Ethnic variations in the characteristics of sexual partnerships reported by behaviourally-heterosexual sexual health clinic attendees in England: Do they explain ethnic differences in STI diagnoses?

Catherine Aicken, Sonali Wayal, Paula Blomquist, Stella Fabiane, Makeda Gerressu, Gwenda Hughes, Cath Mercer

BACKGROUND

- Black Caribbean (BC) populations in the UK experience the highest rates of bacterial STIs and *Trichomonas vaginalis* (TV)
- Understanding these differences may help inform interventions to reduce sexual health inequalities
- We explored whether the characteristics of the sexual partnerships of BC sexual health clinic attendees could ‘explain’ their elevated STI risk

METHODS

Study population: ‘behaviourally-heterosexual’ sexual clinic attendees (reporting opposite-sex partners only, in past 12 months), aged ≥15yrs, self-identifying as BC or White British/Irish (WBI) males or females.

Data collection: bio-behavioural online survey of attendees at 16 clinics across England, conducted in Summer 2016. Survey data were linked (with consent) to a surveillance data extract (GUMCAD). Together this gave us:

- participants’ sociodemographics
 - participants’ reported sexual behaviour
 - acute bacterial STI/TV diagnoses made ±6 weeks of survey completion
- individual-level data on n=1790 participants
- details that participants reported about their (up to) 3 most recent sexual partnerships, within the past 3 months
- partnership-level data on n=2503 partnerships

Analysis: We examined variations in reported sexual behaviour and partnership characteristics, at the *individual*- and *partnership*-levels:

- between ethnic groups (BC compared with WBI), among men and among women;
- between BC men and women.

We then used multivariable logistic regression to calculate adjusted odds ratios (aOR) to examine whether ethnic variations in partnership characteristics explain differences in STI diagnosis, after adjusting for known confounders: age, and partner numbers (past 3 months).

RESULTS

Sexual partner numbers, past 3 months

Men reported **larger numbers** of recent partners than women (BC&WBI: p<0.001)

Partnership types, past 3 months (based on participants’ most recent (up to) 3 partners)

RESULTS, continued:

‘Sexual mixing’ among participants’ partnerships (based on details that they provided about their (up to) 3 most recent partners, in the past 3 months)

- ‘Age-mixing’** (≥5 years’ age difference with partner)
- BC and WBI men’s partnerships were equally likely (~29%) to involve ‘age-mixing’
- BC women’s partnerships were more likely (31.6%) than WBI women’s partnerships’ (25.5%) to involve ‘age-mixing’ (p=0.013)
- No statistically significant difference in ‘age-mixing’ between BC men and BC women attendees’ partnerships

‘Ethnic-mixing’ (different ethnicity to partner)

- 67.3% BC men’s partnerships involved ‘ethnic-mixing’, compared with 35.1% of WBI men’s partnerships (p<0.001)
- No statistically significant difference was observed between BC and WBI women, one third of whose partnerships were with someone of a different ethnicity
- BC men’s partnerships were more likely to involve ‘ethnic-mixing’ than BC women’s partnerships (p<0.001)

Do partnership characteristics explain ethnic differences in acute STI*?

*‘acute STI’: bacterial STI or TV diagnosis within ±6 weeks of survey completion

AOR [1] Adjusted for confounders: age, partner numbers in past 3 months
AOR [2] Adjusted for confounders: age, partner numbers in past 3 months **and partnership type(s), age-mixing and ethnic-mixing** (among any of participants’ (up to) 3 most recent partners, within the past 3 months)

DISCUSSION

- Among sexual health clinic attendees, differences in sexual partnership characteristics do not appear to fully explain ethnic variations in STI rates
- Better characterisation of ‘high transmission networks’ may facilitate better targeting to reduce STI transmission, STI prevalence, and sexual health inequalities in the population

We welcome questions, comments and suggestions about the findings we present here. Please email: c.aicken@ucl.ac.uk.