Supplementary Table S1. Prevalence of hypertension in the study population

|  | Population |  |  | HIV-infected |  |  | HIV-uninfected |  |  | Unknown HIV-status ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2010 | $\begin{gathered} \mathbf{p -} \\ \text { value } \end{gathered}$ | 2004 | 2010 | $\begin{gathered} \mathbf{p -} \\ \text { value } \end{gathered}$ | 2004 | 2010 | $\begin{gathered} \mathbf{p -} \\ \text { value } \end{gathered}$ | 2004 | 2010 | $\begin{gathered} \mathbf{p -} \\ \text { value } \end{gathered}$ |
| Women | 1,557 | 1,825 |  | 335 | 706 |  | 580 | 778 |  | 634 | 341 |  |
| Hypertension $(\%)^{2}$ | $\begin{gathered} 24.1(22.0- \\ 26.3) \\ \hline \end{gathered}$ | $\begin{gathered} 24.1(22.1- \\ 26.1) \\ \hline \end{gathered}$ | 0.979 | $\begin{gathered} 21.1(16.8- \\ 25.5) \\ \hline \end{gathered}$ | $\begin{gathered} 19.3(16.4- \\ 22.2) \\ \hline \end{gathered}$ | 0.480 | $\begin{gathered} 26.2(22.6- \\ 29.8) \\ \hline \end{gathered}$ | $\begin{gathered} 27.6(24.5- \\ 30.8) \\ \hline \end{gathered}$ | 0.558 | $\begin{gathered} 24.0(20.7- \\ 27.3) \\ \hline \end{gathered}$ | $\begin{gathered} 26.1(21.4- \\ 30.8) \\ \hline \end{gathered}$ | 0.472 |
| Stage 2 <br> hypertension $(\%)^{3}$ | $\begin{gathered} 8.3(7.0- \\ 9.7) \end{gathered}$ | $\begin{gathered} 9.5(8.2- \\ 10.9) \end{gathered}$ | 0.230 | $\begin{aligned} & 7.1 \text { (4.4-} \\ & 9.9) \end{aligned}$ | $\begin{gathered} 7.1 \text { (5.2- } \\ 9.0) \end{gathered}$ | 0.972 | $\begin{gathered} 10.3(7.9- \\ 12.8) \end{gathered}$ | $\begin{gathered} 11.6(9.3- \\ 13.8) \end{gathered}$ | 0.477 | $\begin{gathered} 7.3(5.2- \\ 9.3) \end{gathered}$ | $\begin{aligned} & 10.0(6.8- \\ & 13.2) \end{aligned}$ | 0.143 |
| Men | 761 | 759 |  | 157 | 239 |  | 332 | 336 |  | 268 | 184 |  |
| Hypertension $(\%)^{2}$ | $\begin{gathered} 26.8(23.7- \\ 30.0) \\ \hline \end{gathered}$ | $\begin{gathered} 25.0(22.0- \\ 28.1) \\ \hline \end{gathered}$ | 0.430 | $\begin{gathered} 22.9(16.4- \\ 29.5) \\ \hline \end{gathered}$ | $\begin{gathered} 19.2(14.2- \\ 24.2) \\ \hline \end{gathered}$ | 0.376 | $\begin{gathered} 27.7(22.9- \\ 32.5) \\ \hline \end{gathered}$ | $\begin{gathered} 26.8(22.1- \\ 31.5) \\ \hline \end{gathered}$ | 0.788 | $\begin{gathered} 28.4(23.0- \\ 33.8) \\ \hline \end{gathered}$ | $\begin{gathered} 29.3(22.8- \\ 35.9) \\ \hline \end{gathered}$ | 0.819 |
| Stage 2 <br> hypertension <br> $(\%)^{3}$ | $\begin{gathered} 8.8(6.8- \\ 10.8) \end{gathered}$ | $\begin{gathered} 7.5(5.6- \\ 9.4) \end{gathered}$ | 0.357 | $\begin{gathered} 5.7 \text { (2.1 - } \\ 9.4) \end{gathered}$ | $\begin{gathered} 5.4(2.6- \\ 8.3) \end{gathered}$ | 0.901 | $\begin{gathered} 8.7(5.7- \\ 11.8) \end{gathered}$ | $\begin{gathered} 9.2(6.1- \\ 12.3) \end{gathered}$ | 0.824 | $\begin{gathered} 10.8(7.1- \\ 14.5) \end{gathered}$ | $\begin{gathered} 7.1(3.4- \\ 10.8) \end{gathered}$ | 0.177 |

$95 \%$ confidence intervals are shown in brackets. Means were compared with the student's $t$-test and proportions using a z-test.
${ }^{1}$ HIV status was recorded as unknown if a participant could not be linked to the Africa Centre for Population Health's HIV surveillance data, most commonly because he/she did not consent to HIV testing during past surveillance rounds.
${ }^{2}$ Hypertension was defined as systolic BP $\geq 140 \mathrm{mmHg}$ and/or diastolic $\mathrm{BP} \geq 90 \mathrm{mmHg}$.
${ }^{3}$ Stage 2 hypertension was defined as systolic $\mathrm{BP} \geq 160 \mathrm{mmHg}$ and/or diastolic $\mathrm{BP} \geq 100 \mathrm{mmHg}$.

Supplementary Table S2. BMI and blood pressure in 2010 among women living with HIV, by length on ART ${ }^{l}$

|  | Initiated on ART after the survey |  | Initiated on ART before the survey |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In 1-3 years | In 0-1 year | 0-1 year ago | 1-2 years ago | 2-3 years ago | 3-6 years ago |
| n | 54 | 54 | 52 | 48 | 42 | 68 |
| Mean BMI (kg/m²) | 27.5 (25.9-29.0) | 27.2 (25.5-28.8) | 25.0 (23.6-26.4) | 26.1 (24.0-28.2) | 25.1 (23.6-26.6) | 25.7 (24.3-27.1) |
| Overweight or obese ${ }^{2}$ (\%) | 64.8 (52.1-77.6) | 59.3 (46.2-72.4) | 38.5 (25.2-51.7) | 45.8 (31.7-59.9) | 47.6 (32.5-62.7) | 47.1 (35.2-58.9) |
| Obese ${ }^{3}$ (\%) | 25.9 (14.2-37.6) | 25.9 (14.2-37.6) | 15.4 (5.6-25.2) | 14.6 (4.6-24.6) | 16.7 (5.4-27.9) | 17.6 (8.6-26.7) |
| n | 61 | 63 | 60 | 59 | 52 | 85 |
| Mean systolic BP (mmHg) | $117.5(113.3-121.6)$ | 113.0 (108.6-117.5) | $112.1(108.4-115.8)$ | $115.5(111.3-119.6)$ | 115.3 (111.2-119.5) | 116.1 (112.1-120.1) |
| Mean diastolic BP ( $\mathbf{m m H g}$ ) | 81.6 (78.5-84.7) | 78.0 (74.8-81.1) | 77.6 (74.9-80.3) | 78.3 (75.5-81.2) | 79.6 (76.8-82.4) | 79.5 (76.7-82.4) |
| Hypertension ${ }^{4}(\%)$ | 23.0 (12.4-33.5) | 17.5 (8.1-26.8) | 13.3 (4.7-21.9) | 15.3 (6.1-24.4) | 19.2 (8.5-29.9) | 21.2 (12.5-29.9) |
| Stage 2 hypertension ${ }^{5}$ (\%) | 9.8 (2.4-17.3) | 7.9 (1.3-14.6) | $5.0(0.0-10.5)$ | $5.1(0.0-10.7)$ | 5.8 (0.0-12.1) | $5.9(0.9-10.9)$ |

Abbreviations: BMI = Body Mass Index; ART = antiretroviral therapy; BP = blood pressure
${ }^{1} 95 \%$ confidence intervals are provided in brackets after the point estimate.
${ }^{2}$ Defined as a BMI $\geq 25 \mathrm{~kg} / \mathrm{m}^{2}$.
${ }^{3}$ Obesity was defined as a BMI $\geq 30 \mathrm{~kg} / \mathrm{m}^{2}$.
${ }^{4}$ Hypertension was defined as systolic BP $\geq 140 \mathrm{mmHg}$ or diastolic BP $\geq 90 \mathrm{mmHg}$.
${ }^{5}$ Stage 2 hypertension was defined as systolic $\mathrm{BP} \geq 160 \mathrm{mmHg}$ and/or diastolic $\mathrm{BP} \geq 100 \mathrm{mmHg}$.

Supplementary Table S3. BMI and blood pressure in 2010 among men living with HIV, by length on ART

|  | Initiated on ART after the survey |  | Initiated on ART before the survey |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In 1-3 years | In 0-1 year | 0-1 year ago | 1-2 years ago | 2-3 years ago | 3-6 years ago |
| n | 11 | 13 | 16 | 15 | 10 | 21 |
| Mean BMI (kg/m ${ }^{\text {2 }}$ ) | 22.1 (19.7-24.5) | 20.2 (19.0-21.5) | 20.2 (19.1-21.2) | 21.1 (19.3-22.8) | 22.0 (20.4-23.7) | 22.2 (20.2-24.2) |
| Overweight or obese ${ }^{2}$ (\%) | 18.2 (0.0-41.0) | $0.0(0.0-0.0)$ | $0.0(0.0-0.0)$ | $6.7(0.0-19.3)$ | 10.0 (0.0-28.6) | 19.0 (2.3-35.8) |
| Obese ${ }^{3}$ (\%) | 0.0 (0.0-0.0) | $0.0(0.0-0.0)$ | $0.0(0.0-0.0)$ | $0.0(0.0-0.0)$ | 0.0 (0.0-0.0) | 4.8 (0.0-13.9) |
| n | 13 | 15 | 25 | 16 | 14 | 26 |
| Mean systolic BP (mmHg) | 120.3 (110.9-129.8) | $113.5(106.5-120.5)$ | 113.8 (108.5-119.0) | 114.8 (107.2-122.3) | 123.6 (116.6-130.7) | 122.0 (117.6-126.5) |
| Mean diastolic BP ( $\mathbf{m m H g}$ ) | 82.8 (76.6-89.0) | 74.1 (69.0-79.3) | 75.4 (70.9-79.9) | 74.0 (68.9-79.1) | 78.6 (73.8-83.3) | 79.4 (75.7-83.1) |
| $\text { Hypertension }{ }^{4} \text { (\%) }$ | 30.8 (5.7-55.9) | 13.3 (0.0-30.5) | 12.0 (0.0-24.7) | 6.3 (0.0-18.1) | $21.4(0.0-42.9)$ | 26.9 (9.9-44.0) |
| Stage 2 hypertension ${ }^{5}$ (\%) | 7.7 (0.0-22.2) | $0.0(0.0-0.0)$ | $4.0(0.0-11.7)$ | $6.3(0.0-18.1)$ | $0.0(0.0-0.0)$ | $0.0(0.0-0.0)$ |

Abbreviations: BMI = Body Mass Index; ART = antiretroviral therapy; BP = blood pressure
$195 \%$ confidence intervals are provided in brackets after the point estimate.
${ }^{2}$ defined as a $\mathrm{BMI} \geq 25 \mathrm{~kg} / \mathrm{m}^{2}$.
${ }^{3}$ Obesity was defined as a $\mathrm{BMI} \geq 30 \mathrm{~kg} / \mathrm{m}^{2}$.
${ }^{4}$ Hypertension was defined as systolic $\mathrm{BP} \geq 140 \mathrm{mmHg}$ or diastolic $\mathrm{BP} \geq 90 \mathrm{mmHg}$.

