Published in final edited form as:
Int J STD AIDS. 2010 February ; 21(2): 141–142. doi:10.1258/ijsa.2009.009172.

Sexually transmitted infections among pregnant heroin or cocaine addicted women in treatment: The significance of psychiatric comorbidity and sex trade

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Summary

Psychiatric comorbidity and sex trade were tested as correlates of sexually transmitted infections (STIs) among 76 pregnant heroin or cocaine dependent women. Participants were recruited from a drug treatment program and attended a clinician-administered assessment including the Structured Clinical Interview for DSM-IV (SCID-IV-TR) and self report questionnaires about lifetime histories of sex trade and STIs (i.e. gonorrhea, syphilis, chlamydia, herpes, genital warts, or trichomonas). Lifetime and six month rates of STIs were 53.9% and 18.4% respectively. The majority of women also had lifetime histories of psychiatric comorbidity (61.8%) and/or sex trade (60.5%). Participants with psychiatric comorbidity (AOR 3.9; 95% CI 1.3–11.6) and/or sex trade (AOR 3.2; 95% CI 1.1–9.5) were more likely to report STIs during their lifetime compared to those without such histories while controlling for age, education, and race/ethnicity. Results suggest that as many as one-in-five pregnant heroin or cocaine dependent women in treatment have one or more STIs that are concurrent with their pregnancy and may contribute to risk for contracting HIV and pregnancy complications; psychiatric comorbidity and/or sex trade were associated with greater STI risk. Findings underscore the importance of identifying and addressing comorbid psychiatric disorders and sex trade behavior in this population.

Keywords

sexually transmitted infections (STIs); psychiatric comorbidity; prostitution; drug dependence; pregnancy

BACKGROUND

Pregnant heroin or cocaine dependent women are at high risk for contracting sexually transmitted infections (STIs),[1] which contribute to their risk for contracting HIV2 and pregnancy complications.3 While sex trade and psychiatric comorbidity have both been associated with STIs,3–4 no studies to date have examined these variables in relation to STIs among pregnant women in drug dependence treatment. Yet, investigation into correlates of STIs among pregnant drug dependent women may ultimately serve to inform the development of prevention interventions to reduce risk for STIs in this population of women. Therefore, this study tested psychiatric comorbidity and sex trade as correlates of STIs among pregnant heroin or cocaine addicted women in drug treatment.

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METHOD

From March 2006 until December 2008, 76 HIV-seronegative, pregnant heroin or cocaine dependent women were recruited from a drug treatment program to participate in a HIV prevention intervention. Exclusionary criteria were: 1) complications of pregnancy, 2) evidence of fetal malformation, 3) significant maternal health problems that were unrelated to pregnancy, 4) psychosis, and/or 5) acute suicidal ideation. Clinician-administered assessments included self-report measures of sex trade and STIs (i.e. gonnorhea, syphilis, chlamydia, herpes, genital warts, or trichomonas) and the Structured Clinical Interview for DSM-IV (SCID-IV-TR).[6]

RESULTS

Participants were between 18–43 years of age (mean=31.99; SD=5.62) and predominately African-American (56.6% African-American; 39.5% white; and 3.9% other). The majority had a high school education (53.9%) and a lifetime history of a psychiatric comorbidity (61.8%) and sex trade (60.5%). Forty-one women (53.9%) had a STI during their lifetime, 24 women (31.6%) had a lifetime history of more than one STI, and 14 (18.4%) had a STI during the previous 6 months overlapping with their pregnancies. Lifetime rates were as follows: 30.3% for Chlamydia, 27.6% for gonorrhea, 22.4% for trichomoniasis, 11.8% for syphilis, 9.2% for genital warts, and 5.3% for herpes. Results for the univariable and multivariable regressions are presented as the unadjusted and adjusted odds ratios and 95% confidence intervals in Table 1. Sex trade and psychiatric comorbidity were statistically significant correlates of STIs in univariable and multivariable models.

DISCUSSION

Results suggest that as many as one-in-five pregnant heroin or cocaine dependent women in treatment have one or more STIs that are concurrent with their pregnancy and may contribute to risk for contracting HIV and pregnancy complications;[4,5] psychiatric comorbidity and/or sex trade were associated with greater STI risk. However, these findings are preliminary and the span of some confidence intervals indicates some instability in the models due to small sample size. Self reports of STIs may also be viewed as a suboptimal STI assessment method; however, evidence suggests they are viable and comparable to objective sources including medical record reviews and state health department reports.[13] Study strengths include examination of a high risk population for STIs that is hard to access and use of the SCID-IV-TR[6] to assess comorbid psychiatric diagnoses. Findings underscore the importance of identifying and addressing comorbid psychiatric disorders and sex trade behavior in this population.

Acknowledgments

This research was funded by grants 2T32DA007292 and R01DA020929 from the National Institute on Drug Abuse. We would like to thank the Johns Hopkins Center for Addiction and Pregnancy including Hendree Jones, Ph.D., Michelle Tuten, Ph.D., and Heather Fitzsimons, B.A., for their collaboration with this study as well as April Lawson, Christina Salama, Jonathon Rose, and Evonda Hill for their assistance and contributions to this study. All authors have made significant contributions to the manuscript and there are no conflicts of interest.

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Int J STD AIDS. Author manuscript; available in PMC 2011 February 1.

Table 1

Logistic Regression model predicting Lifetime STD (N=76)

	N (%) with Lifetime STI	Unadjusted		Adjusted	
		Odds	95% Confidence Interval	Odds	95% Confidence Interval
Age					
Total	41 (53.9)	1.04	0.96–1.13	1.00	0.91–1.11
Ethnicity					
White	15 (36.6)	1.00	--	1.00	--
Non White	26 (63.4)	1.30	0.52–3.27	1.59	0.47–5.42
Education					
12th Grade/GED	17 (41.5)	1.00	--	1.00	--
Not 12th	24 (58.5)	1.50	0.60–3.71	1.45	0.51–4.19
Grade/GED					
Sex Trade					
Absence	10 (24.4)	1.00	--	1.00	--
Presence	31 (75.6)	4.13**	1.56–10.99	3.24*	1.11–9.45
Lifetime Comorbidity					
Absence	9 (22.0)	1.00	--	1.00	--
Presence	32 (78.0)	4.74**	1.75–12.86	3.93*	1.34–11.55

** p<.01;

* p<.05