



Biology of pregnancy/ development

Fertilization

- Sperm penetrates ovum
- 46 Chomosomes
- 23 pairs
- 1 of ea pair from each cell





- Day 4 60-70 cells, hollow fluid filled, called _____.
- o Differentiation starts
- o Implantation 7th 9th day
- As many as 30% do not implant





- o 3-8 weeks
- o Groundwork for all body structures
- Vulnerable to the effects of teratogens, such as?
- Embryonic disc forms 3 layers of cells
 Ectoderm, Mesoderm, and Endoderm
- By end of the 1st month, 1/4 in long
- By end of 2nd month, 1 in. long





••• Fetal stage

- o 9th week until the end
- During the third month muscles, organs, and CNS become organized and connected
- By 12th week, genitals well developed-sex can be determined
- o This is end of first trimester

••• Fetal stage - Second trimester

- o 17-20 weeks quickening, what is this?
- Organs very well developed
- By the end of trimester, most neurons are in place
- 20 week old fetus-stimulated and irritated by sounds
- o sight has started to emerge
- o generally not able to survive if born now



Viability is reached

- Around 22-26th week
- Born between 7th and 8th month, still likely to have trouble breathing
 Alveoli not yet ready to inflate
- Time awake increases toward the end of this period
- o Personality begins to emerge
- React to sound, show preferences

What is a "person"? Biological category: homo sapiens Ethical status: moral agent Political status: legal recognition

• • • Moral positions on abortion

- Conservative: abortion is never morally justified or, at most, justifiable only to save the mother's life
- Liberal: abortion is always morally justifiable, regardless of the reasons or the time in fetal development
- Intermediate or moderate: abortion is morally acceptable up to a certain point in fetal development and/or with some reasons, though not all
- Catholics for choice position liberal perspective.

• • • • "An Almost Absolute Value in History" John T. Noonan

- Abortion is always wrong, except to save the life of the mother
- o A fetus is a "human" from when?
- Based on what?
- Do you agree with the idea that considering the unborn a person from conception poses fewer problems than alternate views?
- o Biological vs. Psychological Personhood

• A Defense of Abortion" Judith Jarvis Thomson

- Assume the anti-abortion premise: that fetus is a person from the moment of conception
 - What are the consequences for abortion
 - rights if we assume that premise?
 - Even if the fetus is a person from the moment of conception, are all abortions necessarily wrong?
- Focus on rights (not consequences) of fetus, of mother, of third-parties

• • • Abortion"

- Mary Ann Warren
- o Defense of the extreme liberal position
- o Critique of both Noonan and Thomson
- The fetus is not a person and thus abortion is not immoral
- Defends her position against criticism that it permits infanticide

"Why Abortion Is Immoral" Don Marquis

- Central thesis is that, except in rare cases, abortion is seriously immoral.
- Rights/rationality as grounds for a "right to life" fail
- o Loss of one's future is crucial
- Several implications support: 1. not only for humans; 2. nonhuman animals; 3. active euthanasia; & 4. infanticide and killing children prima facie wrong

• • • Marquis (cont.)

- Loss of life = greatest misfortune we can suffer
- o Morally permissible abortions, extremely rare
- Counterexamples to idea that mental activity is necessary to be victimized
- Avoids equivocation, doesn't rest on religious claims, avoids speciesism, compatible with euthanasia and contraception

•••• Current research on abortion and outcomes

- Prevalence/Safety
 - Differences between medical and surgical
- Psychological Consequences
- Summary

Prevalence • • •

- o 1955 birth cohort in South Australia, abortion legal throughout their entire reproductive lifetime, 29%.
- o Higher rates for later birth cohorts
- o US rates, over 40% of women
- o 1998 WHO estimate, 50 million worldwide yearly, 20 million unsafe
- o 80,000 die yearly

Headlines/Data January 19, 2008: Scranton Times **Report shows U.S. abortion rate** at lowest level since early '70s

BY DAVID CRARY ASSOCIATED PRESS

ASSOCIATED PRESS NEW YORK — The number of abortions in the United States fell to 1.2 million in 2005, Jown 25 percent from the all-time high of 1.6 million in 1990 und dropping the abortion rate to its lowest level since 1974, vecording, to remort issued ccording to report issued hursday. The Guttmacher Institute,

The Guttmacher Institute, which surveyed abortion pro-viders nationwide, said there likely were several reasons for the decline, including more effective use of contraceptives, lower levels of unintended

pregnancy and greater difficul-ty obtaining abortions in some parts of the country in the United States because The institute's president, Sharon Camp, noted that despite the drop, more than one in five pregnancies ended in abortion in 2005. "Our policy makers at the state and federal levels need to under-stand that behind virtually every abortion is an unintended our efforts towards prevention, through better access to contra-abortion rights, yet both sides in the debate on the





Complications/ • • • consequences by method

- No evidence of increased problems w/future pregnancy w/RU-486
- o Women generally satisfied w/medical method
- No difference in psychological consequences by method, medical vs. surgical

Academic OB/GYN Statement $\bullet \bullet \bullet$

- American Journal of Obstetrics & Gynecology
 - 1972 statement recognized abortion becoming legal in many states and anticipated the coming Roe V Wade decision. Projected that abortions would increase dramatically and discussed medical education role in meeting increased need.
 - 2012 statement describes 40 years of medical progress and significant political regression that was not anticipated in 1972. New laws imposing requirements aimed at restricting access
 - Very few done in hospitals
 - · Affirms five academic responsibilities
 - Teaching practitioners
 Provide evidence based information to patients

 - 2) Provide evidence based information to legislators
 3) Provide evidence based information to legislators
 4) Insist that teaching hospitals admit patients reqriring pregnancy terminations
 5) Ensure availability of all methods of contraception

Psychological • • • Consequences

- NLSY data unintended pregnancy resolved by abortion associated with increased risk for substance abuse.
- o Abortion group, more likely to be in high risk range for depression, compared with those who carried unintended pregnancy to term
- Underreporting likely, rates only about 40% of # expected
- Recent reviews more valid comparisons
 - Comparing more equivalent groups, reputed mental health consequences largely vanish.
 - Important differences between women having first and second trimester abortions.

• • • Psychological (cont.)

- New Zealand Study, n = about 500
- By age 25, 41% had been pregnant at least once, 74 had obtained an abortion at least once.
- 90 of 422 pregnancies were terminated
- o Underreporting likely, rates at 81%



Subsequent parenting

- Little systematic difference between groups
 - Youngest group of first born children received less emotional support
 - 5-9 year-olds had higher levels of behavior problems
 - No differences in levels of cognitive stimulation provided to any group

Final thoughts • • •

- o Emotional turmoil for many women Can be due to a variety of factors
- Large scale and reliable studies have not supported the idea of dire, long term consequences.
- o Greatest anguish, generally during decision making, later regret usually mild compared to relief

$\bullet \bullet \bullet$ References

 A Statement on Later Abortion. (2012). [Article]. Conscience: The News Journal of Catholic Opinion, 33(1), 20-21.
 Abdel-Aziz, E., Hassan, I. M., & Al-Tahre, H. (2004). Assessment of women's satisfaction with medical termination of pregnancy. Journal of Obstetrics and Gynaecology: The Journal of The Institute Of Obstetrics and Gynaecology. The Journal Of The Institute Of Obstetrics and Gynaecology. The Journal Of The Institute Of Obstetrics and Gynaecology. The Journal Of The Institute Of Obstetrics and Gynaecology. 24(4), 429-433.
 Abnk, P. W., Hamoda, H., Flett, G. M. M., Kidd, A., Fitzmaurice, A., & Templeton, A. (2005). Psychological sequelate of medical and surgical bortion at 10-13 weeks gestation. Acta Obstetrica Journal Of Epidemiology, 159(5), 475-480.
 Chan, A., & Kanen, R. J. (2004). Prevalence of induced abortion in a reproductive lifetime. American Journal of Obstetrics and Gynaecology, 209, 193-198. doi: 10.1016/j.ajog.2013.03.007
 Ferguesson, D. M., Horwood, L. J., & Ridder, E. M. (2006). Abortion in young women and subsequent life outcomes Result J. Mar Reproductive Health, 39(1), 6-12.
 Murphy, E. M. (2003). Being born female is dangerous for your health. *American Psychologist, 58*(3), 205-210.
 Norris, A., Besest, L., Stelferder, J. R., Kavanagi, M. L., De Zorto, S., & Becter, J. (2011). Abortion Styma: 21(3), 589-554. doi: 10.1016/j.wit.2011.02.010
 Reardon, D. C., Coleman, P. K., & Cougle, J. R. (2004). Substatione: Use Associated with Unitended Pregnancy Outcomes in the National Longitudinal Survey of Youth. American Journal of Dia Psychological Laword Survey Of Youth. American Journal of Dia Psychological Laword Neural Subsequent Mathi Issues, 21(3), 549-554. doi: 10.1016/j.wit.2011.02.010
 Reardon, D. C., Coleman, P. K., & Cougle, J. R. (2004). Substated U Mit Unitended Pregnancy Outcomes in the National Longitudinal Survey of Youth. American Journal of Dinterga and Kochol Auture, A Statement on Later Abortion. (2012). [Article]. Conscience: The News Journal of Catholic Opinion, 33(1), 20-