

# Influence of oral contraceptive use of perceived risk of hiv aids



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## Literature Review

Research Question: Does oral contraceptive use influence ones perceived risk of HIV/AIDs among young women (18-25 years of age) in Jackson Mississippi.

Oral contraceptives can be medically defined as a form of birth control pill taken orally, which usually contains hormones such as estrogen and progesterone, and serve the purpose of preventing the ovary from releasing the egg necessary for fertilization (Shiel, 2018). “ Currently there are three types of oral contraceptives; estrogen-progesterone, progesterone and extended use pill” (Cooper, 2019) and about 25% of women ages 15 to 44 use it as their primary mode of birth control (Cooper, 2019). Under the affordable care act in Jackson, Mississippi, women are able to pick up these contraceptives at a pharmacy for free (Andrews, 2013) or could get reimbursement from their insurance company if purchased with a medical prescription. This is especially common among young women, as oral contraceptive use tends to decrease with age.

Studies looking at condom use and perceived risk of STI/HIV has generated consistent findings with agreeing that while “ men’s condom use is not associated with any perceived risk of STI, women’s condom use is (Leval, 2011) or that accurate assessment of risk was associated with increased condom use (Prata, 2006). In a study conducted in Sweden by Leval et al, 2011, they looked at condom use and perceived STI risk in men and women. They say differences in perceived STI risk in relationships with temporary partners and permanent partners between men and women. Men showed no

correlation between condom use and perceived STI risk for temporary and permanent partners while women showed a strong correlation with temporary partners. While in the study conducted by Prata et al, 2006 in Mozambique, an assessment of HIV risk and condom use by resident's ages 15 to 24 showed the " prevalence of condom use was twice as high among those who correctly perceived their HIV risk compared to those who incorrectly assessed their risk" (Prata et al, 2006). And those who incorrectly assessed HIV risk had low condom usage (Prata et al, 2006).

While, with the exception of condoms, contraceptive methods such as hormonal oral contraceptives or hormonal injections do not actively prevent HIV acquisition, the literature is conflicted whether there is a link between hormonal contraceptive use and increased HIV risk. Multiple studies have been conducted in Mombasa, Kenya observing the association between hormonal contraceptive use and risk of HIV-1. The results show an association between use of oral contraceptives and increased HIV-1 risk among high-risk women (sex workers) with an adjusted hazard ratio of 1.46 and 95% confidence interval of 1.00 – 2.13. (Baeten, 2007). Another paper which conducted a systematic review of 8 studies, that were evaluating the association between risk of HIV and oral contraceptive use, had just one of them reporting significant increased risk of HIV acquisition and oral contraceptive use" (Haddad, 2014) and the others showed insignificant findings. (their 95% confidence interval crossed 1.0). One example of a study that showed no association between hormonal contraceptive use and HIV is the Morrison et al. study " which after using a cox proportional hazards model found no significant increase in risk" (Morrison, 2010). But altogether

there are far more studies, which suggest there is some link, albeit small, between oral contraceptive use and HIV risk. (Haddad, 2014). The inconsistency in the results could be attributed to the limitations, most these types of studies have, such as differences in sample size, study design, contraceptive adherence, analytic measures used and rate of discontinuation (Haddad, 2014) and this limits their generalizability.

So based on the above literature review we have observed that contraceptive use can create an association between individuals perceived risk of HIV/STI. Also there are associations between those who correctly assess their HIV risk have higher condom usage and those who don't have lower condom usage. And lastly there is an association in some cases between hormonal oral contraceptive use and increased risk of HIV. But there hasn't been much research into the role of oral contraceptives plays in determining perceived HIV risk, if any. If there is a decreased perceived risk of HIV infection among those on oral contraceptives that could account for the observed association between oral contraceptive use and risk of HIV infection. And given that there appears to be lower condom usage among those who cannot accurately assess their HIV risk, that would also help explain observed association between HIV risk and oral contraceptives and effective policy recommendations can be made to counteract this. So for this study, the hypothesis we would be testing is oral contraceptive use leads to decreased perceived HIV risk among young women 18 to 25 in Jackson, Mississippi.

The preferred sampling method to be used in the study would be the stratified sampling method. This is because there is a large disparity in HIV <https://assignbuster.com/influence-of-oral-contraceptive-use-of-perceived-risk-of-hiv-aids/>

rates based on social determinants such as race in Jackson, Mississippi and it would be the best way to ensure there is an equal representative of all races rather than just random sampling. One example of these disparities is that in Jackson Mississippi “ the rate of black females living with HIV to white females is 10. 2”(AIDSVu, 2017) and the number of new HIV diagnosis by race are 88. 8% black, 1. 5% Hispanic and 7. 1% white (AIDSVu, 2017).

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