

Condom Use In Pregnancy: A Pilot Study

Presented by

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Objectives

At the end of this presentation, you will be able to:

- Identify 2 possible effects of inconsistent condom use for pregnant women.
- Identify 2 possible effects of inconsistent condom use for fetuses.
- Describe interventions that may help couples with consistent condom use in pregnancy.

Facts About Sexually Transmitted Infections (STI)

- STIs have a tremendous effect on sexual health worldwide.
- One million people acquire STIs daily.
- Incidence: 357 million new infections.
- Chlamydia **131 million**, Gonorrhoea **78 million**, Syphilis **5.6 million**, and Trichomoniasis **143 million**.
- Greater than **500 million** people are living with genital Herpes.
- More than **290 million** women have Human Papilloma Virus (HPV) (WHO, 2019).



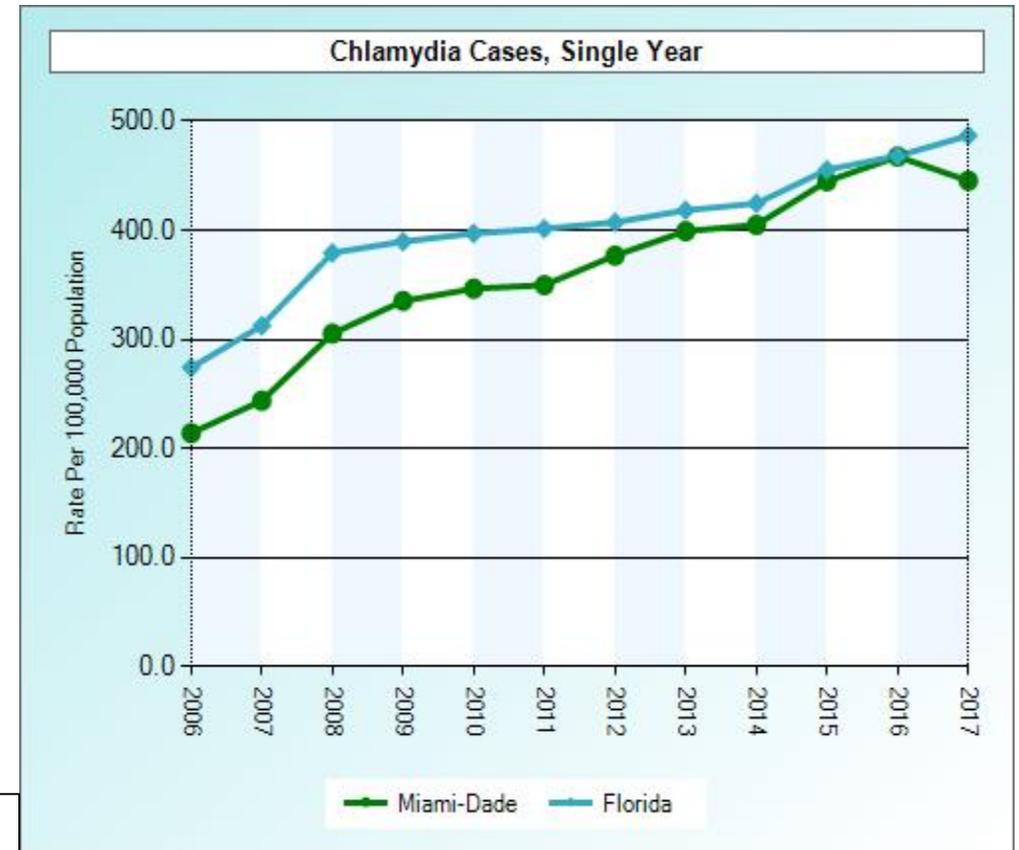
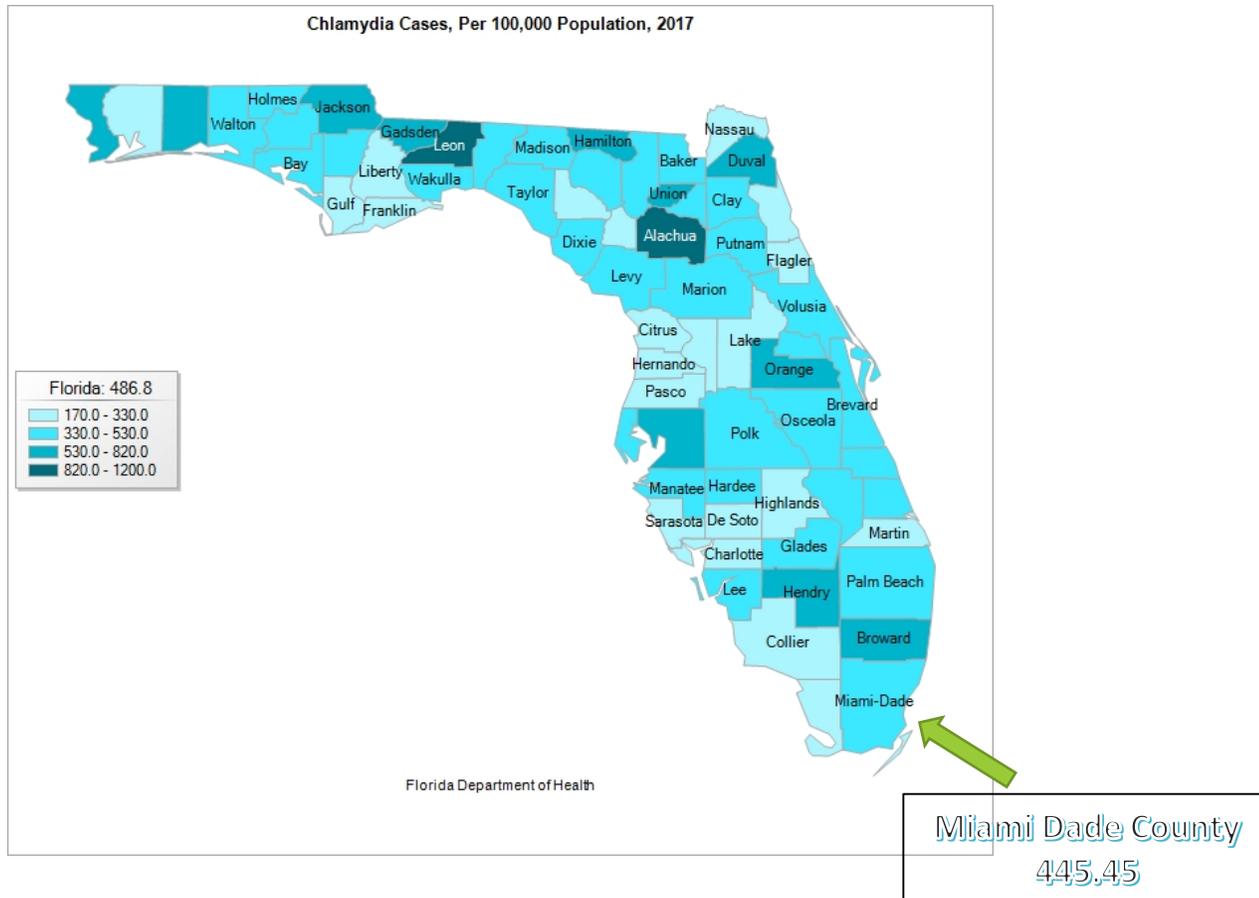
Reported STIs in the US 2017

Reported Cases:

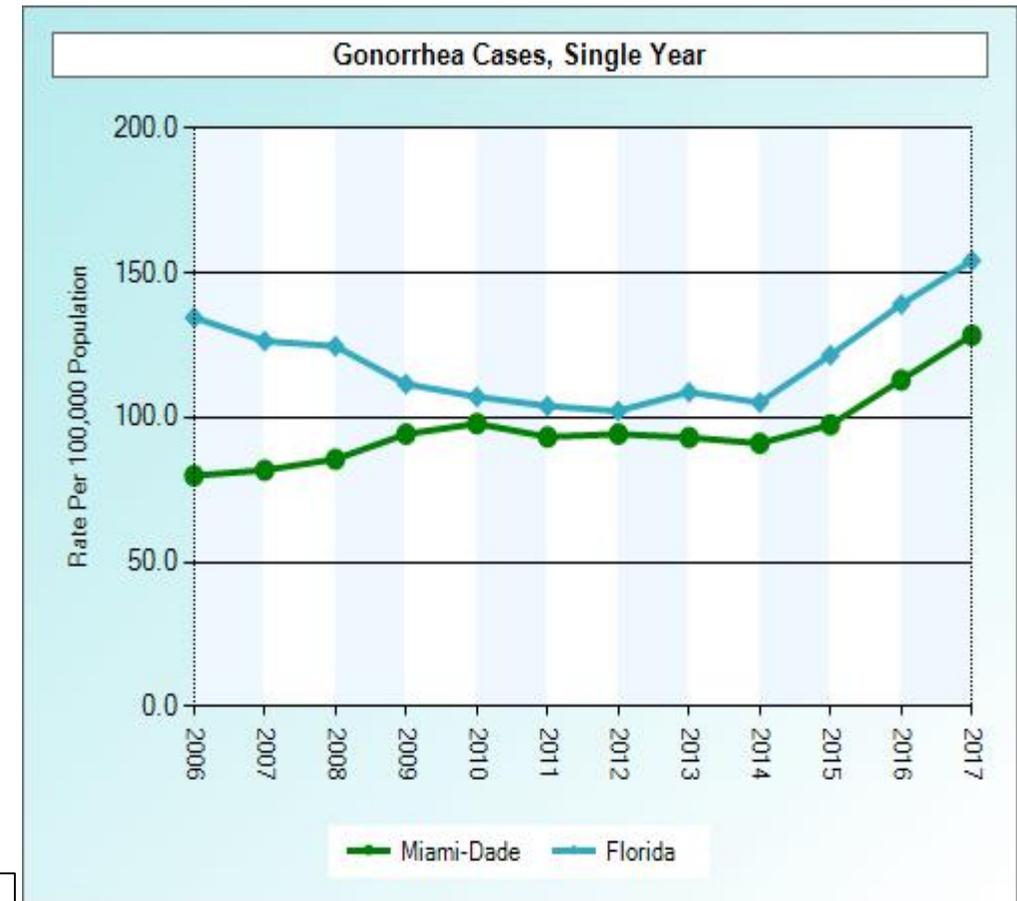
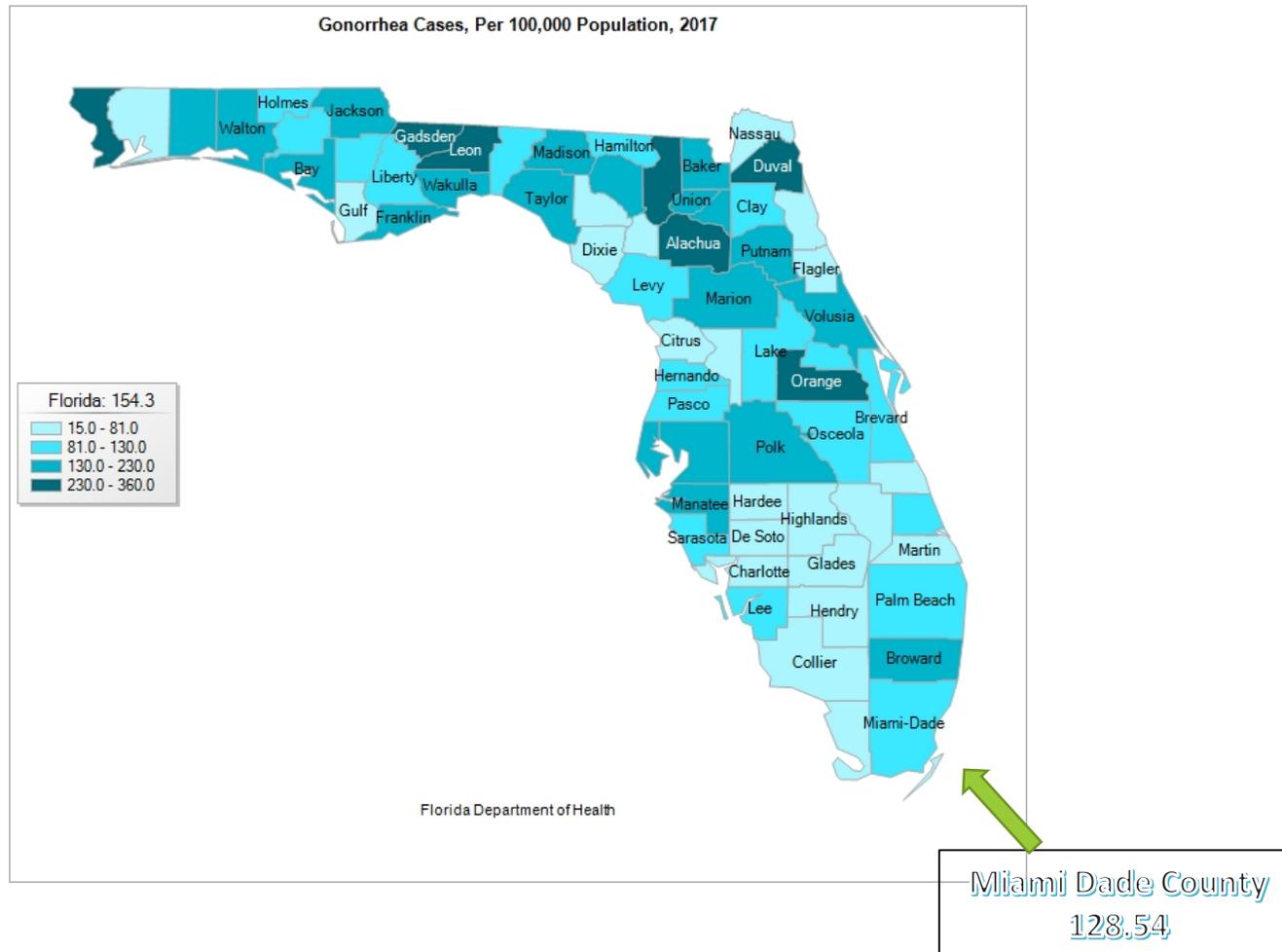
- Total cases since 2017: **2.29 million**
- Chlamydia rate: **529 per 100,000 people (1.7 million)**.
- Gonorrhea rate: **172 per 100,000 people (555,608)**.
- Primary/Secondary Syphilis rate: **10 per 100,000 people (30, 644)**.
- Congenital Syphilis rate: **23 per 100,000 live births (918)**. 2016 **639** infants (CDC, 2018).



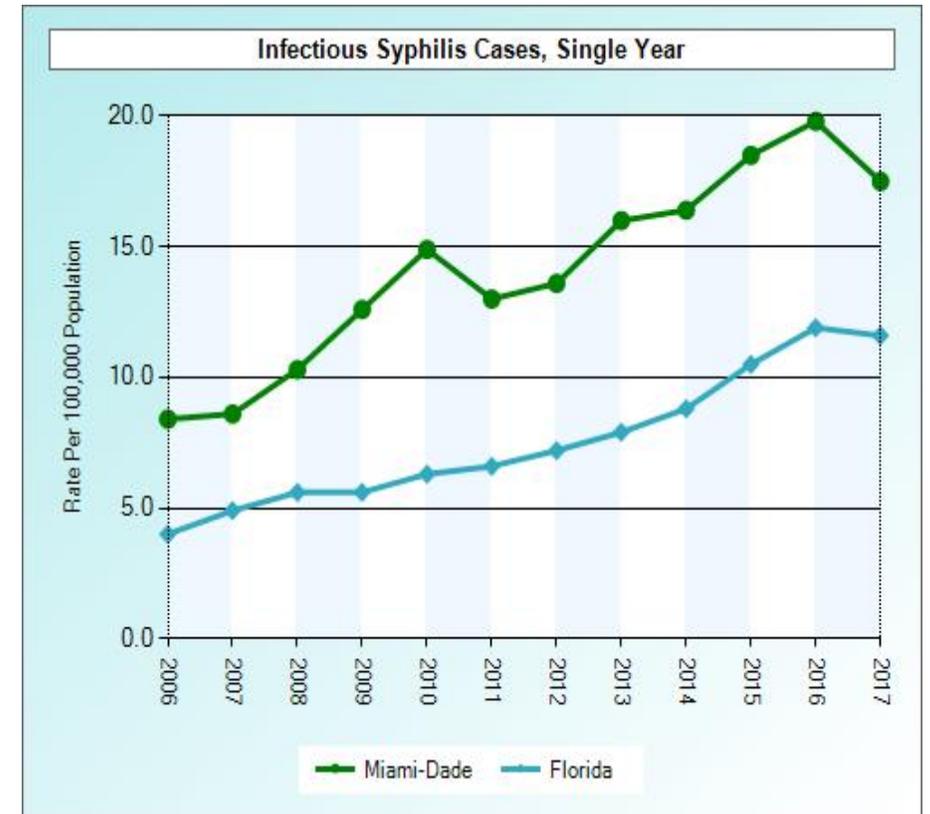
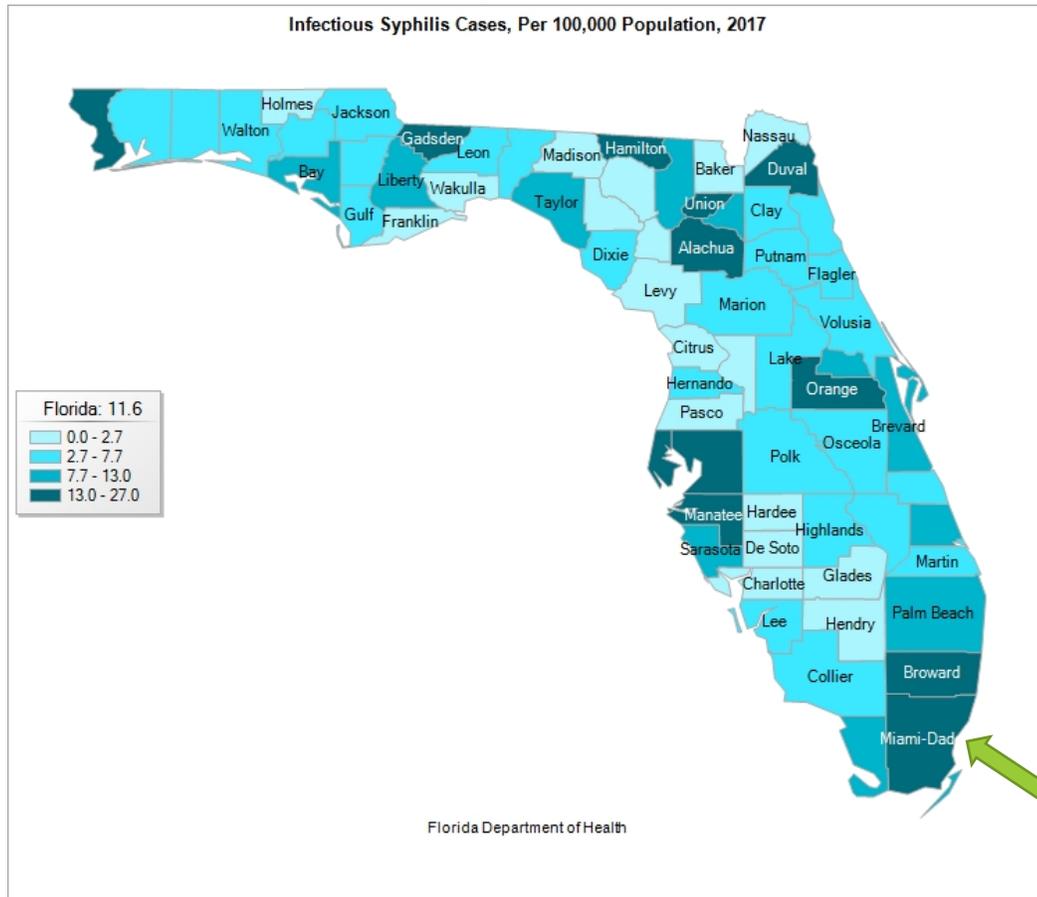
Chlamydia Cases In Florida



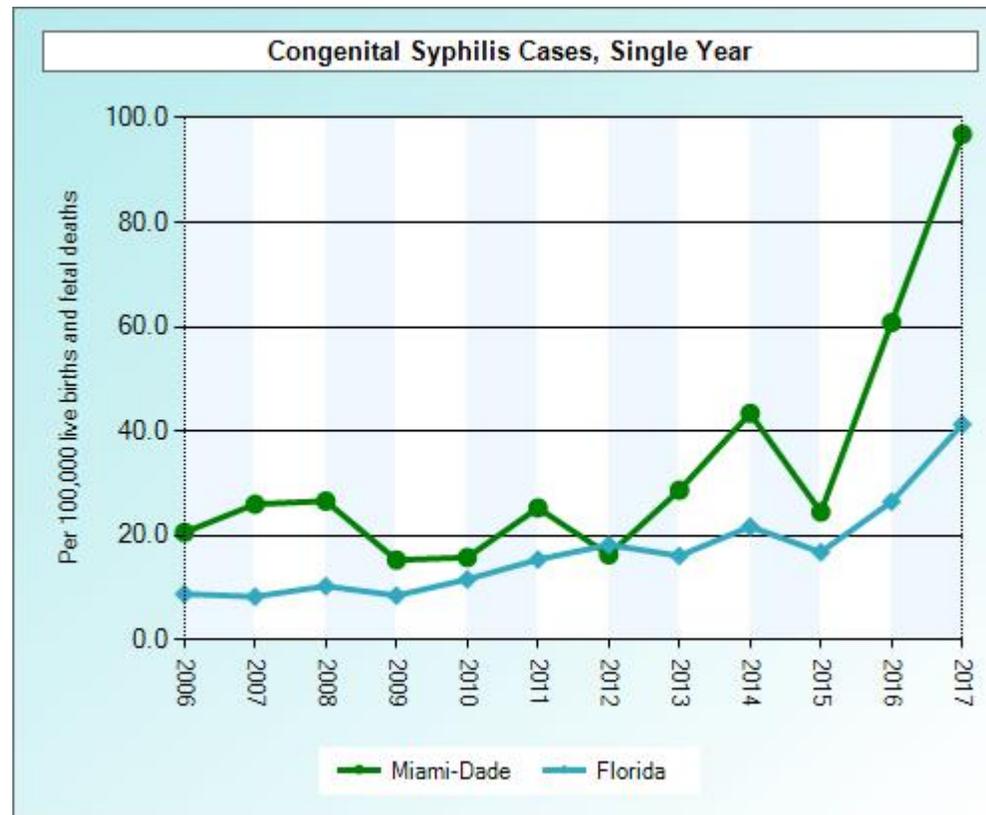
Gonorrhea Cases In Florida



Syphilis Cases In Florida



Syphilis Cases in Florida



Miami Dade County
96.9

Maternal and Fetal Outcomes

- Special population that is susceptible to the consequences of STIs.
- Many pregnant women with chlamydial and gonococcal infections are asymptomatic. Results in pelvic inflammatory disease (PID), ectopic pregnancy, and infertility.
- Untreated infections in pregnancy consist of premature labor and premature rupture of membranes.
- Infants: low birth weight, stillbirth, neonatal death, prematurity, sepsis, pneumonia, ophthalmia neonatorum (conjunctivitis), congenital syphilis infection, developmental disabilities, neonatal herpes infection, laryngeal papillomatosis in children (CDC, 2017; WHO, 2019).

STIs in Women and Children

- Multiple studies investigated sexual education, condom negotiation, and behavioral interventions with non-pregnant adolescents and young adults.
- Replicate studies with pregnant women.
- Pregnant women need to understand their risk for contracting STIs, risk reduction, maternal and infant transmission and adverse effects, screening and treatment, and importance of consistent condom use.



Effects of STDs on Pregnancy

On Fertility:

- Might lead to pelvic inflammatory disease and subsequent infertility.

On Mother and Baby:

- Can cause serious complications, such as miscarriage or birth defects, if untreated.

SheCares

Pilot Study

Purpose:

- to examine the effects of 2 educational interventions compared to a control group on condom use during pregnancy.

2 treatment and 1 control groups

Inclusion criteria:

- 18-24 year old women, primigravidas
- Singleton pregnancy 6-20 weeks pregnant
- English speaking
- 33 participants

Procedure

- Recruitment flyers placed in waiting and exam rooms to advertise the study.
- Women who wished to participate were given additional information and informed consent obtained.
- Pretest survey (Youth Risk Behavior Surveillance Questionnaire) was given privately during initial prenatal visit.
- Random assignment to one of three groups: sexual education only, sexual education with condom negotiation, and control group.

Procedure

- Group 1: received 1:1 education on information on STIs, transmission, maternal-fetal effects, and testing during pregnancy.
- Group 2: received 1:1 education on information on STIs, transmission, maternal-fetal effects, and testing during pregnancy with condom negotiation skill building.
- Group 3: did not receive educational intervention until completion of the study
- Posttest survey (Condom Use Self Efficacy Survey) was completed at the 2nd prenatal visit

Results

Percentage distribution of pregnant women summarizing demographic data and survey responses to number of sexual partners, STDs during pregnancy, and condom use

Characteristics	Pregnant Women (n = 33)
Age	
18-20	23.1
21-24	57.6
Marital status	
Single	57.6
Married	21.2
Committed relationship	21.2
Education	
High school graduate	59.4
College graduate	37.5
Graduate	3.1
Age at first coitus	
<12	3.0
13-16	69.7
17 or >	30.3
Number of lifetime sexual partners	
1 partner	12.1
2-5 partners	48.5
6 or >	36.4
Number of partners in the past 3 months	
> 3months	12.1
1 person	66.7
2 people	15.2
3 people	6.1
Condom use with last sexual intercourse	
Yes	18.8
No	81.3
STDs during pregnancy	
Yes	37.5
No	62.5

Results

- No statistical difference comparing the 2 treatment groups with the control group.
- No statistical difference comparing the 3 groups on planned condom use within the next month.
- Condom use self efficacy did not differ by marital status or education.
- Self efficacy was not related to the number of sexual partners within the last 3 months, lifetime, age at initiation, or condom use in the past month.
- Planned condom use did not differ on age at initiation, number of lifetime partners, condom use with the last intercourse, alcohol and drug use, history of STIs, marital status, and education.
- Overall, the evidence showed inconsistent condom use among the 3 groups.

Implications

- Condom use among pregnant women is complex because of the multifactorial causes of inconsistent condom use.
- The pilot study provided minimal insight on the women's perception of condom use, inconsistent use, use for infection control.
- Self reporting
- Future studies is needed to target on assessing a couple's perception of condom use for contraception versus for infection control and if this behavior is negotiated with perceived low-risk of STDs with their partners.
- Predictors of inconsistent condom use long-term need to be explored prenatally and during the postpartum period with the dyads as consistent condom use decreases over time.

Discussion

- Fontenot and George (2014) commented on 2 studies examining rates of STI testing and methods during pregnancy and STI testing of the male partner during pregnancy.
- >40% of pregnant women were not tested
- Testing rates were higher in younger women and African American women.
- Men's perceived themselves being low risk for STIs, not STI transmitters, and trusting their partners, poor connection with understanding the consequences of STIs for mothers and infants, and viewing prenatal care as gender-specific.

Discussion

- LeFevre (2014) recommends intensive behavioral counseling for sexually active people especially those at risk.

Behavioral counseling included:

- Risk assessment: STIs in the past year, current, multiple partners, inconsistent condom use.
- Interventions: 30 min to 2 hour contact with healthcare provider, basic STI information, assess risk of transmission, training on skills, condom use, communication about safe sex, problem solving, and goal setting.
- USPSTS determines with moderate certainty that intensive behavioral counseling to prevent STIs have a moderate benefit.

Summary

- Common STIs are a hidden epidemic on the rise and a national burden.
- Mother to child transmission of STIs can result in serious consequences.
- Despite current CDC recommendations for STI testing during pregnancy, some women are not screened due to lack or limited prenatal care or infection outside of the testing window.
- Future studies are needed to understand couple's perceptions of condom use.
- Behavior change is a complex challenge.
- High intensity behavioral counseling is effective in decreasing the incidence of STIs and behavior.



**Thank
you!!**

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