Why important to meet males’ sexual/reproductive health needs?

1. Males have SRH needs in their own right
   - Need to address both sides of partner equation
   - Address needs of all males (non-heterosexual & heterosexual)

2. Improved health outcomes for males’ partners including
   - Direct benefits (↓ in infection transmission between partners) &
   - Indirect benefits (shared health promotion practices)

3. Males as critical partners in family planning: engaging males in SRH is critical to ensure pregnancies are planned & wanted

4. Improved males’ capacity for parenting & fathering & ultimately improved child health outcomes

5. SRH care as a clinical hook to address males’ other health needs

6. “Providers” (e.g., parents, teachers, healthcare) lack sufficient knowledge & skills with males on SRH-related topics
**Sexual behavior**
**Normal part of development**

**Pre-adolescent**
- Self-stimulation; childhood masturbation

**Early-adolescent**
- Interest in sexual anatomy & pubertal changes
- Anxieties & questions about genital size & events
- Nocturnal emissions (wet dreams)
- Normal self-exploration & to evaluate & compare to others same sex/age
- Limited dating & intimacy

**Mid-adolescent**
- Test ability to attract opposite sex
- Initiation of sexual activity

**Late-adolescent**
- Intimacy & formation of stable relationships
- Planning for future & commitment (marriage, etc.)

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**Sexual behavior**
**Normal part of development cont.**

- Fewer never-married male teens are reporting having had vaginal sex from 1995 (55%) to 2009 (46%)
- However
  - ~½ male teens still report having had vaginal sex
  - Decrease not observed for all racial/ethnic groups
    - Steepest ↓ for AA (-17%)
    - Less steep ↓ for Whites (-9%)
    - No change for Hispanics
  - Among males not reporting “vaginal sex”, ~13% report oral sex or mutual masturbation
- Thus, ~60% US male teens are reporting any type of sex

---

**Males’ use of contraception methods**

- **Vasectomy** reported by only 13% married males
- **Dual method use** at last sex reported by <40% teens & 20% adults
  - Pills cited as most common partner method of birth control
  - **Partner pill use** reported by <50% unmarried males (any age)
- **Consistent condom use** report (use during 10 prior acts of sex)
  
<table>
<thead>
<tr>
<th>Age</th>
<th>14-17</th>
<th>18-24</th>
<th>25-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
<td>45%</td>
<td>28%</td>
<td>21%</td>
<td>10%</td>
<td>&lt;5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Withdrawal** reported by ~9% sexually active, unmarried males
- **No method use** reported by 30% all men & 19% unmarried men aged 15-44 years

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NSFG & YRBS

NSFG 2002-2010
Improving condom use trends for male adolescents

Since 1970s, overall ↑s in condom use at 1st & last sex
• At 1st sex, 80% report condom use with racial/ethnic variation
  | 1995 | 2002 | 2006-10 |
  | ↑ among Whites: 76% 68% → 81% |
  | No ↓ among AAs: 61% 85% → 80% |
  | ↑ among Hispanics: 55% 67% → 79% |
• Consistency in condom use during past 4 weeks
  No ↓: 50% 68% → 67%
• At 1st sex, 16% report dual contraception use (hormone+condom)
• At 1st sex, no method reported by 15%; at last sex by 8%

Sex & other risk behaviors

| % | Use alcohol/drugs before last sex | 26 a |
|   | ≥ 4 lifetime partners | 16 a |
|   | Sex onset age 13 or younger | 8 a |
|   | Anal sex with female partner | 10 b |
|   | HIV sex risk behaviors | 6 b |
|   | (sex in exchange for money/drugs, partner injects drugs, with HIV-positive partner, with male, with ≥5 opposite sex partners) |

Compared to female adolescents
• Males report earlier age sexual onset & more partners

STI needs in the U.S.

• Each year CDC estimates 19 million new STDs
• More than ¼ of STD diagnosed among 15 to 24 year olds
• In 2010,
  – 1.3 million cases of chlamydia
  – 300,000 cases of gonorrhea
  – Rates for syphilis among black men increased by 134% over past 5 years
STI Rates by Gender, US: 1990-2010

Chlamydia Rates

Gonorrhea Rates

Syphilis Rates

Chlamydia rates per 100,000

Gonorrhea rates per 100,000

2010 Chlamydia rates among men in U.S. by age & race/ethnicity

2010 Gonorrhea rates among men in U.S. by age & race/ethnicity

STD Surveillance 2010, CDC, 2011

2010 Syphilis rates among men in U.S. by age & race/ethnicity

Syphilis rates per 100,000

STD Surveillance 2010, CDC, 2011

2010 Chlamydia & Gonorrhea cases per 100,000 men in Maryland

Chlamydia

Gonorrhea

DHMH. Center for STI Prevention. Jul 2011

2010 Syphilis cases per 100,000 men in Maryland

DHMH. Center for STI Prevention. Jul 2011
Pregnancy & births

• Majority of pregnancies among adolescents & young adults are unintended
  – 82% of teen pregnancies (ages <18)
  – 67% of young adult (ages 18-24)
• Among females adolescents
  – ~750,000 (1 in 5) become pregnant every year
• Among male adolescents
  – 13% have gotten a partner pregnant
  – 2-7% are fathers
• By age 30-34, majority of males report
  – Having had a biological child
  – Intending to have a(nother) child

Fatherless epidemic

Children growing up without meaningful adult contacts (absent fathers; divorce; children outside of marriage)
• What is the impact on the child?
• What is the impact on the father?
Puberty

• 1st visible sign of puberty & hallmark of Sexual Maturity
  Rating 2 (SMR 2) is testicular enlargement followed by penile growth (hallmark of SMR 3)
• Median age of entry into SMR 2 for

<table>
<thead>
<tr>
<th>Genital</th>
<th>Sun 2002</th>
<th>H-G 2012</th>
<th>Hair</th>
<th>Sun 2002</th>
<th>H-G 2012</th>
<th>T Vol&gt;3cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH white</td>
<td>10.0</td>
<td>10.1**</td>
<td>12.0</td>
<td>11.5**</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>NH black</td>
<td>9.2-9.5</td>
<td>9.1</td>
<td>11.2</td>
<td>10.3</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>Mex Am/Hisp</td>
<td>10.3-10.4</td>
<td>10.0</td>
<td>12.3</td>
<td>11.4</td>
<td>9.6</td>
<td></td>
</tr>
</tbody>
</table>

Pubertal abnormalities

• Abnormal health issues are not uncommon, can be distressing & may not be identified until adolescence
• Non STI-related issues
  - Klinefelter syndrome 1 in 500-700
  - Fragile X syndrome 1 in 1000-4000
  - Marfan syndrome 1 in 5000-10000
  - Kallman syndrome 1 in 8000-10,000
  - Gynecomastia 40-65%
  - Testicular torsion 8.6 per 100,000
  - Varicocele 10%
  - Testicular cancer 3.1 in 100,000
  - Acne 95%

• Early maturation related to increased risk-taking
• Late maturation related to ↓ed confidence/self-efficacy & ↑ed teasing, bullying & problems with mental health & substance use

Sexuality

• Limited national U.S. data on same-sex sexual attraction & behavior
  - ~8% [95% CI: 7.5-9.3] report same-sex attraction/relationship (1995)
  - Reports of sexual attraction not always associated with who one has sex with (discordant report)
• Most sexual minority youth are resilient & do well especially when have a supportive environment
  - Presence during disclosure process associated with more positive psychological adjustment
  - Lack associated with increased risk for social isolation, school failure, family conflict, substance abuse, depression, suicide & stigmatization
**Sexual pressure/coercion & IPV**

Sexual pressure
- 82% 12-19 y/o males report friend pressure to have sex
- Among sexually experienced males [15-19], 55% wished they had waited longer before having sex for 1st time
- Among 18-24 y/o males, 38% report really not wanting sex to happen 1st time it did or mixed feelings about it
- 1 in 12 males (8%) report past sexual coercion by female (6%) or male (2%) partner, with higher reports among
  - Males reporting 1st sex <15 y/o
  - Non-hispanic black males
- Past sexual violence experience reported by ~1 in 10 males
- Intimate partner violence reported by 1 in 10 male teens

**Other SRH needs**

Sexual problems
- 1 in 3 experience early ejaculation (31%)
- 1 in 10 experience other issues (e.g., lack of sexual interest, inability to reach orgasm, erectile difficulties)
- Erectile difficulty can be sign of cardiovascular disease
- Few studies examine sexual problems among male teens
- Other causes include
  - Decreased pleasure with condom use
  - Generic performance-related issues due to co-morbid conditions (e.g., diabetes); medication side effects (e.g., SSRIs, alcohol)

Infertility impacts ~2% of all males
SRH-related cancers include prostate, testicle, penile, breast, HPV-related cancer

**Mixed SRH outcome trends for male adolescents**

1. Unplanned pregnancy
2. Teen fatherhood
3. STIs
4. Healthy sexual development

<table>
<thead>
<tr>
<th>Past 2 Decades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decline</td>
</tr>
<tr>
<td>Decline, majority ♀ teen births by fathers ≥20y/o</td>
</tr>
<tr>
<td>↑CT, RPR(MSM) / ↓GC</td>
</tr>
<tr>
<td>↓HSV / ↑ HPV / HIV (AA-MSM)</td>
</tr>
</tbody>
</table>

? Measure
Male SRH definition & framework*

"A state of physical, mental & social well-being & not merely absence of disease, dysfunction or infirmity in all matters relating to reproductive system, its functions & its processes"

- Requires positive & respectful sexuality & sexual relationship approach
- Respect, protect & fulfill sexual rights of all persons
- Sexual experiences should be pleasurable & safe & free of coercion, discrimination & violence
- Males, along with females, have right to be informed & have access to safe, effective, affordable & acceptable family planning methods of choice & appropriate healthcare services

* CDC (2011). A public health approach for advancing sexual health in U.S. Atlanta, GA.

Male SRH clinical care outcomes

**Prevent**
- STIs, including HIV (& control)
- Unintended pregnancy (e.g., family planning)
- Reproductive health cancers (& treatment)

**Promote**
- Sexual health & development
- Reproductive life plan (e.g., timing & spacing of children) & preconception health
- Healthy relationships & behavior

**Reduce**
- Sexual problems, infertility (& treatment)

**Increase**
- Lifespan/survival & quality of life
- Access to clinical services & client satisfaction

What are the goals of male sexual & reproductive health (SRH)?

<table>
<thead>
<tr>
<th>Prevent/Reduce/Increase</th>
<th>Child</th>
<th>Teen</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Unintended pregnancy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. STIs, including HIV (&amp; control)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Reproductive health cancers</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>Promote</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sexual health &amp; development</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5. Reproductive life plan &amp; preconception health</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6. Healthy relationships</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>Reduce</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Sexual problems, infertility</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>Increase</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lifespan/survival/quality of life</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>9. Access to care/satisfied w/ care</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
Where to deliver male sexual & reproductive health?

Any intervention to engage men on the individual OR community level that includes:
1. Clinical services
2. Community outreach
3. Educational initiatives

That uses:
1. Education
2. Counseling
3. Clinical services
4. Support services: recreation, employment & training, spiritual guidance, other...

Males make fewer primary care visits than females at all specialties

- Number of visits to office-based practices per 100 persons per year, 2008

Males make fewer primary care visits than females regardless of age

- % all office visits to primary care generalist physicians by gender & age, 2008
**Males make fewer number primary care visits than females**

Percent distribution of number of visits to healthcare professionals, 2007

**Are sexually active male teens being seen in primary care?**

National Longitudinal Study of Adolescent Health

- 9239 adolescents completed a survey at baseline in school & at follow-up approximately 1.5 years later (retention rate=71%)
- Asked at both surveys
  - Sexual behavior status in past 12 months
  - Physical examination receipt in past 12 months
- Study goal
  - To examine whether adolescents' healthcare use increased after sex onset & how patterns varied by gender adjusting for sociodemographics & access to care factors

**Sexual behavior status over time by teens’ annual visit data (Add Health)**

- The majority of sexually active males reported 2 visits in last year
- Among females, visits ↑ed among all sexual behavior categories (p<.001), including sexual initiators (aOR [95%CI]=2.1[1.7-2.8])
- Among males, visits did not increase especially among males who initiated sex from baseline to follow-up (aOR=1.3[0.9-1.8])

Few young men report receipt of SRH care services

<table>
<thead>
<tr>
<th></th>
<th>% Female</th>
<th>% Male</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provider report:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assess for sexual health*</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td><strong>Client report:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counsel on STIs, HIV, pregnancy**</td>
<td>61</td>
<td>34</td>
</tr>
<tr>
<td>Ever HIV test 15-44***</td>
<td>59</td>
<td>42</td>
</tr>
<tr>
<td>HIV test last yr among 15-44 with ≥1 risk behavior***</td>
<td>43</td>
<td>34</td>
</tr>
<tr>
<td>Assess/counsel on contraception</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>Counsel on condoms</td>
<td>18</td>
<td>7</td>
</tr>
</tbody>
</table>

*** NSFG (2006-10). Special tabulations.

Barriers to SRH care delivery

Influences at multiple levels

**Individual patient level**
- Lack of public health messages that sexually active males should seek care in general or for SRH
- Access to & use of healthcare

**Provider level**
- Gender, specialty, year of graduation
- Training, self-efficacy in care delivery (comfort taking sexual history)

**Clinic setting level**
- Services not designed to meet males’ SRH needs
- Time, competing demands, financial incentives, compensation
- Decision-support tools (reminder systems) & access to internal (e.g. health educators) or external (e.g. urology) referral resources

**System level (HEDIS measures)**
- No one professional organization makes recommendations for male SRH care across lifespan
- But, guidelines alone do not ensure provider compliance


Summary

- It takes 2 to prevent SRH outcomes
- Men have SRH needs in their own right
- SRH arena emphasizes family planning needs of males rather than comprehensive SRH approach
- Many barriers to SRH care services for men
Class 1 Readings: Questions

- Is Cairo definition of reproductive health & WHO definition of sexual health too idealistic?
- Does CDC report on Sexual Health add any new dimensions to the definition?
- For men, how broadly should we be thinking about SRH?
- In Lancet & Lindberg articles,
  - What resonates as men’s top health needs
  - What key topic(s), if any, are missing?

Class 1 Readings: Questions

- How different are SRH goals for men & women?
  - And, why should we care?
  - For example, if same, why focus on men?
- What settings should address men’s SRH?
  - Should men have separate services & service sites?

Overarching Questions for Class

- Why is there a disparity between men’s experience of reproductive morbidity & mortality & health care use?
- Are males being socialized in ways that threaten their health?
Socio-Ecological Framework for Male SRH & Care Seeking

Questions about course structure & content?

Designed as ‘reading seminar plus’

Class 2 Masculinities: What does it mean to be a man & how is this related to men’s health?
Class 3 Male SRH needs across lifespan
Class 4 Community-based interventions
Class 5 Clinic-based interventions
Class 6/7 Student presentations
Class 8 Training needs
Wrap up: Pulling it all together
Evaluation