, whichever method is used.

Follow-up within 7 days or at least 2 weeks is strongly recommended to check the site of the incision looks for any sign of complications and removes any stitches.

MerryTarang will send the clients to Merrygold hospital for female sterilization

3.2.12 Emergency Contraception

It should be used only in the emergency situations described below:

1. Sex was forced (rape) or coerced
2. Any unprotected sex
3. Contraceptive mistakes, such as:
   - Condom was used incorrectly, slipped, or broke
   - Couple incorrectly used a fertility awareness method (for example, failed to abstain or to use another method during the fertile days)
   - Man failed to withdraw, as intended, before he ejaculated
   - Woman has missed 3 or more combined oral contraceptive pills or has started a new pack 3 or more days late
   - IUD has come out of place
   - Woman is more than 2 weeks late for her repeat progestin-only injection or more than 7 days late for her repeat monthly injection

To summarize, emergency contraception can be used in all those circumstances in which a woman has reason for concern that she may become pregnant.

Methods of Emergency Contraception

There exist 3 methods of EC-

1. **Levonorgestrel only EC pills (A dedicated product)**

Available as, over the counter drug

Brand names:

1. E pill
2. ECee2
3. Norlevo 0.75 mg
4. Pill 72
5. Pregnon
6. **Preventol**
7. I Pill

Dosage: One pill of LNG 0.75 mg to be taken as soon as possible after unprotected coitus (within 72 hours), followed by another pill 12 hours later.

2. **High Doses of Oral Contraceptive Pills as Emergency method**

OCP (containing 30 or 35 microgram estrogen e.g. Mala-N, mala-D, Ovral, Pearl etc): 4 tablets as soon as possible (within 72 hours of unprotected coitus), followed by another 4 pills 12 hours later.

Make certain that the client does not want to become pregnant, but that she understands that there is still a chance of pregnancy even after using ECPs. Explain that the ECPs will not cause any harm to the foetus if it fails to prevent pregnancy.

3. **IUCD as an emergency contraception**

- IUCD can be effectively used as an emergency method of contraception within 5 days of first act of unprotected intercourse.
- Eligibility criteria are the same as when IUCD is used for regular contraception but special care should be taken in the case of sexual assault cases as presence of STIs increases the risk for PID.
- Follow- up of all the woman after the first menstrual period is critical to make sure that the client is not pregnant and that IUCD is in situ.

Note: Emergency contraception should not be used in place of other family planning methods.

3.2.13 Special Groups

After Delivery

A woman should not wait until the return of monthly bleeding to start a contraceptive method, but instead she should start as soon as guidance allows in the table given below:

Table 9: Earliest time when a woman can start a family planning method after childbirth

Family Planning Method	**Fully or nearly fully breastfeeding**	**Partially Breastfeeding or not breastfeeding**
Lactational Amenorrhea Method	Immediately	(Not applicable)
Vasectomy	Immediately or during partners' pregnancy*	
Male or Female condom	Immediately or when sex is resumed	
Copper-bearing IUD	Wait 6 weeks, Post Placental insertion (only by trained providers)	
Female sterilization	Within 7 days, otherwise wait 6 weeks	
Fertility awareness methods/SDM	Start when normal secretions have returned (for symptoms-based methods) or she has had 3 regular menstrual cycles (for calendar-based methods). This will be later for breastfeeding women than for women who are not breastfeeding.	
Progestin-only pills	6 weeks after childbirth **	• Immediately if not breastfeeding ** • 6 weeks after childbirth if partially breastfeeding.
Progestin-only Injectables		
Implants		
Combined oral contraceptives	6 months after childbirth**	21 days after childbirth if not breastfeeding **
Injectables		

* If a man has a vasectomy during the first 6 months of his partner's pregnancy, it will be effective by the time she delivers her baby.

** Earlier use if not usually recommended unless other, more appropriate methods are not available or not acceptable.

Family Planning in Post abortion Care

1. Counsel with Compassion
2. To make decisions about her health and fertility, she needs to know:
    - Fertility returns quickly—within 2 weeks after a first-trimester abortion or miscarriage and within 4 weeks after a second-trimester abortion or miscarriage.
    - She can choose among many different family planning methods that she can start at once (see next page). Methods that women should not use immediately after giving birth pose no special risks after treatment for abortion complications.
    - She can wait before choosing a contraceptive for ongoing use, but she should consider using a backup method* in the meantime if she has sex. If a woman decides not to use contraceptives at this time, providers can offer information on available methods and where to obtain them. Also, providers can offer condoms, oral contraceptives, or emergency contraceptive pills for women to take home and use later.
    - To avoid infection, she should not have sex until bleeding stops—about 5 to 7 days. If being treated for infection or vaginal or cervical injury, she should wait to have sex again until she has fully healed. If she wants to become pregnant again soon, encourage her to wait.
    - *
    - *Backup methods include abstinence, male or female condoms and withdrawal.*

Combined oral contraceptives, progestin-only pills, progestin-only injectables, monthly injectables, male condoms, female condoms, and withdrawal can be started immediately in every case, even if the woman has injury to the genital tract or has a possible or confirmed infection.

IUDs, female sterilization, and fertility awareness methods can be started once infection is ruled out or resolved.

IUDs, female sterilization, and fertility awareness methods can be started once any injury to the genital tract has healed.

Special considerations:

- IUD insertion immediately after a second-trimester abortion requires a specifically trained provider.
- Female sterilization must be decided upon in advance, and not while a woman is sedated, under stress, or in pain. Counsel carefully and be sure to mention available reversible methods).
- Fertility awareness methods: A woman can start symptoms-based methods once she has no infection-related secretions or bleeding due to injury to the genital tract.

Adolescents

- All Contraceptives Are Safe for Young People
- **Male and female condoms (provides triple protection** which many young people need)
- **Hormonal contraceptives** (oral contraceptives, injectables)
- **Emergency contraceptive pills** (ECPs)
- **Copper Bearing Intrauterine device**
- **Fertility awareness methods/ Standard days Method**
- **Withdrawal**

- **Female sterilization and vasectomy (**Provide with great caution)

Male Participation in family Planning

- Providers can give support and services to men both as supporters of women and as clients.
- Important services that many men want include:
  -Condoms, vasectomy, and counseling about other methods
  -Counseling and help for sexual problems STI/HIV counseling, testing, and treatment
  -Infertility counseling
  -Screening for penile, testicular, and prostate cancer
- Like women, men of all ages, married or unmarried, have their own sexual and reproductive health needs. They deserve good-quality services and respectful, supportive, and non-judgmental counseling.

Women near Menopause

- It is recommended to use a family planning method for 12 months after last bleeding
- To prevent pregnancy until it is clear that she is no longer fertile, an older woman can use any method, if she has no medical condition that limits its use. By itself, age does not restrict a woman from using any contraceptive method.

Special Considerations about Method Choice

When helping women near menopause choose a method, consider:

Combined hormonal methods (combined oral contraceptives [COCs], monthly injectables,

- Women age 35 and older who smoke—regardless of how much—should not use COCs,
- Women age 35 and older who smoke 15 or more cigarettes a day should not use monthly injectables.
- Women age 35 or older should not use COCs, monthly injectables, if they have migraine headaches (whether with migraine aura or not).

Progestin-only methods (progestin-only pills, progestin-only injectables)

- A good choice for women who cannot use methods with estrogen. During use, DMPA decreases bone mineral density slightly. It is not known whether this decrease in bone density increases the risk of bone fracture later, after menopause.

Emergency contraceptive pills

- Can be used by women of any age, including those who cannot use hormonal methods on a continuing basis.

Female sterilization and vasectomy

- May be a good choice for older women and their partners who know they will not want more children.
- Older women are more likely to have conditions that require delay, referral, or caution for female sterilization.

Male and female condoms, diaphragms, spermicides, cervical caps and withdrawal

- Protect older women well, considering women's reduced fertility in the years before menopause.
- Affordable and convenient for women who may have occasional sex.

Copper Bearing Intrauterine device

- Expulsion rates fall as women grow older, and are lowest in women over 40 years of age.
- Insertion may be more difficult due to tightening of the cervical canal.

Fertility awareness methods

- Lack of regular cycles before menopause makes it more difficult to use these methods reliably.

When a Woman Can Stop Using Family Planning

Because bleeding does not come every month in the time before menopause, it is difficult for a woman whose bleeding seems to have stopped to know when to stop using contraception. Thus, it is recommended to use a family planning method for 12 months after last bleeding in case bleeding occurs again.

Hormonal methods affect bleeding, and so it may be difficult to know if a woman using them has reached menopause. After stopping a hormonal method, she can use a non hormonal method. She no longer needs contraception once she has had no bleeding for 12 months in a row.

Copper-bearing IUDs can be left in place until after menopause. They should be removed within 12 months after a woman's last monthly bleeding.

Contraceptives for Clients with STIs, HIV, and AIDS

Advice should be given on choosing a **Triple Protection Strategy-** (i. e. protection against pregnancy, STIs and HIV) - The strategy is mainly to use a male or female condom correctly and consistently with every act of sex despite of using another method of contraception for extra protection. See the table given below for special consideration regarding various family planning methods for them.

Table 10: Special family planning considerations for clients with STIs, HIV, AIDS, or on Antiretroviral Therapy

Method	Has STIs	Has HIV or AIDS	On anti-retroviral (ARV) Therapy
Intrauterine device (Copper -bearing or hormonal IUDs)	Do not insert an IUD in a woman who is at very high individual risk for gonorrhea and Chlamydia, or who currently has gonorrhea, Chlamydia, purulent cervicitis, or PID (a current IUD user who becomes infected with gonorrhea or Chlamydia or develops PID can safely continue using an IUD during and after treatment	A woman with HIV can have an IUD inserted. A woman with AIDS should not have an IUD inserted unless she is clinically well on ARV therapy (a woman who develops AIDS while using an IUD can safely continue using the IUD).	Do not insert an IUD if client is not clinically well.
Female sterilization	If client has gonorrhea, Chlamydia, purulent cervicitis, or PID, delay sterilization until the condition is treated and cured.	Woman who are infected with HIV, have AIDS or are on antiretroviral therapy can safely undergo female sterilization. Special arrangements are needed to perform female sterilization on a woman with AIDS. Delay the procedure is she is currently ill with AIDS-related illness.	
Vasectomy	If client has scrotal skin infection, active STI, swollen, tender tip of penis, sperm ducts, or testicles, delay sterilization until the condition is treated and cured	Men who are infected with HIV, have AIDS, or are on antiretroviral therapy can safely undergo vasectomy. Special arrangements are needed to perform vasectomy on a man with AIDS. Delay the procedure if he is currently ill with AIDS related illness.	

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Annexure and References

Annexure 1

Symptoms, signs, probable diagnosis and action required to be taken (at a glance)

Symptoms	**Signs/investigations**	**Most probable diagnosis**	**Action(s) to be taken**
Vomiting during the first trimester		May be physiological	Advise the woman to eat small frequent meals; avoid greasy food; eat lot of green vegetables and drink plenty of fluids. If vomiting is excessive in the morning, ask her to eat dry foods such as biscuits or toast after waking up in the morning.
Excessive vomiting, especially after the first trimester	The woman may be dehydrated	Hyperemesis gravidarum	Refer the woman to the specialist.
Palpitations, easy Fatigability, breathlessness at rest	Conjunctival and/or palmer pallor present Hb level <7 g/dl	Severe anaemia	Refer to specialist for further management
Puffiness of the face, generalized body oedema	- BP >140/90 mmHg. Proteinuria absent	Hypertensive disorder of pregnancy	- Refer to specialist for hypertensive medication
	- BP >140/90 mm Hg Proteinuria present	- Pre-Eclampsia	- Refer to Merrygold hospital. Advise her on the danger signs of imminent eclampsia and eclampsia
Heartburn and nausea		Reflux	- Advise the woman to avoid spicy and rich foods. - Ask her to take cold milk during attacks.

			- If severe, antacids may be prescribed.
Increased frequency of urination up to 10 - 12 weeks of pregnancy		May be physiological due to pressure of the gravid uterus on the urinary bladder	Reassure her that it will be relieved on its own.
- Increased frequency of urination after 12 weeks, or persistent symptoms, or burning on urination	- Tenderness may be present at the sides of the abdomen and back - Body temperature may be raised	Urinary tract infection (UTI)	- Refer the woman to the nearest Merrysilver clin ic or Merrygold hospital.
Constipation		Physiological	- Advise the woman to take more fluids, leafy vegetables and a fiber-rich Diet. - If not relieved, give her Isabgol, 2 tablespoonfuls to be taken at bedtime, with water or with milk. - Do NOT prescribe strong laxatives as they may start uterine contractions

Bleeding P/V, before 20 weeks of gestation	Check the pulse and BP to assess for shock	Threatened abortion/ spontaneous abortion/ hydatidiform mole/ ectopic pregnancy	- If woman is bleeding and the retained products of conception can be seen coming out from the vagina, remove them with your finger. - Refer to the specialist
	- Ask for history of violence	-Spontaneous abortion due to violence	Put her in touch with local support groups
Bleeding P/V, after 20 weeks of gestation	Check the pulse and BP to assess for shock	Ante partum haemorrhage	Do NOT carry out a vaginal examination under any circumstances. Refer to the next level/specialist
Fever	Blood peripheral smear is positive for malaria parasite.	Malaria	Manage according to the NAMP guidelines for malaria in pregnancy.
	Body temperature is raised	Site of infection somewhere, including possible sepsis	Refer to next level

Decreased or absent foetal movements (NOTE: foetal movements are felt only after about 4 months of gestation.	FHS heard, and within the normal range of 120-160/ minute	Baby is normal	Reassure the woman
	FHS heard, but the rate is<120/minute or >160/ minute	Foetal distress	Repeat FHS after 15 Minutes. If the FHS is still out of the normal range, refer.
	FHS not heard	? Intrauterine foetal death	Inform the woman and her family that the baby might not be well. Refer to the next level
Vaginal discharge, with or without abdominal pain		RTI/STI	Advise the woman regarding vaginal hygiene, i.e. cleaning the external genitalia with soap and Water.
Leaking of watery fluids P/V	Wet pads/cloths	Premature rupture of Membrane.	Look if the woman is in labour / refer

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