

# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 1: Welcome, Pre-course Assessment, and Introduction





# Welcome!

- Workshop opening
- Pre-course assessment
- Transfer-in
- Hopes and Fears
- Ground rules/norms
- Workshop goals and participant learning objectives
- Workshop schedule
- Participant materials



# Course goals

To build the capacity of health workers to provide:

- Health education about obstetric fistula and the importance of antenatal care and skilled attendance at birth
- Quality reproductive health and maternity care services for
  - preventing, recognizing and providing pre-repair care for cases of obstetric fistula in women
  - referring women with obstetric fistula for surgical repair
  - providing postoperative care and reintegration services for women with obstetric fistula



# Participant learning objectives

By the end of the training, the participants will be able to:

- Provide health education to communities about safe motherhood, the importance of antenatal care and skilled attendance at birth, and fistula prevention, recognition, and repair
- Demonstrate and train others in the use of the partograph to prevent prolonged/obstructed labor
- Identify and assess women who may have obstetric fistula



## Participant learning objectives (cont'd)

- Provide counseling and care for women with obstetric fistula during the pre-repair period
- Refer women to pre-repair unit (PRU) for ongoing care
- Provide support to women following repair during reintegration into communities



# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 2: Overview of Safe Motherhood and Global Maternal Morbidity and Mortality



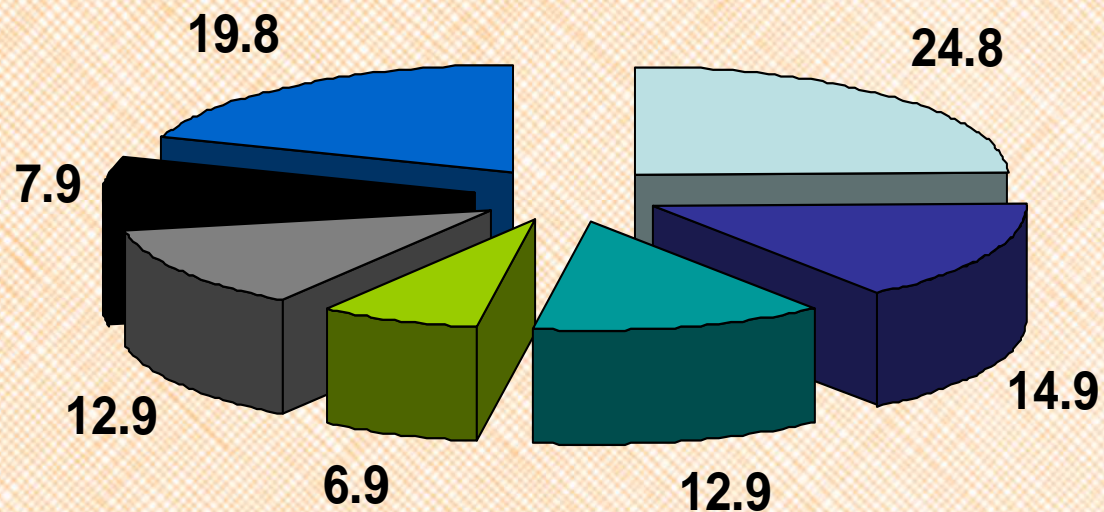


# WHO definition of maternal death

- The death of a woman while pregnant or within 42 days of the end of pregnancy from any cause related to or aggravated by the pregnancy or its management (NOT from accidental or incidental causes)
- LATE maternal death is death of a women from direct or indirect obstetric causes more than 42 days but less than one year after the end of a pregnancy.



# Global causes of maternal mortality



- Hemorrhage 24.8%
- Infection 14.9%
- Eclampsia 12.9%
- Obstructed Labor 6.9%
- Unsafe Abortion 12.9%
- Other Direct Causes 7.9%
- Indirect Causes 19.8%



# Direct obstetric death

Death resulting from:

- Obstetric complications of pregnancy, birth or postpartum
- Interventions, omissions, and/or incorrect treatment for complications of pregnancy



# Common causes of direct obstetric death

- Hemorrhage
- Infection
- Pre-eclampsia/eclampsia
- Obstructed labor
- Unsafe abortion
- Complications of anesthesia or surgery related to pregnancy



# Indirect obstetric death

Death of a pregnant woman or woman within 42 days of termination of pregnancy resulting from:

- pre-existing disease or
- disease/injury exacerbated by pregnancy



# Common causes of indirect obstetric death

- Exacerbation of cardiac or renal disease
- Severe anemia
- Tuberculosis
- Violence related to pregnancy state
  - domestic violence, homicide, suicide
- HIV disease
  - with the new international classification of diseases (ICD, 10<sup>th</sup> edition), HIV related illness exacerbated by pregnancy and resulting in death is counted as an indirect maternal mortality



# Measurements of maternal mortality

- Maternal Mortality Ratio:
  - The number of maternal deaths per 100,000 live births in the same time period
- Maternal Mortality Rate:
  - The number of maternal deaths per 100,000 women of reproductive age in the same time period
- Lifetime Risk of Maternal Death:
  - The probability of a woman dying from a maternal cause during the course of her lifetime (includes risk of death x # of pregnancies)



# Global maternal mortality update

- Since 1990, there has been overall a 34% decline in global maternal mortality – **now estimated at 358,000 maternal deaths per year (down from 530,000)**
- Countries in sub-Saharan Africa and South Asia account for 87% of these deaths (313,000)



## Global maternal mortality update (cont'd)

- 147 countries experienced SOME decline in MMR from 1990-2008
- 23 countries had an increase in MMR. Most of these are in sub-Saharan Africa (in addition to Afghanistan, Laos, Bangladesh, Haiti, and Cambodia)



# Eleven countries account for 65% of maternal deaths

Afghanistan

Bangladesh

DRC

**Ethiopia**

India

Indonesia

Kenya

Nigeria

Pakistan

Sudan

Tanzania



# Ethiopia

- On average, 3 million women in Ethiopia are pregnant each year and 2 million give birth
- 42% of pregnancies are unintended and more than half a million pregnancies are terminated
- More than 25,000 mothers die related to pregnancy each year and up to 500,000 may have short term and/or long term disabilities



# Ethiopia

- Overall, 53% DECLINE in maternal deaths since 1990 and annual decline of 4.2%
- Maternal mortality ratio of:
  - 673/100,000 live births (Ethiopia DHS, 2005)
  - 470/100,000 live births (WHO, 2008)
- Lifetime risk of maternal death 1:40
- MDG 5 target for 2015 of further reduction to 267/100,000 live births

Trends in Maternal Mortality 1990-2008.  
WHO/UNICEF/UNFPA/World Bank Update.  
Published by WHO 2010.



# Ethiopia

- Only 15% of women delivered at a health facility (85% home deliveries)
- Approximately 10% of deliveries are attended by health extension workers (HEW)



# Global maternal morbidity

- For every ONE maternal death, 40-60 women experience an illness or injury related to pregnancy
- Important causes of maternal morbidity:
  - obstetric fistula and other birth related trauma
  - severe anemia
  - infertility
  - pelvic pain



# Preventing maternal mortality and morbidity

- Many maternal deaths cannot be prevented or predicted
- Eighty percent of maternal deaths occur around labor, delivery, and first 24-48 hours postpartum
- Whether or not a woman dies or suffers morbidity depends on her seeking and receiving access to timely and competent emergency obstetric care
- Without the ability to diagnose and treat obstetric complications, maternal lives cannot be saved



# WHY Do Women Die? The Three Delay Model

1. Delay in decision to seek care
2. Delay in reaching care
3. Delay in receiving care



# WHY Do Women Die? The Three Delay Model

## 1. Delay in decision to seek care

- Lack of education and understanding of symptoms, warning signs of problems in pregnancy
- Cultural acceptance of risk of death during childbirth
- Low status of women
- Socio-cultural barriers to seeking care – lack of control of household decision making and access to family finances, gender bias, poverty



# WHY Do Women Die? The Three Delay Model

## 2. Delay in reaching care

- Geographic barriers
- Lack of available/appropriate transport and finances

## 3. Delay in receiving care

- Lack of equipped health care facilities to meet needs of the population
- Limited supplies and trained personnel at health facilities
- Poor quality of care or discrimination in provision of care
- Disruption in health care services due to civil unrest, politics and other wider social factors



# Strategies to address delays

- Empowering and educating women and their families
- Strengthening outreach and community-based care
- Developing community supported transport and emergency finances
- Building infrastructure closer to homes of women with limited resources (rural and underserved areas)
- Developing effective referral systems
- Improving quality and availability of emergency obstetric care
- Promoting commitment to affordable high quality maternal health services for all women
- Strengthening monitoring and evaluation information for continual improvement of health care services and workers



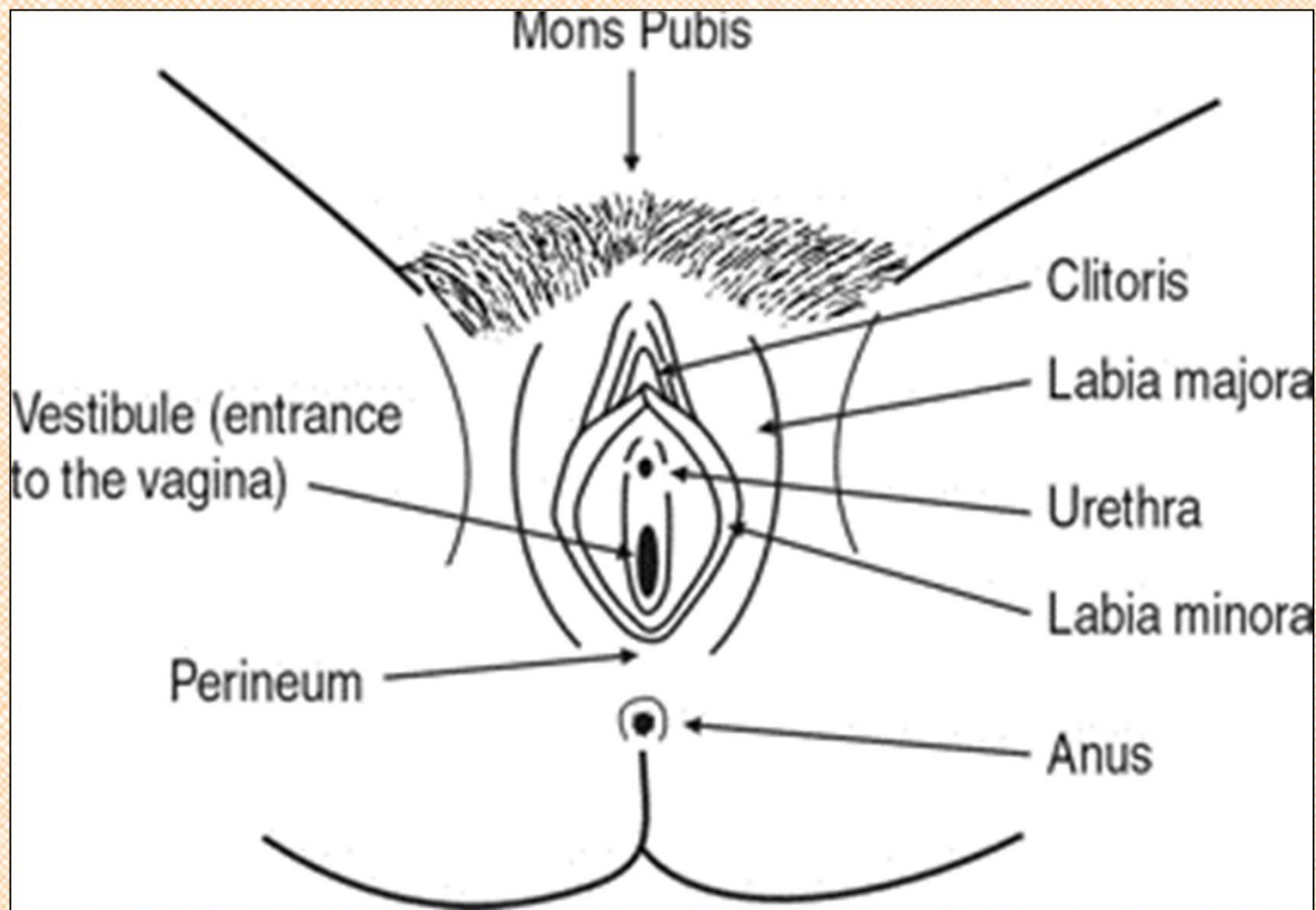
# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 3: Female Reproductive System



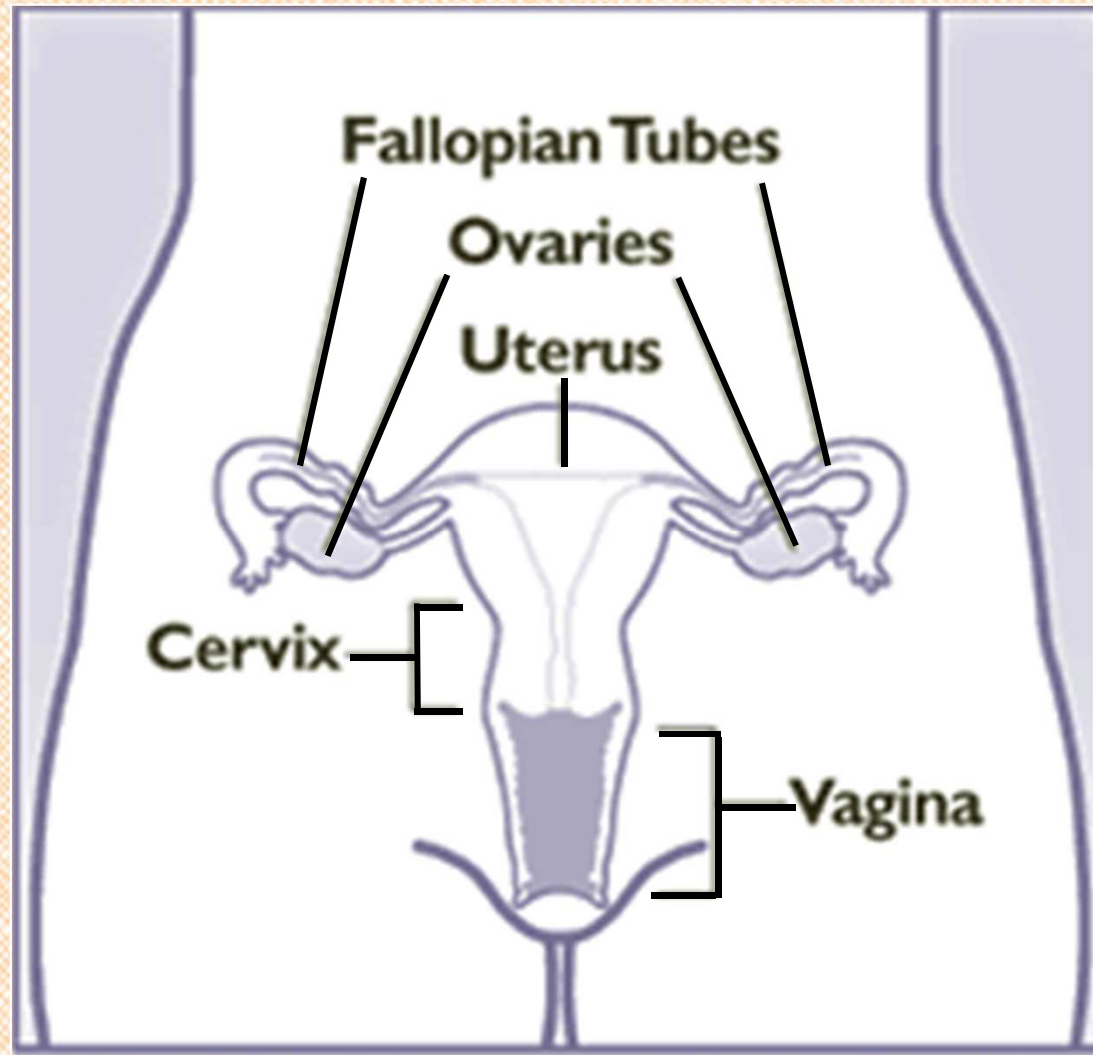


# External female reproductive organs





# Internal female reproductive organs





# Menstrual cycle

- Menstruation usually starts when a girl is between 11-15 years of age (menarche) and continues until 50-60 years of age (menopause)
- Monthly cycle if a woman is not pregnant or breastfeeding (can also be affected by some methods of family planning)
- Controlled by hormone cycles
  - Follicular stimulating hormone (FSH) and Luteinizing hormone (LH) from the pituitary gland
  - Estrogen and progesterone from the ovaries
- After the egg is released from the ovary (ovulation) if there is no fertilization with sperm, there is a discharge of blood and mucous from the uterus and the cycle repeats



# Changes during pregnancy

- A woman can get pregnant if she has sex during or near the time of ovulation
- Symptoms of pregnancy women may notice: missed menstruation, soreness and enlargement of breasts, nausea, frequent urination and fatigue
- As the fetus grows inside the uterus, it stretches and extends above the pelvic bones



# Impact of nutrition on reproduction

- Inadequate nutrition interferes with physical growth – height and weight – of children
- Young women who had inadequate nutrition as children may be short in stature, undernourished and have pelvic bones not well developed for pregnancy and childbirth
- Under-nutrition can also interfere with reproductive hormones and increase risk of anemia. Women who are undernourished may not have normal menstrual cycles and may have difficulty getting pregnancy and staying healthy during pregnancy



# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 4: Essential Components of Antenatal Care and Emergency Obstetric Care





# Spectrum of Maternal Health Care Services

- Focused Antenatal Care
- Basic and Comprehensive Emergency Obstetric Care  
(including skilled attendance at each birth)
- Postpartum Care
- Family Planning
- Postabortion Care
- Care for Sexually Transmitted Infections  
(including HIV)



# Purpose of antenatal care

- To provide health education on key issues
- To provide evidence based interventions and care which can prevent and treat complications of pregnancy
- To encourage skilled attendance at delivery
- To discuss plans for emergency transport and funds in the case of an emergency and to identify the nearest site of Emergency Obstetric Care
- To provide a link between women and the health care system



## WHO recommends a minimum of four ANC visits

- First visit: On confirmation of pregnancy
- Second visit: 20-28 weeks
- Third visit: 34-36 weeks
- Fourth visit: before expected date of delivery or when the pregnant woman feels she needs to consult health worker



# Leading causes of maternal mortality

- Hemorrhage
- Infection
- Eclampsia
- Prolonged and obstructed labor
- Unsafe abortion
- Other indirect causes:
  - HIV/AIDS, malaria and TB, heart disease, anemia



# Evidence-based focused ANC

- Measurement of weight/body mass index (BMI) and assessment of nutritional status
- Detection of pre-existing conditions which may complicate pregnancy
- Monitoring blood pressure and signs and symptoms of pre-eclampsia/eclampsia
- Tetanus toxoid immunization



## Evidence-based focused ANC (cont'd)

- Prevention and treatment of anemia
  - Iron/folate supplementation for at least 6 months of pregnancy and 2 months postpartum
  - De-worming medication in areas where parasites are common
- Promotion of active management of the third stage of labor for the prevention of postpartum hemorrhage
- Prevention of malaria in pregnancy
  - Intermittent preventive treatment (IPT) for malaria
  - Insecticide treated bednets (ITNs)



## Evidence-based focused ANC (cont'd)

- Recognition and treatment of sexually transmitted infections (STIs)
- “Opt out” counseling and testing for HIV and education and clinical services for the prevention of maternal to child transmission (PMTCT) including use of condoms during pregnancy in discordant couples
- Confirmation of fetal position by 36 weeks of pregnancy
- Urinalysis for proteinuria in third trimester if signs of pre-eclampsia
- Birth Preparedness and Complication Readiness



# Skilled birth attendant (SBA)

- *“Trained health provider who has completed a set course of study in handling obstetric emergencies and is registered or legally licensed to practice”*
- Includes doctors, nurses, midwives, and other health workers who:
  - Can diagnose and manage complications during pregnancy and childbirth,
  - Can assist in normal deliveries, and
  - Are linked to a referral system for further care when necessary
- **Skilled attendance at birth reduces the risk of maternal mortality by 13-33%**



# Emergency obstetric care (EmOC)

- Many women “*at risk*” never develop complications and a significant number of women who are “*low risk*” do
- A woman can move from low to high risk (or vice versa) throughout pregnancy and postpartum
- Services need to be available as close as possible to where women live



## Emergency obstetric care (cont'd)

- 40% of all pregnant women have some complication
- Up to 15% need emergency obstetric care to manage life threatening complications to the mother or child
- WHO estimates that between 10-15% of women will need a caesarian section to safely deliver their infants



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth			
Administration of antibiotics for infection			
Administration of anti-hypertensive and anticonvulsant medication			
Essential newborn care			
Manual removal of placenta			
Assisted vaginal delivery			
Advanced surgical skills			
Blood transfusion			



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth	<b>X</b>	<b>X</b>	<b>X</b>
Administration of antibiotics for infection			
Administration of anti-hypertensive and anticonvulsant medication			
Essential newborn care			
Manual removal of placenta			
Assisted vaginal delivery			
Advanced surgical skills			
Blood transfusion			



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth	X	X	X
Administration of antibiotics for infection	X	X	X
Administration of anti-hypertensive and anticonvulsant medication			
Essential newborn care			
Manual removal of placenta			
Assisted vaginal delivery			
Advanced surgical skills			
Blood transfusion			



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth	X	X	X
Administration of antibiotics for infection	X	X	X
Administration of anti-hypertensive and anticonvulsant medication	X	X	X
Essential newborn care			
Manual removal of placenta			
Assisted vaginal delivery			
Advanced surgical skills			
Blood transfusion			



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth	X	X	X
Administration of antibiotics for infection	X	X	X
Administration of anti-hypertensive and anticonvulsant medication	X	X	X
Essential newborn care	X	X	X
Manual removal of placenta			
Assisted vaginal delivery			
Advanced surgical skills			
Blood transfusion			



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth	X	X	X
Administration of antibiotics for infection	X	X	X
Administration of anti-hypertensive and anticonvulsant medication	X	X	X
Essential newborn care	X	X	X
Manual removal of placenta		X	X
Assisted vaginal delivery			
Advanced surgical skills			
Blood transfusion			



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth	X	X	X
Administration of antibiotics for infection	X	X	X
Administration of anti-hypertensive and anticonvulsant medication	X	X	X
Essential newborn care	X	X	X
Manual removal of placenta		X	X
Assisted vaginal delivery		X	X
Advanced surgical skills			
Blood transfusion			



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth	X	X	X
Administration of antibiotics for infection	X	X	X
Administration of anti-hypertensive and anticonvulsant medication	X	X	X
Essential newborn care	X	X	X
Manual removal of placenta		X	X
Assisted vaginal delivery		X	X
Advanced surgical skills			X
Blood transfusion			



# Components and levels of EmOC

Core skill	Obstetric First Aid Skilled attendance	BEmOC	CEmOC
Normal pregnancy and childbirth	X	X	X
Administration of antibiotics for infection	X	X	X
Administration of anti-hypertensive and anticonvulsant medication	X	X	X
Essential newborn care	X	X	X
Manual removal of placenta		X	X
Assisted vaginal delivery		X	X
Advanced surgical skills			X
Blood transfusion			X



# International goals for EmOC

- Skilled attendance at every birth
- At least 4 Basic EmOC sites (within 4 hours) and 1 Comprehensive site (within 12 hours) for every 500,000 population
- At least 15% of births should take place in a health facility
- Case fatality in health facilities should be  $<1\%$



# Safe and healthy pregnancy and birth

- Most women (85%) have healthy and safe pregnancies and birth
- EVERY woman should have antenatal care and should deliver with a skilled birth attendant
- Many women with “high risk” conditions can have normal deliveries
- Some women who are “low risk” will have emergencies that cannot be predicted or prevented



# Birth preparedness: preparing for normal birth

- Skilled attendant at every birth
- Deciding on place of delivery
- Availability of essential clean items for mother and baby at the time of birth



## Complication readiness: preparing for complications

- Recognition of warning signs of complications in pregnancy or childbirth
- Designated decision maker(s)
- Access to emergency funds
- Rapid referral and transport to Emergency Obstetric Care site



# Key warning signs of complications in pregnancy or postpartum

- Swelling of hands and face
- Pale conjunctiva, tongue, palms and nail beds
- Persistent vomiting
- Jaundice
- Bleeding from the vagina
- Severe headache, blurred vision, seizures, loss of consciousness
- Rupture of membranes or foul smelling discharge
- Persistent lower abdominal pain
- Diminished/loss of fetal movement
- Fever



# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 5: Prevention of Prolonged and Obstructed Labor





# Prolonged and obstructed labor

- One of the five major causes of maternal death (responsible for 8% of all maternal deaths)
- **Prolonged and obstructed labor is the MOST common reason for obstetric fistula**
- An estimated 6.5 million women in the world have obstructed labor each year (2-15 cases/1000 births)
- Approximately 2-5% of women who experience a prolonged or obstructed labor will develop obstetric fistula
- Many cases of obstructed labor and obstetric fistula are not reported because women do not seek care



# Obstructed labor injury complex

- Nerve compression (predominantly to the peroneal and lumbosacral nerves) which can result in foot drop and sometimes loss of feeling in the lower extremities
- Avascular necrosis (i.e., disruption of blood supply causing break down of the bone) of the symphysis pubis leading to pelvic bone pain and abnormal gait
- Scarring in the vagina leading to vaginal stenosis, chronic pain with intercourse, amenorrhea (no menses), and secondary infertility
- Chronic skin changes because of contact with urine and feces – irritation, wound development, chronic dermatitis



# Preventing obstructed labor

- During antenatal care, confirmation of fetal position as CEPHALIC by 36 weeks gestation. All women who are not cephalic should be referred to a CEmOC site.
- Recognizing and referring women who are at increased risk of obstructed labor:
  - Women who are pregnant very young
  - Women who have undergone FGM, particularly infibulation or the total excision of vulva and restriction of vaginal opening
  - Women who previously had a prolonged or obstructed labor or caesarian section



# Partograph

- **Objective tool to assess the progress of normal labor at timely intervals in order to recognize and prevent prolonged or obstructed labor**
- **WHO recommends that ALL health care workers use the partograph for ALL births**
- When the partograph is routinely used, prolonged and obstructed labor can be recognized before there are complications.
- Timely transfer to emergency obstetric care, including caesarian section if indicated, is possible



# WHO Partograph

# WHO PARTOGRAPH

Name: \_\_\_\_\_ Age: \_\_\_\_ G: \_\_\_\_ P: \_\_\_\_\_ Hospital No.           

Date of Admission: \_\_\_\_\_ Time of Admission: \_\_\_\_\_

Ruptured membrane: Y/N If yes, Date \_\_\_\_\_ (time) \_\_\_\_\_ True Labour Pain Started Date (time) \_\_\_\_\_

**Fetal Heart Rate per minute**

Amniotic fluid Moulding

Cervix (cm) [Plot X]

Descent of head [Plot 0]

Contraction per 10 minutes

Oxytocin U/L drops/min

Drugs given and IV fluids

Pulse ●

BP

Temperature °C

Protein

Urine Output

The partograph grid consists of several horizontal plots sharing a common vertical axis for 'Hour Time' from 1 to 15. The plots are as follows:

- Fetal Heart Rate per minute:** A large grid with a vertical axis from 80 to 200 in increments of 10.
- Amniotic fluid Moulding:** A grid with a vertical axis from 0 to 10 in increments of 1.
- Cervix (cm) [Plot X] and Descent of head [Plot 0]:** A grid with a vertical axis from 0 to 10 in increments of 1. Two diagonal lines are drawn: one from (1, 4) to (6, 10) labeled 'Alert', and another from (5, 4) to (10, 10) labeled 'Action'.
- Contraction per 10 minutes:** A grid with a vertical axis from 1 to 6. A legend indicates three levels: <20 (stippled), 20-40 (diagonal lines), and 40 (solid black).
- Oxytocin U/L drops/min:** A grid with a vertical axis from 1 to 6.
- Drugs given and IV fluids:** A series of 15 empty vertical boxes.
- Pulse ●:** A grid with a vertical axis from 60 to 180 in increments of 10.
- BP:** A grid with a vertical axis from 60 to 180 in increments of 10.
- Temperature °C:** A grid with a vertical axis from 36 to 42 in increments of 0.2.
- Protein:** A grid with a vertical axis from 0 to 3 in increments of 1.
- Urine Output:** A grid with a vertical axis from 0 to 3 in increments of 1.



## Step one

### **Begin using the partograph when a woman begins or is in active labor**

- Active phase of first stage of labor: The cervix is at least 4 cm dilated, and the woman has 3 contractions in 10 minutes lasting at least 45–60 seconds
- Latent phase of first stage of labor: The cervix is not dilating or is dilating very slowly, and there are fewer than 3 contractions in 10 minutes
  - Do not begin the partograph when the woman is in the latent phase of labor



## Step two

### **Record information about the woman**

- Record name and age on the top of the partograph
- Record gravida, para, medical record number, date and time of admission
- If her membranes ruptured before she presented to the health center, record what time this happened



# Step three

## Record the time

- Each small block on the partograph represents 30 minutes, and each large block represents one hour
- Record actual clock time in the blocks marked “Time”
- Record hours since start of active labor to the right of each line in the “Hours” section



## Step four

### Record other vital components of labor assessment

- Record the woman's temperature, pulse and blood pressure in the appropriate squares at the bottom of the partograph
- Check the color of amniotic fluid at each vaginal exam and when changing pads, and mark on the middle of the graph
  - Mark **I** if membranes are intact, **C** if fluid is clear, and **M** if there is meconium



## Step four (cont'd)

### **Record other vital components of labor assessment**

- During the vaginal exam, check the fetus' head for moulding. Record fetal scalp moulding:
  - 0 = no moulding/skull bones easily felt
  - + = skull bones touching each other
  - ++ = skull bones overlapping but reducible
  - +++ = skull bones overlapping but not reducible



## Step four (cont'd)

### **Record other vital components of labor assessment**

- Every time the woman passes urine, write the volume of urine in the appropriate box at the bottom of the partograph
- If possible, check the volume and whether there is protein (assessing for pre-eclampsia) and/or acetone (assessing for dehydration) present in the urine



## Step five

### **Record the fetal heart rate every 30 minutes during active phase of first stage of labor**

- Count fetal heart tones for a full minute (bpm)
- Record the fetal heart rate (FHR) with a dot “●” at the appropriate place on the top section of the partograph
- If FHR is less than 100 bpm or more than 180 bpm, or if there are decelerations after every contraction, this may indicate fetal hypoxia or distress, and the woman should be referred to a place where comprehensive emergency obstetric care is available



## Step six

**Record the strength, duration and frequency of contractions in the appropriate squares in the middle of the graph**

- Check contractions for 10 minutes every 30 minutes during active phase of the first stage
- Note the number, duration and strength of contractions in 10 minutes. Each small box represents one contraction.
  - *Less than 20 seconds – few dots in box*
  - *Between 20 and 40 seconds – dashes in box*
  - *More than 40 seconds – completely filled in box*
- **EXAMPLE:** If a woman has four strong contractions in 10 minutes, four boxes should be completely filled in



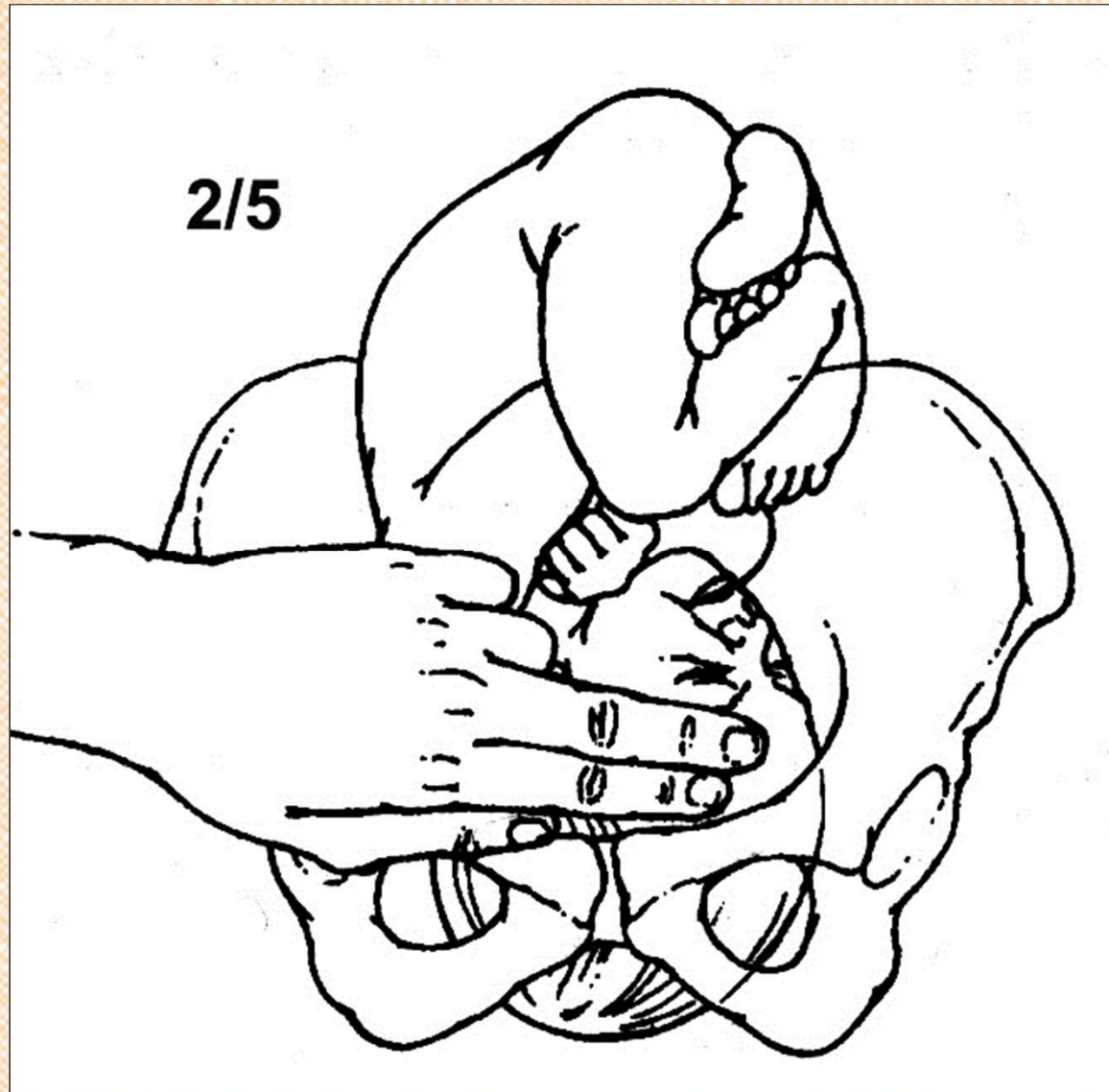
## Step seven

**Measure cervical dilation and descent of the baby's head every four hours, and record in the center portion of the partograph**

- This is the most important section of the partograph
  - Record dilation of the cervix with an “X” in the box to the right of the corresponding dilation amount (4–10 cm)
  - Record descent of the baby's head with an “O” to the right of the corresponding descent values (from 5 to 0 fingers above the pubic symphysis of the mother)

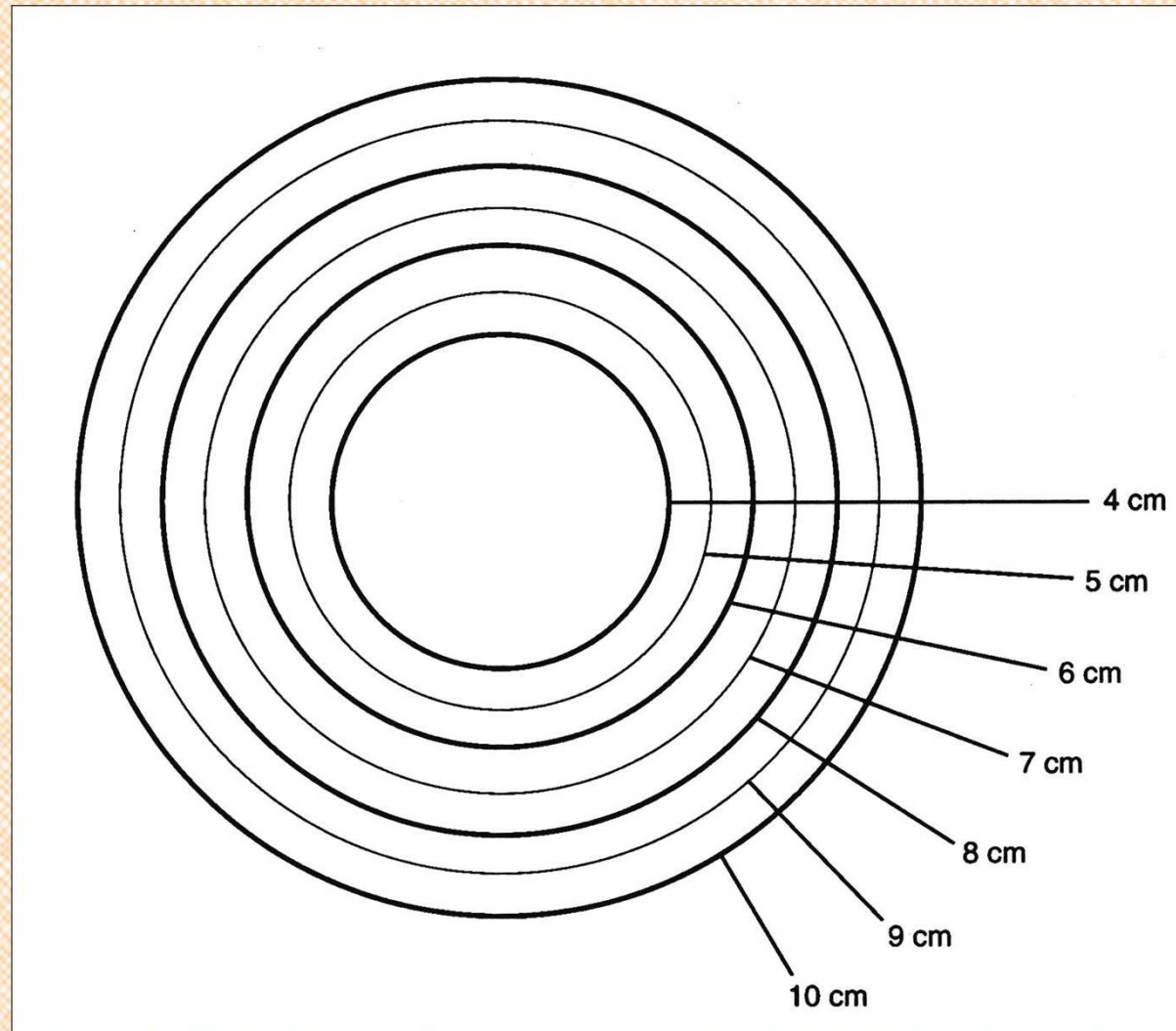


Descent: Measured in finger breadths above the pelvic bone on abdominal exam





# Cervical dilation: Measured in centimeters on vaginal exam (4-10 cm)





## Step eight

### Monitor the progress of labor charted on the center of the partograph

- **The first diagonal line on the chart is the "Alert" line.** If the cervical dilation or fetal head descent cross this line, consider referral for prolonged labor if emergency obstetric care is not available
  - If the membranes are still intact, may assess the strength of contractions and take action based on the level of facility
  - If there is no progress after 1-2 hours, **REFER** the woman immediately. She may need oxytocin to strengthen contractions or an operative delivery
- **The second diagonal line on the chart is the "Action" line.** If cervical dilation or fetal head descent cross this line, take **IMMEDIATE** action and **refer** the patient. Send the partograph **WITH** the woman when she is transferred.



## Step nine

When the woman delivers, record all the other important information about the delivery and the baby on the partograph



# Example of completed partograph

**WHO PARTOGRAPH**

Name: Amra-Case 1 Age: 28 G: 3 P: 2 Hospital No.             

Date of Admission: 19.9.2009 Time of Admission: 05.00

Ruptured membrane: ON if yes. Date 19.9.2009 (time) 04.00 True Labour Pain Started Date (time) \_\_\_\_\_

Fetal Heart Rate per minute

Amniotic fluid Moulding

Cervix (cm) [Plot X]

Descent of head [Plot 0]

Contractions per 10 minutes

Oxytocin U/L drops/min

Drugs given and I/V fluids

Pulse ●

BP

Temperature °C

Protein

Acetone

Urine Output

**Fetal Heart Rate (per minute):**

Hour	Heart Rate (b/min)
1	110
2	110
3	140
4	130
5	140
6	130
7	140

**Amniotic fluid Moulding:**

Hour	Moulding
1	-
2	-
3	-
4	-
5	-
6	-

**Cervix (cm) [Plot X]:**

Hour	Cervix (cm)
1	4
2	5
3	6
4	7
5	8
6	9

**Descent of head [Plot 0]:**

Hour	Descent (cm)
1	2
2	2
3	2
4	2
5	2
6	2

**Contractions per 10 minutes:**

Hour	Contractions
1	20-40
2	20-40
3	20-40
4	20-40
5	20-40
6	>40

**Oxytocin U/L drops/min:**

Hour	Oxytocin
1	0
2	0
3	0
4	0
5	0
6	0

**Drugs given and I/V fluids:**

Hour	Drugs/Fluids
1	
2	
3	
4	
5	
6	

**Pulse (b/min):**

Hour	Pulse
1	80
2	80
3	80
4	80
5	80
6	80

**BP (mmHg):**

Hour	BP
1	110/70
2	110/70
3	110/70
4	110/70
5	110/70
6	110/70

**Temperature (°C):**

Hour	Temperature
1	36.8
2	37
3	37
4	
5	
6	

**Protein:**

Hour	Protein
1	-
2	-
3	-
4	-
5	-
6	-

**Acetone:**

Hour	Acetone
1	-
2	-
3	-
4	-
5	-
6	-

**Urine Output (ml):**

Hour	Urine Output
1	200
2	
3	
4	
5	150
6	

**Notes:**

- Alert
- Action
- SVD at 13.20
- live female infant
- weight = 3250 g



# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 6: Obstetric Fistula – Definition, Causes and Contributing Factors, and Impact on Affected Women





# What is an obstetric fistula?

- A fistula is defined as an abnormal opening between two areas of the body
- An obstetric fistula MOST often develops during labor and birth when the infant's head descends into the maternal pelvis and cannot pass through, usually because:
  - Woman's pelvis is too small or poorly developed
  - Infant is too big or is poorly positioned (malpresentation or malposition)



# Development of obstetric fistula

- The continual pressure during uterine contractions compresses maternal tissue against hard bone on either side (mother's pelvis and infant's head). This gradually constricts the blood supply and damages the tissue.
- A fistula usually develops between the bladder and vagina (vesico-vaginal fistula or VVF) or less commonly between the vagina and the rectum (recto-vaginal fistula or RVF). It is unusual to develop a RVF without a VVF.
- Initially, there may be small area of central necrosis (dead tissue) but scarring from the “crush” injury often develops over a much larger area which creates a hole or fistula.



# Anatomy of obstetric fistula

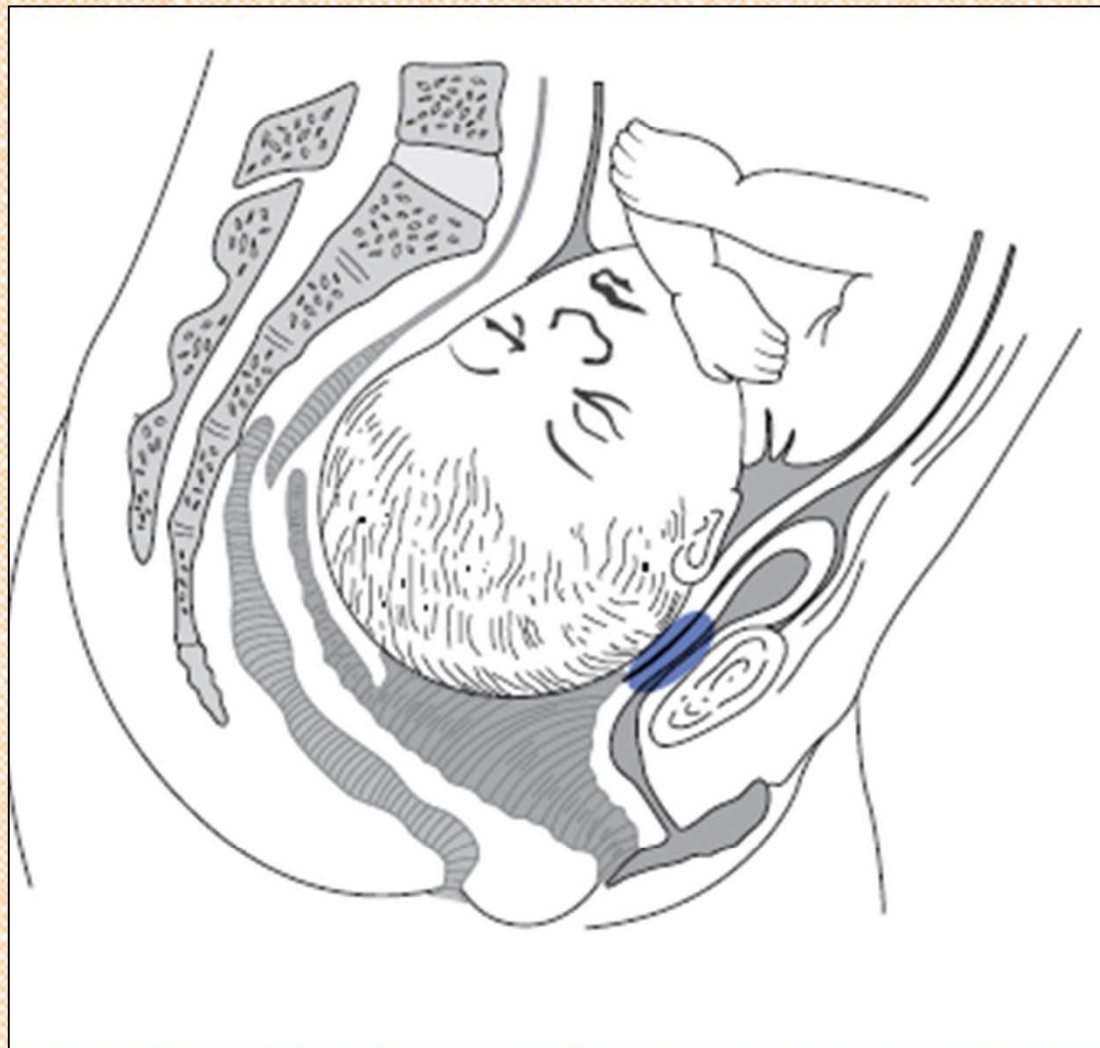


Figure from: Hancock, B and A Browning. Practical Obstetric Fistula Surgery. The Royal Society of Medicine Press Ltd. London: 2009. Used by permission.



# Anatomy of obstetric fistula (cont)

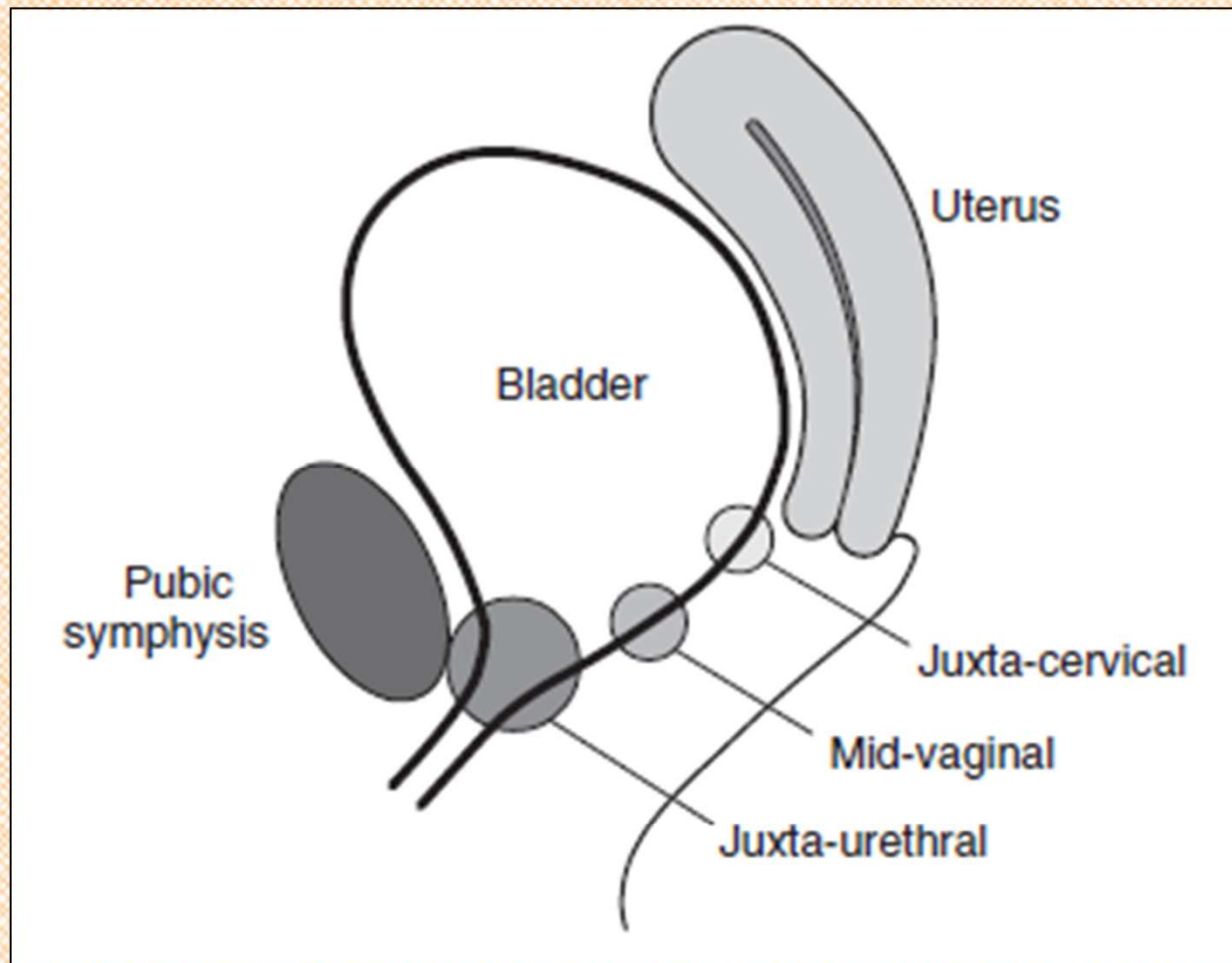


Figure from: Hancock, B and A Browning. Practical Obstetric Fistula Surgery. The Royal Society of Medicine Press Ltd. London: 2009. Used by permission.



# Contributing factors

- The **MOST important contributing factor** for the development of obstetric fistula is **prolonged or obstructed labor**
- If a woman with prolonged or obstructed labor doesn't seek or receive timely emergency obstetric care, she may develop an obstetric fistula
- On average (AAFH statistics), women who developed obstetric fistula were in labor 3.8 days
- The **BEST strategy to address obstetric fistula is to prevent obstructed labor by providing safe and timely emergency obstetric care**

*“The sun should not rise or set twice on a woman in labor” –  
old African proverb*



## Other contributing factors

- Young age at first birth
- Cephalo-pelvic disproportion (CPD) due to:
  - Malnutrition
  - Insufficient Calcium and Vitamin D resulting in pelvic deformities
  - Large fetus or malpresentation of fetus
- Female genital mutilation may explain as many as 15% cases of VVF in some areas of Africa



# Other causes of obstetric fistula

- Occasionally, women also develop fistulas from:
  - Cancer or radiation treatment from cancer
  - Injury during other gynecologic or obstetric surgery (for example, a poorly repaired episiotomy after a complicated delivery or injury during a caesarian section or destructive delivery)
- Fistulas can also be caused directly because of:
  - Coital trauma and sexual violence
  - Infection (specifically lymphogranuloma venereum)
  - Female genital mutilation



# Maternal age and obstetric fistula

- In most studies, the average age of women with fistula is 22-23 years but many women with fistula are as young as 13-14 years
- In Ethiopia (AAFH statistics)
  - More than 95% of women with VVFs developed them after obstructed labor
  - Mean age of marriage 14.7 years, mean age at causative delivery was 17.8 years, and mean age at presentation was 22 years
- Fistulas can also form at 35-40 years of age because the birth weight of infants tends to increase with subsequent pregnancies. Women having their 4<sup>th</sup> or 5<sup>th</sup> pregnancy may have LARGER babies, and be at risk for obstructed labor and obstetric fistula.



# Underlying societal issues

- Poverty, illiteracy and lack of education about reproductive health, including family planning, nutrition and safe maternity care
- Status of women and gender discrimination
- Harmful traditional practices including female genital mutilation
- Sexual violence



# Complications which may be associated with obstetric fistula

- **INCONTINENCE OF URINE AND/OR STOOL**
- Chronic pyelonephritis, hydronephrosis and bladder stones
- Renal failure
- Vaginal stenosis (scarring) and dyspareunia (pain during intercourse)
- Pelvic inflammatory disease, amenorrhea and infertility
- Osteitis pubis (infection in the pubic bone and pubic symphysis)



## Complications which may be associated with obstetric fistula (cont'd)

- Lumbar plexus and/or peroneal nerve damage resulting in foot drop, loss of control of rectal muscles and numbness/weakness pelvic area and lower extremities. This may lead to contractures of the legs
- Urea dermatitis - Chronic irritation and excoriation of skin (labia, perineum, groin) from contact with urine and stool
- Malnutrition – often a result of neglect, depression and poverty



# Psychosocial complications

- Depression and anxiety
- Social isolation
  - >50% of women with obstetric fistula have been abandoned by their husbands
- Depression and grief related to infertility
- Inability to work
- Stigmatization

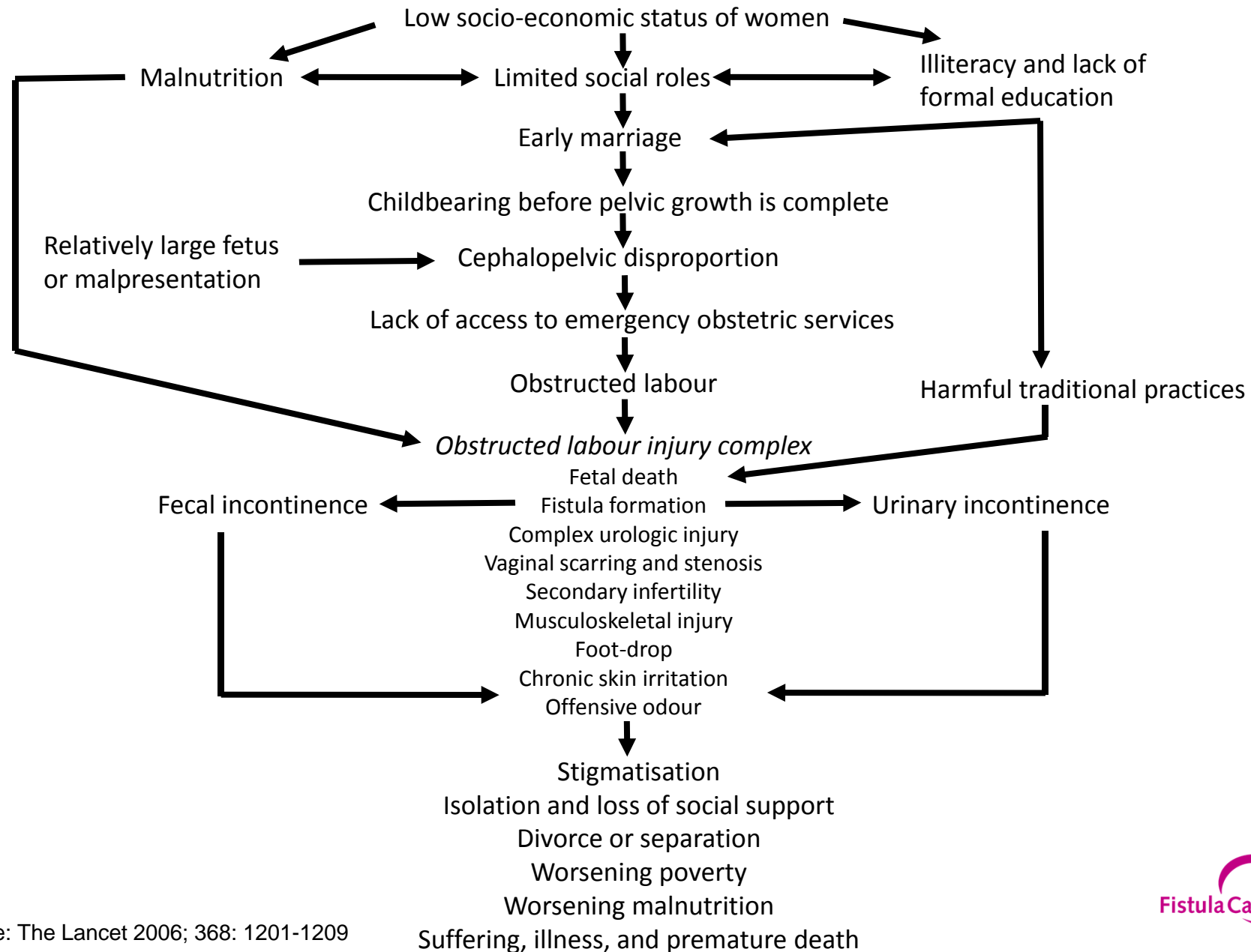


# Fistulas and stillbirth

- Fistulas do not cause stillbirths, but if a woman has a labor that is difficult and long enough to result in an obstetric fistula, it is unlikely that her infant will survive the delivery
- It is estimated that in 95% of cases, if a woman developed a fistula during childbirth her baby was not born alive



# The Obstetric Fistula Pathway





# Primary prevention

- Adolescent and maternal nutrition
- Education and empowerment for women
- Delaying marriage and child bearing



# Secondary prevention

- Birth preparedness and complication readiness, including transportation and family decision making
- Skilled attendance at every birth
- Monitoring of every labor with the partograph for early recognition of obstructed labor
- Ready access to high quality emergency obstetric care
- Community awareness raising and education about prevention and treatment of obstetric fistula



# Tertiary prevention

- Early recognition of developing or developed fistula in women who have had an obstructed labor or genital trauma
- Standard protocol at health centers for management of women who have survived prolonged/obstructed labor to prevent further damage



# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 7: Identification of Obstetric Fistula





# Identification of obstetric fistula

- The objective of this training is to provide knowledge and skills ONLY for the initial identification and assessment of women who may have obstetric fistula; not definitive diagnosis which requires more careful examination and highly skilled providers
- Fistulas are described according to the anatomic location (depending on the progress/descent of fetal head during labor)
  - Vesico-vaginal (between bladder and vagina)
  - Utero-vaginal (between uterus and vagina)
  - Vesico-uterine (between bladder and uterus)
  - Uretero-vaginal (between ureters and vagina)
  - Recto-vaginal (between rectum and vagina)



# Classification systems for obstetric fistula

- There are various different classification systems surgeons have designed to assist with planning for and documenting surgical repair. Most include:
  - Size: large or >3 cm involves most of anterior vaginal wall and more difficult to repair
  - Amount of scarring: fistulas with extensive scarring are more difficult to repair
  - Whether or not the fistula is circumferential
  - Distance between fistula and the external urethral orifice (EUO or “opening” of the urethra): if this distance is > 5cm it usually does NOT involve the neck of the bladder and is simpler to repair
  - Estimation of bladder size



# Vesico-vaginal fistula (VVF)

- Between bladder and vagina
- The most common type of obstetric fistula
- Women with a fistula involving the bladder will have leak urine continuously or almost continuously



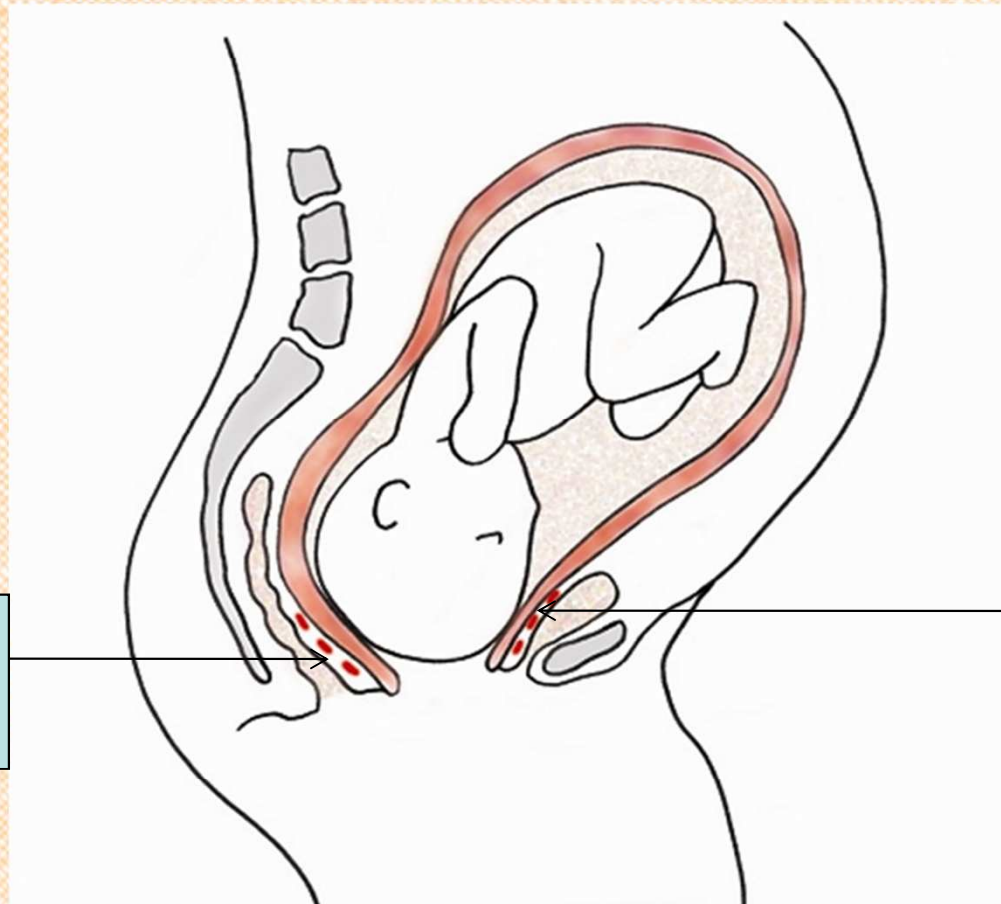
# Recto-vaginal fistula (RVF)

- Between vagina and rectum
- Not as common as VVF and unusual to have ONLY a RVF
- These women will develop bowel incontinence (leakage of stool) and/or flatulence
- More commonly associated with a traumatic injury during childbirth; may be associated with:
  - Forceps delivery or
  - Poor repair of an episiotomy or perineal laceration.



# Location of obstetric fistulas

Recto-  
vaginal



Vesico-  
vaginal

Figure adapted from Fistula Care



# Diagnosis of obstetric fistula

- VVF can usually be diagnosed when a woman leaks urine by 1-2 weeks postpartum or after surgery
- Some obstetric fistulas may be obvious as soon as 24-48 hours after delivery (particularly if the fistula involves the anterior wall of the vagina)
- Most women will leak urine continuously but if the fistula is small it may be only intermittent
- Some women will be incontinent of stool



# JOB AID: DIAGNOSIS OF OBSTETRIC FISTULA

Woman presenting with leakage of urine at primary health center



If NO to all of these  
questions – simple Obstetric  
fistula – prepare for repair

NO

DESCRIBE FISTULA: IS THERE MORE THAN ONE FISTULA VISIBLE?  
IS IT MORE THAN 2 CM IN SIZE? DOES IT INVOLVE THE URETHRA?  
IS THERE EXTENSIVE VAGINAL SCARRING PRESENT?

DOES THE CLIENT ALSO HAVE FOOT  
DROP OR HIP CONTRACTURES?

IS THERE ALSO STOOL IN THE VAGINA OR DOES  
THE WOMAN COMPLAIN OF BEING UNABLE TO  
DEFECATE NORMALLY THROUGH THE RECTUM?

YES

If YES to any of these questions,  
likely to need more complex  
surgery or extensive preparation  
for surgery and rehabilitation  
– REFER for first repair where  
specialist available

## Preparing for Obstetric Fistula Repair:

### NUTRITION

High protein diet, Iron/Folate supplements

### LAB SCREENING

Blood type and Hgb, urine microscopy,  
stool for parasites

### TREATMENT

Treat infection if necessary

### HEALTH AND HYGIENE

Perineal care 2x day, encourage fluid  
intake of at least 4 liters water per day,  
discuss family planning needs

### COUNSELING

Will need catheter for at least 2 weeks after  
surgery, family planning, HIV and hygiene  
counseling. Inform clients to refrain from  
penetrative sexual relations for 3 months,  
and that even after surgery, some women  
may be wet. Emphasize importance of  
early antenatal care, skilled attendance and  
the potential of C/S delivery for any future  
pregnancies.

## References

1. Hurdles, R, Brannan, A and C Grace Owen. Risk factors for obstetric fistulae: a systematic review. *British Medical Journal* 2008; 337: 1-4.
2. Lacey, A. Simple fistulae: the good and the bad. *Journal of Obstetrics and Gynaecology* 2008; 28: 545-548.
3. George, A. A. and P. B. George. Obstetric fistula: A clinical review. *Journal of Obstetrics and Gynaecology* 2008; 28: 545-548.
4. World Health Organization. *Obstetric fistula: a global challenge for child and women's health*. Geneva: WHO, 2006.
5. Hurdles, R. *First Step in Vaginal-obstetric fistula repair*. The Royal Society of Medicine Press, London, 2006.
6. Kelly, J. Vaginal-obstetric and recto-vaginal fistulae. *Journal of Obstetrics and Gynaecology* 1998; 18: 209-211.
7. Waddell, R. The obstetric fistula: a review. *Journal of Obstetrics and Gynaecology* 2008; 28: 545-548.



# Prognostic factors of success of repair

- Degree of scarring and ease of access to the site of the fistula
- Size of fistula and proximity to the urethra and neck of the bladder (where the trigone of bladder muscles are located)
- Whether this is the first attempt at surgical repair
  - 80-95% success with first repair
  - 65% or less success with repeat attempts
- Presence of associated complications such as malnutrition, chronic pelvic or bladder infections



# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 8: Pre-repair Care and Referral for Women with Obstetric Fistula





# Early detection and treatment

- If a woman has recently survived a prolonged or obstructed labor, take the following steps to prevent the development of an obstetric fistula OR to encourage spontaneous closing of a small fistula (estimated to prevent 10-20% of fistulas)
  - Indwelling urinary foley catheterization (size 16-18) for at least 2 weeks (and as long as 4-6 weeks for larger fistula)
  - Clean the perineum and vagina with mild detergent and soap twice a day
  - Encourage the woman to drink 4-5 liters of fluid per day
  - IF there is an experienced clinician available, explore the vagina and gently excise any necrotic tissue



## Early detection and treatment (cont'd)

- For all pregnant women who have had prolonged/obstructed labor
  - Educate on the symptoms of fistula and
  - Encourage to seek care if symptoms develop



# Pre-repair care

- Most women who present with obstetric fistulas will have had them for months or years and will have many other associated problems
- Women need to be as healthy as possible prior to surgical repair in order to have the best possibility for success and post-operative recovery.
- For women with chronic obstetric fistula, immediate referral for surgery is recommended after pre-repair care is complete
- For acute cases of obstetric fistula (leaking urine immediately postpartum) the standard procedure currently at AAFH is to wait for three months before referring for surgical repair



# Outpatient card for fistula patient (side 1)

## OUTPATIENT CARD FOR FISTULA PATIENT

Card # \_\_\_\_\_

Date \_\_\_\_\_

Time \_\_\_\_\_

### IDENTIFICATION

Name of the Patient \_\_\_\_\_ Age \_\_\_\_\_

Address: Woreda \_\_\_\_\_ Kebele/PA \_\_\_\_\_ H.No. \_\_\_\_\_

Occupation \_\_\_\_\_ Parity \_\_\_\_\_

Marital Status \_\_\_\_\_ Number of alive children \_\_\_\_\_

Educational Status \_\_\_\_\_

### HISTORY

Patient came by herself or referred? \_\_\_\_\_

If referred, by whom? \_\_\_\_\_ When? \_\_\_\_\_

When was the index delivery? \_\_\_\_\_ Who attended the index delivery? \_\_\_\_\_

Where was the index delivery? \_\_\_\_\_ Outcome of the index delivery \_\_\_\_\_

How long did the index labor take? \_\_\_\_\_

When, after the index delivery, did you notice the continuous leakage of urine/stool? \_\_\_\_\_

How long did it take you to walk by yourself after the index delivery? \_\_\_\_\_

Did you seek treatment for the problem? \_\_\_\_\_

If "yes", When? \_\_\_\_\_

Where? \_\_\_\_\_

Is the patient amenorrheic? \_\_\_\_\_ If "yes", since when? \_\_\_\_\_

Additional relevant medical/surgical history \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### PHYSICAL EXAMINATION

Weight \_\_\_\_\_ Kg Height \_\_\_\_\_ cm

Vital signs: BP \_\_\_\_\_ mmHg: Temp \_\_\_\_\_ °C; PR \_\_\_\_\_ /min; RR \_\_\_\_\_ /min

### GENERAL PHYSICAL EXAMINATION

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Outpatient card for fistula patient (side 2)

---

---

---

---

---

**FISTULA:**


1. Site \_\_\_\_\_

2. Size \_\_\_\_\_

3. Scar \_\_\_\_\_

4. Perineal skin \_\_\_\_\_  
\_\_\_\_\_

Sketch of the fistula

**DIAGNOSIS:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**INVESTIGATION:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**MANAGEMENT:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Health Worker's Name \_\_\_\_\_ Signature \_\_\_\_\_



# Medical and obstetric history

- Age, parity and past obstetric history
- Any history of FGM or other genital or sexual trauma
- Description of last labor and birth, including whether the infant was born live or stillborn and mode of delivery
- Duration of symptoms of urinary or fecal incontinence
- Any problems with mobility or walking
- Other past medical history including any illnesses, other surgery or allergies
- Social history, including marital history and any problems which have arisen due to consequences of obstetric fistula



# Physical examination

- Complete physical examination, with attention to:
  - Fever and signs of infection
  - Anemia
  - Nutrition
  - Dermatitis
  - Lower limb weakness and contractures
  - Bed sores or ulcers



# Genito-urinary examination

- SEE JOB AID
- Careful and sensitive examination of external and internal genitals
- Methylene blue injection by a trained provider through foley catheter in bladder to initially assess the size, location and number of fistulas
- Careful recto-vaginal examination for recto-vaginal fistulas and any involvement of the anal sphincter or presence of rectal strictures



# Laboratory evaluation

Depending on local resources and condition of patient:

- Blood type and hemoglobin
- HIV test
- Stool for parasites
- Evaluation for urinary tract infection
- Evaluation for sexually transmitted diseases



# Pre-repair care (for PRUs or where inpatient care available)

- Treatment for anemia with iron/folate supplements
- High protein diet
- Treatment for any infections – parasitic medication, antibiotics if any signs of UTI or STI
- Skin care for dermatitis
- Perineal care with mild detergent in water twice a day
- Initiation of rehabilitation and physical therapy for foot drop or contractures
- Psychological and emotional support
- After complete evaluation, explanation of treatment options to the woman (and her family) including recommendations for surgery and obtaining consent



# Counseling women with obstetric fistulas about repair

- Most fistulas can be repaired with surgery, especially if:
  - They are small
  - They are not associated with other complications
  - They have not been present for a long time AND
  - This is the first attempt at repair
- Women need to know that the surgery is not always successful
- Even if the fistula is closed, some women will still leak urine (15-20%) and most will have urinary frequency because of a smaller bladder
- Complications such as infertility, chronic pelvic pain and infections will not likely be corrected with obstetric fistula surgery



# Referral process

- Women with acute obstetric fistulas are currently encouraged to wait for three months before surgical repair at AAFH
- Women with chronic obstetric fistulas should be referred from health centers to the nearest PRU as soon as possible
- Women are cared for at the PRU for rehabilitation and pre-repair care for approximately one week and then referred to the fistula hospital
- The Fistula Patients Referral form summarizes important information for referral and feedback between the Health Center and PRU and the Fistula Hospital



## Referral process (cont'd)

- Most women will stay at the fistula hospital for two weeks (with a urinary catheter) and after discharge will return to the PRU for 2-5 days for follow-up and post-repair care before returning to their homes
- The cost of transportation to/from the fistula hospital is covered by the project. It is not necessary for family to accompany the patient to the hospital
- The cost of surgical repair is covered by funding through the fistula hospital



# Counseling about surgery

- The woman will not be restricted from eating and drinking the day before surgery. Usually she will be given an enema in preparation for surgery
- Surgery takes 60 minutes on average for uncomplicated fistula, but can be as long as 3-4 hours if complicated
- The usual approach for repair is through the vagina, but occasionally an abdominal incision is needed
- Usually performed under spinal anesthesia
- Most women will receive antibiotics before and after the surgery to prevent infection
- Usually the woman will need to be admitted to the fistula hospital for two weeks and may need help with dressing changes, eating, bathing, etc.

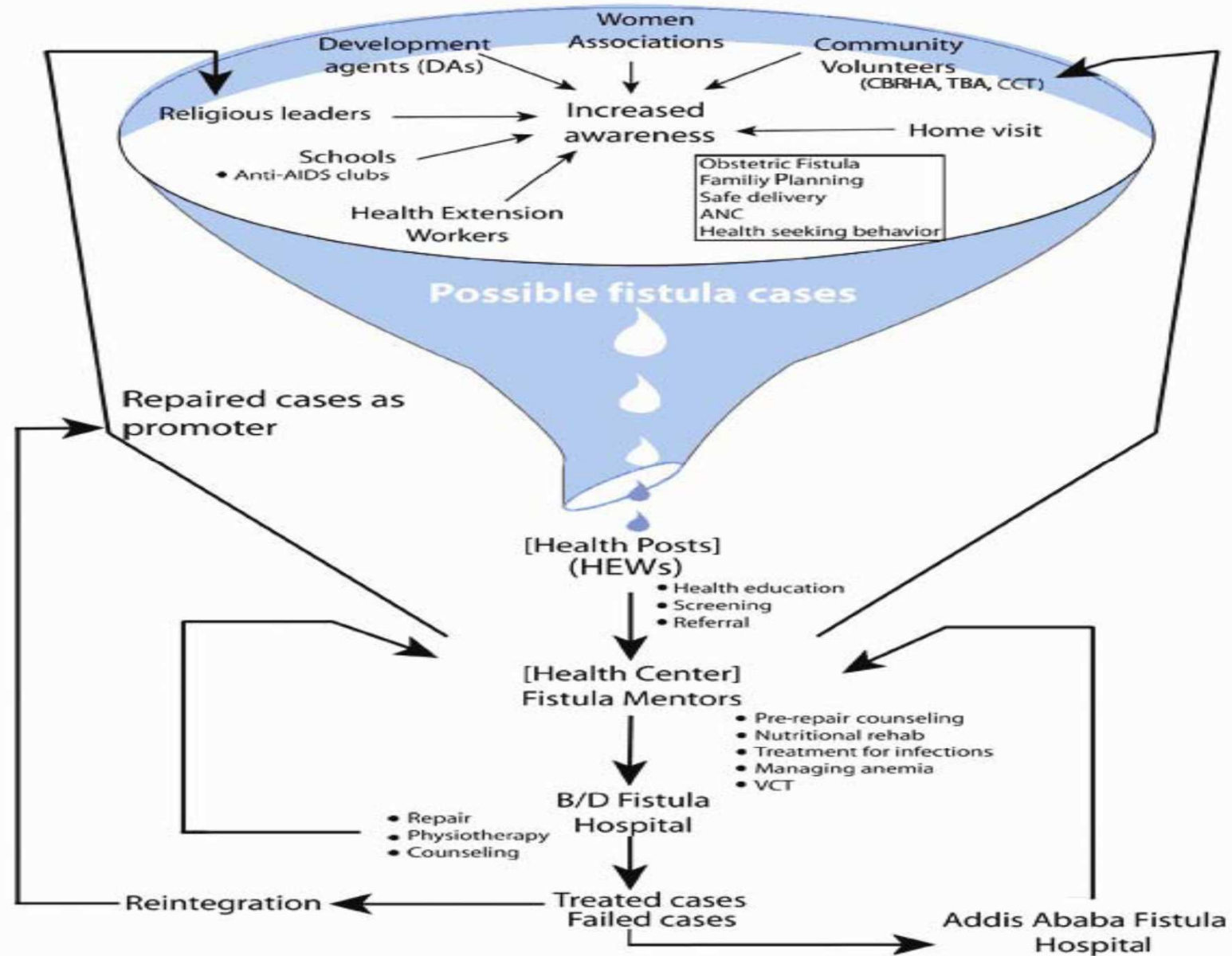


# What is the optimal timing for fistula surgery?

- There is no clear consensus or data to support specific timing
- Surgeons have traditionally waited for three months after delivery but many now advocate for repair as soon as leakage of urine is noted and the diagnosis is made
- The AAFH continues to follow a recommendation of three months delay before repair of acute obstetric fistula
- The longer a woman's repair is delayed, the more physical, social and emotional damage there may be for the woman



## How the Fistula Project Works





# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 9: Principles of Postoperative Care and Reintegration of Women with Obstetric Fistula





# Post-operative care

- For simple repairs, women are usually able to get up and walk within 1-2 days of surgery
- Usually women can eat soft foods on the day after surgery and then return to a normal diet
- Sutures on the labia and within the vagina are either absorbable or removed in the first few days after surgery
- For complicated fistula surgery, women may:
  - have labial pressure dressings or vaginal packing for a few days
  - be on bed rest (for as long as 2 weeks) and need help with bathing, eating, etc.
- For women with neurologic damage, it is important to prevent bed sores and worsening contractures by gentle movement
- Women should continue to drink 4-5 liters of water or liquids per day



# Post-operative bladder catheter

- After surgery, the woman will have a foley catheter in place for at least two weeks. Some women may have a separate catheter in their ureter(s).
- The catheters are irrigated at least daily with saline solution or dilute boric acid.
- It is EXTREMELY important that the catheter does not get blocked and the bladder become distended.
- The catheter is clamped/released intermittently for a few hours on the day before removal to help with the return of normal bladder function and the ability to hold urine



# Possible post-operative complications

- Secondary vaginal hemorrhage
- Blockage of urinary catheter and distention of bladder
- Anuria (absence of urine) because of accidental ligation of ureters or obstruction
- Development of bladder stones
- Breakdown of fistula repair due to infection or necrosis
- Dyspareunia (pain with intercourse), urethral or vaginal strictures, or infertility – in MOST cases these problems are NOT due to the surgery but may worsen after surgery



# Post-repair counseling

- Family planning:
  - Women should abstain from genital sexual relations for three months after repair
  - Pregnancy should be delayed for at least one year
- Many women will need to do pelvic muscle exercises to regain strength in their bladder and pelvis
- Delivery of next child:
  - Should be at a hospital with emergency obstetric care
  - In most cases, cesarean birth is recommended. Obstetric fistulas may reopen during a subsequent vaginal birth



# Reintegration

- While a woman with obstetric fistula is waiting for and recovering from surgery, she can:
  - Learn skills that will help her for the future
  - Be encouraged and educated about:
    - Delaying marriage, sexual activity and first births
    - Family planning and reproductive health
    - Safe obstetric care
    - The rights of women in society and importance of education for women
    - Microenterprise and ways to reintegrate back into family and community life
- These messages should be reinforced at the local health centers when women who have had repair return to their communities.



# Return to community

When a fistula client returns to her community, whether she joins her husband's home or not, she will need:

- A sense of belonging (to feel loved and supported)
- Support for reintegration into her family and community (using existing community support structures)
- To feel comfortable sharing her life with friends and family
- To feel respected and to maintain or redevelop her dignity
- To have access to any follow-up care needed, including family planning, reproductive health services and emergency obstetric care for her next birth



# Material and socio-economic support

Women recovering from obstetric fistula repair may also need:

- Nutritious food and clean water
- Personal hygiene products (soap, cosmetics, sanitary pads or clean cloths to contain incontinence)
- Financial support for her and her children
- Clean clothes and shoes
- A clean protected environment
- Access to educational opportunities and income generating skills development



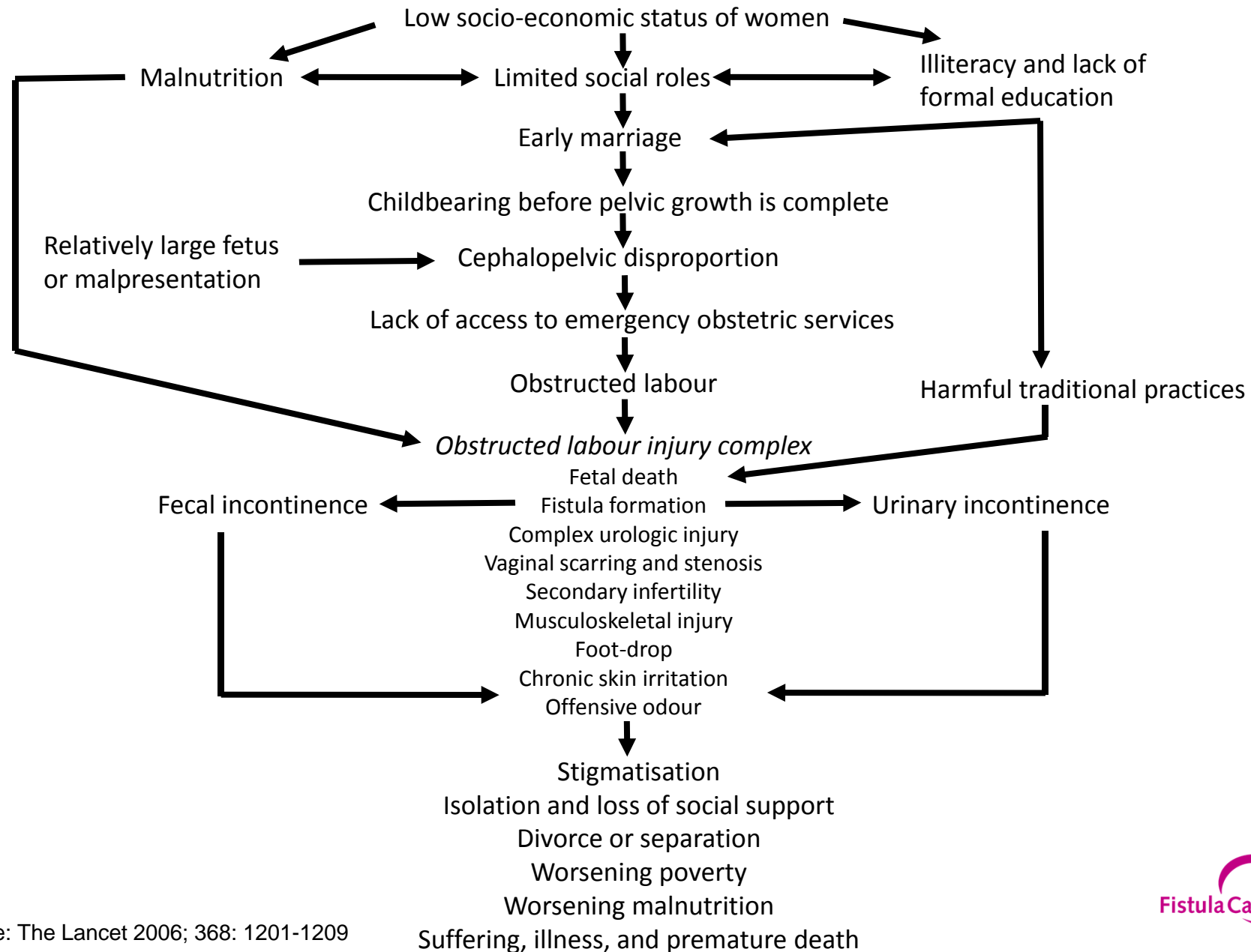
# *Prevention and Recognition of Obstetric Fistula Training Package*

## Module 10: The Roles of Families, Community and the Health Care System in Prevention and Care for Women with Obstetric Fistula





# The Obstetric Fistula Pathway





# Community Messages

- Obstetric fistula can be prevented
  - Educate girls and keep them in school
  - Eradicate harmful traditional practices such as female genital mutilation
  - Delay marriage and first birth
  - Promote voluntary family planning to space births and limit the total number of births
  - Assure access to a skilled birth attendant at every delivery and emergency obstetric care when needed
- Most women who develop obstetric fistula can be cured with surgical repair



# Promote reproductive rights

- Promote and support the rights of girls and women and gender equality
- Particularly in situations of conflict or humanitarian emergency, girls and women need protection from sexual violence



# Develop infrastructure

- Rapid referral, emergency funds and transport
- Emergency obstetric care for all women
- Medical and surgical capabilities for the repair of obstetric fistula



# Prevent the direct causes of obstetric fistula

- Create community awareness about skilled attendance and emergency obstetric care
- Prevent prolonged and obstructed labor
- Provide timely care for women who have had prolonged and obstructed labor

*The sun should not rise or set twice on a woman in labor” – African proverb*



# The role of families

- Feed and educate girls as equally as boys
- Avoid early marriage arrangements and encourage delay of pregnancy once married
- Give equal decision-making power to girls and women for family resources and decisions about reproduction and family size
- Put aside money for emergencies
- Collaborate with neighbors and community when access to health services is needed



# The role of communities

- Organize transport and emergency funds for medical emergencies, especially for pregnant women
- Support the more needy families in the community and educate one another about complications in pregnancy and childbirth
- Work with organizations and the government to build roads or other infrastructure that are needed in emergencies
- Advocate from the government for high quality emergency obstetric services
- Accept and support women with obstetric fistula before and after repair



# The role of health extension workers (HEWs)

- Provide health education to families on core topics: family planning, antenatal care, institutional delivery, postnatal care, HIV and PMTCT
- Refer women to health centers for antenatal care and follow-up with information about birth preparedness, complication readiness and warning signs of problems in pregnancy and childbirth
- Assist in normal deliveries when a woman cannot get to the health facility
- Identify obstetric fistula at the community level, counsel the woman and refer for care



# The role of health workers at Health Centers and Pre-repair Units

- Support the health center by working with other staff to provide high quality care
- Provide health education to patients and the community
- Provide quality care to pregnant women and their families, including safe basic emergency obstetric care and the use of a partograph for every delivery
- Provide timely referral when comprehensive emergency obstetric care is needed
- Arrange transport and an accompanying person for safe referral
- Provide follow-up care for women who have had fistula surgery



# The role of health workers at the District Hospital

- ALL of the roles as at health centers PLUS:
- Organization of surgical services including blood bank or mobilizing blood donors
- Written feedback to the health centers about referrals and follow-up
- Supportive supervision of health workers at health centers



# The Obstetric Fistula Pathway

