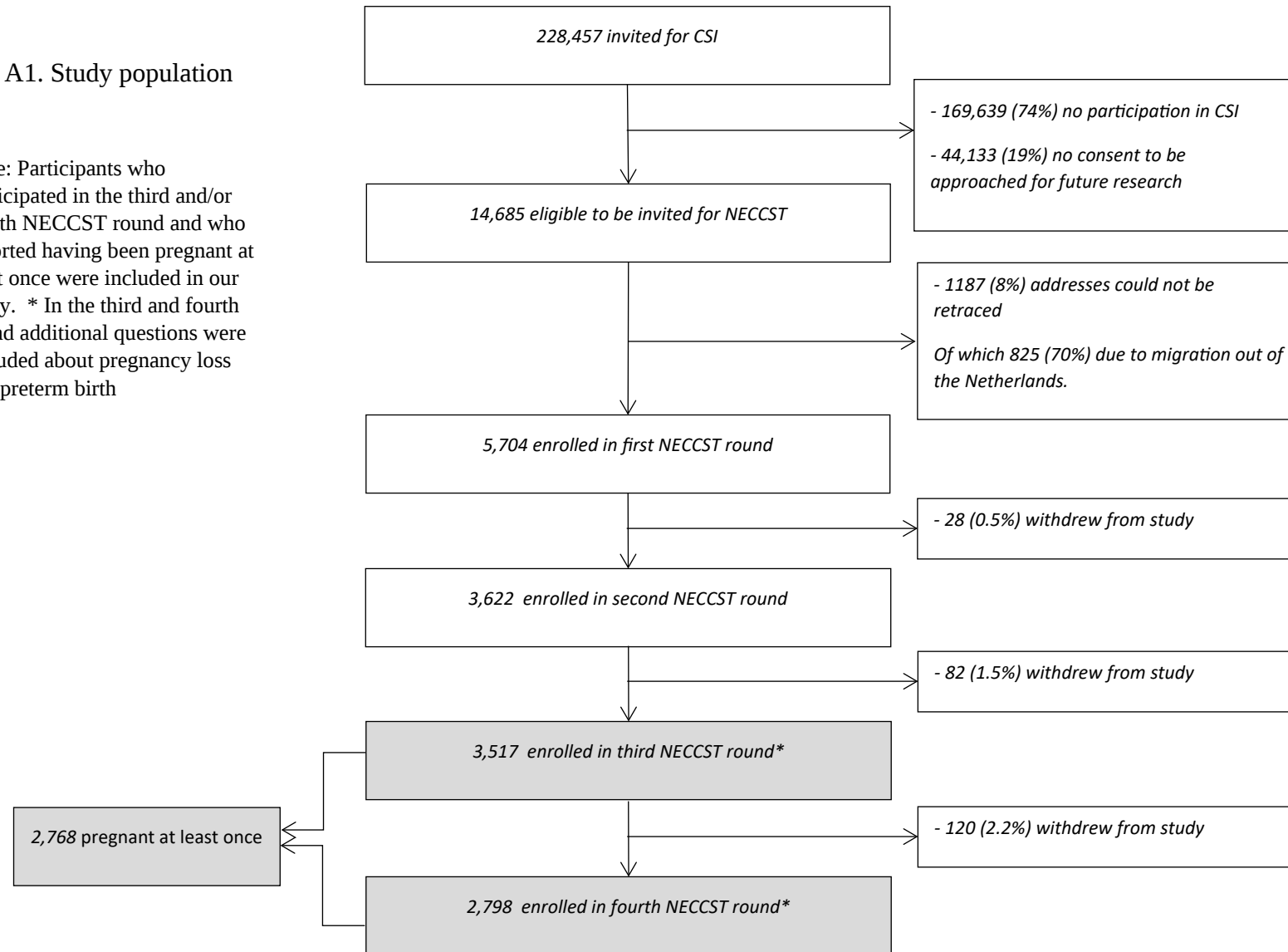


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Box A1. Study population

Note: Participants who participated in the third and/or fourth NECCST round and who reported having been pregnant at least once were included in our study. * In the third and fourth round additional questions were included about pregnancy loss and preterm birth



Box A2. Variable Categories and Timing of Data Collection

Variable	Categories	Time Point of Collection	Notes
Age (median, IQR), years	<i>Not applicable</i>	At first pregnancy	
Age categorized, years	<30, 30 - 35	At first pregnancy	
Time since chlamydia positivity (median, IQR)	<i>Not applicable</i>	At first pregnancy	
Number of pregnancies	<i>Not applicable</i>	During the full observed study period	
Number of pregnancies, categorized	1, 2 - 3, 4 - 15	During the full observed study period	
Nulligravida at adverse outcome	No, yes	At time of adverse pregnancy outcome (for those with adverse outcomes only)	
Migration background	Western (Dutch, Western NonDutch (incl. West European countries, Australia, North America, Indonesia and Japan))/ non-Western (Marocco and Turkey, Suriname, Aruba and the former Dutch Antilles, other Non-western countries)	At baseline of cohort study	
Education status	Theoretical (higher professional education, university level education)/ practical (all other education)	At baseline of cohort study	
SES (socio-economic status) at partial street level postcode areas	Low, middle, high, unknown	At baseline of chlamydia screening study	Divided in tertiles based on financial prosperity, education level, and recent employment history

Number of chlamydia tests	1 - 2, 3 - 5, 6 or more	At baseline of cohort study	
Condom use with casual partner	Always or mostly, sometimes, never or not often, no casual partners	At baseline of cohort study	
Number of sex partners	Fewer than 6, 6 to 12, more than 12	At baseline of cohort study	
Age of sexual debut (IQR), years		At baseline of cohort study	
Planned pregnancy	No, yes	At first pregnancy	
BMI before pregnancy	underweight <18.5, normal weight 18.5–25, overweight 25–30, obesity ≥30	At first pregnancy	
Daily smoker before pregnancy	No, yes, not sure	At first pregnancy	
Pregnant with intratuterie device	No, yes	At first pregnancy	
Last used contraceptive	No contraception, copper intrauterine device [copper IUD], hormonal intrauterine device [hormonal IUD], hormonal contraception, condom, other methods, unknown	At first pregnancy	
Subfertility	No subfertility, own subfertility, partner subfertility, other or unexplained subfertility	At first pregnancy	No exclusively male partner factor subfertility
Fertility treatments	No treatment, hormonal treatment, assisted reproductive technology [ART], including in vitro fertilization [IVF] and intracytoplasmic sperm injection [ICSI], surgical treatment, other	At first pregnancy	Treatments do not include those exclusive to male partners. Included are procedures such as intrauterine insemination (IUI), egg donation, and others.
Chlamydia infection history	Never, before, same year, after	Relative to timing first pregnancy	
Chlamydia diagnosis type	Negative, positive (screening PCR and/or self-reported), positive (antibody only)	At time of diagnosis	
Gonorrhea infection history	Never, before, same year, after	Relative to timing first pregnancy	
Pelvic inflammatory disease	No, yes	During the full observed study period	

Ectopic pregnancy	No, yes	During the full observed study period	
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Figure A1. Co-occurrence of adverse outcomes in the same person

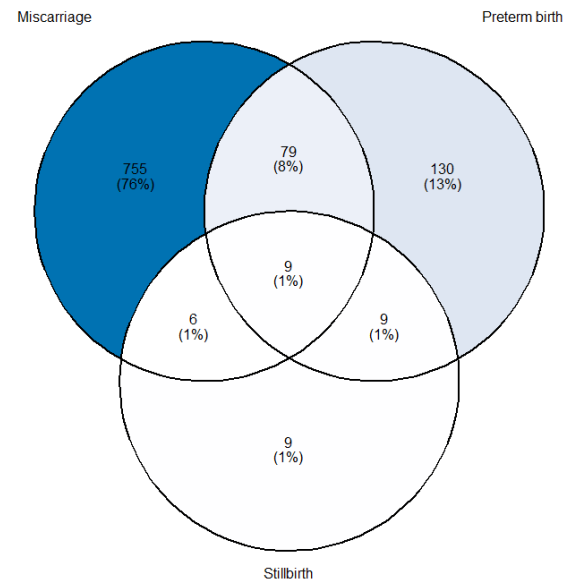


Figure A2. Lifetime partners across levels of migration background and education

The Kruskal-Wallis test showed significant differences in the distribution of lifetime partners across migration backgrounds ($p < 0.001$) and education levels ($p < 0.001$).

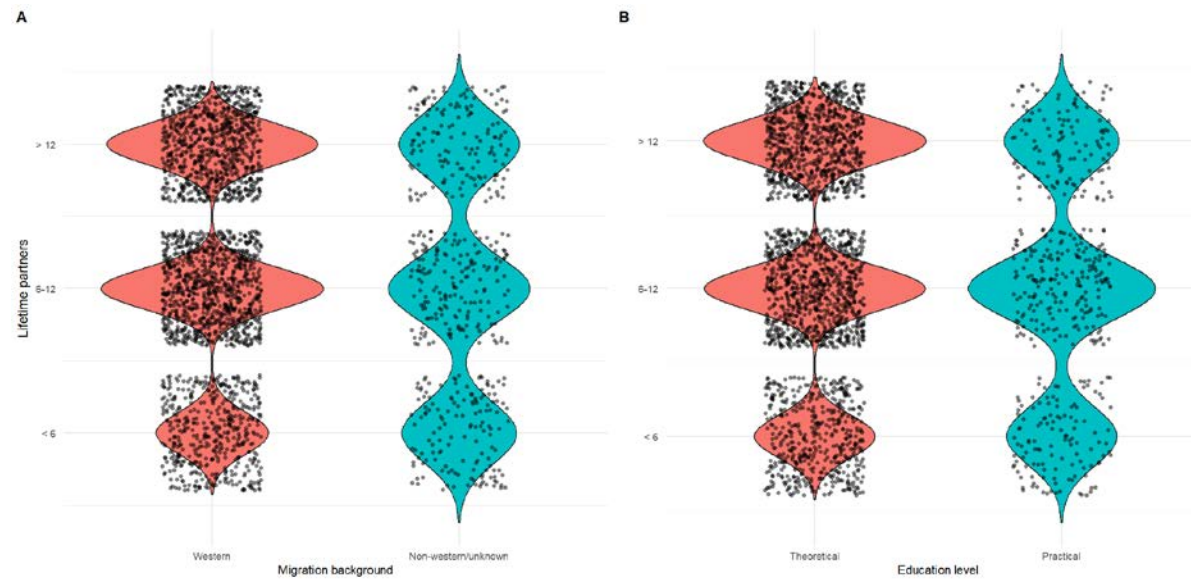


Table A1. Pregnancy related variables by chlamydia status at first pregnancy, the Netherlands Chlamydia Cohort Study 2008-2022

N(%)	Chlamydia positive, N = 807	Chlamydia negative N = 1,961	p-value
Age (median, IQR), years\$	31.00 (28.00, 34.00)	31.00 (28.00, 33.00)	<0.001
Age categorized, years\$			0.023
under 30	342 (42%)	911 (46%)	
30-34	317 (39%)	766 (39%)	
35 and older	148 (18%)	284 (14%)	
Number of pregnancies, categorized†			0.004
1	276 (34%)	547 (28%)	
2 - 3	431 (53%)	1,135 (58%)	
4 - 15	100 (12%)	279 (14%)	
Age of sexual debut (IQR), years*	16.00 (15.00, 18.00)	17.00 (16.00, 18.00)	<0.001
Planned pregnancy\$	593 (73%)	1,466 (75%)	0.5
BMI before pregnancy\$			0.11
<18.5 (Underweight)	26 (3.2%)	79 (4.0%)	
20–25 (Normal weight)	590 (73%)	1,492 (76%)	
25–30 (Overweight)	137 (17%)	289 (15%)	
≥30 (Obesity)	54 (6.7%)	101 (5.2%)	
Daily smoker before pregnancy\$			<0.001
Yes	161 (20%)	269 (14%)	
No or not sure	646 (80%)	1,692 (86%)	
Pregnant with IUD\$	4 (0.5%)	14 (0.7%)	0.5
Last used contraceptive\$#			0.3
None	89 (11%)	177 (9.0%)	
Copper IUD	31 (3.8%)	87 (4.4%)	
Hormonal IUD	114 (14%)	284 (14%)	
Hormonal	409 (51%)	983 (50%)	
Condom	145 (18%)	398 (20%)	
Other/Unknown	19 (2.4%)	32 (1.6%)	
Subfertility\$‡			0.056

No	697 (86%)	1,741 (89%)	
Yes (Own subfertility)	41 (5.1%)	106 (5.4%)	
Yes (Other/Unexplained)	49 (6.1%)	75 (3.8%)	
Yes (Partner subfertility)	20 (2.5%)	39 (2.0%)	
Fertility treatments\$%			0.2
None	706 (87%)	1,772 (90%)	
Hormonal	37 (4.6%)	67 (3.4%)	
ART (IVF/ICSI)	33 (4.1%)	72 (3.7%)	
Surgical (fallopian tubes/ovaries/uterus)	6 (0.7%)	10 (0.5%)	
Other	25 (3.1%)	40 (2.0%)	

\$ at first pregnancy

† during full observed study period

* at baseline of cohort study

** at baseline of chlamydia screening study

* no exclusively male partner factor subfertility

% treatments do not include those exclusive to male partners. Included are procedures such as intrauterine insemination (IUI), egg donation, and others.

ART = assisted reproductive technology, IVF = in vitro fertilization, ICSI = intracytoplasmic sperm injection, IQR = interquartile range.

For p-values continuous variables were compared using an independent t-test (for two groups). Categorical variables were compared using a chi-square test (or Fisher's exact test when expected cell counts were low).

Table A2. Number of persons with recurrent miscarriages and risks of cumulative and sequential miscarriages in persons with and without past chlamydia, the Netherlands Chlamydia Cohort Study 2008-2022

	N	Unadjusted HR (95% CI)	Adjusted HR [#] (95% CI)
Cumulative (1st, 2nd 3rd)	1154	1.03 (0.89, 1.19)	1.04 (0.90, 1.20)
First miscarriage	849	1.03 (0.90, 1.17)	1.03 (0.91, 1.18)
Second miscarriage	226	0.93 (0.71, 1.23)	0.95 (0.72, 1.25)
Third miscarriage	79	1.31 (0.84, 2.07)	1.33 (0.85, 2.09)

* Past chlamydia was defined as screening-PCR, and/or the presence of chlamydia IgG and/or a self-reported chlamydia infection. For these analyses, multiple imputations were used to estimate time of first chlamydia infection in women without a known first year of chlamydia infection.

[#] Adjusted for age at sexual debut (continuous) and education level (theoretical versus practical)

HR = hazard ratio, CI = confidence interval