Safest Cheapest Way for Her to Get Pregnant? Control His HIV

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The most cost-effective method for an HIV-positive man and an HIV-negative woman to conceive a child, while lowering the risk of transmitting the virus, is through controlling his HIV with treatment and having sex without a condom during her fertile days, Reuters Health reports. Publishing their findings in the American Journal of Obstetrics and Gynecology, researchers devised a model assuming that 10,000 couples, in which the HIV-positive male partner has a suppressed viral load due to treatment, try to conceive for one year.

The models compared having condomless sex regularly, having condomless sex only on fertile days, using pre-exposure prophylaxis (PrEP) and having condomless sex regularly, or using PrEP only on fertile days while having condomless sex only on fertile days.

The general practice of limiting condomless sex to fertile days was assumed to cut transmission risk by 80 percent, while regular PrEP use was presumed to reduce the risk by 67 percent. The researchers calculated that combining condomless sex with PrEP only on fertile days meant a 93.4 percent risk reduction.

The 67 percent figure was the population-level risk reduction figure of the Partners PrEP study, conducting among heterosexual couples. A potential major flaw of this new study is it fails to account for research suggesting that a considerable amount of time may need to pass for women who are on daily PrEP to build up high enough drug levels in vaginal tissues for top effectiveness. Recent research has suggested that a week of daily dosing is required for men who have sex with men to develop such high levels in rectal tissue. And other studies have suggested that women need longer than that for top protection through vaginal sex. If the female partner is only taking PrEP on her fertile days, this may not be enough to build up enough drug in her vaginal tissues even by the end of that short, intermittent period for high protection.

According to the researchers' model, the highest risk of transmission occurred when couples never used condoms or PrEP, resulting in 5.4 projected transmissions. The risk was lowest for sperm washing, which led to no transmissions.

Only having condomless sex on fertile days and not using PrEP led to 0.9 transmissions, compared with 1.8 for using continuous PrEP without condoms.

Condomless sex without PrEP cost the least 786 euros ($878). The continuous PrEP option cost 3,836 euros and was the most expensive option. The second most expensive option was sperm washing, at 3,208 euros.

Using PrEP only on fertile days would cost 1.13 million euros per life-year saved, compared with 3.6 million for sperm washing. So ultimately, while continuous PrEP did lower the risk of transmission, this was associated with higher costs.

To read the Reuters article, click here.

To read the study abstract, click here.

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http://beta.docker.poz.com/article/pregnancy-prevention-transmission-27338-6037