**Supplementary Table 1: Shows distribution of enrolment characteristics, proportion with no follow-up visit, and odds ratios from simple and multivariable models for risk factors for having no follow-up visit among women enrolled into the Good Health for Women Project (GHWP) between April 2008 and May 2017.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Characteristic at enrolment** | **Frequency distribution, n (column %)** | **Proportion with no follow-up visit, n (%)** | **Odds Ratio (95% CI) adjusted for cohort and age** | **p-value (LRT)** | **Adjusted Odds Ratio (95% CI) for risk factors** | **p-value (LRT)** |
| Total | 3084 | 878 (28.5) |  |  |  |  |
| **SOCIO-DEMOGRAPHIC** |  |  |  |  |  |  |
| **Cohort of enrolment** |  |  |  |  |  |  |
| Closed cohort | 647 (21.0) | 42 (6.5) | 1 | <0.001 | 1 | <0.001 |
| Open cohort | 2437 (79.0) | 836 (34.3) | 7.71 (5.57-10.68) |  | 6.59 (4.70-9.24) |  |
| Age in years |  |  |  |  |  |  |
| <24 | 1350 (44.6) | 459 (34.0) | 1 | <0.001 | 1 | <0.001 |
| 25-34 | 1306 (43.2) | 321 (24.6) | 0.62 (0.52-0.74) |  | 0.77 (0.61-0.97) |  |
| 35+ | 368 (12.2) | 69 (18.8) | 0.40 (0.30-0.53) |  | 0.44 (0.30-0.65) |  |
| **Highest education level at enrolment** |  |  |  |  |  |  |
| Less than primary | 1191 (41.5) | 328 (27.5) | 1 | 0.15 |  |  |
| Completed Primary to incomplete Ordinary level | 1221 (42.5) | 330 (27.0) | 0.91 (0.75-1.10) |  |  |  |
| Completed Secondary Ordinary level and above | 460 (16.0) | 123 (26.7) | 0.78 (0.60-1.01) |  |  |  |
| **Marital status\*** |  |  |  |  |  |  |
| Widowed/divorced | 1864 (61.5) | 483 (25.9) | 1 | 0.11 |  |  |
| Currently married | 215 (7.1) | 67 (31.2) | 1.33 (0.96-1.84) |  |  |  |
| Never married | 950 (31.4) | 296 (31.2) | 0.91 (0.75-1.12) |  |  |  |
| **Number of children\*** |  |  |  |  |  |  |
| None | 484 (16.2) | 187 (38.6) | 1 | 0.01 | 1 | 0.01 |
| One | 781 (26.1) | 239 (30.6) | 0.77 (0.60-0.99) |  | 0.72 (0.53-0.96) |  |
| At least 2 | 1730 (57.8) | 407 (23.5) | 0.66 (0.51-0.85) |  | 0.63 (0.47-0.86) |  |
| **Source of income\*** |  |  |  |  |  |  |
| Sex work alone | 1750 (58.1) | 523 (29.9) | 1 | 0.01 |  |  |
| Sex work and other job | 1118 (37.1) | 275 (24.6) | 0.75 (0.63-0.90) |  |  |  |
| No sex work | 145 (4.8) | 43 (29.7) | 0.88 (0.60-1.30) |  |  |  |
| **Where paying clients are recruited from** |  |  |  |  |  |  |
| Bar, club or restaurant | 1396 (49.1) | 356 (25.5) | 1 | <0.001 | 1 | 0.004 |
| Street | 775 (27.3) | 291 (37.5) | 1.51 (1.24-1.83) |  | 1.37 (1.09-1.72) |  |
| Several avenues | 670 (23.6) | 138 (20.6) | 0.87 (0.69-1.09) |  | 0.88 (0.68-1.13) |  |
| **REPRODUCTIVE HEALTH** |  |  |  |  |  |  |
| **Pregnancy\*** |  |  |  |  |  |  |
| Not pregnant | 2858 (95.4) | 811 (28.4) | 1 | 0.25 |  |  |
| Pregnant | 138 (4.6) | 26 (18.8) | 0.76 (0.48-1.21) |  |  |  |
| **Current contraceptive use\*** |  |  |  |  |  |  |
| none or other | 1813 (63.6) | 530 (29.2) | 1 | 0.01 | 1 | 0.05 |
| oral cc | 205 (7.2) | 34 (16.6) | 0.57 (0.38-0.85) |  | 0.58 (0.37-0.89) |  |
| inject | 696 (24.4) | 180 (25.9) | 0.84 (0.68-1.03) |  | 0.85 (0.67-1.08) |  |
| Pregnant | 138 (4.8) | 26 (18.8) | 0.73 (0.46-1.16) |  | 0.80 (0.48-1.34) |  |
| **BEHAVIOURAL CHARACTERISTICS** |  |  |  |  |  |  |
| **Frequency of paid sex in the last 12 months at enrolment** |  |  |  |  |  |  |
| Less than once a week/None | 400 (13.1) | 125 (31.3) | 1 | <0.001 | 1 | <0.001 |
| At least once a week | 945 (31.0) | 210 (22.2) | 0.63 (0.48-0.83) |  | 0.46 (0.31-0.69) |  |
| Daily | 1703 (55.9) | 522 (30.7) | 0.90 (0.70-1.15) |  | 0.56 (0.38-0.83) |  |
| **Number of sexual partners\*** |  |  |  |  |  |  |
| <5 | 753 (26.3) | 190 (25.2) | 1 | 0.87 |  |  |
| 5-19 | 671 (23.4) | 169 (25.2) | 1.05 (0.82-1.35) |  |  |  |
| At least 20 | 1442 (50.3) | 420 (29.1) | 1.06 (0.86-1.30) |  |  |  |
| **Number of men the participant had paid sex with in last month\*** |  |  |  |  |  |  |
| <5 | 789 (27.6) | 203 (25.7) | 1 | 0.98 |  |  |
| 5-19 | 650 (22.7) | 162 (24.9) | 0.98 (0.76-1.26) |  |  |  |
| At least 20 or cannot remember | 1420 (49.7) | 411 (28.9) | 0.99 (0.80-1.21) |  |  |  |
| **Condom use frequency with paid sex in the last month\*** |  |  |  |  |  |  |
| Inconsistent | 1183 (41.1) | 296 (25.0) | 1 | 0.002 | 1 | 0.001 |
| Consistent (always) | 1366 (47.5) | 397 (29.1) | 1.39 (1.15-1.67) |  | 1.34 (1.10-1.65) |  |
| No paid sex | 329 (11.4) | 88 (26.7) | 1.15 (0.86-1.54) |  | 0.69 (0.43-1.09) |  |
| **Alcohol consumption frequency\*** |  |  |  |  |  |  |
| Non-drinker | 691 (23.4) | 203 (29.4) | 1 | 0.27 |  |  |
| Non-daily drinker | 1218 (41.2) | 327 (26.8) | 0.97 (0.77-1.20) |  |  |  |
| Daily drinker | 1047 (35.4) | 284 (27.1) | 0.85 (0.68-1.06) |  |  |  |
| **Binge drinking in last 3 months\*** |  |  |  |  |  |  |
| Non drinker | 690 (23.1) | 201 (29.1) | 1 | 0.28 |  |  |
| No binging | 721 (24.1) | 164 (22.7) | 1.06 (0.82-1.37) |  |  |  |
| Binged | 1576 (52.8) | 465 (29.5) | 0.90 (0.73-1.10) |  |  |  |
| **Illicit drug use in last 3 months\*** |  |  |  |  |  |  |
| Not used drugs in last 3 months | 2075 (72.4) | 562 (27.1) | 1 | 0.36 |  |  |
| Non-daily drug user | 187 (6.5) | 58 (31.0) | 1.14 (0.81-1.60) |  |  |  |
| Daily drug user | 603 (21.0) | 159 (26.4) | 0.89 (0.72-1.10) |  |  |  |
| **HIV TESTING HISTORY** |  |  |  |  |  |  |
| >1 year ago or never | 990 (33.1) | 202 (20.4) | 1 | 0.07 |  |  |
| 7-12 months ago | 404 (13.5) | 95 (23.5) | 0.96 (0.72-1.28) |  |  |  |
| <6 months ago | 1599 (53.4) | 535 (33.5) | 1.21 (0.99-1.48) |  |  |  |
| **SEXUALLY TRANSMITTED INFECTIONS (STIs)** §**\*** |  |  |  |  |  |  |
| No STI | 1941 (65.8) | 592 (30.5) | 1 | 0.89 |  |  |
| With STI | 1008 (34.2) | 221 (21.9) | 0.99 (0.81-1.20) |  |  |  |

§STI variable was a composite variable combining data on STI symptoms from clinical examination and test results for STI for syphilis. \*Data collected at enrolment and follow-up study visits.

**Supplementary Table 2: Factors associated with the odds of being in higher categories of missed scheduled visits (MSV) than in lower categories using two-level random-effects ordered logistic regressions.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Characteristic** | **1Model 1:**  **Odds Ratio (95% CI)** | **p-value (LRT)** | **Model 2: Adjusted Odds Ratio (95% CI)** | **p-value (LRT)** |
| **SOCIO-DEMOGRAPHIC** |  |  |  |  |
| **Cohort of enrolment** |  |  |  |  |
| Cohort-1 (Closed cohort) | 1 | <0.001 | 1 | <0.001 |
| Cohort-2 (Open cohort) | 2.39 (2.13-2.68) |  | 3.40 (2.93-3.95) |  |
| **Age in years** |  |  |  |  |
| <25 | 1 | 0.001† | 1 | 0.42 |
| 25-34 | 1.22 (1.08-1.37) |  | 1.10 (0.96-1.26) |  |
| At least 35 | 1.26 (1.07-1.48) |  | 1.08 (0.89-1.31) |  |
| **Years of follow-up** |  |  |  |  |
| First 2 years of follow-up | 1 | <0.001 | 1 | <0.001 |
| Post 2 years follow-up | 2.42 (2.17-2.70) |  | 2.37 (2.10-2.66) |  |
| **With a stable sexual partner\*** |  |  |  |  |
| Yes | 1 | 0.21 |  |  |
| No | 0.93 (0.83-1.04) |  |  |  |
| **Highest education level** |  |  |  |  |
| Less than primary | 1 | 0.04 | 1 | 0.02 |
| Completed Primary to incomplete ordinary level | 1.15 (1.02-1.30) |  | 1.15 (1.00-1.33) |  |
| Completed Secondary ordinary level above | 0.99 (0.84-1.17) |  | 0.89 (0.73-1.09) |  |
| **Marital status\*** |  |  |  |  |
| Widowed/divorced | 1 | <0.001 |  |  |
| Currently married | 1.28 (1.13-1.46) |  |  |  |
| Never married | 0.93 (0.81-1.07) |  |  |  |
| **Number of children\*** |  |  |  |  |
| None | 1 | 0.09 |  |  |
| One | 0.95 (0.78-1.15) |  |  |  |
| At least 2 | 1.10 (0.92-1.33) |  |  |  |
| **Source of income\*** |  |  |  |  |
| Sex work alone | 1 | <0.001 |  |  |
| Sex work and other job | 0.99 (0.89-1.10) |  |  |  |
| No sex work | 1.37 (1.18-1.60) |  |  |  |
| **Where paying clients are recruited from** |  |  |  |  |
| Bar, club or restaurant | 1 | <0.001 | 1 | <0.001 |
| Street | 1.39 (1.19-1.62) |  | 1.52 (1.27-1.82) |  |
| Several avenues | 1.12 (0.99-1.28) |  | 1.13 (0.98-1.32) |  |
| **REPRODUCTIVE HEALTH** |  |  |  |  |
| **Current contraceptive use\*** |  |  |  |  |
| none or other | 1 | <0.001 |  |  |
| oral cc | 0.86 (0.73-1.02) |  |  |  |
| inject | 0.93 (0.83-1.03) |  |  |  |
| Pregnant | 1.41 (1.18-1.69) |  |  |  |
| **Pregnancy\*** |  |  |  |  |
| Not pregnant | 1 | <0.001 | 1 | <0.001 |
| Pregnant | 1.43 (1.20-1.72) |  | 1.60 (1.33-1.94) |  |
| **BEHAVIOURAL CHARACTERISTICS** |  |  |  |  |
| **Number of sexual partners\*** |  |  |  |  |
| <5 | 1 | 0.001 |  |  |
| 5-19 | 0.80 (0.71-0.91) |  |  |  |
| At least 20 or cannot remember | 0.88 (0.78-0.99) |  |  |  |
| **Number of clients in the last month\*** |  |  |  |  |
| <5 | 1 | 0.001 |  |  |
| 5-19 | 0.80 (0.71-0.91) |  |  |  |
| At least 20 or cannot remember | 0.88 (0.78-0.99) |  |  |  |
| **Condom use frequency with clients in the last month\*** |  |  |  |  |
| Inconsistent | 1 | <0.001 | 1 | 0.001 |
| Consistent (always) | 1.02 (0.92-1.14) |  | 0.98 (0.87-1.11) |  |
| No paid sex | 1.40 (1.24-1.58) |  | 1.23 (1.07-1.42) |  |
| **Alcohol consumption frequency\*** |  |  |  |  |
| Non-drinker | 1 | <0.001† | 1 | 0.05 |
| Non-daily drinker | 0.98 (0.87-1.09) |  | 1.07 (0.95-1.22) |  |
| Daily drinker | 0.78 (0.68-0.89) |  | 0.91 (0.78-1.06) |  |
| **Binge drinking in last 3 months\*** |  |  |  |  |
| Non-drinker | 1 | <0.001 |  |  |
| No binging | 0.71 (0.62-0.80) |  |  |  |
| Binged | 1.08 (0.96-1.21) |  |  |  |
| **Illicit drug use in last 3 months\*** |  |  |  |  |
| No | 1 | 0.15 | 1 | 0.01 |
| Yes | 1.09 (0.97-1.22) |  | 1.23 (1.08-1.40) |  |
| **SEXUALLY TRANSMITTED INFECTIONS (STIs)\***§ |  |  |  |  |
| No STI | 1 | <0.001 | 1 | <0.001 |
| With STI | 0.71 (0.64-0.79) |  | 0.79 (0.70-0.89) |  |

1The outcome is a three-level categorical variable (No missed visit, 1-2 missed scheduled visits, ≥3 missed scheduled visits). 1Model 1, adjusted for cohort of enrolment and age at previous attendance. Model 2, adjusted for cohort of enrolment, age at previous attendance, years of follow-up, education level, Where paying clients are recruited from, pregnancy status, Condom use frequency with clients in the last month at follow-up, Alcohol consumption frequency at follow-up, Illicit drug use in last 3 months at follow-up, Sexually Transmitted Infections (STI). † p-value for trend. The Odds Ratios are proportional odds interpreted as the odds of being in higher categories of MSV [i.e (i) ≥3 or (ii) 1-2 or ≥3] than in lower categories [(i) no MSV or 1-2, or (ii) no MSV, respectively]. §STI variable was a composite variable combining data on STI symptoms from clinical examination and test results for STI for syphilis. \*Data collected at enrolment and follow-up study visits.

**Supplementary Table 3: Association of HIV seroconversion with the number of missed visits between consecutively attended visits using the Cox regression model, by cohort of enrolment.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | ***Cohort-1*** |  |  | ***Cohort-2*** |  |  |
| **Characteristic** | **New HIV cases/pyr (Rate/100 pyr)** | **Adjusted Hazard Ratio (95% CI)** | **p-value (LRT)** | **New HIV cases/PYR (rate/100 PYR)** | **Adjusted Hazard Ratio (95% CI)** | **p-value (LRT)** |
| **SOCIO-DEMOGRAPHIC** | |  |  |  |  |  |
| **Number of visits missed between attendances** | |  | **0.45** |  |  | **0.002** |
| No missed visit | 53 /1886 (2.8) | 1 |  | 28 /1220 (2.3) | 1 |  |
| One/two missed visit(s) | 18 /542 (3.3) | 1.30 (0.73-2.32) |  | 20 /708 (2.8) | 1.62 (0.88-2.97) |  |
| At least 3 missed visits | 22 /574 (3.8) | 1.41 (0.80-2.51) |  | 29 /607 (4.8) | 2.81 (1.61-4.91) |  |
| **Age in years** |  |  | **0.27** |  |  | **0.12** |
| <25 | 30 /774 (3.8) | 1 |  | 23 /788 (3.0) | 1 |  |
| 25-34 | 51 /1706 (3.0) | 0.74 (0.45-1.20) |  | 41 /1250 (3.3) | 1.04 (0.60-1.79) |  |
| At least 35 | 12 /524 (2.4) | 0.57 (0.27-1.19) |  | 13 /470 (2.7) | 1.18 (0.57-2.44) |  |
| **With a stable sexual partner\*** |  |  | **0.12** |  |  | **0.01** |
| Yes | 71 /2437 (2.9) | 1 |  | 42 /1522 (2.8) | 1 |  |
| No | 22 /566 (3.9) | 1.53 (0.89-2.61) |  | 35 /645 (5.4) | 2.04 (1.25-3.33) |  |
| **Highest education level at enrolment** |  |  | **0.07** |  |  | **0.48** |
| Incomplete primary level | 43 /1336 (3.2) | 1 |  | 31 /1025 (3.0) | 1 |  |
| Completed Primary to incomplete O level | 41 /1300 (3.2) | 1.05 (0.68-1.63) |  | 29 /968 (3.0) | 1.16 (0.68-1.97) |  |
| Completed Secondary O'level above | 9 /368 (2.4) | 0.94 (0.45-1.94) |  | 16 /425 (3.8) | 1.50 (0.79-2.86) |  |
| **Recruitment of clients\*** |  |  | **0.03** |  |  | **0.10** |
| Bar, club or restaurant | 46 /1608 (2.9) | 1 |  | 30 /1109 (2.7) | 1 |  |
| Street | 20 /354 (5.7) | 2.05 (1.18-3.56) |  | 26 /534 (4.9) | 1.80 (1.02-3.19) |  |
| Several avenues | 27 /964 (2.8) | 0.92 (0.56-1.49) |  | 21 /669 (3.1) | 1.02 (0.57-1.81) |  |
| **REPRODUCTIVE HEALTH** |  |  |  |  |  |  |
| **Current** **contraceptive use\*** |  |  | **0.001** |  |  | **0.09** |
| none or other | 55 /1641 (3.4) | 1 |  | 45 /1519 (3.0) | 1 |  |
| oral cc | 7 /348 (2.0) | 0.60 (0.27-1.34) |  | 5 /177 (2.8) | 0.87 (0.34-2.23) |  |
| inject | 30 /725 (4.1) | 1.25 (0.79-1.96) |  | 26 /653 (4.0) | 1.46 (0.88-2.40) |  |
| Pregnant | 1 /289 (0.3) | 0.09 (0.01-0.69) |  | 1 /107 (0.9) | 0.24 (0.03-1.75) |  |
| **BEHAVIOURAL CHARACTERISTICS** | | |  |  |  |  |
| **Number of men the participant had paid sex**  **within last month\*** | | | **0.24** |  |  | **0.23** |
| <5 | 55 /1883 (2.9) | 1 |  | 24 /933 (2.6) | 1 |  |
| 5-19 | 14 /554 (2.5) | 0.58 (0.30-1.11) |  | 13 /535 (2.4) | 0.84 (0.40-1.76) |  |
| At least 20 or cannot remember | 24 /567 (4.2) | 0.82 (0.46-1.49) |  | 36 /955 (3.8) | 1.07 (0.57-1.99) |  |
| **Condom use frequency with paid sex in the**  **last month\*** | | | **0.27** |  |  | **0.001** |
| Inconsistent | 32 /827 (3.9) | 1 |  | 40 /788 (5.1) | 1 |  |
| Consistent (always) | 34 /1120 (3.0) | 0.66 (0.40-1.11) |  | 21 /1102 (1.9) | 0.36 (0.21-0.64) |  |
| No paid sex | 27 /1056 (2.6) | 0.71 (0.39-1.31) |  | 16 /545 (2.9) | 0.83 (0.40-1.69) |  |
| **Alcohol consumption frequency\*** | |  | **0.03** |  |  | **0.44** |
| Non-drinker | 24 /1137 (2.1) | 1 |  | 25 /733 (3.4) | 1 |  |
| Non-daily drinker | 42 /1249 (3.4) | 1.69 (0.99-2.88) |  | 26 /953 (2.7) | 0.72 (0.40-1.31) |  |
| Daily drinker | 27 /617 (4.4) | 2.21 (1.20-4.08) |  | 26 /800 (3.2) | 0.79 (0.43-1.46) |  |
| **SEXUALLY TRANSMITTED INFECTIONS (STIs)\***§ |  |  | **0.14** |  |  | **0.17** |
| No STI | 51 /1991 (2.6) | 1 |  | 58 /2042 (2.8) | 1 |  |
| With STI | 42 /1012 (4.1) | 1.40 (0.89-2.20) |  | 19 /459 (4.1) | 1.06 (0.60-1.86) |  |

§STI variable was a composite variable combining data on STI symptoms from clinical examination and test results for STI for syphilis. \*Data collected at enrolment and follow-up study visits.