

*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

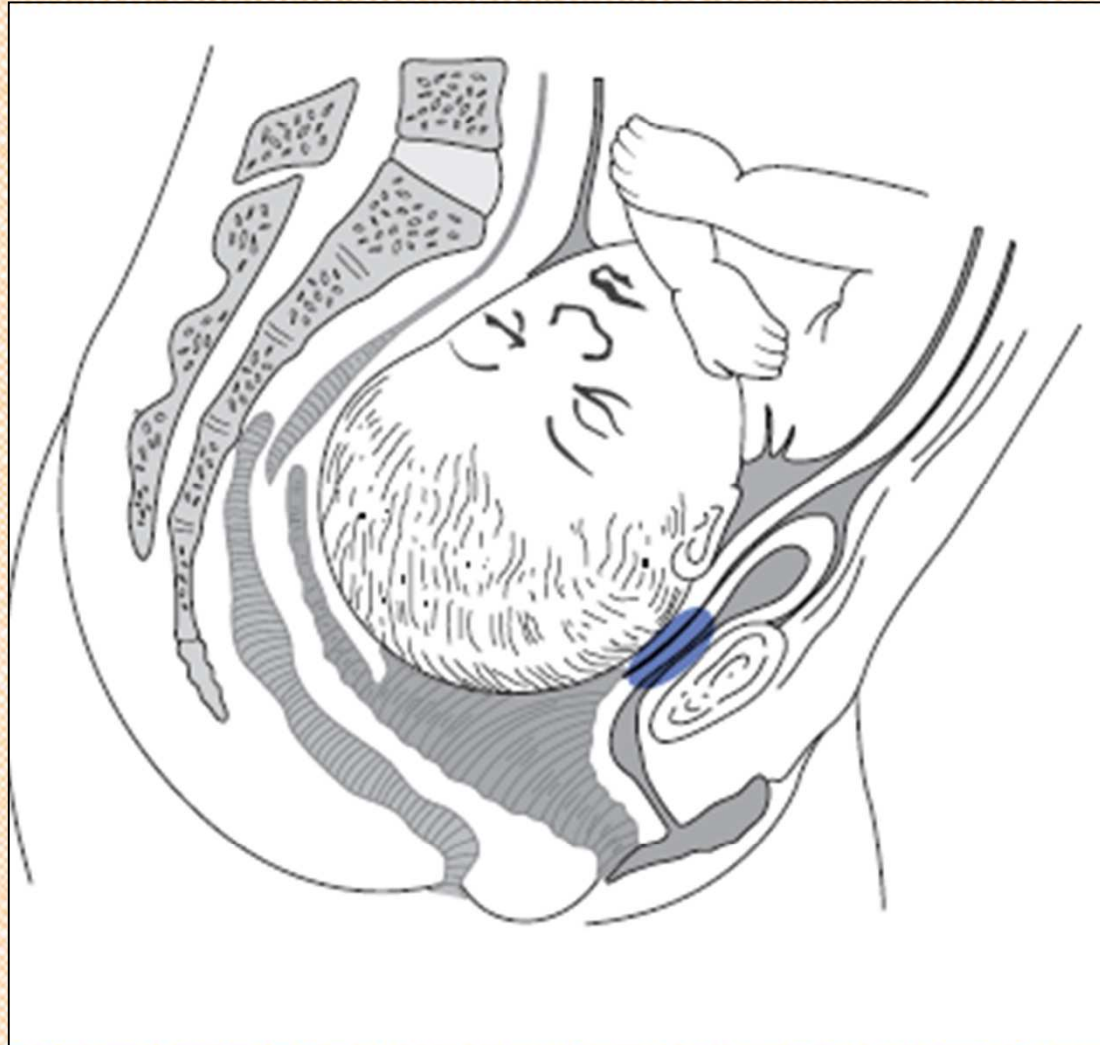


Figure from: Hancock, B and A Browning. Practical Obstetric Fistula Surgery. The Royal Society of Medicine Press Ltd. London: 2009. Used by permission.



# Anatomy of obstetric fistula (cont)

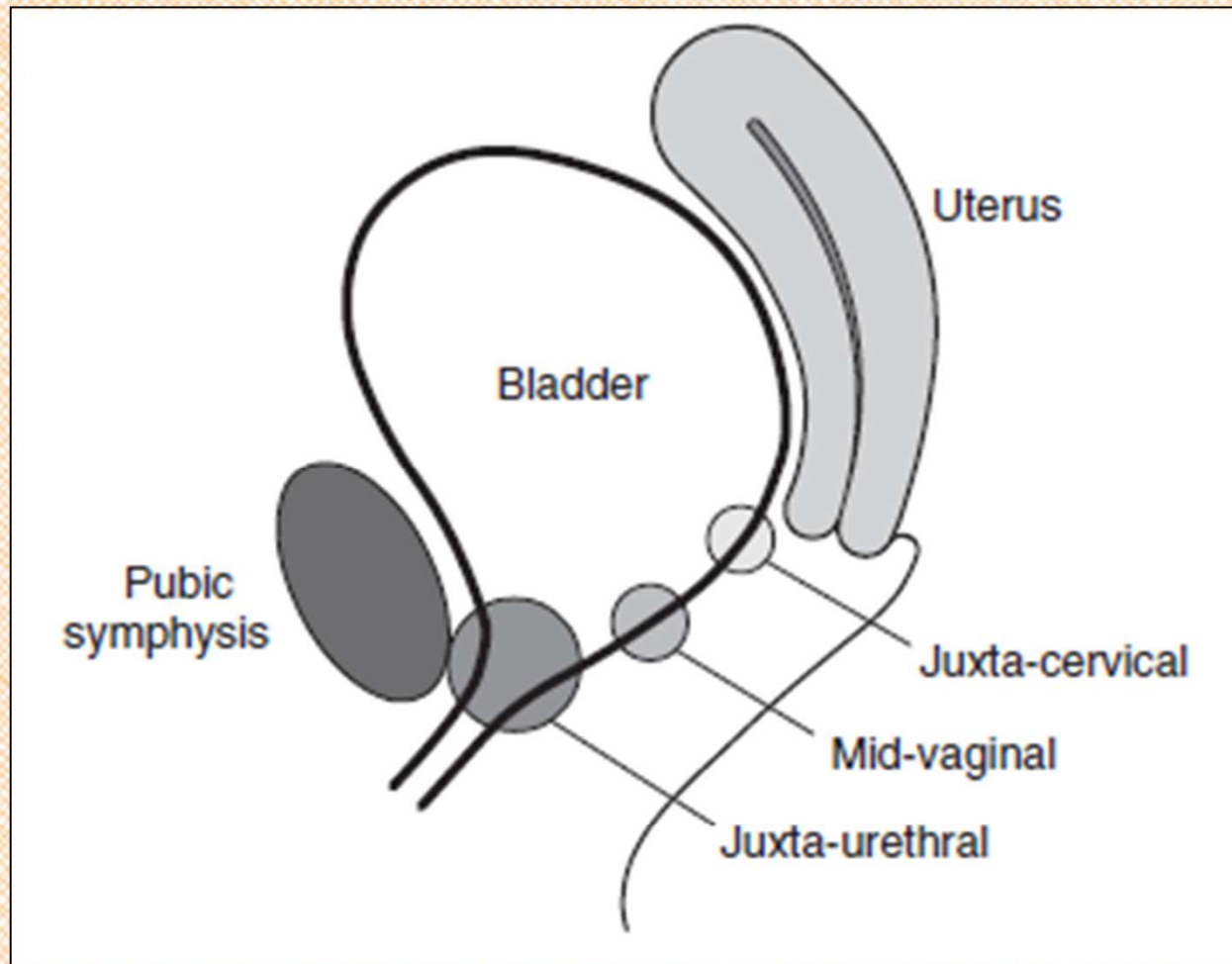


Figure from: Hancock, B and A Browning. Practical Obstetric Fistula Surgery. The Royal Society of Medicine Press Ltd. London: 2009. Used by permission.



# 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

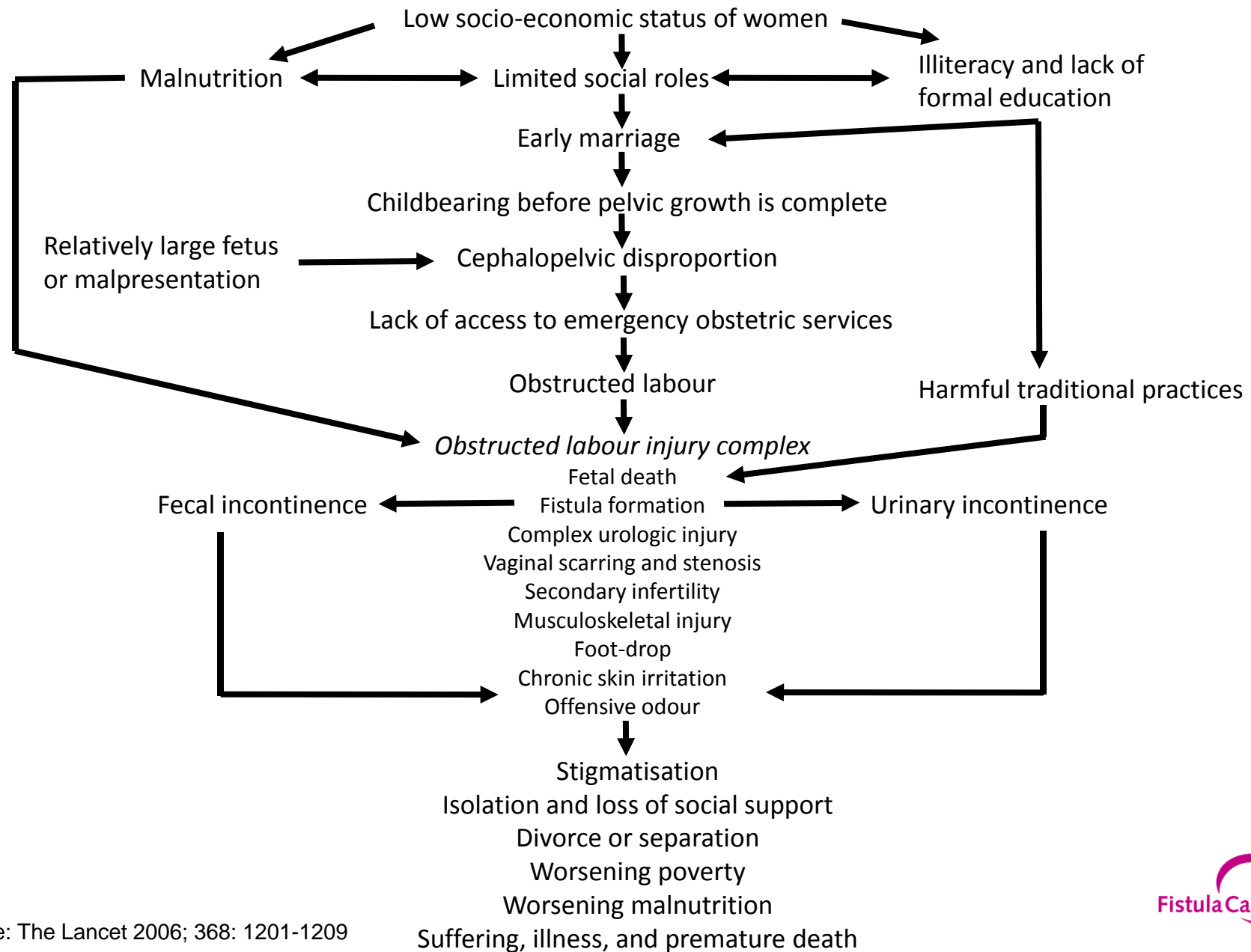


# Fistulas and stillbirth

- 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