Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Dema E, Gibbs J, Clifton S, et al. Initial impacts of the COVID-19 pandemic on sexual and reproductive health service use and unmet need in Britain: findings from a quasi-representative survey (Natsal-COVID). Lancet Public Health 2022; 7: e36–47.
### Supplementary Material

Since the start of lockdown (23 March 2020), did you use any of the following sexual or reproductive health services? Please include phone, online or video appointments. Select all that apply.

- None
- Contraception services/advice
- Fertility services/advice
- Maternity/antenatal services
- Abortion/Pregnancy termination services
- Cervical screening (smear test/pap test)
- STI (Sexually Transmitted Infection) testing
- STI follow-up care
- HIV testing
- Advice or counselling for sexual problems
- Relationship support services/advice
- Sexual assault/rape support services or helplines
- Other type of sexual or reproductive health service/advice

Since the start of lockdown (23 March 2020), were there any sexual or reproductive health services which you tried to use but couldn’t?

- None – I have not needed to access services or advice
- None – I have been able to access the services I needed
- None – I would have liked to, but didn’t try
- Contraception services/advice
- Fertility services/advice
- Maternity/antenatal services
- Abortion/Pregnancy termination services
- Cervical screening (smear test/pap test)
- STI (Sexually Transmitted Infection) testing
- STI follow-up care
- HIV testing
- Advice or counselling for sexual problems
- Relationship support services/advice
- Sexual assault/rape support services or helplines
- Other type of sexual or reproductive health service/advice

---

**Appendix A: Natsal COVID sexual and reproductive health (SRH) services questions**
Participants who reported accessing sexually transmitted infection (STI) testing services were asked about their method and location of access. Response options were:

- **Face-to-face appointment**
  - At a sexual health (GUM) clinic
  - At a GP
  - At a private (paid for) healthcare service
  - Somewhere else

- **Telephone appointment**
  - With a sexual health (GUM) clinic
  - With a GP
  - With a private (paid for) healthcare service
  - With another service

- **Video appointment**
  - With a sexual health (GUM) clinic
  - With a GP
  - With a private (paid for) healthcare service
  - With another service

- **Other online service**
  - With a sexual health (GUM) clinic
  - With a GP
  - With other NHS (free) service
  - With a private (paid for) healthcare service
  - With another service

- **Other**
  - Other type of appointment

**Appendix A: Natsal COVID sexual and reproductive health (SRH) services questions**
Since the start of lockdown (23 March 2020), which of the following have you used to prevent pregnancy?

- Does not apply – not had vaginal sex since lockdown
- Does not apply – currently pregnant
- Does not apply – trying to get pregnant
- Does not apply – cannot get pregnant
- No method used
- Condoms
- Oral contraceptive pill
- Hormonal IUS (e.g. Mirena, Jaydress, Kyleena, Levossert)
- Vaginal ring (e.g. NuvaRing)
- Contraceptive patch (e.g. EVRA)
- Injections
- Implants
- Copper coil/intra-uterine device (IUD)
- Emergency contraceptive pill/morning after pill
- Emergency copper coil/intra-uterine device (IUD)
- Safe period/calendar method/rhythm method
- Withdrawal (partner not ejaculating in vagina)
- Spermicides (foams/gels/sprays/pessaries)
- Other contraception

Was there any time since lockdown when you needed to use any of the following, but didn’t because you couldn’t get hold of it?

- Condoms
- Other contraception
- Medication for sexual problems (e.g. Viagra)

Appendix A: Natsal COVID sexual and reproductive health (SRH) services questions
Appendix B: Timeline of Natsal-COVID study and COVID-19 restrictions on Britain.²
Appendix C: Recruitment process for Natsal-COVID.³

Survey email sent to 164,074 web-panellists

- 17,425 started the survey
- 6,657 complete surveys
  - 3 removed in analysis due to inconsistent responses
  - 6,654 included in analysis
- 847 ineligible or did not provide consent
- 8,373 quota full (no more cases needed in their quota group)
- 1,326 abandoned before final education question
  - 137 inconsistent responses
  - 85 not returned
Appendix D: Sample selection for analysis of SRH service use.

*654 participants did not provide information about previous sexual partners, and are therefore excluded from these denominators.
Appendix E: Variations in reporting successful sexually transmitted infection (STI)-related service use and an unsuccessful attempt to use STI-related services among sexually-active men aged 18-44 years (n=1197) in the four months following the start of a national lockdown in Britain (23/03/2020).

|                          | Successful use |                      |                      | Unsuccessful attempt to use |                      |                      |
|--------------------------|----------------|----------------------|----------------------|-----------------------------|----------------------|----------------------|
|                          |                | OR (95% CI)          | aOR (95% CI) ±       | Denominator † (unweighted,  | OR (95% CI)          | aOR (95% CI) ±       |
|                          |                |                      |                      | weighted)                   |                      |                      |
| All sexually-active men aged 18-44 years | 5·9 (4·6 - 7·5) | ···                  | ···                  | 1194, 1272                 | 3·4 (2·4 - 4·7) | ···                  | 1197, 1276 |
| Age (years)              |                |                      |                      |                             |                      |                      |
| 18-24                    | 12·3 (7·9 - 18·7) | 4·06 (1·99 - 8·26) | ···                  | 188, 203                    | 5·1 (2·4 - 10·4) | ···                  | 1185, 200 |
| 25-29                    | 7·5 (4·9 - 11·3) | 2·33 (1·18 - 4·63)  | ···                  | 299, 312                    | 4·3 (2·5 - 7·5) | ···                  | 302, 317 |
| 30-34                    | 4·0 (2·1 - 7·6) | 1·22 (0·52 - 2·85)  | ···                  | 218, 237                    | 4·0 (2·1 - 7·7) | ···                  | 219, 238 |
| 35-44                    | 3·3 (2·0 - 5·4) | 1·00                | ···                  | 489, 520                    | 1·8 (0·9 - 3·6) | 1·00                | 491, 521 |
| Location                 |                |                      |                      |                             |                      |                      |
| Urban                    | 6·2 (4·7 - 8·0) | 1·00                | 1·00                 | 951, 1012                   | 3·2 (2·2 - 4·7) | 1·07 (0·34 - 3·35) | 954, 1017 |
| Rural                    | 5·4 (2·3 - 12·1) | 0·87 (0·34 - 2·18)  | 0·78 (0·31 - 1·97)  | 116, 121                    | 3·5 (1·2 - 9·5) | 1·00 (0·32 - 3·16) | 115, 120 |
| Ethnicity                |                |                      |                      |                             |                      |                      |
| White ***                | 5·0 (3·8 - 6·6) | 1·00                | 1·00                 | 1044, 1065                  | 2·7 (1·8 - 3·9) | 1·00                | 1042, 1062 |
| Mixed/multiple/other ¶   | 4·6 (1·2 - 16·4) | 0·91 (0·22 - 3·80)  | 0·75 (0·19 - 2·98)  | 36, 49 **                    | 9·6 (3·6 - 23·4) | 3·86 (1·25 - 11·89) | 36, 49 ** |
| Asian/ Asian British ¥   | 11·7 (6·4 - 20·7) | 2·51 (1·21 - 5·22)  | 2·50 (1·19 - 5·26)  | 85, 111                      | 6·7 (2·9 - 14·7) | 2·61 (1·00 - 6·82) | 88, 116 |
| Black / Black British ¤  | ···            | ···                 | ···                 | ···                         | ···                 | ···                 | 20, 38 * |
| Relationship status      |                |                      |                      |                             |                      |                      |

|                          |                |                      |                      |                             |                      |                      |
|                          | 0·15           |                      |                      |                             |                      |                      |
| p=0·0006                 |                |                      |                      |                             |                      |                      |
| p=0·053                 |                |                      |                      |                             |                      |                      |
| p=0·038                 |                |                      |                      |                             |                      |                      |
| p=0·070                 |                |                      |                      |                             |                      |                      |

**p < 0.001, *p < 0.01, °p < 0.05, ¶p < 0.1, ¥p < 0.2, †Denominator = weighted. ±aOR (unweighted, weighted).
| Did not have partnered sex since lockdown | 2·1 (0·7 - 6·0) | 0·40 (0·13 - 1·23) | 0·36 (0·11 - 1·16) | 166, 178 | 1·2 (0·3 - 4·7) | 0·43 (0·10 - 1·78) | 0·39 (0·09 - 1·69) | 167, 179 |
|----------------------------------------|----------------|-------------------|-------------------|-----------|----------------|-------------------|-------------------|-----------|
| Partnered sex, not in a steady relationship | 11·2 (7·1 - 17·2) | 2·29 (1·24 - 4·23) | 1·78 (0·91 - 3·48) | 183, 177 | 7·7 (1·4 - 13·2) | 2·84 (1·34 - 6·02) | 2·28 (0·97 - 5·35) | 184, 178 |
| Partnered sex, in a steady, non-cohabiting relationship | 9·0 (4·4 - 17·5) | 1·81 (0·78 - 4·19) | 1·31 (0·53 - 3·29) | 89, 96 | 3·9 (1·2 - 11·5) | 1·36 (0·39 - 4·81) | 1·02 (0·26 - 3·95) | 91, 99 |
| Partnered sex, in a steady, cohabiting relationship | 5·2 (3·7 - 7·2) | 1·00 | 1·00 | 742, 806 | 2·9 (2·8 - 4·5) | 1·00 | 1·00 | 743, 807 |

### Employment status

| Employment status | p=0.0068 | p=0.0026 | p=0.078 | p=0.015 |
|------------------|-----------|-----------|----------|----------|
| Employed | 6·5 (5·1 - 8·3) | 1·00 | 1·00 | 1057, 1129 | 3·6 (2·6 - 5·1) | 1·00 | 1·00 | 1059, 1131 |
| Unemployed | 1·6 (0·6 - 4·3) | 0·23 (0·08 - 0·67) | 0·19 (0·06 - 0·56) | 81, 84 | 2·1 (0·6 - 7·8) | 0·58 (0·14 - 2·36) | 0·48 (0·12 - 1·94) | 82, 86 |
| Full time parent, home maker | .. | .. | .. | 12, 12 * | .. | .. | .. | 12, 12 * |
| Student/Pupil | 0 | 0 | 0 | 44, 47 ** | [0·4 (0·1 - 2·9)] | 0·11 (0·01 - 0·82) | 0·05 (0·01 - 0·43) | 44, 47 ** |

### Sexual identity - self-reported

| Sexual identity - self-reported | p=0.0002 | p=0.0004 | p=0.059 | p=0.046 |
|-------------------------------|-----------|-----------|----------|----------|
| Heterosexual/straight | 5·5 (4·2 - 7·1) | 1·00 | 1·00 | 1006, 1210 | 3·3 (2·3 - 4·6) | 1·00 | 1·00 | 1010, 1215 |
| Gay | 15·5 (9·9 - 23·5) | 3·18 (1·76 - 5·74) | 3·26 (1·78 - 5·95) | 112, 37 | 6·5 (3·2 - 12·6) | 2·05 (0·90 - 4·65) | 0·47 (0·11 - 2·05) | 113, 37 |
| Bisexual | 13·1 (6·6 - 24·3) | 2·60 (1·16 - 5·86) | 1·95 (0·84 - 4·54) | 67, 17 | 1·6 (0·4 - 6·2) | .. | .. | 66, 17 |
| Other | .. | .. | .. | 5, 3 * | .. | .. | .. | 5, 3 * |
| Social grade                                                                 | p=0.15 | p=0.14 | p=0.31 | p=0.30 | \n|------------------------------|--------|--------|--------|--------|\n| AB Higher and intermediate managerial/administrative/professional occupation | 6.5 (4.3 - 9.9) | 1.00 | 1.00 | 375, 360 | 1.00 | 1.00 | 377, 362 |
| C1 Supervisory, clerical and junior managerial/administrative/professional occupations/C2 Skilled manual occupations | 6.5 (4.8 - 8.8) | 0.99 (0.57 - 1.73) | 0.98 (0.56 - 1.71) | 658, 726 | 3.8 (2.5 - 5.7) | 1.04 (0.50 - 2.13) | 1.02 (0.49 - 2.10) | 658, 726 |
| D Semi-skilled and unskilled manual occupations/E On state benefit, unemployed and lowest grade occupations | 2.4 (0.9 - 6.3) | 0.35 (0.11 - 1.06) | 0.34 (0.11 - 1.04) | 161, 186 | 1.4 (0.4 - 4.7) | 0.37 (0.09 - 1.48) | 0.36 (0.09 - 1.43) | 162, 187 |

| Education (3 categories) | p=0.72 | p=0.74 | p=0.91 | p=0.89 | \n|--------------------------|--------|--------|--------|--------|\n| Degree                   | 5.4 (3.8 - 7.6) | 1.00 | 1.00 | 662, 967 | 3.2 (2.0 - 5.0) | 1.00 | 1.00 | 671, 708 |
| Below degree             | 6.6 (4.6 - 9.3) | 1.24 (0.73 - 2.09) | 1.23 (0.73 - 2.10) | 498, 537 | 3.7 (2.3 - 5.9) | 1.15 (0.58 - 2.28) | 1.15 (0.58 - 2.29) | 491, 529 |
| No qualifications        | 6.5 (1.6 - 22.7) | 1.22 (0.28 - 5.31) | 1.16 (0.24 - 5.55) | 34, 38 ** | 2.8 (0.4 - 17.5) | 0.87 (0.11 - 6.77) | 0.83 (0.11 - 6.51) | 35, 39 ** |

| Alcohol consumption since lockdown | p=0.0004 | p=0.0016 | p=0.0002 | p=0.0003 | \n|-----------------------------------|--------|--------|--------|--------|\n| No change                        | 3.2 (2.0 - 5.1) | 1.00 | 1.00 | 603, 645 | 1.3 (0.6 - 2.7) | 1.00 | 1.00 | 601, 643 |
| Increased                        | 10.3 (7.3 - 14.3) | 3.46 (1.87 - 6.41) | 3.13 (1.67 - 5.87) | 347, 363 | 7.3 (4.8 - 11.0) | 5.96 (2.51 - 14.1) | 5.45 (2.27 - 13.1) | 350, 366 |
| Decreased                        | 6.8 (4.1 - 11.0) | 2.20 (1.07 - 4.50) | 1.86 (0.87 - 3.98) | 237, 256 | 3.0 (1.5 - 6.1) | 2.34 (0.82 - 6.67) | 2.04 (0.68 - 6.07) | 238, 257 |

| Symptoms of depression (PHQ-2) **** | p<0.0001 | p<0.0001 | p=0.0010 | p=0.0030 |
|                          | No                         | Yes                        |
|--------------------------|----------------------------|----------------------------|
|                          | 3.0 (1.9 - 4.5)            | 11.7 (8.6 - 15.6)          |
|                          | 4.34 (2.48 - 7.50)         | 3.82 (2.16 - 6.73)         |
|                          | 369,861                    | 367,390                    |
|                          | 1.9 (1.1 - 3.3)            | 3.26 (1.61 - 6.58)         |
|                          | 6.0 (3.9 - 9.2)            | 2.85 (1.43 - 5.70)         |
|                          | 809,861                    | 376,390                    |
| Symptoms of anxiety (GAD-2)*** | p<0.0001 | p<0.0001                   |
|                          | 1.00                       | 1.00                       |
|                          | 834,886                    | 1.00                       |
|                          | 1.00                       | 7.68 (3.60 - 16.4)         |
|                          | 813,865                    | 352,379                    |
| New sexual partners since lockdown ‡ | p<0.0001 | p<0.0001                   |
| None                     | 2.2 (1.3 - 3.5)            | 1.00                       |
|                          | 860,924                    | 1.00                       |
| At least one             | 24.3 (12.1 - 48.8)         | 90,89                      |
|                          | 19.3 (11.6 - 30.2)         | 16.8 (6.99 - 40.5)         |
|                          | 352,89                     | 88,86                      |
| Condom-less sex with a new partner since lockdown ¶ | p<0.0001 | p<0.0001                   |
| None                     | 2.4 (1.6 - 3.8)            | 1.00                       |
|                          | 880,939                    | 1.00                       |
| At least one             | 28.0 (13.8 - 57.1)         | 67,69                      |
|                          | 20.9 (12.0 - 33.9)         | 13.3 (5.29 - 32.9)         |
|                          | 888,949                    | 65,67                      |
| Previous same-sex experience in their lifetime ‡ | p=0.0029 | p=0.012                    |
| No                       | 5.4 (4.1 - 7.1)            | 1.00                       |
|                          | 987,1168                   | 1.00                       |
| Yes                      | 5.1 (2.5 - 10.2)           | 1.00                       |
|                          | 208,105                    | 208,105                    |

CI=confidence intervals. OR=odds ratio. aOR=adjusted odds ratio. PHQ-2=Patient Health Questionnaire (2 item). GAD-2=Generalized anxiety disorder (2 item).

± Age-adjusted ORs, adjusting for age as a continuous variable
† Men aged 18-44 years who reported at least one sexual partner in the past year (i.e. sexually-active). Trans men are included in data for men. 27 and 24 sexually-active men aged 18-44 years responded “prefer not to say” to the questions about use and unsuccessful use of STI-related services, respectively. These individuals are excluded from the denominator.
* Unweighted denominator <30. Results not shown due to small denominator.
** Unweighted denominator <50. Results should be interpreted with caution due to small denominator.
*** White includes all those who identify as White English, Welsh, Scottish, Northern Irish, British, Irish, Gypsy or Irish Traveller, or from any other White background.
¶ Mixed ethnicity includes those who identify as White and Black African, White and Black Caribbean, White and Asian or any other mixed or multiple ethnic background.
Asian includes those who identify as Indian, Pakistani, Bangladeshi, Chinese or from any other Asian background
Black includes those who identify as African, Caribbean, or from any other Black background.

Participants were classified as having symptoms of depression or anxiety if they scored three or more on the patient health questionnaire two item (PHQ-2) or generalised anxiety disorder two item (GAD-2) scales
Includes both opposite-sex and same-sex partners
Same-sex experience defined as oral/anal/vaginal sex

All percentages are weighted. These are row percentages which describe successful use/unsuccessful use of services within a specific subgroup.

### Appendix F: Variations in reporting successful sexually transmitted infection (STI)-related service use and an unsuccessful attempt to use STI-related services among sexually-active women aged 18-44 years (n=1548) in the four months following the start of a national lockdown in Britain (23/03/2020).

| Successful use | Unsuccessful attempt to use |
|----------------|-----------------------------|
| % (95% CI)     | OR (95% CI)                 | Denominator † (unweighted, weighted) | % (95% CI) | OR (95% CI) | aOR (95% CI) ‡ (unweighted, weighted) | Denominator † (unweighted, weighted) |
| All sexually-active women aged 18-44 years | 3·6 (2·7 - 4·7) | ... | ... | 1548, 1292 | 1·0 (0·7 - 1·7) | ... | ... | 1547, 1291 |

| Age (years) | % (95% CI) | OR (95% CI) | aOR (95% CI) ‡ | Denominator † (unweighted, weighted) | % (95% CI) | OR (95% CI) | aOR (95% CI) ‡ | Denominator † (unweighted, weighted) |
|-------------|------------|-------------|----------------|-------------------------------------|------------|-------------|----------------|-------------------------------------|
| 18-24       | 7·8 (5·2 - 11·5) | 11·4 (3·36 - 38·8) | ... | 347, 224 | 2·9 (1·5 - 5·5) | 5·34 (1·63 - 17·46) | ... | 1131, 939 |
| 25-29       | 4·5 (2·9 - 6·9) | 6·38 (1·86 - 21·9) | ... | 514, 337 | 0·9 (0·4 - 2·1) | 1·56 (0·41 - 5·93) | ... | 196, 163 |
| 30-34       | 3·8 (2·0 - 7·1) | 5·31 (1·41 - 19·9) | ... | 269, 274 | 1·5 (0·6 - 3·9) | 1·00 | ... | 270, 276 |
| 35-44       | 0·7 (0·2 - 2·3) | 1·00 | ... | 418, 457 | 0 | 1·00 | ... | 415, 453 |

| Location | % (95% CI) | OR (95% CI) | aOR (95% CI) ‡ | Denominator † (unweighted, weighted) | % (95% CI) | OR (95% CI) | aOR (95% CI) ‡ | Denominator † (unweighted, weighted) |
|----------|------------|-------------|----------------|-------------------------------------|------------|-------------|----------------|-------------------------------------|
| Urban    | 3·6 (2·6 - 5·0) | 1·00 | ... | 1131, 939 | 1·0 (0·6 - 1·7) | 1·00 | ... | 1131, 939 |
| Rural    | 1·8 (0·7 - 4·4) | 0·47 (0·17 - 1·28) | 0·46 (0·17 - 1·22) | 196, 164 | 1·0 (0·2 - 4·1) | 1·03 (0·22 - 4·75) | 0·98 (0·21 - 4·07) | 195, 163 |
## Ethnicity

| Ethnicity                                      | p=0·70                  | p=0·77                  | p=0·22                  | p=0·26                  |
|-----------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| White ***                                     | 3·4 (2·6 - 4·5)         | 1·00                    | 1·00                    | 1·2 (0·7 - 1·9)          |
| Mixed/multiple/other ¶                        | 4·8 (1·2 - 17·2)        | 1·42 (0·33 - 6·04)      | 0·89 (0·20 - 3·93)      | 0·3 (0·0 - 2·4)          |
| Asian/ Asian British ¥                        | 2·8 (0·7 - 10·9)        | 2·8 (0·7 - 10·9)        | 2·8 (0·7 - 10·9)        | 2·8 (0·7 - 10·9)        |
| Black / Black British ❄                       |                         |                         |                         |                         |

## Relationship status

| Relationship status                          | p=0·0001                | p=0·0041                | p=0·021                 | p=0·64                 |
|---------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Did not have partnered sex since lockdown   | 3·9 (1·5 - 7·47)        | 2·56 (1·15 - 5·73)      | 0·9 (0·3 - 2·8)         | 0·70 (0·17 - 2·88)      |
| Partnered sex, not in a steady relationship | 4·65 (2·9 - 9·45)       | 3·30 (1·65 - 6·62)      | 2·3 (0·9 - 5·7)         | 1·79 (0·54 - 5·90)      |
| Partnered sex, in a steady, non-cohabiting relationship | 4·37 (1·99 - 9·58)   | 2·84 (1·22 - 6·62)      | 2·0 (0·6 - 6·2)         | 1·35 (0·30 - 6·19)      |
| Partnered sex, in a steady, cohabiting relationship | 1·9 (1·2 - 2·9)       | 1·00                    | 0·8 (0·4 - 1·5)         | 1·00                    |

## Employment status

| Employment status                            | p=0·033                 | p=0·26                  | p=0·94                  | p=0·58                  |
|----------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Employed                                     | 3·3 (2·4 - 4·6)         | 1·00                    | 1·1 (0·6 - 1·8)         | 1·00                    |
| Unemployed                                   | 6·2 (2·9 - 12·8)        | 1·90 (0·80 - 4·50)      | 1·86 (0·79 - 4·40)      | 1·36 (0·30 - 6·15)      |
| Full time parent, home maker                 | 0·7 (0·1 - 5·0)         | 0·21 (0·03 - 1·56)      | 0·27 (0·04 - 1·99)      | 0·95 (0·12 - 7·64)      |
| Student/Pupil                                | 7·7 (3·8 - 15·0)        | 2·40 (1·06 - 5·46)      | 0·97 (0·42 - 2·23)      | 0·25 (0·03 - 1·20)      |
| Sexual identity - self-reported | p=0.33 | p=0.80 | p=0.12 | p=0.39 |
|--------------------------------|--------|--------|--------|--------|
| Heterosexual/straight          | 3.5 (2.6 - 4.6) | 1.00 | 1.00 | 1.00 (0.6 - 1.6) | 1.00 | 1.00 | 1341, 1231 |
| Gay or Lesbian                 | 6.8 (2.4 - 17.4) | 2.01 (0.66 - 6.07) | 1.66 (0.51 - 4.97) | 40, 15 ** | 1.27 (0.16 - 9.93) | 0.73 (0.06 - 8.29) | 40, 15 ** |
| Bisexual                       | 5.2 (2.6 - 10.1) | 1.52 (0.70 - 3.30) | 1.06 (0.48 - 2.35) | 148, 32 | 2.42 (0.67 - 8.76) | 1.61 (0.43 - 6.03) | 147, 32 |
| Other                          | .. | .. | 10, 5 * | .. | .. | .. | 11, 6 * |

| Social grade                   | p=0.84 | p=0.75 | p=0.47 | p=0.44 |
|--------------------------------|--------|--------|--------|--------|
| AB Higher and intermediate managerial/administrative/professional occupations | 3.1 (1.8 - 5.2) | 1.00 | 1.00 | 1.6 (0.7 - 3.3) | 1.00 | 1.00 | 406, 322 |
| C1 Supervisory, clerical and junior managerial/administrative/professional occupations/C2 Skilled manual occupations | 3.8 (2.6 - 5.4) | 1.22 (0.63 - 2.36) | 1.29 (0.66 - 2.52) | 807, 695 | 0.9 (0.5 - 1.9) | 0.61 (0.22 - 1.70) | 0.64 (0.23 - 1.83) | 808, 697 |
| D Semi-skilled and unskilled manual occupations/E On state benefit, unemployed and lowest grade occupations | 3.7 (2.1 - 6.4) | 1.20 (0.54 - 2.66) | 1.12 (0.50 - 2.51) | 335, 274 | 0.7 (0.2 - 2.4) | 0.44 (0.10 - 1.95) | 0.39 (0.09 - 1.77) | 333, 272 |

| Education (3 categories)       | p=0.069 | p=0.046 | p=0.27 | p=0.20 |
|--------------------------------|--------|--------|--------|--------|
| Degree                         | 4.2 (3.0 - 5.8) | 1.00 | 1.00 | 1.3 (0.7 - 2.3) | 1.00 | 1.00 | 865, 727 |
| Below degree                   | 2.5 (1.5 - 4.0) | 0.59 (0.32 - 1.07) | 0.55 (0.30 - 1.01) | 644, 533 | 0.7 (0.3 - 1.7) | 0.56 (0.20 - 1.56) | 0.50 (0.17 - 1.46) | 642, 531 |
| No qualifications              | 8.6 (2.8 - 23.8) | 2.17 (0.62 - 7.56) | 2.21 (0.60 - 8.15) | 41, 34 ** | 0 | 0 | 0 | 40, 32 ** |

| Alcohol consumption since lockdown | p=0.011 | p=0.036 | p=0.19 | p=0.23 |
|-----------------------------------|--------|--------|--------|--------|
| No change                        | 2.3 (1.5 - 3.6) | 1.00 | 1.00 | 1.1 (0.6 - 2.0) | 1.00 | 1.00 | 888, 759 |
| Increased                        | 5.4 (3.5 - 8.4) | 2.44 (1.28 - 4.68) | 2.28 (1.18 - 4.38) | 365, 290 | 0.5 (0.1 - 1.4) | 0.42 (0.11 - 1.55) | 0.36 (0.10 - 1.35) | 369, 294 |
| Decreased                        | 5.3 (3.1 - 8.7) | 2.36 (1.17 - 4.78) | 1.93 (0.93 - 4.00) | 282, 230 | 1.7 (0.7 - 3.9) | 1.58 (0.54 - 4.62) | 1.17 (0.39 - 3.51) | 282, 229 |
### Symptoms of depression (PHQ-2) ****

|   | p=0·028 | p=0·14 | p=0·55 | p=0·97 |
|---|---------|---------|---------|---------|
| No | 2.5 (1·7 - 3·6) | 1·00 | 1·00 | 1054, 908 |
| Yes | 4·6 (3·1 - 6·9) | 1·91 (1·07 - 3·41) | 1·56 (0·87 - 2·79) | 476, 367 |

### Symptoms of anxiety (GAD-2) ****

|   | p=0·0026 | p=0·022 | p=0·082 | p=0·25 |
|---|---------|---------|---------|---------|
| No | 2·5 (1·7 - 3·7) | 1·00 | 1·00 | 986, 867 |
| Yes | 5·7 (3·9 - 8·1) | 2·37 (1·35 - 4·15) | 1·96 (1·10 - 3·51) | 555, 418 |

### New sexual partners since lockdown §

|   | p<0·0001 | p<0·0001 | p=0·019 | p=0·055 |
|---|---------|---------|---------|---------|
| None | 2·1 (1·5 - 3·1) | 1·00 | 1·00 | 1239, 1060 |
| At least one | 23·9 (12·7 - 40·4) | 14·4 (6·05 - 34·1) | 10·5 (4·28 - 25·8) | 44, 30 ** |

### Condom-less sex with a new partner since lockdown §

|   | p=0·0001 | p=0·0001 | p=0·049 | p=0·11 |
|---|---------|---------|---------|---------|
| None | 2·3 (1·6 - 3·3) | 1·00 | 1·00 | 1263, 1072 |
| At least one | 6·2 (13·0 - 45·7) | 15·1 (5·85 - 39·0) | 10·5 (3·94 - 28·2) | 32, 22 ** |

### Previous same-sex experience in their lifetime ‡

|   | p=0·0001 | p=0·0001 | p=0·0029 | p=0·0072 |
|---|---------|---------|---------|---------|
| No | 2·9 (2·1 - 4·0) | 1·00 | 1·00 | 1346, 1197 |
| Yes | 12·1 (7·5 - 19·0) | 4·62 (2·48 - 8·60) | 4·21 (2·25 - 7·89) | 202, 95 |
CI=confidence intervals. OR=odds ratio. aOR=adjusted odds ratio. PHQ-2=Patient Health Questionnaire (2 item). GAD-2=Generalized anxiety disorder (2 item).

± Age-adjusted ORs, adjusting for age as a continuous variable
† Women aged 18-44 years who reported at least one sexual partner in the past year (i.e. sexually-active). Trans women are included in data for women. 12 and 13 sexually-active women aged 18-44 years responded “prefer not to say” to the questions about use and unsuccessful use of STI-related services, respectively. These individuals are excluded from the denominator.
* Unweighted denominator <30. Results not shown due to small denominator.
** Unweighted denominator <50. Results should be interpreted with caution due to small denominator.
*** White includes all those who identify as White English, Welsh, Scottish, Northern Irish, British, Irish, Gypsy or Irish Traveller, or from any other White background.
¶ Mixed ethnicity includes those who identify as White and Black African, White and Black Caribbean, White and Asian or any other mixed or multiple ethnic background.
¥ Asian includes those who identify as Indian, Pakistani, Bangladeshi, Chinese or from any other Asian background.
¤ Black includes those who identify as African, Caribbean, or from any other Black background.
**** Participants were classified as having symptoms of depression or anxiety if they scored three or more on the patient health questionnaire two item (PHQ-2) or generalised anxiety disorder two item (GAD-2) scales.
§ Includes both opposite-sex and same-sex partners.
‡ Same-sex experience defined as oral/anal/vaginal sex.

All percentages are weighted. These are row percentages which describe successful use/unsuccessful use of services within a specific subgroup.

**Appendix G: Variations in reporting successful contraceptive service use and an unsuccessful attempt to use contraceptive services among sexually-experienced women aged 18-44 years (n=1715) in the four months following the start of a national lockdown in Britain (23/03/2020).**

| Successful use | Unsuccessful attempt to use |
|----------------|-----------------------------|
|                | % (95% CI) | OR (95% CI) | aOR (95% CI) | Denominator† (unweighted, weighted) | % (95% CI) | OR (95% CI) | aOR (95% CI) | Denominator† (unweighted, weighted) |
| All sexually-experienced women aged 18-44 years | 14·8 (13·1 - 16·6) | 2·96 (1·95 - 4·49) | ·· | 1715, 1438 | 4·0 (3·1 - 5·1) | 1·63 (0·77 - 3·46) | ·· | 1715, 1438 |
| Age (years) |                      |                |                |                |                      |                |                |                |
| 18-24         | 22·3 (18·0 - 27·1) | 2·96 (1·95 - 4·49) | ·· | 370, 237 | 4·8 (3·0 - 7·8) | 1·63 (0·77 - 3·46) | ·· | 368, 236 |

p<0·0001
p=0·58
| Location       | p=0.11 | p=0.10 | p=0.038 | p=0.039 |
|----------------|--------|--------|----------|----------|
| Urban          | 15.3 (13.3 - 17.5) | 1.00 | 1.00 | 1245, 1038 |
|                | 11.1 (7.5 - 16.1) | 0.69 (0.44 - 1.09) | 0.68 (0.43 - 1.08) | 222, 186 |
| Rural          |        |        | 1.2 (0.4 - 3.8) | 0.28 (0.09 - 0.94) | 221, 185 |

| Ethnicity      | p=0.56 | p=0.73 | p=0.16 | p=0.19 |
|----------------|--------|--------|--------|--------|
| White ***      | 14.5 (12.8 - 16.5) | 1.00 | 1.00 | 1525, 1215 |
|                | 29.7 (11.2 - 32.4) | 1.45 (0.73 - 2.86) | 1.36 (0.69 - 2.66) | 59, 49 |
|                | 13.2 (7.0 - 23.6) | 0.90 (0.44 - 1.84) | 0.96 (0.45 - 2.03) | 81, 111 |
|                | 20.7 (9.6 - 38.9) | 1.53 (0.62 - 3.79) | 1.38 (0.56 - 3.43) | 32, 45 ** |

| Relationship status | p=0.0001 | p=0.0023 | p=0.44 | p=0.50 |
|---------------------|----------|----------|--------|--------|
| Did not have partnered sex since lockdown | 9.2 (6.4 - 12.9) | 0.64 (0.41 - 0.98) | 0.60 (0.39 - 0.94) | 342, 284 |
| Partnered sex, not in a steady relationship | 21.7 (16.1 - 28.7) | 1.74 (1.15 - 2.65) | 1.33 (0.86 - 2.03) | 188, 143 |
| Partnered sex, in a steady, non-cohabiting relationship | 26.3 (19.9 - 33.8) | 2.24 (1.49 - 3.37) | 1.61 (1.04 - 2.49) | 174, 133 |
| Partnered sex, in a steady, cohabiting relationship | 13.7 (11.6 - 16.2) | 1.00 | 1.00 | 985, 857 |

| Employment status | p=0.015 | p=0.76 | p=0.30 | p=0.20 |
|------------------|--------|--------|--------|--------|

16
| Category                        | Employed | Unemployed | Full time parent, home maker | Student/Pupil | Sexual identity - self-reported | Social grade | Education (3 categories) |
|--------------------------------|----------|------------|-------------------------------|---------------|--------------------------------|--------------|--------------------------|
|                                | 14·8 (12·9 - 16·9) | 12·7 (7·8 - 19·9) | 10·1 (5·7 - 17·3) | 24·5 (17·5 - 33·2) | 17·0 (13·0 - 16·7) | 14·6 (12·3 - 17·1) | 12·9 (9·8 - 16·8) |
|                                | 1·00 | 0·84 (0·48 - 1·47) | 0·65 (0·34 - 1·24) | 1·88 (1·19 - 2·96) | 1·00 | 0·83 (0·60 - 1·16) | 0·83 (0·48 - 1·10) |
|                                | 1·00 | 0·82 (0·47 - 1·46) | 0·74 (0·38 - 1·43) | 0·95 (0·59 - 1·54) | 1·00 | 0·86 (0·61 - 1·21) | 0·73 (0·48 - 1·10) |
|                                | 1315, 1118 | 150, 1118 | 121, 1118 | 129, 83 | 4·4 (3·4 - 5·8) | 3·7 (2·6 - 5·2) | 3·7 (2·0 - 6·6) |
|                                | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 |
|                                | 1313, 1116 | 151, 120 | 122, 119 | 129, 83 | 4·0 (3·1 - 5·2) | 1·6 (0·26 - 5·21) | 0·77 (0·29 - 2·07) |
|                                | 1·00 | 1·00 | 1·07 (0·24 - 4·81) | 0·68 (0·25 - 1·81) | 1·07 (0·24 - 4·81) | 4·6 (1·1 - 17·4) | 4·6 (1·1 - 17·4) |
|                                | 1472, 1365 | 43, 16 ** | 43, 16 ** | 170, 37 | 171, 38 | 1·6 (0·26 - 5·21) | 0·77 (0·29 - 2·07) |
|                                | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 |
|                                | 1472, 1365 | 43, 16 ** | 43, 16 ** | 170, 37 | 171, 38 | 1·6 (0·26 - 5·21) | 0·77 (0·29 - 2·07) |
|                                | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 |
|                                | 1472, 1365 | 43, 16 ** | 43, 16 ** | 170, 37 | 171, 38 | 1·6 (0·26 - 5·21) | 0·77 (0·29 - 2·07) |
|                                | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 |
|                                | 1472, 1365 | 43, 16 ** | 43, 16 ** | 170, 37 | 171, 38 | 1·6 (0·26 - 5·21) | 0·77 (0·29 - 2·07) |
|                                | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 |
|                                | 1472, 1365 | 43, 16 ** | 43, 16 ** | 170, 37 | 171, 38 | 1·6 (0·26 - 5·21) | 0·77 (0·29 - 2·07) |
|                                | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 |
|                                | 1472, 1365 | 43, 16 ** | 43, 16 ** | 170, 37 | 171, 38 | 1·6 (0·26 - 5·21) | 0·77 (0·29 - 2·07) |
|                                | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 | 1·00 |

**p=0·0041, p=0·021, p=0·046, p=0·082**

Social grade

| Social grade | Degree | Below degree | p=0·30 | p=0·29 | p=0·69 | p=0·71 |
|--------------|--------|-------------|--------|--------|--------|--------|
| AB           | 17·0 (13·5 - 21·2) | 14·4 (12·2 - 17·0) | 1·00 | 1·00 | 4·8 (2·9 - 7·7) | 1·00 | 1·00 | 433, 346 |
| C1           | 14·6 (12·3 - 17·1) | 15·8 (13·2 - 18·8) | 1·00 | 1·00 | 3·7 (2·0 - 6·6) | 1·00 | 1·00 | 383, 313 |
| D            | 12·9 (9·8 - 16·8) | 11·1 (9·8 - 14·8) | 1·00 | 1·00 | 4·3 (3·1 - 6·0) | 1·00 | 1·00 | 964, 815 |
| E            | 12·9 (9·8 - 16·8) | 11·1 (9·8 - 14·8) | 1·00 | 1·00 | 3·7 (2·0 - 6·6) | 1·00 | 1·00 | 383, 313 |

**p=0·21, p=0·21, p=0·73, p=0·74**

**p=0·21, p=0·21, p=0·73, p=0·74**

**p=0·0041, p=0·021, p=0·046, p=0·082**

**p=0·21, p=0·21, p=0·73, p=0·74**
| No qualifications | 5.1 (1.2 - 18.7) | 0.32 (0.07 - 1.38) | 0.31 (0.07 - 1.39) | 43.35 ** | 3.3 (0.5 - 19.9) | 0.75 (0.10 - 5.68) | 0.76 (0.10 - 5.82) | 42.33 ** |
|---|---|---|---|---|---|---|---|---|
| Alcohol consumption since lockdown | p=0.43 | p=0.37 | p=0.89 | p=0.89 |
| No change | 14 (12.1 - 16.7) | 1.00 | 1.00 | 998,855 | 3.8 (2.7 - 5.3) | 1.00 | 1.00 | 995,853 |
| Increased | 17 (13.4 - 21.2) | 1.23 (0.88 - 1.72) | 1.16 (0.82 - 1.63) | 393,312 | 4.4 (2.7 - 7.0) | 1.15 (0.62 - 2.11) | 1.11 (0.61 - 2.04) | 397,316 |
| Decreased | 13 (10.3 - 18.5) | 0.97 (0.66 - 1.43) | 0.84 (0.56 - 1.25) | 315,261 | 3.7 (1.9 - 7.2) | 0.97 (0.44 - 2.13) | 0.90 (0.40 - 2.04) | 315,260 |
| Symptoms of depression (PHQ-2) **** | p=0.010 | p=0.066 | p=0.25 | p=0.35 |
| No | 13 (11.3 - 15.5) | 1.00 | 1.00 | 1160,1005 | 3.4 (2.5 - 4.8) | 1.00 | 1.00 | 1161,1007 |
| Yes | 18 (15.1 - 22.1) | 1.47 (1.09 - 1.97) | 1.32 (0.98 - 1.79) | 537,415 | 4.7 (3.1 - 7.1) | 1.38 (0.79 - 2.41) | 1.31 (0.75 - 2.30) | 538,415 |
| Symptoms of anxiety (GAD-2) **** | p=0.075 | p=0.045 | p=0.0028 | p=0.0063 |
| No | 13 (11.6 - 15.8) | 1.00 | 1.00 | 1097,970 | 2.9 (2.0 - 4.2) | 1.00 | 1.00 | 1097,970 |
| Yes | 17 (14.0 - 20.4) | 1.30 (0.97 - 1.74) | 1.12 (0.83 - 1.52) | 610,461 | 6.3 (4.4 - 8.9) | 2.24 (1.32 - 3.80) | 2.12 (1.24 - 3.63) | 610,460 |

CI = confidence intervals. OR = odds ratio. aOR = adjusted odds ratio. PHQ-2 = Patient Health Questionnaire (2 item). GAD-2 = Generalized anxiety disorder (2 item).

± Age-adjusted ORs, adjusting for age as a continuous variable
† Women, including trans women, aged 18-44 years who reported at least one sexual partner in their lifetime (i.e. sexually-experienced). 13 sexually-experienced women aged 18-44 years responded “prefer not to say” to the questions about use and unsuccessful use of contraceptive services. These individuals are excluded from the denominator.
* Unweighted denominator <30. Results not shown due to small denominator.
** Unweighted denominator <50. Results should be interpreted with caution due to small denominator.
*** White includes all those who identify as White English, Welsh, Scottish, Northern Irish, British, Irish, Gypsy or Irish Traveller, or from any other White background.
¶ Mixed ethnicity includes those who identify as White and Black African, White and Black Caribbean, White and Asian or any other mixed or multiple ethnic background.
¥ Asian includes those who identify as Indian, Pakistani, Bangladeshi, Chinese or from any other Asian background.
□ Black includes those who identify as African, Caribbean, or from any other Black background.
Participants were classified as having symptoms of depression or anxiety if they scored three or more on the patient health questionnaire two item (PHQ-2) or generalised anxiety disorder two item (GAD-2) scales.

All percentages are weighted. These are row percentages which describe successful use/unsuccessful use of services within a specific subgroup.