Contraception and Sexual Function

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Disclosures

- None

Objective

- Describe the potential positive and negative impact of various contraceptive methods on sexual function

Prevention of Unwanted Pregnancy

- 10 – 15% of all sexually active women use no birth control method
- More than 3 million unintended pregnancies occur annually (1 in 20), 50% end in abortion
- Over the past 40+ years, OCPs has afforded women greater control over their reproductive lives
- Globally, 150 million women use hormonal contraception
- OCPs are the most commonly used contraception for women in developed nations

Shindel AW, et al J Sex Med 2008; 5: 796-803
Carrasco-Garrido P, et al J Sex Med 2011; 8: 383-390

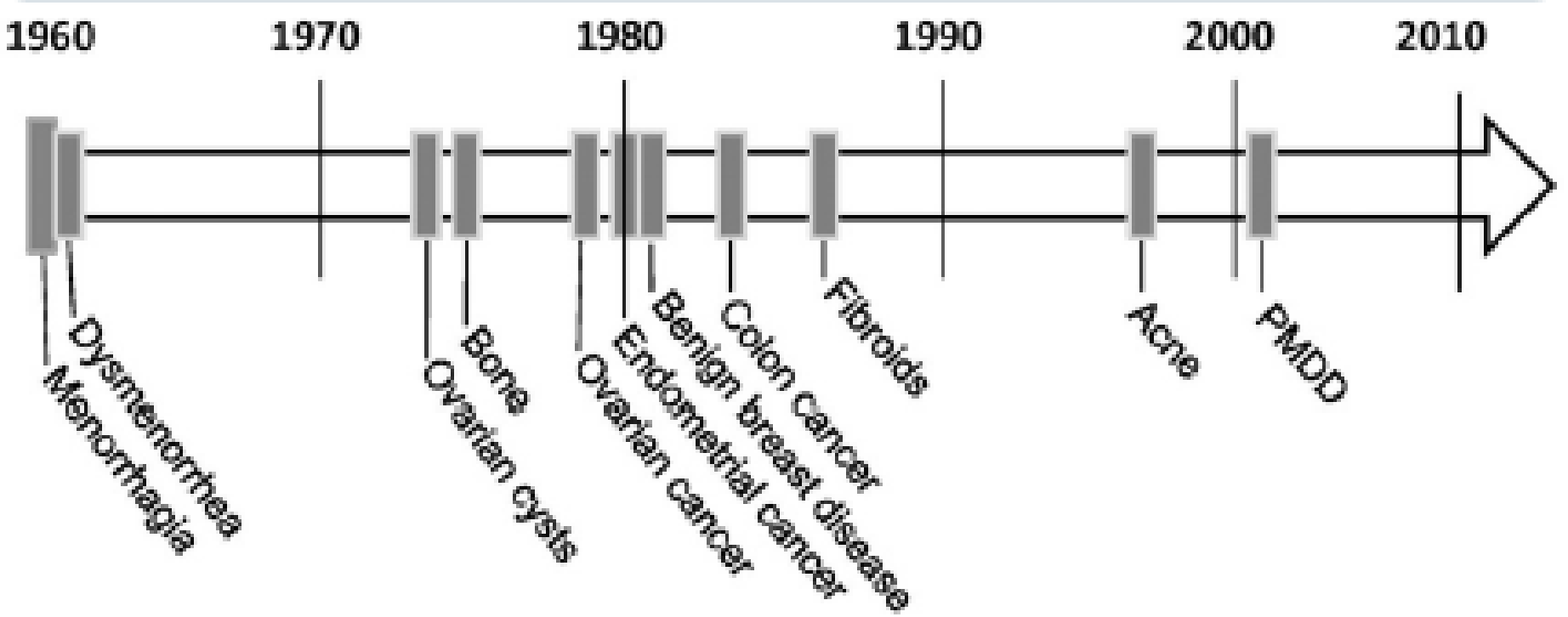
Guttmacher Institute – http://gu.tt/uscontraception
Guttmacher.org

Socio-Economic Disparities

- Poorest U.S. Women more likely to face unintended pregnancies
- Rates in U.S. 4X higher than in other developed nations (i.e. the Netherlands, Sweden, Japan)
- Higher rates unintended pregnancy among Black and Hispanic women, even after controlling for income
- Other factors – cost of contraception, lack of insurance coverage

Gold RB - Guttmacher Policy Review 2006; 9 (3)
Finer LB Perspect Sex Reprod Health 2006

Identification of Noncontraceptive Effects

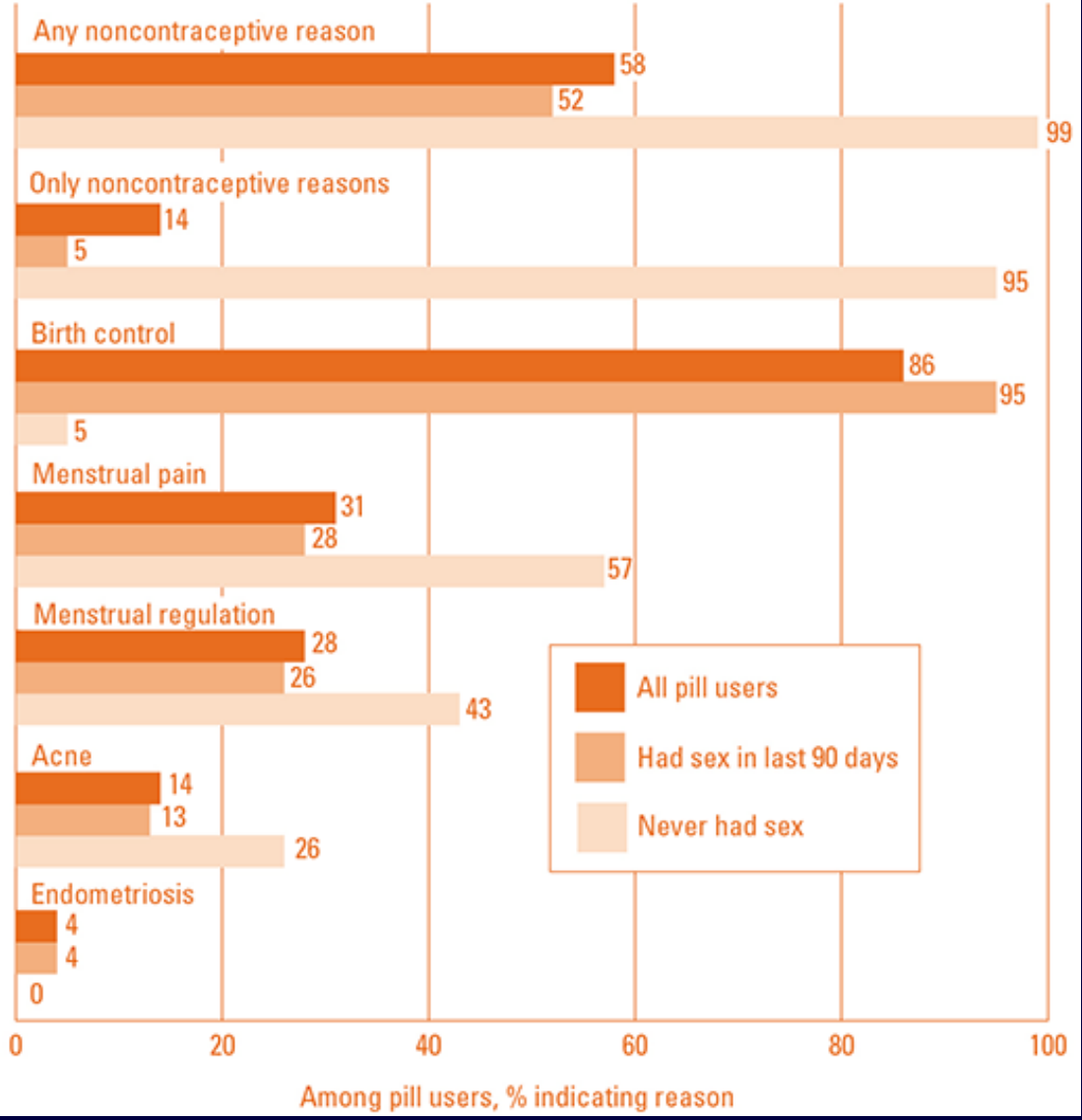


Identification of noncontraceptive effects of combination oral hormonal contraceptives: a time line.

Maguire. Noncontraceptive health benefits. Am J Obstet Gynecol 2011.

Noncontraceptive Benefits of Birth Control Pills

Many women use oral contraceptive pills for noncontraceptive reasons, including women who have never had sex.



Guttmacher.org

Noncontraceptive Health Benefits OCPs

- Menorrhagia/Anemia
  - 40% decrease in blood loss after 3 months of use
- Dysmenorrhea
  - 66% decreased cramping
  - Low-dose pills effective for improving menstrual pain over time
- Improved bleeding pattern
  - Better cycle control, fewer bleeding/spotting days
  - Improvement in heavy/prolonged bleeding
- Ovarian cysts and benign ovarian tumors
  - Risk reduction with longer duration of use
  - Less effective with low-dose OCPs

Maguire K et al AJOG 2011

Noncontraceptive Health Benefits OCPs

- Bone
  - » Use among women in their 40s associated with 25% decrease in hip fractures later in life
  - » Dose-related effect on Bone Mineral Density (BMD)
- Fibroids
  - » Manages pain and menorrhagia
- Premenstrual Dysphoric Disorder
  - » Drospirenone-containing OCPs associated with reduced symptoms
- Acne
  - » Decreased free testosterone, increased SHBG
  - » 50% decrease inflammatory lesions
- Endometriosis-associated chronic pelvic pain
  - » Continuous use low-dose pills relieves pain

Maguire K et al AJOG 2011

Noncontraceptive Health Benefits OCPs

- Benign breast disease
  - » Lower risk of fibroadenoma, cystic breast disease, and nonbiopsied breast lumps
  - » Risks decrease with increasing years of OCP use
    - OCPs use for > 7 yrs decreases risk of benign breast disease by 15%
    - No association with breast cancer
- Cancer
  - » Ovarian cancer
    - 40% decreased risk, even after use for only a few months
    - The longer the duration of use, the > risk reduction
      - – 20% reduction for every 5 yrs of use
    - 50% risk reduction for women with known BRCA1/BRCA2 mutations
  - » Endometrial cancer
    - 50% risk reduction
  - » Colorectal cancer
    - 50% reduction, with decreased risk stronger among recent users

Maguire K et al AJOG 2011

Long Acting Reversible Contraception (LARC)

- i.e. Levonorgestrel and Copper T IUDs
- Highly effective, easily reversible
- Very few contraindications to placement
- Appropriate for nulliparous women and adolescents
- Higher rates of satisfaction in nulliparous women compared to OCPs
- Expulsion rate 3.3% (Levonorgestrel) – 9.2% (copper T)
- No increased risk of PID

LARC most effective Contraceptive Method

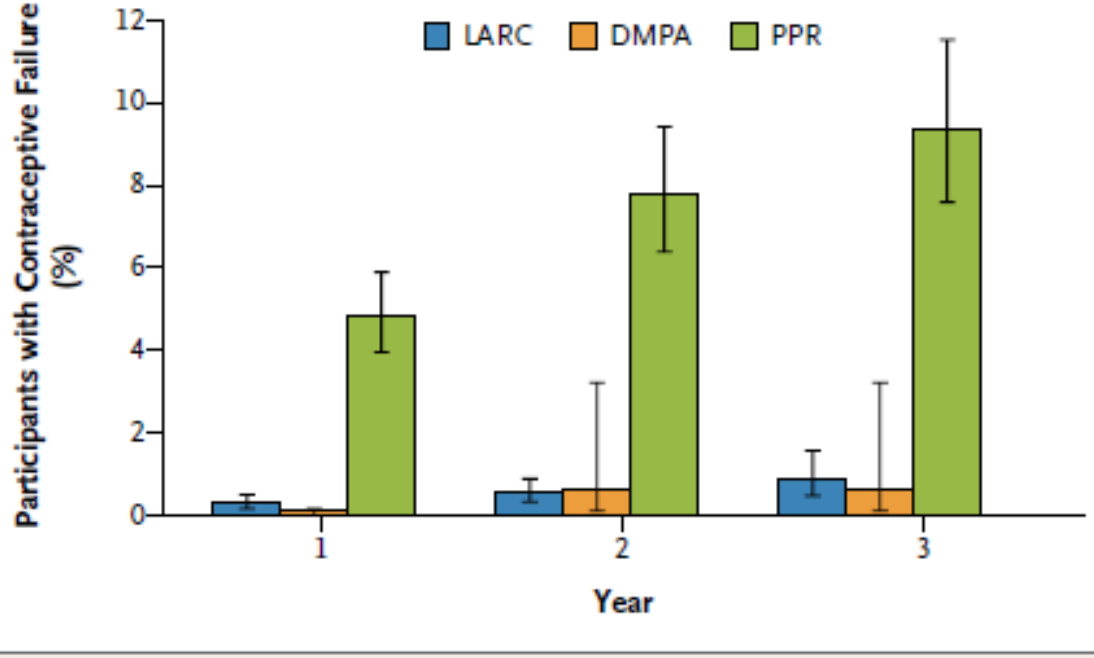


Figure 1. Cumulative Percentage of Participants Who Had a Contraceptive Failure at 1, 2, or 3 Years, According to Contraceptive Method.

Bars depict the cumulative percentage of participants who had a contraceptive failure with long-acting reversible contraception (LARC), depot medroxyprogesterone acetate (DMPA), or pill, patch, or ring (PPR) at 1, 2, or 3 years. Participants using PPR had significantly more unintended pregnancies than those using LARC ($P<0.001$) or DMPA ($P<0.001$).

Winner B et al NEJM, 2012

ORIGINAL RESEARCH—WOMEN'S SEXUAL HEALTH

Sexual Functioning in Women Using Levonorgestrel-Releasing Intrauterine Systems as Compared to Copper Intrauterine Devices

- 33% LNG-IUD users reported FSD (c/w with general prevalence rates of FSD)
  - » 20% reported an increased sexual desire
  - » 5% arousal problems
  - » 8% orgasm problems
- No difference in psychological and sexual functioning between LNG vs Cu T IUD users
- Perceived influence IUDs on sexual functioning was in lower range and did not differentiate LNG vs Cu T

Enzlin P, et al. JSM 2012

Levonorgestrel IUD

- N=156 women in Italy
- Evaluated efficacy, compliance, changes in menstrual cyclicity on QOL and sexual function
- Results:
  - Improvement in quality of life
  - FSFI → decrease in dyspareunia, improvement in sexual desire

Bastianelli C et al. Contraception 2011; 84(4):402-8

Noncontraceptive Benefits Levonorgestrel IUD

- Efficacy in therapy for heavy menstrual bleeding[1]
- Treatment for endometrial hyperplasia and adenocarcinoma in poor surgical candidates[2]
- Progestin source for women using estrogen therapy[3]
- Prevention Tamoxifen-associated endometrial polyps in women with breast cancer[4]

Gupta J et al Fertil Steril 2012; 98:893-7[1]
Brown AJ et al Obstet Gynecol 2012; 119: 423-6[2]
Antoniou G et al Maturitas 1997; 26: 103-11[3]
Wong AWY et al Obstet Gynecol 2013;121: 943-50[4]

Potential Impact on Provider Prescribing Practices

- Greatest association with hormonal contraception use is visits to the gynecologist
- Tailored discussion
  - » Risks, Benefits, Indications, Alternatives
- Evidence-Based Counseling
- Recognition of Lack of Consensus

Carrasco-Garrido P, et al J Sex Med 2011; 8: 383-390

Appropriate Counseling

- Individualized – Identify situations in which patients most at risk sexual side effects
  - Sexual History
  - Family history
  - Presence of co-morbidities
  - Presence of complex psychosocial and contextual issues (i.e. stress, relationship, culture, interpersonal, body image, etc)
- Assess overall life situation and fluidity of reproductive health goals
- Address logistical and cost barriers
- Patient should make an ***informed*** Personal Choice

Need for More Rigorous Data

- Prospective, longitudinal, randomized controlled trials
- Consistency in use of Validated instruments
- Reproducibility of results
- Wide variety of hormonal contraception
  - » Differences in Dose, Type of Hormone, Route of Administration
- More research is needed to clarify situations in which sexual response is adversely affected