

STD Screening:
Focus on Chlamydia and Gonorrhoea
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An Example

- 20 y.o. sexually active female presents for annual exam
- Screen?
- One partner, boyfriend of 2-3 years. Use condoms most of the time. No concerns for STDs, no history of STD. Screen?
- The full story

CDC estimates

- 19 million new infections each year, half among people ages 15 -24
- Direct medical costs estimated at 14.7 billion

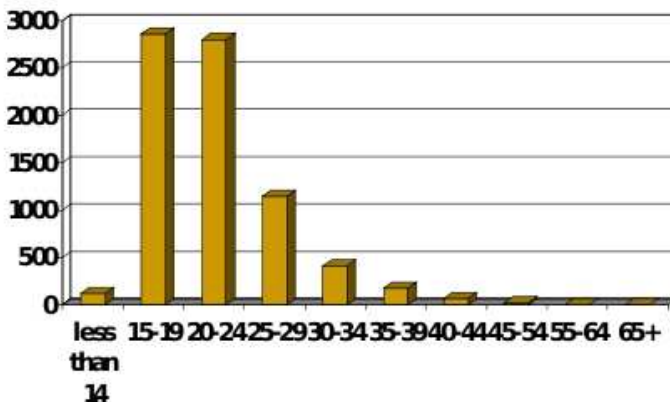
Chlamydia

- Over 1 million reported cases (347.8 per 100,000)
- 2.8 million estimated cases annually
- Reported cases in ND = 286.0 per 100,000
- Estimate 7% of 15-24 y.o. females are infected

Gonorrhea

- 358,366 reported cases (120.9 per 100,000)
- 2x estimated Chlamydia Rates Among Females, 2006 (cases per 100,000)

Chlamydia Rates Among Females, 2006 (cases per 100,000)



Impact of Chlamydia and Gonorrhea

- PID (majority of cases asymptomatic or subclinical)
- Occurs in 20-40% of females with untreated chlamydia
- Of those with PID, 20% develop infertility, 9% ectopic pregnancy, and 18% chronic pelvic pain

HIV

- Increased infectivity and susceptibility

Economic

- Screening programs save money overall with prevalence rates down to 1-3%

Screening Recommendations: Chlamydia

- All sexually active women aged 24 (or 25) or less
- Women 25 (or 26) who are at increased risk
- Increased risk includes previous STD, new or multiple partners, inconsistent condom use, and exchanging sex for drugs or money. Age is the strongest predictor of risk.
- Same recommendations apply to pregnant women
- No current recommendations for screening males
- Rescreen in 3 months following a positive test
- CDC, USPSTF (grade A), AAFP, ACOG, AAP

Chlamydia and North Dakota

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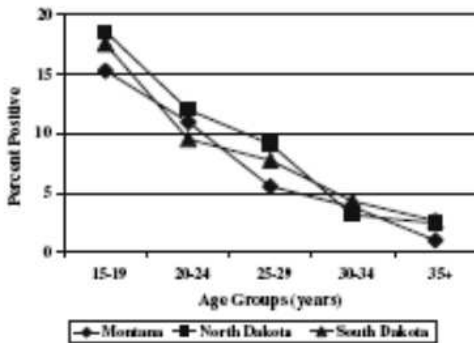


Fig. 1 Chlamydia positivity by age group and state, Indian Health Service Clinics, 2003

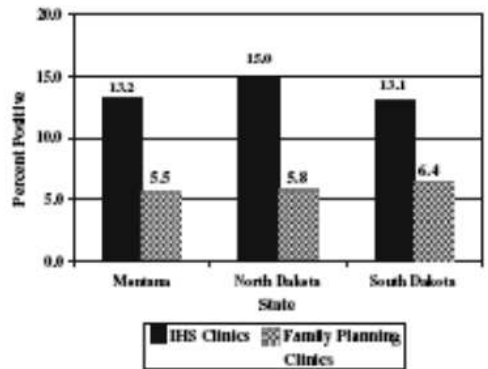


Fig. 2 Chlamydia positivity in women aged 15-24 years screened in Indian Health Service Clinics versus Family Planning Clinics by state.

Screening Recommendations: Gonorrhea

- All sexually active women at increased risk
- Increased risk includes age less than 25 and other individual or population risk factors
- USPSTF (B recommendation), CDC, AAFP, AAP, ACOG

Screening Recommendations: Other STDs

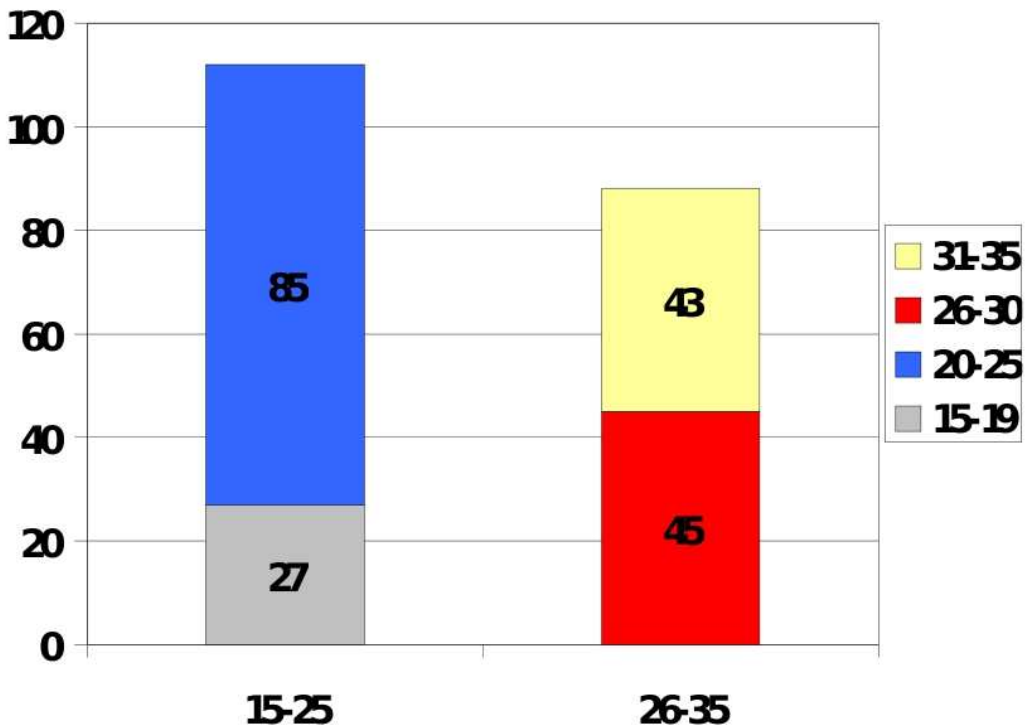
- Syphilis - all pregnant women
- HIV - consider in all patients with STD diagnosis, high risk behaviors, MSM
- Other STDs with no routine screening recommendations
- Partner treatment

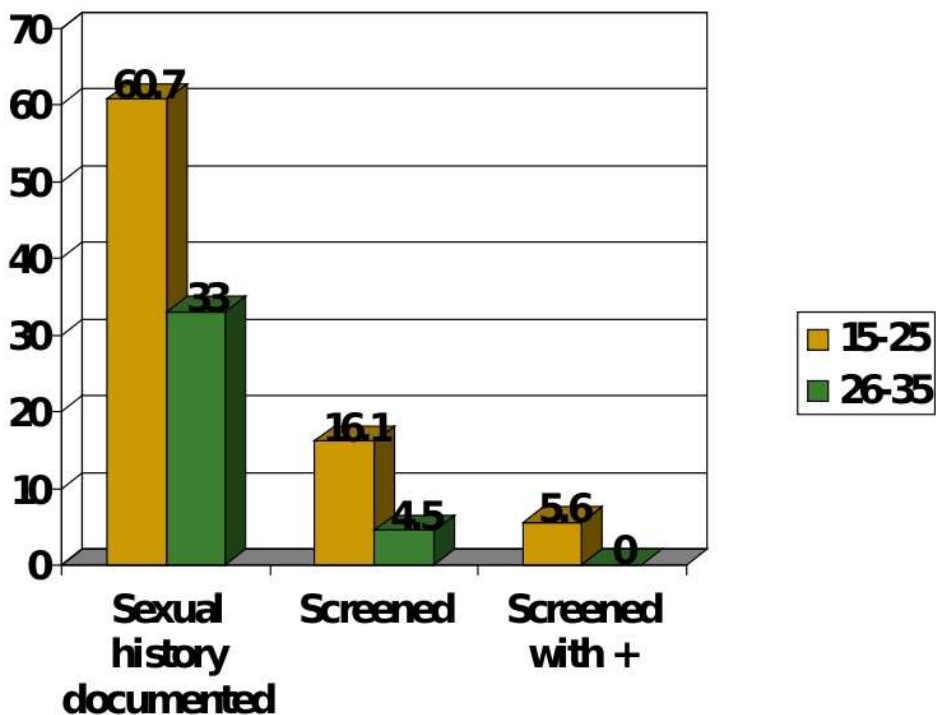
Current Screening Practices for CT/GC

- Screening rates among young women remain low
- Estimated at 30-50% by USPSTF
- Guoyu, et. al. 42% of sexually active females aged 16-25 were tested
- Fiscus, et. al. 18% of sexually experienced females in grades 7-12 were tested
- Survey of Colorado PCP. 54% reported regularly screening sexually active adolescent females for CT
- Survey of California PCP. 47% of physicians and 79% of NPs regularly screened women 25 and younger.

Our Clinic

- 421 females between ages 15-35 were seen for annual exams from 01/01/07 to 01/01/08
- Looked only at annual health maintenance exams (i.e. did not look at any visits with patient coming in with a specific complaint)
- Reviewed 200 charts dividing women into two age groups (15-25 and 26-35) and then looked at our current screening practices





Comments on 15-25 y.o. age group

- Documented sexual history in 68/112 (=60.7%)
- 18 (=16.1%) were screened
- 6 had documented history of no sexual activity and were not screened
- This brings appropriately tested/not tested to 21.4%
- 7 of 18 that were screened was secondary to patient request and/or history of previous STD

In the 15-19 y.o. age group

- Documented sexual history in 81.5%
- 4 were screened, 2 not sexual y active = 22.2% appropriately tested/not tested

Comments on 26-35 y.o. age group

- 29/88 (=33%) had documented sexual history
- 4/88 (4.5%) were screened
- 2 had no documented reason for screen
- 1 was screened secondary to patient request
- 2 with documented risk factors were not screened (both had h/o incarceration, drug use, multiple partners)

Back to example

- 20 y.o. sexually active female presents for annual exam
- Screen?
- Yes

Summary:

- All sexually active females under 25 should be screened for GC/CT at annual exam.
- Ask enough questions of 26+ to decide if they should be screened or not.

References

CDC. Trends in Reportable Sexually Transmitted Diseases in the United States, 2006: National Surveillance Data for Chlamydia, Gonorrhea, and Syphilis. Nov. 13, 2007.

Kohl, et. al. Developments in the screening for Chlamydia trachomatis: a review. *Obstet Gynecol Clin N Am* 30 (2003) 637-658.

Dicker, et. Al. An Ongoing Burden: Chlamydial infections among young American Indian women. *Matern Child Health J* 2007.

Screening for chlamydial infection: U.S. Preventive Services Task Force recommendation statement. 2007.

Screening for Gonorrhea: U.S. Preventive Services Task Force recommendation statement. 2005.

Meyers, et. Al. Screening for chlamydial infection: A focused evidence update for the USPSTF. June 2007.

Guoyu, et. al. Estimating Chlamydia screening rates by using reported sexual y transmit ed disease tests for sexually active women aged 16 to 25 years in the United States. *Sexually Transmitted Diseases*, March 2007, vol. 34, No. 3, p. 180-182.

Fiscus, et. al. Infrequency of sexually transmitted disease screening among sexually experienced U.S. female adolescents. *Perspectives on Sexual and Reprod Health*, 2004, 36(6): 233-238.

Torkko, et. al. Testing for Chlamydia and sexual history taking in adolescent females: Results from a statewide survey of Colorado primary care providers. *Pediatrics*. 106(3), Sept. 2000.

Guerry, et. al. Chlamydia screening and management practices of primary care physicians and nurse practitioners in California. *J Gen Intern Med* 2005; 20: 1102-1107.

Moses, et. al. Sexually transmitted diseases in Manitoba. *Sexually Transmitted Diseases*. December 2002, 840-846.

ACOG Committee Opinion. Sexually transmitted diseases in adolescents. Number 301, October 2004.

Kodner, Charles. Sexually transmitted infections in men. *Prim Care Clin Office Pract* 20 (2003) 173-191.

Wiesenfeld, et. al. Knowledge about sexually transmitted diseases in women among primary care physicians. *Sexually Transmitted Diseases*. Nov 2005, vol 32, no 11, p 649-653.

Guoyu and Irwin. Receipt of HIV and STD testing services during routine general medical and gynecological examinations: variations by patient sexual risk behaviors. *Sexually Transmitted Diseases*, Dec 2007: 34(12).

Hu, et. al. Screening for Chlamydia trachomatis in women 15 to 29 years of age: A cost-effectiveness analysis. *Annals of Internal Medicine*. 141(7), October 2004.