



Understanding why serodifferent couples do not always use condoms when the HIV+ partner is on ART.

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Background

Some serodifferent partnerships do not use condoms every time they have sex. This includes, those in which the HIV+ partner is on ART. Understanding the context and the risk of transmission with suppressed viraemia is essential to inform prevention interventions.

Methods

The PARTNER study recruits serodifferent partnerships (heterosexual (HS) and men-who-have sex with men (MSM)) who had condom-less penetrative sex in the past 4 weeks and where the HIV+ partner is on ART to assess risk behaviours, reasons for non-condom use, attitudes to use of ART for prevention, and to estimate the absolute risk of HIV transmission on ART with a viral load <50 copies/mL. We report baseline data on risk behaviours in the 4 months prior to enrollment.

Results

In HS partnerships, VL was <50 copies in 167/184 (90.8%) [79/91 (86.8%) m+/f- and 88 /93 (94.6%) f+/m- partnerships] and 104/110 (94.6%) in MSM partnerships. 86% (159/185) of –ve HS partners and 93% (93/104) of –ve MSM stated that they knew their partners current VL. In HS m+/f- partners, 69% (61/88) reported ejaculation for vaginal and 9.9% for anal sex (when not using condoms). For MSM not using condoms, HIV +ve partners were the receptive partner in 90/105 (85.7%) of partnerships, and the insertive partner in 55.7% (with ejaculation in 24.5%). The main reasons given for not using a condom included a belief that the risk of transmission was low (56.8% +ve, 53.6% -ve) and greater pleasure (59.6% +ve, 56.6% -ve).

Only 80/353 (22.7%) of HS within the partnerships [30.1% m-ve, 22.1% m+ve, 15.9% f-ve, 21.5% f+ve] and 49/212 (23%) of MSM [21.8% +ve, 24.5% –ve] agreed with the statement that “condom use is unnecessary during sex if an HIV positive person is on ART with an undetectable viral load”. HS HIV +ve men who agreed with this statement were more likely to have condomless ejaculatory vaginal sex with –ve partners than those who did not agree (OR 13.4, 95% CI: 1.3, 139.5. $p=0.005$). No association was found for insertive anal sex with ejaculation in +ve MSM who agreed with the statement.

Conclusions

In this study population, the decision to not use condoms is significantly related to a belief that condoms are not necessary when viral load is undetectable. Results from the HPTN 052 trial and growing awareness of the prevention role of ART, are likely to increase this belief. Accurately defining the actual risks will therefore be critical to defining the safety or risk of these choices.