Health Extension Service Level - IV

Module Title: Managing Delivery Practice at the time of Emergency

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Bishoftu, Ethiopia

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LG #24	LO #1- Plan to enhance institutional delivery

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Safe and clean delivery practices
- Planning and advocating for clean and safe delivery
- Role and responsibilities of family and community to support safe delivery

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Describe safe and clean delivery practices
- Plan and advocate for clean and safe delivery
- Role and responsibilities of family and community to support safe delivery

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks” which are placed following all information sheets.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
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Information Sheet 1- Safe and clean delivery practices

1.1 Introduction to labor

Labour: is the term for the changes in anatomy and physiology in the female reproductive tract that prepare the fetus and the placenta for delivery. In the majority of cases, this happens when the baby is fully developed at full term, between 37-40 weeks gestation. Labour heralds the end of the baby's time in the uterus and the beginning of adaptation to life outside the mother.

1.2 Definition of terms

Labour is the term for the changes in anatomy and physiology in the female reproductive tract that prepare the fetus and the placenta for delivery.

Continuum of care- Is when the same health professional will look after the pregnant woman and her baby from the first antenatal visit until the end of the postnatal period.

1.3 Characteristics of labor

A normal labour has the following characteristics:

- Spontaneous onset (it begins on its own, without medical intervention)
- Rhythmic and regular uterine contractions
- Vertex presentation (the 'crown' of the baby's head is presented to the opening cervix,
- Vaginal delivery occurs without active intervention in less than 12 hours for a multigravida mother and less than 18 hours for a primigravida (first birth)
- No maternal or fetal complications.

Any type of labour that deviates from these conditions is considered abnormal, and usually requires referral for specialist care.

If true labour is progressing, there will be adequate uterine contraction, evaluated on the basis of three features — the frequency, the duration and the intensity of the contractions:

- The frequency of uterine contractions will be 3-5 times in every 10 minute period.
- Each contraction lasts 40–60 seconds; this is known as the duration of contractions.
- The woman tells you that her contractions feel strong; this is the intensity of contractions.

You can assess the strength of uterine contractions for yourself by palpating the woman's abdomen in the area of the fundus (top) of the uterus. In between contractions, when the uterus is relaxed and the muscular wall is soft, you will be able to palpate the fetal parts. But when a strong contraction comes, you will not be able to feel the fetal parts, because the abdominal wall over the uterus is very tense and very painful if you apply deep pressure with your fingers.

Table 1 Characteristics of true labour and false labour

Characteristics	True labour	False labour
Uterine contractions	Contractions occur at regular intervals, but the interval between each contraction gradually becomes shorter	Contractions occur at irregular intervals
	Duration of each contraction gradually increases	Duration remains unchanged — either long or short
	Intensity of contractions becomes stronger and stronger	Intensity remains unchanged
Cervical dilation	Cervix progressively dilates	Cervix does not dilate, remains less than 2 cm
Pain	Discomfort at the back in the abdomen, cannot be stopped by strong anti-pain medication	Discomfort is non-specific (has no particular location) and is usually relieved by strong anti-pain medication or by walking

1.4. Stages of labor

1.4.1 First stage of labour

The first stage of labour is characterized by progressive opening of the cervix, which dilates enough to let the baby out of the uterus. For most of the pregnancy, nothing can get in or out of the cervix, because the tiny opening in it is plugged with mucus.

During pregnancy the cervix is long and firm, like a big toe (see Figure 2a), but the immediate effect of uterine contraction is to dilate the cervix and shorten the lower segment of the uterus, so the edges of the cervix are gradually drawn back and are taken up. This process is called effacement.

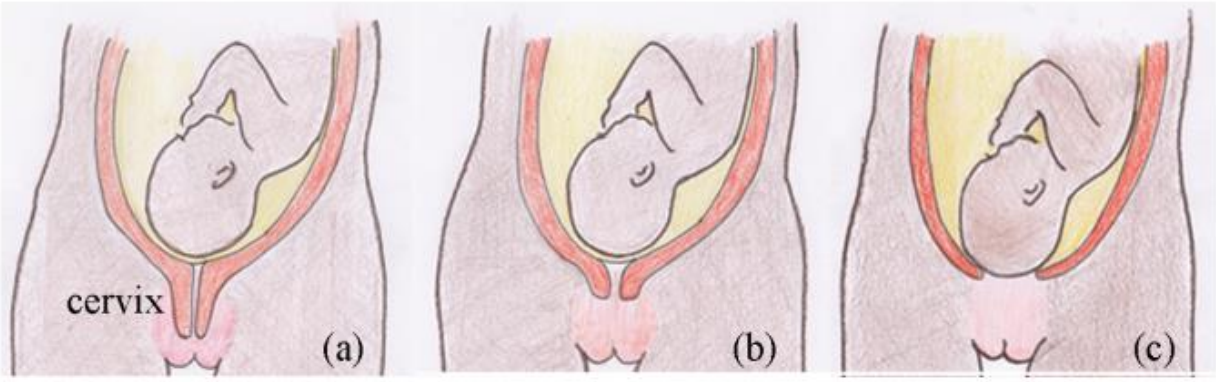


Figure2 Effacement of the cervix. (a) Before labour begins, the cervix is not effaced. (b) Cervix is 60% effaced. (c) Cervix is fully effaced.

The cervix then dilates (the diameter gradually increases) – this is known as cervical dilatation. Each time the uterus contracts, it pulls a little bit of the cervix up and open. Between contractions, the cervix relaxes. The first stage is divided into two phases: the latent and the active phase, based on how much the cervix has dilated.

Latent phase

The latent phase is the period between the start of regular rhythmic contractions up to cervical dilatation of 4 cm. During this phase, contractions may or may not be very painful, and the cervix dilates very slowly. The latent phase ends when the rate at which the cervix is dilating speeds up (it dilates more quickly). This signals the start of the active phase.

Active phase

The active phase is said to be when the cervix is greater than 4 cm dilated. Contractions become regular, frequent and usually painful. The rate of cervical dilation becomes faster and it may increase in diameter by as much as 1.2 to1.5 cm per hour, but the minimum dilation rate should be at least 1 cm per hour. You should start to plot data on the pantograph at this stage. Cervical dilatation continues until the cervix is completely open: a diameter of 10 cm is called fully dilated. This is wide enough for the baby to pass through (Figure 1.2). At this diameter, you would not feel the cervix over the fetal head when you make a vaginal examination with your gloved fingers.

1.4.2 Second stage of labour

The second stage begins when the cervix is fully dilated (10 cm) and is completed when the baby is completely born. After the cervix is fully dilated, the mother typically has the urge to push. Her efforts in 'bearing down' with the contractions of the uterus move the baby out through the cervix and down the vagina. This is known as fetal descent. The rate of fetal descent is an important indicator of the progress of labour, which will be described in more detail later. The average duration of second stage is 1 hour and usually not longer than 2 hours. Table 3 summarizes the symptoms and signs during the first and second stages of normal labour.

Table 3 symptoms and signs during the first and second stages of normal labour.

Symptoms and signs	Stage	Phase
Cervix not dilated Uterine contractions not regular or strong	False labour/Not in labour	
Regular uterine contraction but not very strong Cervix dilated less than 4 cm	First	Latent
Regular and strong uterine contractions Cervix dilated 4–9 cm Rate of dilatation typically 1 cm per hour or faster Fetal descent begins	First	Active
Cervix fully dilated (10 cm) Fetal descent continues Mother has no urge to push	Second	Early (non-expulsive)
Cervix fully dilated (10 cm) Presenting part of fetus reaches pelvic floor Mother has the urge to push	Second	Late (expulsive)

1.4.3 Third stage of labour

The third stage of labour is the delivery of the placenta and membranes after the baby has been born. The duration is usually a maximum of 30 minutes.

1.4.4 Fourth stage of labour

The first four hours immediately following placental delivery are critical, and have been designated by some experts as the fourth stage of labour. This is because after the delivery of the placenta, the woman can have torrential vaginal bleeding due to failure of uterine contractions to close off the torn blood vessels where the placenta detached from the uterine wall. Therefore, you should be vigilant to detect revealed or concealed postpartum hemorrhage and manage it accordingly.

The placenta, membranes and umbilical cord should be examined for completeness and for abnormalities (Study Session 6 covers this). Maternal blood pressure and pulse should be recorded immediately after delivery and every 15 minutes for the first four hours. Normally, after the delivery of the placenta, the uterus will become firm due to sustained contraction, so the woman might feel strong contractions after the birth. Reassure her that these contractions are healthy, and help to stop the bleeding.

1. 5 Mechanisms of labor

The seven cardinal movements are the series of positional changes made by the baby which assist its passage through the birth canal. (Cardinal means ‘fundamentally important’.) The positional changes made by the baby are specific, deliberate and precise. They allow the smallest diameter of the baby to pass through the mother's pelvic cavity. Neither you nor the mother is responsible for these positional changes. The baby has the responsibility for the seven cardinal movements.

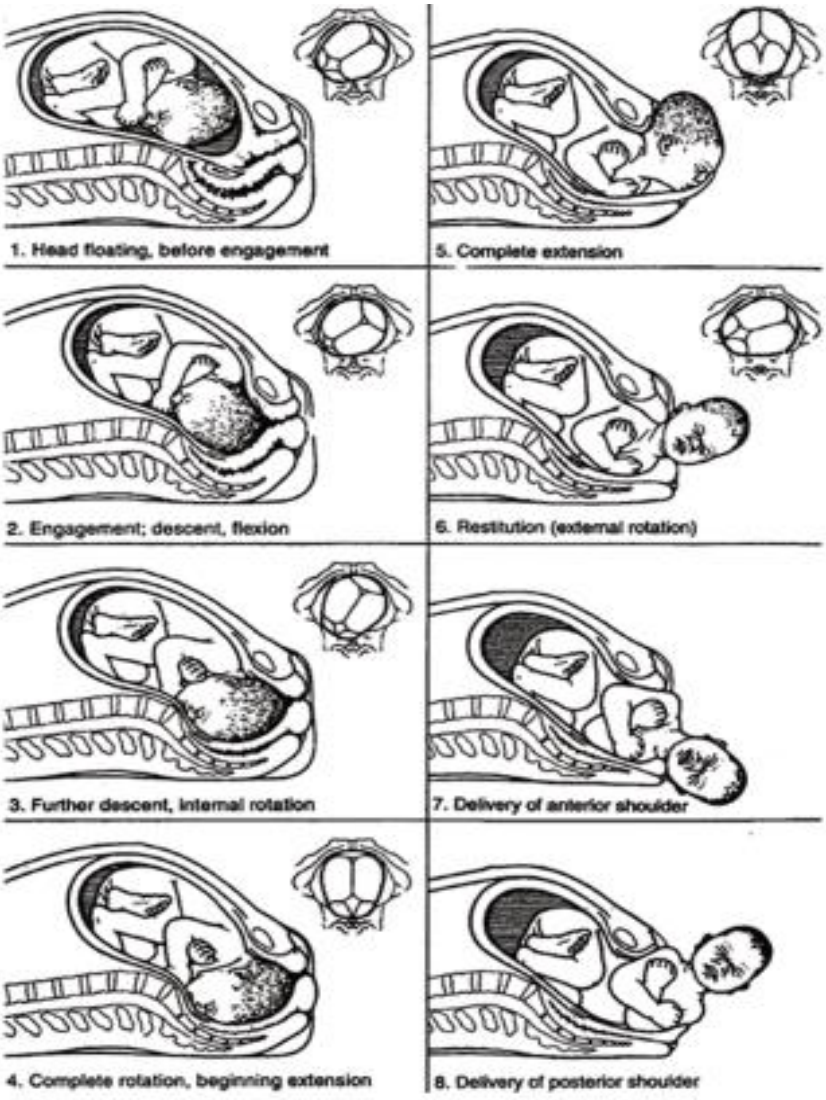


Figure: the starting position and the seven cardinal movements of the baby as it descends through the birth canal. The small pictures show the position of the baby's head, as if you were looking up the birth canal.

Engagement

Engagement is when the fetal head enters into the pelvic inlet. The head is said to be engaged when the parietal diameter (measuring ear tip to ear tip across the top of the baby's head, descends into the pelvic inlet, and the occiput is at the level of the ischial spines in the mother's pelvis

1.5.1 Descent

The term fetal descent is used to describe the progressive downward movement of the

fetal presenting part (commonly the head) through the pelvis. When there is regular and strong uterine contraction, and the size of the baby's' head and the size of the mother's pelvic cavity are in proportion so the baby can pass through, there will be continuous fetal descent deep into the pelvic cavity. Since the pelvic cavity is enclosed with pelvic bones, when the uterus is strongly pushing down, occasionally the fetal scalp bones undergo overlapping at the suture lines in order to allow the head to pass through the narrow space. This overlapping is called molding. The commonest types of molding include one parietal bone overlapping over the other parietal bone along the sagittal suture, the occipital bone overlapping the temporal bone, and the frontal bone overlapping the parietal bones.

1.5.2 Flexion

The movement known as flexion occurs during descent and is brought about by the resistance felt by the baby's head against the soft tissues and bones of the mother's pelvis. The resistance brings about a flexion in the baby's head so that the chin meets the chest. The smallest diameter of the baby's head presents into the pelvis.

1.5.3 Internal rotation

As the head reaches the pelvic floor, it typically rotates to accommodate the change in diameters of the pelvis. At the pelvic inlet, the diameter of the pelvis is widest from right to left. At the pelvic outlet, the diameter is widest from front to back. So the baby must rotate from lying sideways to turning its face towards the mother's backbone. When the rotation is complete, the back of the baby's head is against the front of the mother's pelvis). The sagittal suture in the fetal skull is no longer at an angle, but points straight down towards the mother's backbone. This movement is called internal rotation because it occurs while the baby is still completely inside the mother.

1.5.4 Extension

After internal rotation is complete, the baby's head passes through the pelvis and a short rest occurs when the baby's neck is under the mother's pubic arch. Then extension of the baby's head and neck occur – the neck extends, so the chin is no

longer pressed against the baby's chest, and the top of the head, face and chin are born.

1.5.6 External rotation (restitution)

After the head of the baby is born, there is a slight pause in the action of labour. During this pause, the baby must rotate so that his/her face moves from facing the mother's backbone to facing either of her inner thighs. This movement is called external rotation because part of the baby is already outside the mother (it is also called restitution). The rotation is necessary as the baby's shoulders must fit around and under the mother's pubic bone.

1.5.7 Expulsion

Almost immediately after external rotation, the anterior (foremost) shoulder moves out from under the pubic bone. The mother's perineum becomes distended by the posterior (second) shoulder, which is then also born (Figure 1.3, diagram 8). The rest of the baby's body is then born (expulsion), with an upward motion of the baby's body assisted by the care provider.

Information Sheet 1- Planning and advocating for clean and safe delivery

1.1 Identifying and discussing community perception and cultural beliefs with women

The importance of ensuring the availability and accessibility of skilled care during pregnancy and childbirth is highly promoted because this would avoid most maternal deaths occurring from preventable birth complications. Unfortunately, as you have seen in table 1.1, the current utilization of existing maternal health services is very low in Ethiopia. Factors like unavailability of the service, inadequate number of skilled personnel, geographical inaccessibility of facilities and poor quality of care are some of the commonly mentioned reasons.

However, current evidences also show that the socio- economic status of the woman also affects the utilization of institutional delivery. Factors like, the age of the mother, the birth order of the child, the educational level of the mother, the income of the mother and place of residence (rural- urban set up) are some of these socio-economic factors. The studies showed that the older the age of the woman, the lower the educational level and rural residence resulted in lower utilization of health institutions for delivery.

In addition to that, there is no perceived need for the institutional delivery i.e women do not know the importance of institutional delivery and thus prefer home delivery because they think that is much less expensive than institutional delivery. The perception of woman that institutional delivery is unfriendly and not in line with their belief, culture and religion is also another factor affecting institutional delivery in Ethiopia.

1.2 Observes rules and norms of culture as appropriate.

You have to understand the culture of the community and introduce new ideas with a natural ease and caution. Learns about traditional practices of the locality and recognize the richness and spiritual significance of the community and culture that could possibly contribute for better utilization of health institutions. This means you should be aware of the traditional beliefs regarding pregnancy and childbirth and cooperates and liaises with traditional healthcare system when possible so that you could promotes/builds on positive traditional practices.

For instance you could start from some of the positive aspect of the traditional practices done in the community like that of the traditional birth attendants good practice of allowing the presence of relatives, encouraging walking around, allowing free position in delivery, placing the baby on the mother‘s breast even before umbilical cord is cut.

You should also identify cultural attitudes and practices that prevent the utilization of health service. Instead, you need to offer sound alternatives in place of the harmful practices. You must avoid using dogmatic statements contrary to existing belief, culture and practices since such approach will result in rejection and hatred. Therefore, your health educations should starts from where people are (their existing reality) and slowly build up the discussion to allow them understand, appreciate and internalize fresh ideas.

Provide positive reinforcement for women who previously delivered at health institution and continue to use this approach. Expanding such best practices to other women, families and community members through a 1-5 networking system should be practiced so that it could be replicated. To do this you could use model families who implemented all the packages of health extension program which probably includes better utilization of healthcare institutions for ANC , delivery etc. Providing various rewards for mothers who deliver in healthcare facility could also motivate other mothers in the community.

- Follow pregnant women in your kebele after providing a serious of health education sessions so that you could witness and give feedback for any change in behavior/ practice that occur. Look for any change in health seeking behavior and also utilization of the health care facility.
- Use the various setting you could get like the house to house visit, —Edirǁ, —Ekube coffee drinking ceremonies, religious places, market places, schools, community gathering of any kind etc, to teach the community and get your message out.

1.2 Advocating institutional delivery

1.2.1 Promote institutional delivery

Promotion and Communication on the Importance of Institutional Delivery

Maternal health care service utilization is important for the improvement of both maternal and child health. In a study of six African countries, lower number of maternal and neonatal mortality and morbidity were shown when mothers give birth in a health facility with the help of skilled medical personnel. These study results show the importance of having an increased number of women to give birth in health institutions with the assistance of trained staff/skilled attendant so as to avoid the needless death of mother and child. In general, institutional delivery provides a much better and safer service than home delivery, however, different studies; indicate that a vast majority of women still not utilize the service.

Among most of the factors, lower educational level of women is the one which could be easily addressed with a much lesser but very effective intervention called health promotion and communication. The fact that a huge number of women still think of institutional delivery as ―unnecessary‖, clearly show you the prevailing high awareness gap among our community and women in particular. This also shows the need to have an immediate and large scale interventions targeting on improving women‘s educational opportunities. This can be achieved as a long-term action but could also be achieved in the short term through effective health education programs by addressing more women with no education. DHS study of 2016 also clearly indicates the need to have effective health education and information campaign as an important intervention to dispel the knowledge gap and negative attitudes of women towards institutional delivery.

1.2.2 How to Promote Institutional Delivery?

Hence, as a health extension worker you could play an important role in promoting institutional delivery by applying the principles of health education and communication. Any health community problem that demands health education intervention is based on the assumption: ―that beneficial health behavior will result from a combination of planned, consistent, integrated learning opportunities and scientific evaluation of programs in different settings.‖ You will follow the following principles and approaches in the promotion of institutional delivery in your community:

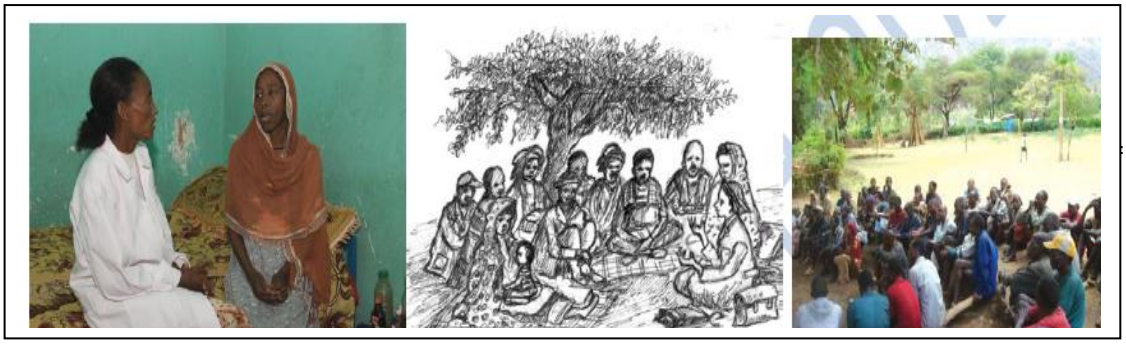
- Identify the factors/gaps for lower level of institutional delivery in your Keble. This step helps you to understand and analyze the causes of the problem.
- You should set the goal of promoting institutional delivery. Your goal here could be to increase the current institutional delivery to a better level so that all pregnant women under your kebele deliver at health institution.

- Participate all member of the community in the health promotion activity since it is impossible to increase institutional delivery without their active involvement. Therefore, make sure to involve her families, religious leaders, respected individuals, traditional birth attends development army (in her 1-5 network) and the community at large. This will also help for the development of local partnership.

By principle participation also helps people to identify their own need for change and promotes the ability to choose for themselves methods and strategies that will enable them to take action.

Figure: Working closely with the community is an important role of Health Extension workers. (Photo: AMREF/ZeinyaTokha)

Identifying the target of education is also important. Your targets could be an individual pregnant woman, group of individuals or the community. There are various opportunities to come in contact with your targets, some of these are your house to house visit which will allow you to get an individual pregnant woman and a 1-5 network of women. Group gathering of any kind like Ekube, Edir and community meetings could also allow you to find your targets/audience. Identifying your target/group will help you to adapt proper health education method and activity that will fit your audience.



individuals last photo

You should first set the objective of your health education that will address the identified gaps or factors contributing for lower institutional delivery. Your objective might address one, most or all of these objectives in one or another way based on the gap you identify for your kebele.

- Use credible resource (updated scientific facts) is also very important not to diffuse the information shared and also lose trust.
- Multiple causes/factors will always be found for any given behaviors. For each of the multiple predisposing, enabling, and reinforcing factor identified a different methods or components of comprehensive behavioral change must be provided. The most important teaching methods you could use could be:
- Talking on the importance of institutional delivery using relevant, local and tangible experience the audience could easily understand. Using local language and way of expression is also important
- Experience sharing of some women whose lives was saved because of institutional delivery and also a testimony of traditional birth attendants could influence the community
- Invite role models, influential individuals, elders religious leaders to promote the importance of institutional delivery
- Role play and drama on the risk of home based delivery and the importance of institutional delivery

Mass media:

- Studies suggested the effectiveness of mass media (access to radio) than printed media to transmit health information especially in rural setting where most women cannot read. In addition to that using local language to transmit health education is also found to be very effective.
- Audio visual aids like posters
- Demonstration
- Group discussion in a 1-5 network
- Traditional means of communication such as poems, stories, songs, dances and puppet shows

Planning and organizing health education is very important. It involves deciding in advance the when, who, what, how and why of health education on institutional delivery.

It requires the planning of health education objectives, resources, methods and materials to be used and identification of target groups etc.

1.3 Three delays of labor and delivery service

What is maternal death?

Death of a woman while pregnant or within 42 days of termination of pregnancy irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

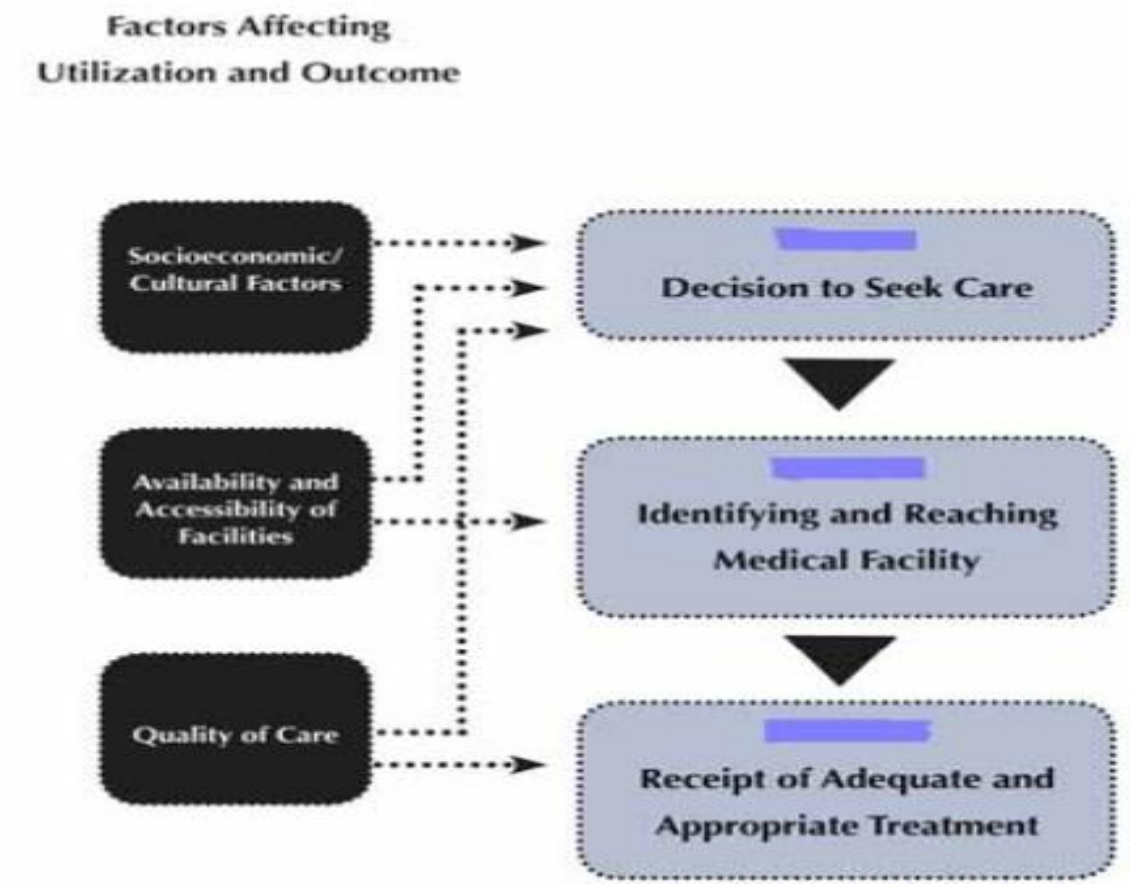


Figure: Factors affecting utilization and outcomes of labour and delivery services.

1. Delay in deciding to seek medical care

   - Failure to recognize danger signs
   - Lack of money to pay for medical expenses and cost of transportation
   - Fear of being ill-treated in the health facility
   - Reluctance from the mother or the family due to cultural constraints
   - The woman or family member present at childbirth lack power to make a decision
   - Lack of encouragement from relatives and community members to seek care

- No available person to take care of the children, the home and livestock
- Lack of companion in going to the health facility

2. Delay in identifying and reaching the appropriate facility

   - Distance from a woman's home to a facility or provider
   - Lack of roads or poor condition of roads
   - Lack of emergency transportation whether by land or water
   - Lack of awareness of existing services
   - Lack of community support

3. Delay in receiving appropriate and adequate care at the health facility

   - Lack of healthcare personnel
   - Gender insensitivity of healthcare providers
   - Shortages of supplies, i.e. emergency medicines or blood
   - Lack of equipment for labour and delivery services
   - Lack of competence of health care providers to deliver the services
   - Weak referral system includes transportation and communication

Information Sheet 3 Role and responsibilities of family and community to support safe delivery

3.1 Roles, relationships and responsibilities to support safe birthing

Traditional Birth Attendants'(TBAs) assist 60% -80% deliveries throughout the world and are called by different names. Therefore, considering the large number of community they serve, the positive perception of the community towards them and their ability to identify some level of obstetric problems compared with other community members, the need to involve TBAs in the promotion of institutional delivery is unquestionable.

TBAs could be an important and helpful agent in advising and referring mothers during pregnancy and delivery. However, it is also equally important for you to respect them and their effort, acknowledge their contribution and make them an active participant (even a lead person) in the 1-5 household networks and the health development army. It is only through these partnerships you could make them an ally/partner in improving the health outcome of mothers and children. Studies show that establishing partnership with TBAs will increase a healthy collaboration with TBAs which consequently results in an improved maternal and neonatal health outcome. So, being an important partner, TBAs should be actively involved at each step of your health promotion and communication practice.

3.2 Involve Families, Relatives, Friends and the Community in the Promotion of Institutional Delivery

The health extension program support start from single families 'to the community, making sure that there is no one left behind. So you have a very good opportunity to come in direct contact with the whole family members (the mother, husband, relatives etc.), neighbors, community leaders, religious leaders and the community. Therefore, you should use these opportunities to promote the importance of institutional delivery. The 1-5 network, the existing community development groups, development armies are also another opportunity though which you could teach the community about the benefits of having a delivery with the assistance of skilled health professional. You could also inform the community that the service provided in the healthcare facility is women

friendly: which respect the belief, culture and religion of the mother and the community. You could also use these opportunities to clear any myth the community have towards institutional delivery

LG #25	LO #2- Support women during labor and delivery

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Assessment of labor
- Assessment of progress of labor
- Applying appropriate labor and delivery care in all stages of labor

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Assess labor
- Assess progress of labor
- Apply appropriate labor and delivery care in all stages of labor

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