

Is age really but a number?

A seminar on age-mixing patterns, associated sexual risk behaviours and HIV transmission

1 March 2018, 16.00h - 18.30h

Campus Drie Eiken, Room S.037

Antwerp, Belgium

Dr Brendan Maughan-Brown (University of Cape Town)

In search of evidence against the age-disparate hypothesis:

Young women with older partners are at greater HIV-infection risk

This talk presents an overview and discussion of findings from four studies that searched for explanations for the null finding that age-disparate partnerships were not associated with increased risk of HIV acquisition in several independent analyses from Southern Africa. The four studies in South Africa focused on specific aspects of age-disparate partnerships that could mitigate risk from age-disparate partnerships for young women. Results show that age-disparate male partners of 15-24 year old women were more likely to be HIV-positive and treatment-naïve, and more likely to be HIV-positive and have a viral load ≥ 1000 copies/mL, compared to age-similar partners. These findings indicate that current differences by age in the uptake of HIV testing and antiretroviral therapy among men do not mitigate HIV-infection risk from age-disparate partnerships. Results also provide evidence that young women's age-disparate partnerships involve greater frequency of sex, and that age-disparate partnering in both urban and rural populations are associated with greater sexual risk. Overall, study findings point to an increased HIV-infection risk for young women in age-disparate partnerships.

Miss Roxanne Beauclair (Ghent University and Stellenbosch University)

The role of age-mixing patterns in HIV transmission dynamics:

Novel hypotheses from a field study in Cape Town, South Africa

This analysis used data from a survey in Cape Town ($n = 506$) to describe age-mixing dynamics in the four population strata of HIV negative and HIV positive male and female participants. The analysis also explored whether HIV status was associated with participants having a larger range in partner ages. HIV positive women had large variability in partner ages at the population level, and at the individual level had nearly three times the expected range of partner ages compared to HIV negative women. This pattern may increase the potential for HIV transmission across birth cohorts and may partially explain the persistence of the epidemic in South Africa. Young men, who have been previously absent from the age-disparity discourse, also choose older partners who may be putting them at increased risk of HIV infection due to the high HIV prevalence among older age categories of women.

Prof Wim Delva (Ghent University, UHasselt, KU Leuven and Stellenbosch University)

The effects of age-mixing patterns on long-term, population-level trends in HIV incidence:

Results from a simulation study

Using an individual-based model of HIV transmission in a dynamic sexual network with flexible age-mixing rules, this simulation study investigated which characteristics of the age-mixing pattern are particularly influential in shaping the population-level trends in HIV incidence over the duration of multiple generations. Constrained by data-driven estimates of partner turnover rates and HIV infectiousness, our simulations indicate that sustained HIV transmission beyond the initial generation of infected individuals requires sufficiently large variation in age differences between index cases and their partners. In comparison, the average partner age difference is much less critical for long-term HIV transmission dynamics.

Registration

Registration is free, but kindly confirm your attendance via DELVAW@sun.ac.za for catering purposes



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