

Number of sex acts matters for heterosexual transmission and control of *Chlamydia trachomatis*

Photo: Spencer Tunick

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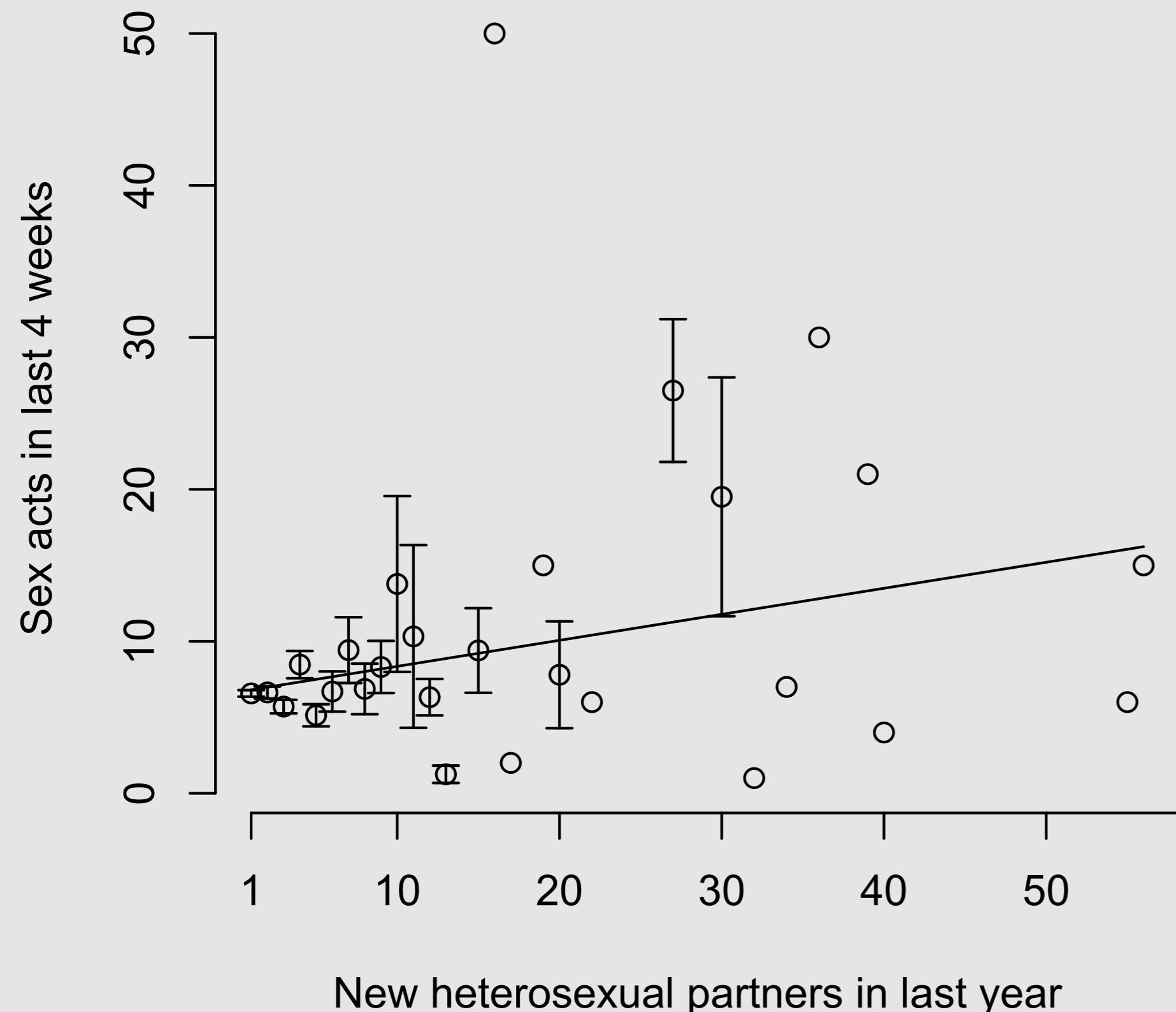
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Q1: What is the relationship between the number of sex acts and the number of heterosexual partners?

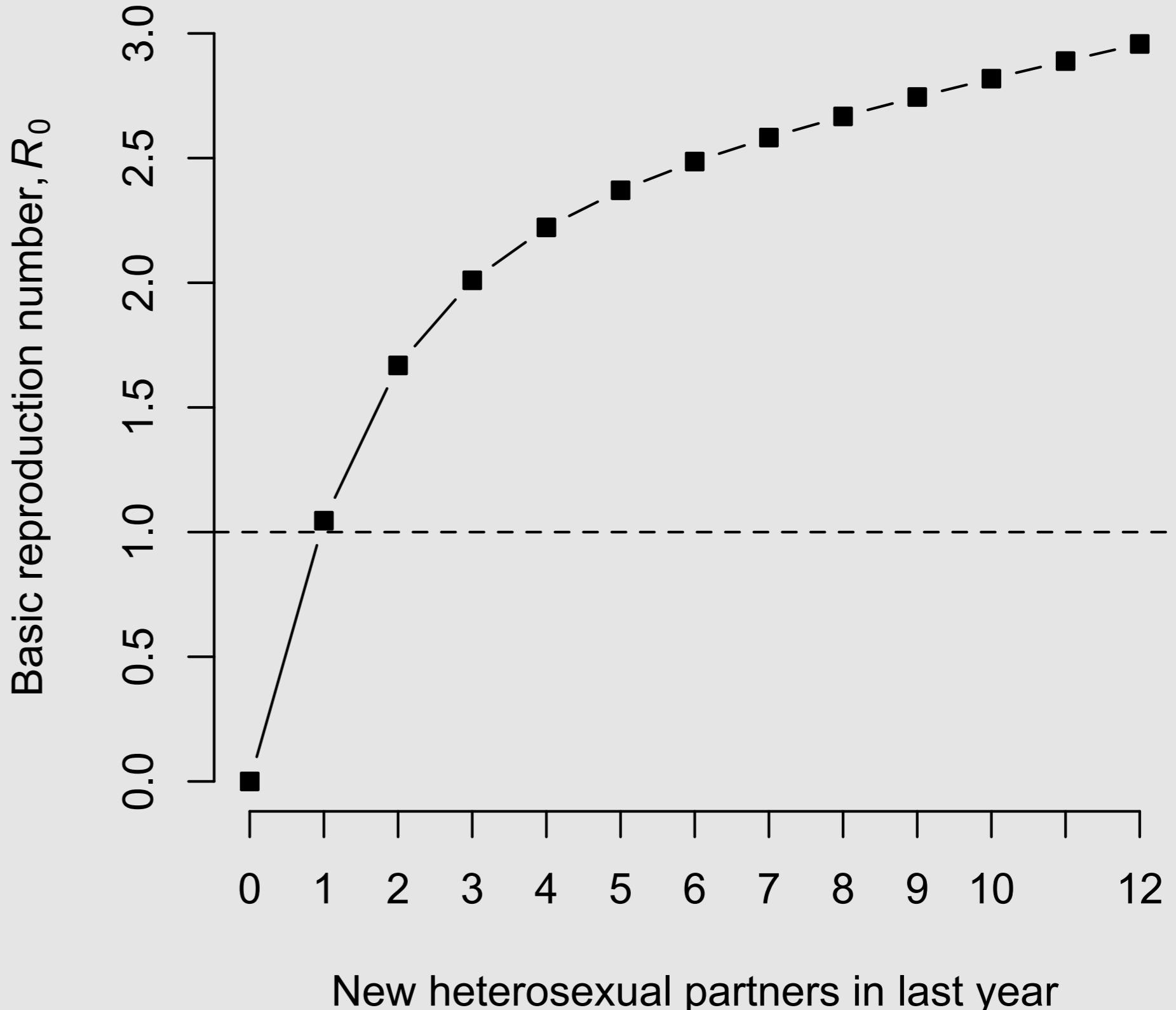


Data: British National Survey of Sexual Attitudes and Lifestyles (Natsal-2)

A1: Total number of sex acts increases only marginally with number of sex partners.

Q2: What are the implications of taking realistic numbers of sex acts into account for modeling chlamydia transmission and the impact of control interventions?

A2: The basic reproduction number R_0 saturates for individuals with a high number of sex partners.



All chlamydia infected individuals with one or more new heterosexual partners per year contribute to ongoing transmission ($R_0 > 1$).



Details of the data analysis and the mathematical model are available as a PeerJ Preprint:
<https://peerj.com/preprints/940>