Righarts, A., Morgan, J., Horner, P. J., Wills, G. S., McClure, M. O., \& Dickson, N. P. (2017). Chlamydia trachomatis Incidence Using Self-Reports and Serology by Gender, Age Period, and Sexual Behavior in a Birth Cohort. Sexually Transmitted Diseases, 44(6), 344-350. https://doi.org/10.1097/OLQ.0000000000000605

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Table 1: Incidence rate of chlamydia (per 1000 person-years) by age period, sexual behavior and education for women and men

|  | First coitus to age 26 |  |  |  | Age 26-32 |  |  | Age 32-38 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { No } \\ & \text { Ct+ } \end{aligned}$ | Person years | Incidence rate (95\% CI) | $X^{2}$ test* <br> $P$-value | $\begin{aligned} & \text { No } \\ & \mathrm{Ct}+ \end{aligned}$ | Person years | Incidence rate (95\% CI) | $X^{2}$ test* <br> $P$-value | No. Ct+ | Person years | Incidence rate ( $95 \% \mathrm{Cl}$ ) | $X^{2}$ test* <br> $P$-value |
| Women |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 106 | 3245 | 32.7 (27.0-39.5) |  | 36 | 2427 | 14.8 (10.7-20.6) |  | 15 | 2595 | 5.8 (3.5-9.6) |  |
| Number of sexual partners in each age-period |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | 3 | 342 | 8.8 (2.8-27.2) |  | 3 | 1228 | 2.4 (0.8-7.6) |  | 6 | 1680 | 3.6 (1.6-7.9) |  |
| 2-4 | 7 | 738 | 9.5 (4.5-19.9) |  | 17 | 725 | 23.4 (14.6-37.7) |  | 5 | 621 | 8.1 (3.4-19.3) |  |
| 5-9 | 22 | 994 | 22.1 (14.6-33.6) |  | 11 | 315 | 34.9 (19.3-63.1) |  | 2 | 228 | 8.8 (2.0-32.5) |  |
| 10 or more | 74 | 1734 | 42.7 (34.0-53.6) | <0.001 | 5 | 159 | 31.4 (13.1-75.6) | <0.001 | 2 | 66 | 30.3 (6.4-102.5) | 0.012 |
| Age of first coitus (years) ${ }^{+}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\geq 18$ | 12 | 716 | 16.8 (9.5-29.5) |  | 9 | 666 | 13.5 (7.0-26.0) |  | 3 | 705 | 4.3 (1.4-13.2) |  |
| 15-17 | 65 | 2191 | 29.7 (23.3-37.8) |  | 18 | 1296 | 13.9 (8.9-22.0) |  | 8 | 1398 | 5.7 (2.9-11.4) |  |
| $\leq 14$ | 25 | 764 | 32.7 (22.1-48.4) | 0.069 | 8 | 360 | 22.2 (11.1-44.4) | 0.367 | 4 | 372 | 10.8 (4.0-28.6) | 0.237 |
| Same-sex sexual contact in the age-period |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 17 | 433 | 39.3 (24.4-63.2) |  | 6 | 180 | 33.3 (15.0-74.2) |  | 3 | 177 | 16.9 (5.5-52.6) |  |
| No | 89 | 3375 | 26.4 (21.4-32.5) | 0.130 | 30 | 2247 | 13.4 (9.3-19.1) | 0.047 | 12 | 2418 | 5.0 (2.8-8.7) | 0.050 |
| Educational attainment (by age 26) ${ }^{+}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Low | 50 | 1335 | 37.5 (28.4-49.4) |  | 15 | 796 | 18.8 (11.4-31.3) |  | 8 | 834 | 9.6 (4.8-19.2) |  |
| Medium | 39 | 1517 | 25.7 (18.8-35.2) |  | 17 | 983 | 17.3 (10.8-27.8) |  | 3 | 1071 | 2.8 (0.9-8.7) |  |
| High | 16 | 945 | 16.9 (10.4-27.6) | 0.003 | 4 | 642 | 6.2 (2.3-16.6) | 0.072 | 4 | 678 | 5.9 (2.2-15.7) | 0.305 |


| Table 1 continued | First coitus to age 26 |  |  |  | Age 26-32 |  |  | Age 32-38 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Ct+ | Person years | Incidence rate (95\% CI) | $X^{2}$ test* <br> $P$-value | No. Ct+ | Person years | Incidence rate (95\% CI) | $X^{2}$ test* <br> $P$-value | No. Ct+ | Person years | Incidence rate (95\% CI) | $X^{2}$ test* <br> $P$-value |
| Men |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 64 | 3486 | 18.4 (14.4-23.5) |  | 32 | 2470 | 13.0 (9.2-18.3) |  | 19 | 2631 | 7.2 (4.6-11.3) |  |
| Number of sexual partners in each age-period |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | 0 | 247 | 0.0 (-) |  | 2 | 770 | 2.6 (0.7-10.4) |  | 6 | 1356 | 4.4 (2.0-9.8) |  |
| 2-4 | 5 | 559 | 8.9 (3.7-21.5) |  | 9 | 745 | 12.1 (6.3-23.2) |  | 4 | 558 | 7.2 (2.7-19.1) |  |
| 5-9 | 10 | 888 | 11.3 (6.1-20.9) |  | 9 | 505 | 17.8 (9.3-34.3) |  | 5 | 393 | 12.7 (5.3-30.6) |  |
| 10 or more | 49 | 213 | 23.1 (17.4-30.5) | <0.001 | 12 | 450 | 26.7 (15.1-47.0) | <0.001 | 4 | 324 | 12.3 (4.6-32.9) | 0.052 |
| Age of first coitus (years) $\dagger$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\geq 18$ | 7 | 971 | 7.2 (3.4-15.1) |  | 15 | 876 | 17.1 (10.3-28.4) |  | 8 | 954 | 8.4 (4.2-16.8) |  |
| 15-17 | 33 | 1803 | 18.3 (13.0-25.7) |  | 7 | 1065 | 6.6 (3.1-13.8) |  | 9 | 1089 | 8.3 (4.3-15.9) |  |
| $\leq 14$ | 21 | 821 | 25.6 (16.7-39.2) | 0.003 | 7 | 369 | 19.0 (9.0-39.8) | 0.684 | 1 | 399 | 2.5 (0.4-17.8) | 0.343 |
| Same-sex sexual contact in the age-period |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 3 | 356 | 8.0 (2.6-24.9) |  | 1 | 120 | 8.3 (1.2-59.2) |  | 1 | 159 | 7.3 (4.6-11.6) |  |
| No | 61 | 3129 | 17.7 (13.8-22.8) | 0.171 | 31 | 2350 | 13.2 (9.3-18.8) | 0.644 | 18 | 2472 | 6.3 (0.9-44.6) | 0.888 |
| Educational attainment (by age 26) ${ }^{+}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Low | 31 | 1409 | 22.0 (15.5-31.3) |  | 9 | 835 | 10.8 (5.6-20.7) |  | 5 | 891 | 5.6 (2.3-13.5) |  |
| Medium | 25 | 1749 | 14.3 (9.7-21.2) |  | 16 | 1101 | 14.5 (8.9-23.7) |  | 11 | 1155 | 9.5 (5.3-17.2) |  |
| High | 8 | 633 | 12.6 (6.3-25.3) | 0.079 | 5 | 504 | 9.9 (4.1-23.8) | 0.979 | 3 | 543 | 5.5 (1.8-17.1) | 0.865 |

* Test for trend where variables are in ordered categories.
$\dagger$ There were small numbers of participants who did nor provide information on age of first coitus and/or education (refer to Supplementary Table for details) Abbreviations: Had evidence of chlamydia though positive serology and/or a self-reported diagnosis (Ct+); confidence interval (CI).

Table 2: Poisson regression derived incident rate ratios for chlamydia by age period, number of partners, same-sex contact and education for women and men

|  | Crude <br> IRR (95\% CI) |  | Adjusted* |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | AIRR | (95\% CI) |
| Women |  |  |  |  |
| Age period |  |  |  |  |
| First coitus - 26 years | Reference |  |  |  |
| 26-32 years | 0.45 | (0.16-0.65) | 1.04 | (0.68-1.58) |
| 32-38 years | 0.17 | (0.10-0.30) | 0.53 | (0.29-0.96) |
| Number of sexual partners in each age-period |  |  |  |  |
| 0-1 | Reference |  |  |  |
| 2-4 | 3.81 | (1.95-7.47) | 3.35 | (1.69-6.64) |
| 5-9 | 6.6 | (3.44-12.78) | 5.27 | (2.62-10.60) |
| 10 or more | 14.06 | (7.67-25.78) | 10.08 | (5.05-20.09) |
| Same-sex sexual contact in the age-period |  |  |  |  |
| No | Reference |  |  |  |
| Yes | 2.19 | (1.44-3.34) | 1.25 | (0.81-1.93) |
| Educational attainment (by age 26) |  |  |  |  |
| Low | Reference |  |  |  |
| Medium | 0.65 | (0.46-0.92) | 0.68 | (0.48-0.96) |
| High | 0.4 | (0.26-0.65) | 0.45 | (0.28-0.71) |
| Men |  |  |  |  |
| Age period |  |  |  |  |
| First coitus - 26 years | Reference |  |  |  |
| 26-32 years | 0.69 | (0.45-1.06) | 1.04 | (0.65-1.65) |
| 32-38 years | 0.38 | (0.23-0.64) | 0.81 | (0.47-1.41) |
| Number of sexual partners in each age-period |  |  |  |  |
| 0-1 | Reference |  |  |  |
| 2-4 | 2.91 | (1.26-6.73) | 2.64 | (1.12-6.21) |
| 5-9 | 4.13 | (1.84-9.24) | 3.95 | (1.72-9.04) |
| 10 or more | 7.58 | (3.60-15.98) | 7.19 | (3.24-15.95) |
| Same-sex sexual contact in the age-period |  |  |  |  |
| No | Reference |  |  |  |
| Yes | 0.57 | (0.23-1.41) | 0.38 | (0.15-0.94) |
| Educational attainment (by age 26) |  |  |  |  |
| Low | Reference |  |  |  |
| Medium | 0.88 | (0.58-1.33) | 0.86 | (0.57-1.30) |
| High | 0.63 | (0.35-1.14) | 0.78 | (0.43-1.41) |

[^0]Table 3: Poisson regression derived incident rate ratios for chlamydia by age at first coitus, number of partners, same-sex contact and education, for women from first coitus-age 26

|  | Crude IRR (95\% CI) |  | Adjusted |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | AIRR | (95\% CI) |
| Age of first coitus (years) |  |  |  |  |
| $\geq 18$ | Reference |  |  |  |
| 15-17 | 1.94 | (1.06-3.64) | 1.14 | (0.60-2.16) |
| $\leq 14$ | 2.34 | (1.17-4.65) | 1.12 | (0.54-2.32) |
| Number of sexual partners in each age-period |  |  |  |  |
| 0-1 | Reference |  |  |  |
| 2-4 | 1.09 | (0.28-4.12) | 1.15 | (0.29-4.53) |
| 5-9 | 2.75 | (0.82-9.17) | 2.50 | (0.72-8.61) |
| 10 or more | 6.12 | (1.93-19.40) | 5.57 | (1.68-18.43) |
| Same-sex sexual contact in the age-period |  |  |  |  |
| No | Reference |  |  |  |
| Yes | 1.69 | (1.00-2.83) | 1.15 | (0.65-2.01) |
| Educational attainment (by age 26) |  |  |  |  |
| Low | Reference |  |  |  |
| Medium | 0.64 | (0.42-0.98) | 0.67 | (0.44-1.03) |
| High | 0.40 | (0.23-0.70) | 0.42 | (0.24-0.76) |

* Simultaneously adjusted for all other variables in the table.

Abbreviations: Incidence rate ratio (IRR); adjusted incidence rate ratio (AIRR); confidence interval (CI).


[^0]:    * Simultaneously adjusted for all other variables in the table for women and men separately.

    Abbreviations: Incidence rate ratio (IRR); adjusted incidence rate ratio (AIRR); confidence interval (CI).

