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

Anatomy of obstetric fistula (cont)

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 4th or 5th 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

- Low socio-economic status of women
- Illiteracy and lack of formal education
- Limited social roles
- Early marriage
- Childbearing before pelvic growth is complete
- Cephalopelvic disproportion
- Lack of access to emergency obstetric services
- Obstructed labour
- Relatively large fetus or malpresentation
- Harmful traditional practices

- Obstructed labour injury complex
  - Fetal death
  - Fistula formation
  - Complex urologic injury
  - Vaginal scarring and stenosis
  - Secondary infertility
  - Musculoskeletal injury
  - Foot-drop
  - Chronic skin irritation
  - Offensive odour

- Stigmatisation
- Isolation and loss of social support
- Divorce or separation
- Worsening poverty
- Worsening malnutrition
- Suffering, illness, and premature death

Source: The Lancet 2006; 368: 1201-1209
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