Wire mesh stent in coronary vessel
Reproduction
Asexual
same genes, no diversity

Sexual Reproduction
eggs, sperm, diversity
700,000,000 YA
internal fertilization
sharks 1st to dev penis
500,000 YA
Sharpnose Shark
Courtesy NOAA
Oviparous
Ovoviviparous
Viviparous
Humans

- largest penis for body size
- big brains
- birth difficult
- needed community to protect undeveloped young
- whole section of brain for sex
- mate guarding
Circumcision
Both sexes, pubic rites
Religious
Catholic – mortal sin
Today 30% of world
Egypt 2,400 BC
God made a covenant with Abraham promising him land and multiplying nations. In return, all men had to be circumcised, as well as all newborn boys once they reached 8 days old. Abraham was 99 years old when he was circumcised. (Genesis 17:24)
Castration
Chinese Hua T’o (145-208)
Special technique eunuchs
Anton van Leeuwenhoek (1678)
Microscope
1st to report sperm
Previously thought parasites
Anatomy of pregnancy
Leonardo da Vinci
John Hunter and Jan van Rymsdyk
Childbirth
Natural, rather than medical
Social = friends, family, midwife
Midwives forbidden:
abortions
infanticide
conceal a birth
use drugs
Midwife job:
force name of father
Emergency baptism
Often accused of witchery
Considered lowly
Call male physician if trouble
1st book midwifery text 1513
Eucharius Rosslin
Garden of Roses for Pregnant Women and Midwives

Berated women, lack of sympathy
Punish for sexuality
Men not allowed to be midwives

Dr. Wertt of Hamburg 1522

dressed as a woman
burned at stake
Physicians began sight unseen
Later called when problems
Chamberlens forceps
Kept secret for 4 generations
1600-1728, revealed in 1818
Johann Peter Frank (1745-1821) wrote six volumes on Medical Police. He advocated for the care of pregnant women and emphasized the duty of the state to ensure women bear children.
1800s lying-in hospitals
Increase in puerperal fever
Common to lose 20%
Chance of God
Oliver Wendell Holmes
stop going between post-mortem and delivery
no one listened
Semelweiss 1847
Women dying after childbirth
Doctor delivered vs midwives
Wash hands with chloride lime
Cut death rate from 30%-1%
NO ONE LISTENED!!!
Puerperal fever
Monthly mortality rates 1841-1849

Chlorine handwash
When change?

50% births at home  1938
95% in hospital  1955

25% C-sects
C-sect

Julius Caesar

Macbeth

1st woman to survive 1500

Max Sanger (1853-1903)

special sutures with silver wire
Salpingectomy
1st successful surgery on Ectopic pregnancy  1883
Amniocentesis

14-20 weeks
Women over 34 years
amniotic fluid which has sluffed Cells
Look for:
Down’s, spina bifida, sickle cell
Cystic fibrosis, MS, Tay-Sachs
Ultrasound

1st dev. WWI for submarines

1959 Used on embryos

Common by 1970s
Fetal surgery  1981
IVF
Hormones to ># eggs
Removed, mix with sperm
2-3 days, 8 cell embryo
Implanted
1978 Louise Brown
1,000,000
Birth Control

1. Aspirin
2. Pessary
3. Condoms
4. IUD
5. pills
6. Abortion
7. Sterilization
8. Infanticide
Pessary

Egyptians
- Crocodile dung
- Elephant dung
- Plug made with honey/natron

Spermicides?
Blockades?
Lack of interest?
Condoms

1564 1st published description
By Gabriele Falloppio
Linen sheath
Casanova
Used against disease  17th century
1st rubber  1855

Illegal to put in mail  1873
Latex  1920s

Illegal in Ireland until 1978
IUD

German Ernest Grafenberg 1929

Ring of silk wrapped with wire

1. Copper kills sperm
2. Encouraged prostaglandins
3. Increase WBCs

Dalkon shield 1970
Birth Control Pill

Social advancement
More women graduated from college
More women entered work force
Prevent ovulation, high progesterone
U.S. approved 1960
Margaret Sanger funding
Condemned by Pope Paul VI 1968
Pill + smoking = heart attack
Abortion

Ancients accepted abortion and infanticide as pop. control

Surgical intervention condemned

Ancient used herbs, hellebore
Catholic embryo not a person until 40 days
Pope Innocent III said 4 months
Jewish soul enters at birth
Rove vs. Wade 1973
Women’s rights
Only up to first trimester
Sterilization

Eugenics
Spartans tossed babies into chasm
Compulsory 1st in US
Carrie Buck 1927
65,000 until 1970
Nazis 400,000
Pap Smear
Georgios Nicholas Papanikolaou
1928 Cervical cancer, HPV virus

Mammography
Albert Salomon 1913
Used x-ray to see calcification
Today MRI, PET, biopsy
Gene BRCA1 or BRCA2
Sex of child

Aristotle  hot semen=male
Cold semen=female
XX or XY
Turner’s X_y not needed
Klinefelter  XXy
XXXnormal XXXX not normal
Xyy  taller
Sex Determination in Humans

Figure 6.6

[Diagram showing sex determination in humans with X and Y chromosomes, illustrating how sperm and eggs combine to form XX (female) and XY (male) offspring.]