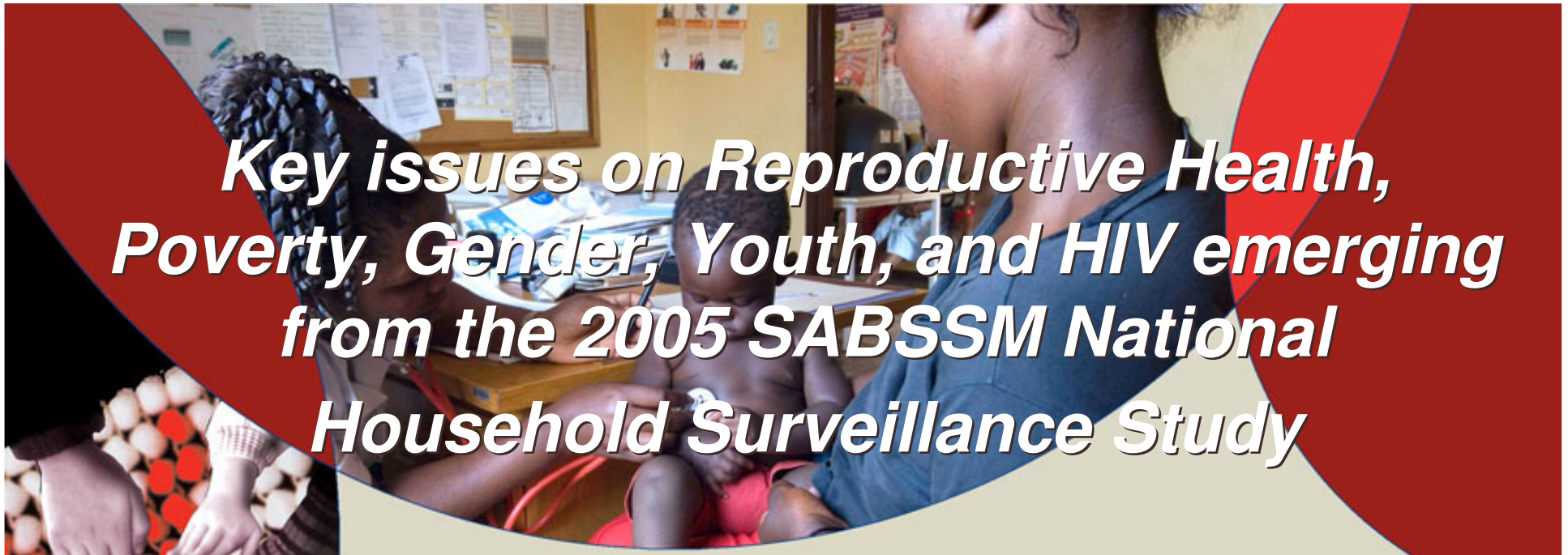

Key issues on Reproductive Health, Poverty, Gender, Youth, and HIV emerging from the 2005 SABSSM National Household Surveillance Study

Presenter: Prof LC Simbayi, D.Phil.
Deputy Executive Director, SAHA, HSRC

Presentation to the Population Council's Strategic Planning Meeting to be held at the Premier Cape Hotel Cape Manor, Sea Point in Cape Town on 29 November 2007

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Structure of the presentation

- Background
- Aims of the presentation
- Some key findings on HIV prevalence
- Some key findings on HIV incidence
- Some key findings on the associations between HIV prevalence, HIV incidence and some behavioural and social factors
- Conclusions

Background

- SABSSM stands for South African Behaviour, Sero-Status and Mass Media Impact Survey

- SABSSM surveys are conducted every 3 years by an HSRC-led consortium:
  - The first ever one was done in 2002
  - The second one in 2005
  - The next two are planned for next year (2008) and 2011.

Social Aspect of HIV/AIDS and Health

Background (contd)

- In South Africa, there are two main complementary methods that are now being used for national HIV surveillance:
  - The antenatal sentinel clinic surveys based on pregnant women done by the DoH since 1991.
  - Household [or population]-based surveys on the general population which are done every 3 years by an HSRC-led consortium since 2002.

Aims of the presentation

- To share some of the key findings which emerged from the 2005 SABSSM National Household Surveillance Study on Reproductive Health, on Poverty, Gender, Youth, and HIV issues

Social Aspect of HIV/AIDS and Health

Some key findings on HIV prevalence

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Table 3.8: Overall HIV prevalence by sex, South Africa 2005

Sex	n	HIV+ %	95% CI
Male	6 342	8.2	7.1–9.6
Female	9 509	13.3	12.1–14.6
Total	15 851	10.8	9.9–11.6

Table 3.9: HIV prevalence by age group, South Africa 2005

Age	n	HIV+ %	95% CI
Children (2–14)	3 815	3.3	2.3–4.8
Youth (15–24)	4 120	10.3	8.7–12.0
Adults (= >25yrs)	7 912	15.6	14.2–17.1
Adults (= >50 yrs)	2 787	5.7	4.4–7.4
Age group 15–49	9 245	16.2	14.9–17.7

Figure 3.1: HIV prevalence by sex and age group, South Africa 2005

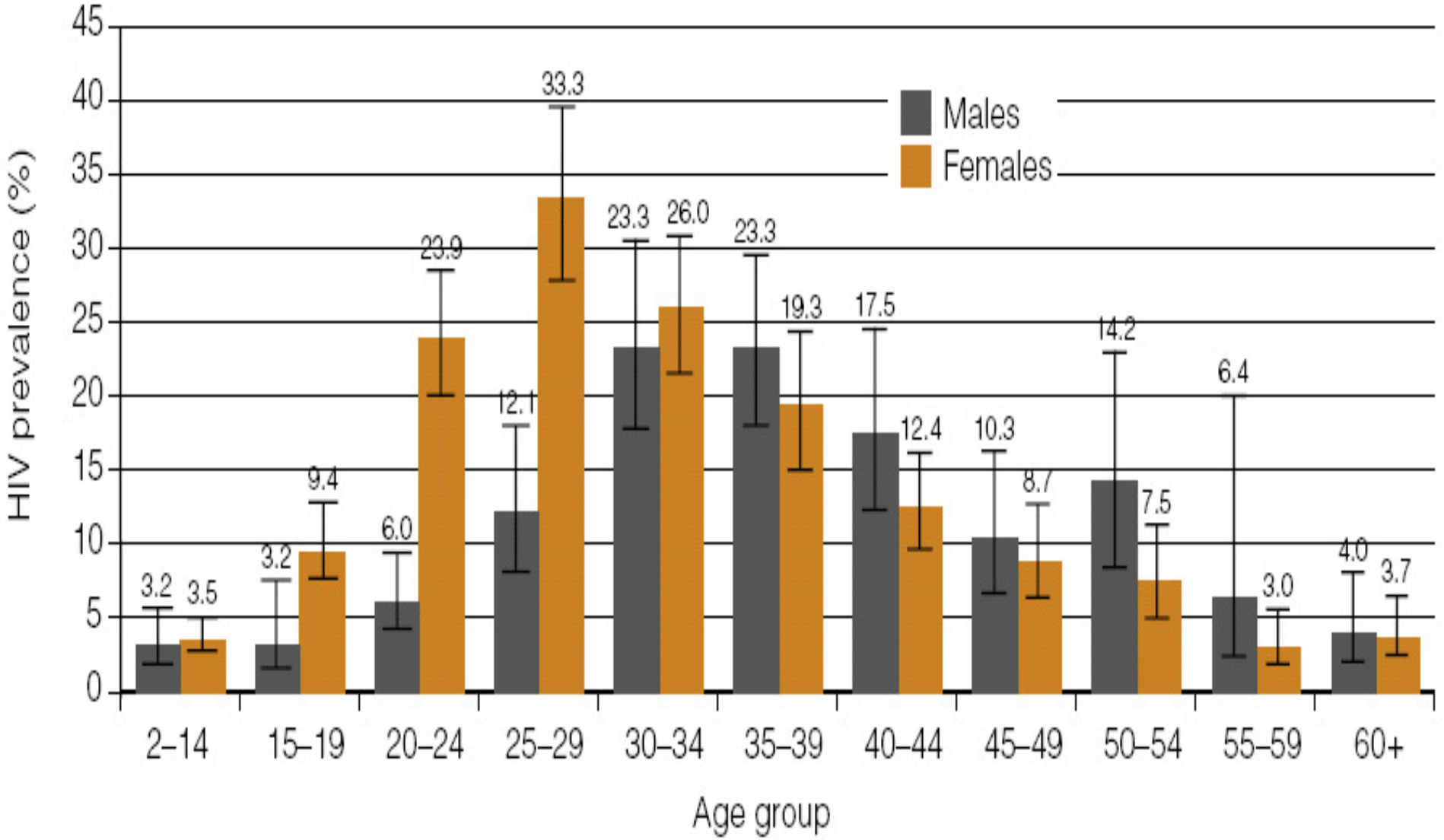


Figure 3.5: HIV prevalence among youth aged 15–24 years by sex, South Africa 2005

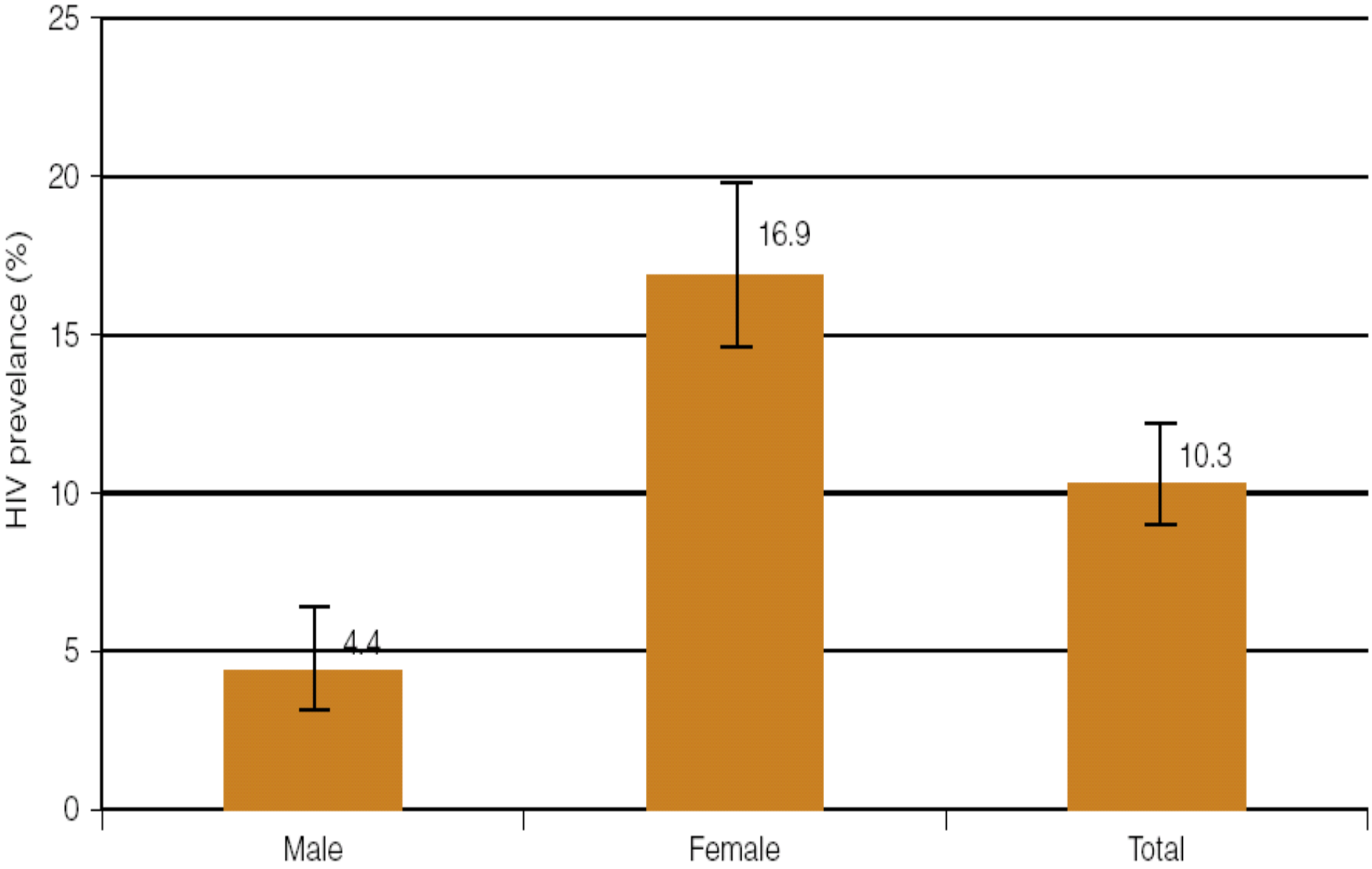


Table 3.11: HIV prevalence among youth aged 15–24 years by locality type, South Africa 2005

Locality type	n	HIV+ %	95% CI
Urban formal	2 147	6.9	5.3–8.9
Urban informal	490	17.8	13.7–22.9
Rural informal	1 088	11.1	8.5–14.3
Rural formal	395	16.7	9.3–28.1

Table 3.12: HIV prevalence among youth aged 15–24 years by race, South Africa 2005

Race	n	HIV+ %	95% CI
African	2 707	12.3	10.4–14.4
White	219	0.3	0.1–1.2
Coloured	867	1.7	0.9–2.9
Indian	321	0.8	0.2–3.0

Figure 3.7: HIV prevalence among adults aged 15–49 years by sex, South Africa 2005

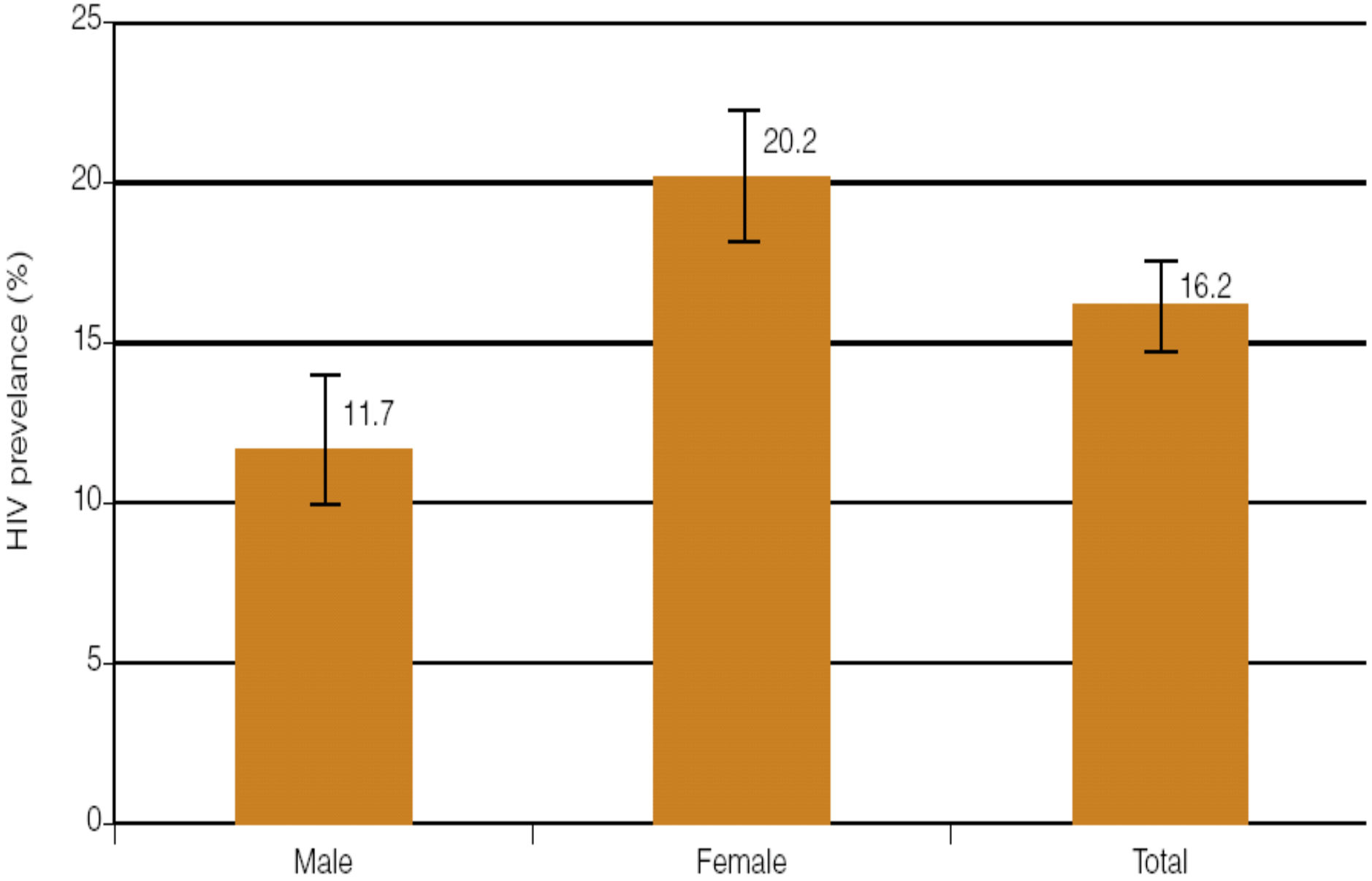


Figure 3.9: HIV prevalence among adults aged 15–49 years by locality type, South Africa 2005

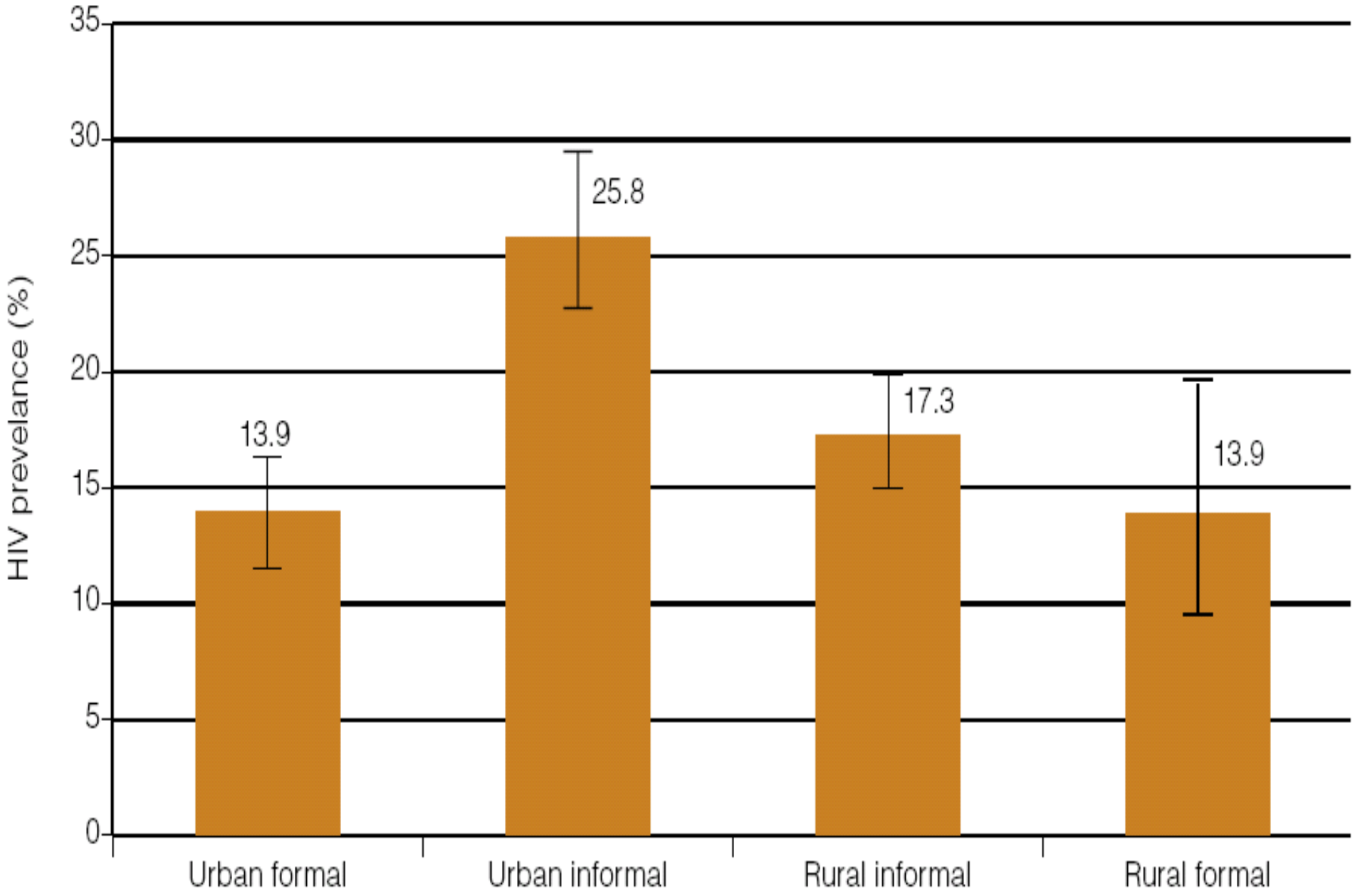
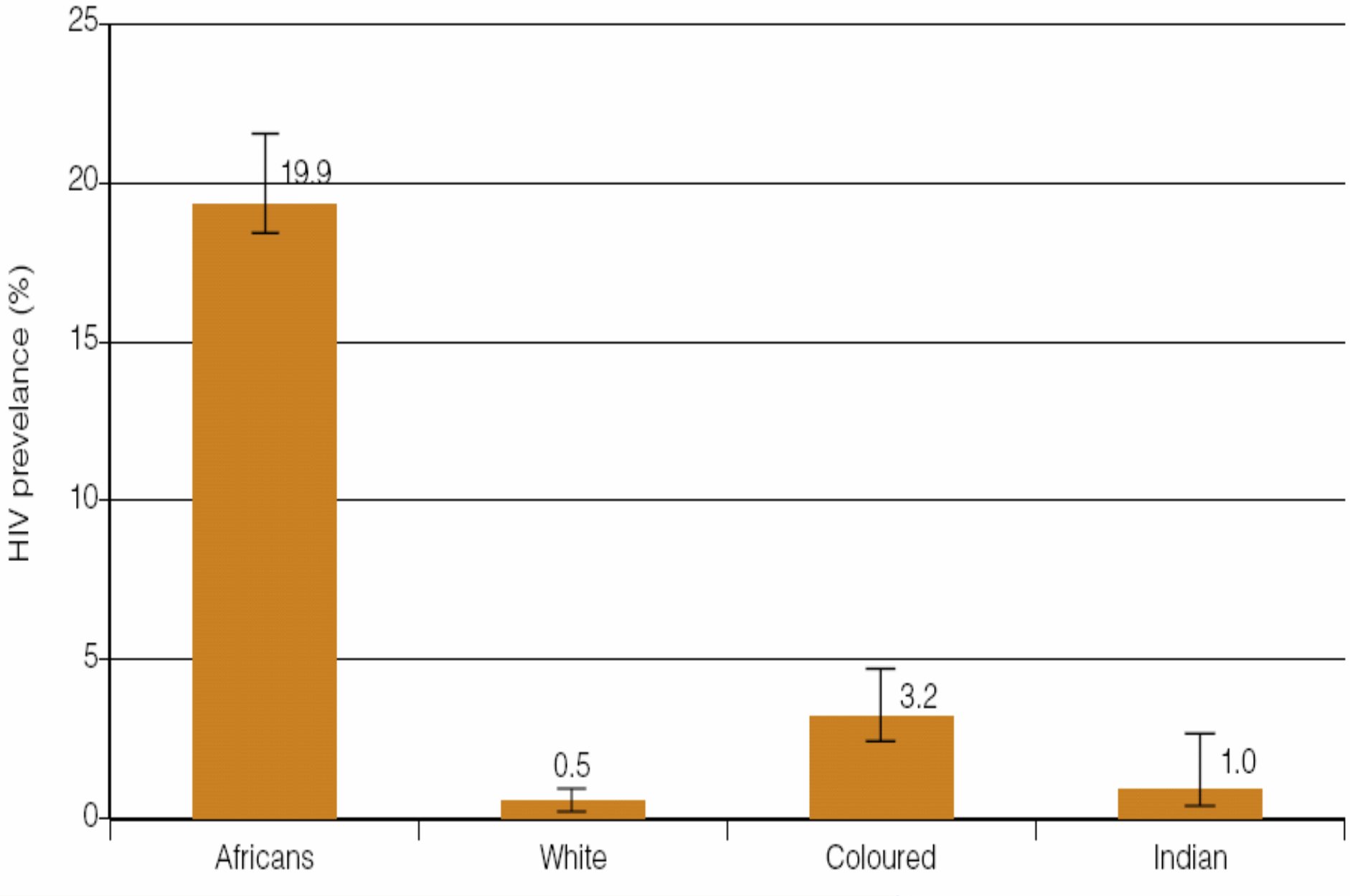


Figure 3.10: HIV prevalence among adults aged 15–49 years by race, South Africa 2005



HIV prevalence in Children aged 2-14 years

Age (Years)	n	HIV prevalence	95% CI
2-4	729	5.1	2.8-9.1
5-9	1341	4.4	3.0-6.6
10-14	1745	1.7	1.0-2.8

HIV prevalence among adults aged 50 years and older, South Africa 2005

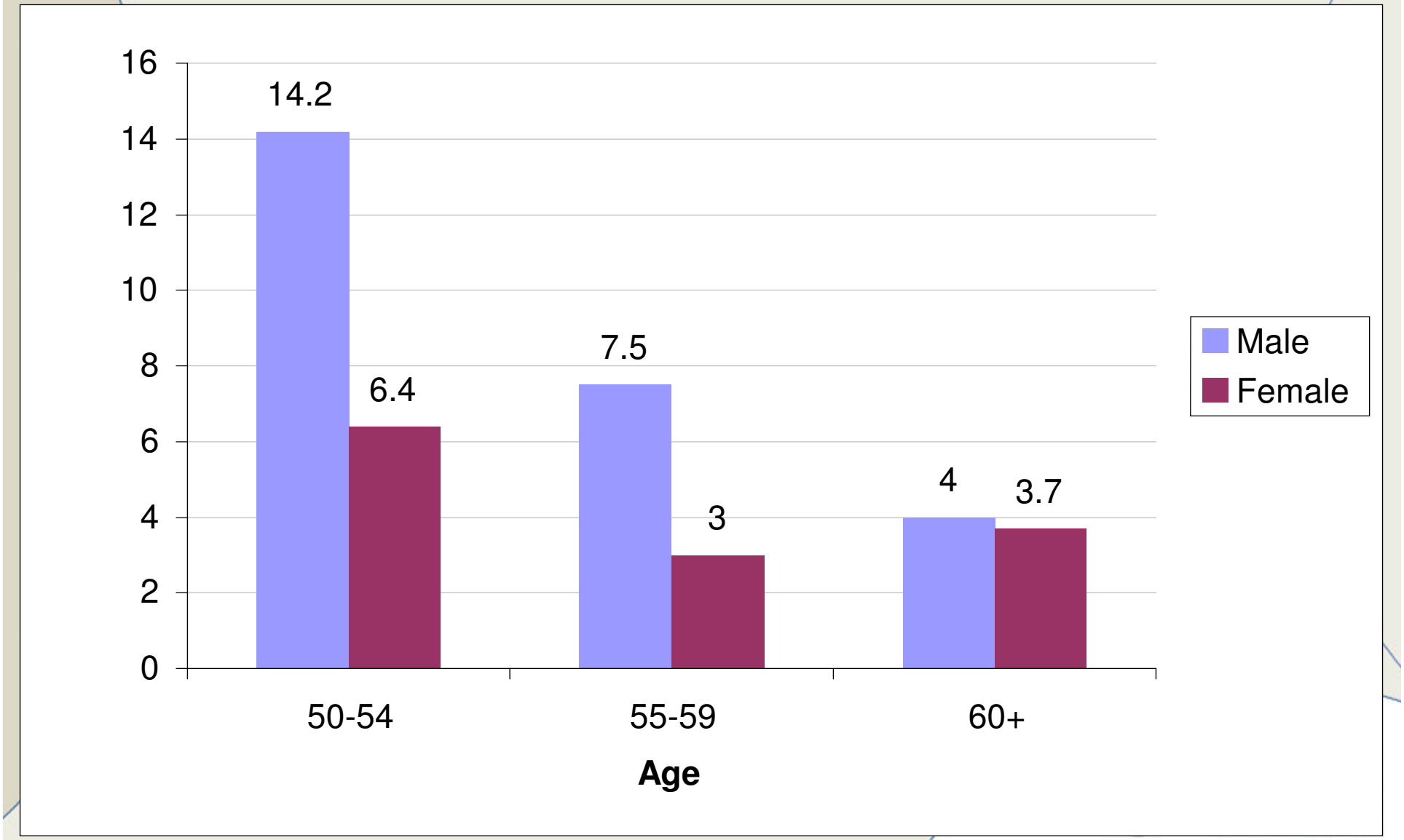
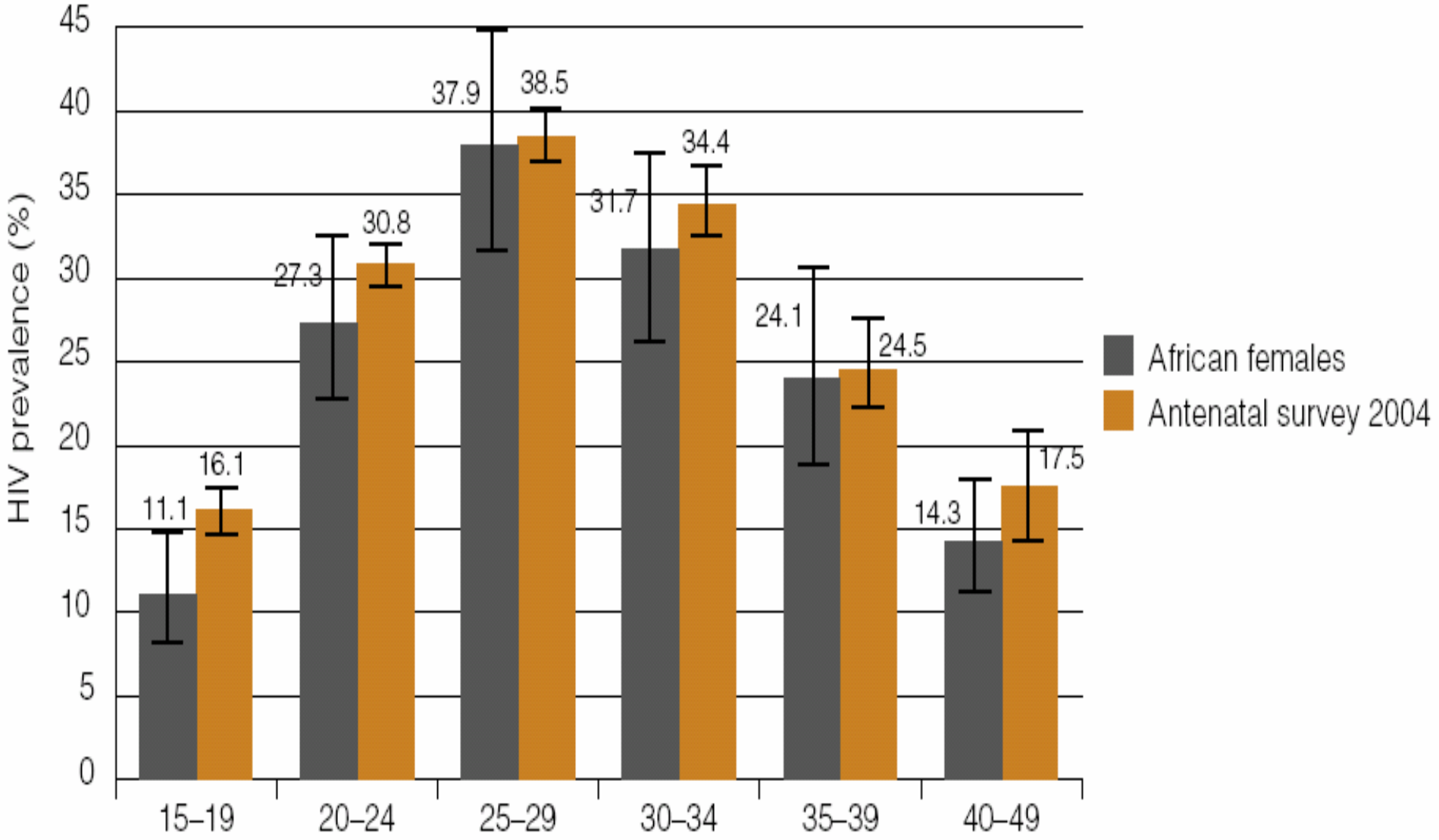


Figure 3.11: HIV prevalence among African females aged 15–49 years surveyed in the 2005 household survey compared to females surveyed in the 2004 antenatal survey



Social Aspect of HIV/AIDS and Health

Some key findings on HIV Incidence

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Estimation of HIV incidence

- New tests allow for identification of recent infection using blood samples (including from DBS specimens) – BED capture EIA
- Developed by USA's Centers for Disease Control and Prevention (CDC)
- Technology is still new and needs further validation
- Almost 16,000 specimens in survey allowed for identification of recent infection (i.e. acquired in the previous 180 days)
- 181 samples with recent infection identified

HIV incidence estimates : 2005

Age group	Number with recent HIV infection (past 6 months)	Estimate for annual HIV incidence in this group (weighted)
2 years and older	181	2.7%
Children (2-14)	11	0.9%
Youth (15-24)	70	3.3%
Males (15-24)	9	0.8%
Females (15-24)	61	6.5%
Adults (≥25)	100	3.6%
Male (≥25)	34	2.4%
Female (≥25)	130	6.3%

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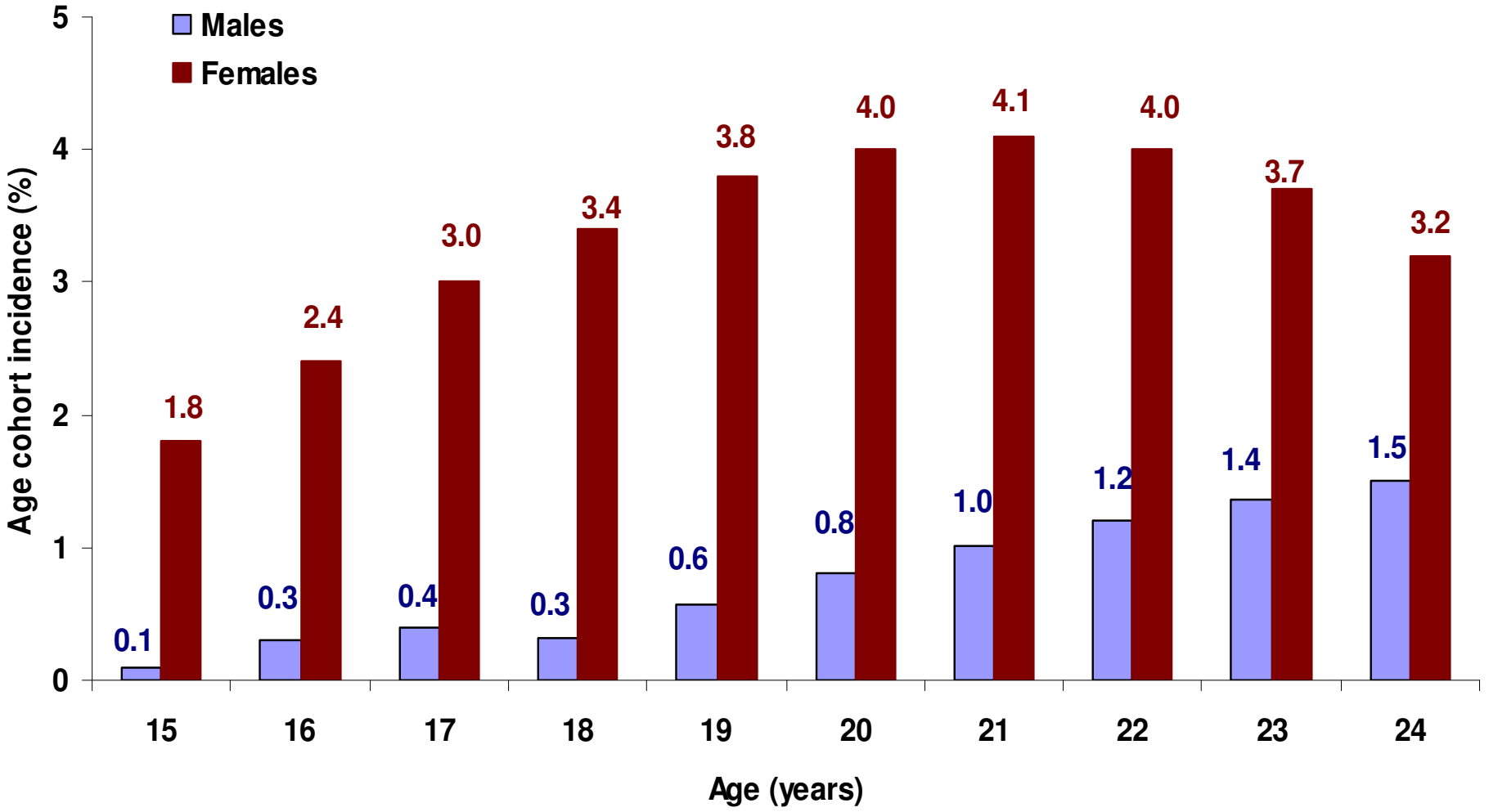
Comparison of adjusted HIV incidence estimates, South Africa 2005

	BED ODn=0.8	BED ODn=0.4	BED Hargrove	BED McDougal	ASSA 2003
Overall (≥2 years)	2.7	1.3	1.5	1.4	1.3
Male	1.5	0.7	0.5	0.5	1.2
Female	3.9	1.9	2.5	2.4	1.5
Youth (15-24 years)	3.3	1.9	2.3	2.2	2.9
Male	0.8	0.3	0.3	0.3	1.8
Female	6.5	3.8	4.9	4.6	4.1
Adult (15-49 years)	4.4	1.9	2.6	2.4	2.2
Male	2.4	1.1	1.1	1.0	1.9
Female	6.3	2.8	4.0	3.8	2.5

HIV incidence estimates by sex from single year age cohort prevalence in 15-24 year olds



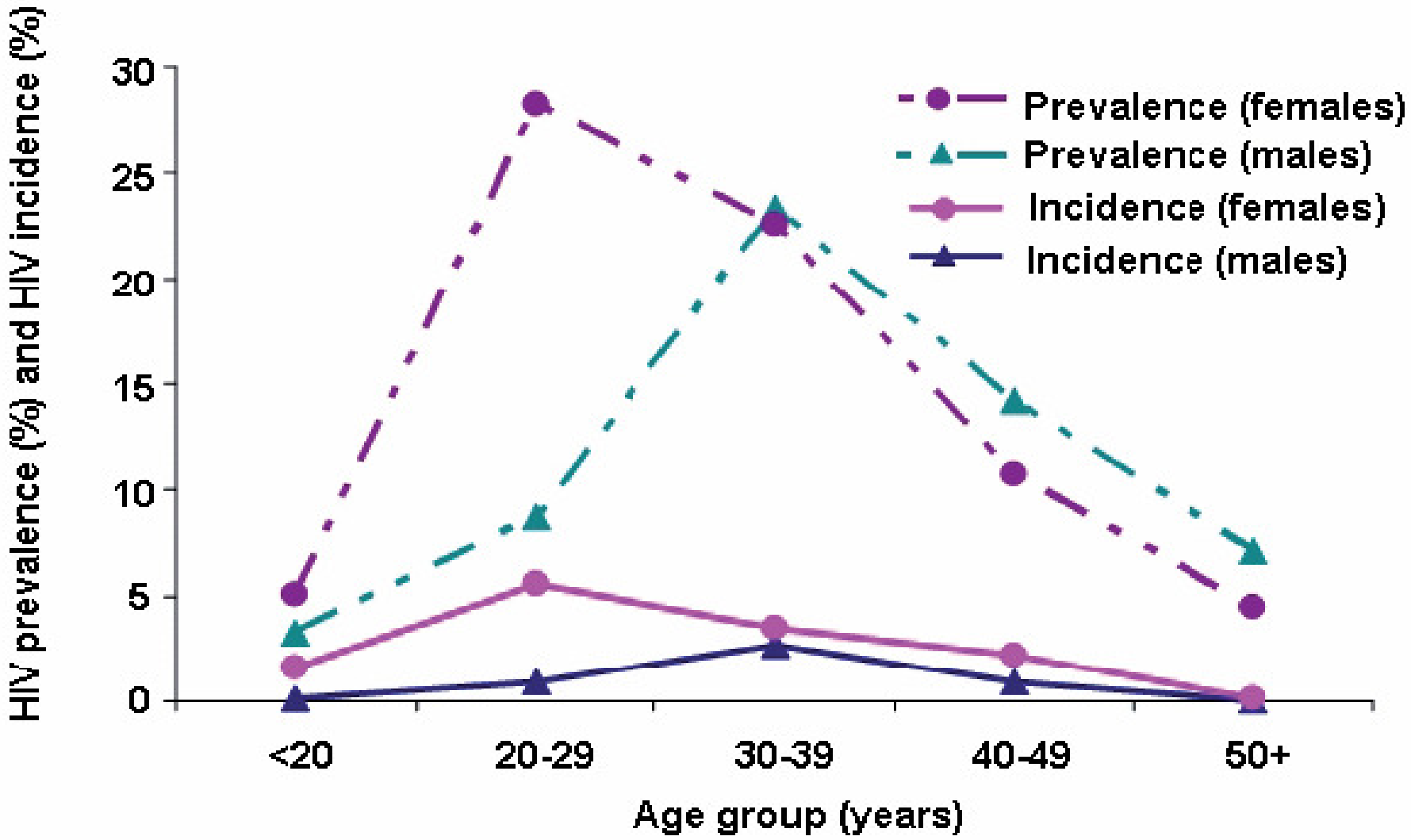
HIV incidence and number of new infections by age group, South Africa, 2005 (*Source: Rehle et al., 2007).*

Age group (yrs)	Weighted sample (N)	HIV incidence (%per year) (95% CI)	Estimated number of new infections per year (N)
> 2	44 513 000	1.4 (1.0 - 1.8)	571 000
2 - 14	13 253 000	0.5 (0.0 - 1.2)	69 000
15 - 24	9 616 000	2.2 (1.3 - 3.1)	192 000
> 25	21 645 000	1.7 (1.1 - 2.3)	310 000
15 - 49	24 572 000	2.4 (2.2 - 2.7)	500 000

HIV incidence and number of new infections by race, province and locality type (age ≥ 2 years), South Africa, 2005 (*Source: Rehle et al., 2007*).

Variable	Weighted sample (*N*)	HIV incidence (% per year) (95% CI)	Estimated number of new infections per year (*N*)
Race			
Black	35 113 000	1.8 (1.3 - 2.3)	557 000
Other	9 337 000	0.2 (0.0 - 0.3)	14 000
Province			
Mpumalanga	3 083 000	2.4 (0.9 - 3.8)	63 000
Free State	2 827 000	1.9 (0.4 - 3.4)	47 000
Gauteng	8 512 000	1.9 (0.8 - 3.0)	144 000
KwaZulu-Natal	9 213 000	1.7 (0.7 - 2.7)	134 000
Limpopo	5 207 000	1.6 (0.3 - 2.8)	76 000
North West	3 642 000	1.0 (0.2 - 1.8)	33 000
Western Cape	4 382 000	0.8 (0.2 - 1.5)	33 000
Eastern Cape	6 777 000	0.7 (0.1 - 1.2)	40 000
Northern Cape	871 000	0.2 (0.0 - 0.4)	1 000
Locality type			
Urban informal	3 878 000	5.1 (3.2 - 7.0)	166 000
Rural formal	3 577 000	1.6 (0.7 - 2.5)	52 000
Rural informal	16 495 000	1.4 (0.1 - 2.8)	211 000
Urban formal	20 563 000	0.8 (0.3 - 1.2)	142 000

HIV incidence and HIV prevalence by age and sex, South Africa, 2005 (Source: Rehle et al., 2007).



Social Aspect of HIV/AIDS and Health

Some key findings on the associations between HIV prevalence, HIV incidence and some behavioural and social factors

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Multiple sexual partnerships

Social Aspect of HIV/AIDS and Health

- Having frequent sexual partner turnover, even if one is faithful to one's partner, increases HIV risk

- More than one partner in past year amongst those sexually active in past year:
  - 27% for males and 6% for females aged 15-24
  - 14.4% for males and 1.8% for females aged 25-49
  - 9.8% for males and 0.3% for females aged ≥50

- Overall rates were higher for informal settlements
  - 20.0% for males and 3.5% for females

- HIV prevalence for those with more than 1 partner in past year was higher
  - 20.6% for >1 partner, 16.3% for 1 partner

Age mixing

- Having a partner 5 years or older poses high HIV infection risk for youth, as it exposes them to a higher prevalence age group
- Only 2.0% of sexually active males aged 15-19 had female partners 5 or more years older
- 18.5% of sexually active females aged 15-19 had male partners 5 or more years older
- HIV prevalence of 15-19 year olds
  - 29.5% for females with partner ≥5 years older vs.17.2% for females with partner within 5 years of own age
  - 19.0% for males with partner ≥5 years older vs. 3.0% for males with partner within 5 years of own age

Contraceptive Use

- More than half (57%) of sexually active females 15-24 have never used contraceptives
- HIV prevalence amongst 25-49 year old females was high amongst non-contraceptive users and injectable contraceptive users

Method used by 25-49 year old females	n	HIV+ %
Never used any contraceptive	934	22.6%
Not currently using any method	865	21.5%
Contraceptive pill	303	16.0%
Contraceptive injection	564	21.1%
Female sterilisation	287	13.3%

HIV prevalence and incidence by self-reported socio-behavioural factors (age group 15 - 49 years) (*Source: Rehle et al.. 2007*).

Variable	Survey sample (*N*)	HIV prevalence (%) (95% CI)	HIV incidence (% per year) (95% CI)
Marital status			
Single	5 306	16.6 (14.9 - 18.5)	3.0 (1.9 - 4.1)
Married	3 240	14.3 (12.3 - 16.6)	1.3 (0.5 - 2.1)
Widowed	227	34.0 (25.5 - 43.7)	5.8 (0.0 - 13.8)
Divorced	318	15.1 (9.5 - 23.0)	0.5 (0.0 - 1.6)
Sexual history			
Never had sex	1 747	4.3 (2.7 - 7.0)	1.5 (0.0 - 3.0)
No sex in the past 12 months	1 358	18.0 (14.9 - 21.5)	2.4 (0.8 - 4.1)
Sexually active in the past 12 months	5 803	18.7 (17.0 - 20.6)	2.4 (1.5 - 3.3)
Current pregnancy	215	37.0 (24.9 - 51.0)	5.2 (0.0 - 12.9)
Number of sexual partners			
One sex partner in the past 12 months	5 233	18.4 (16.7 - 20.4)	2.1 (1.3 - 3.0)
More than one sex partner in the past 12 months	468	21.3 (15.9 - 28.0)	3.1 (0.0 - 6.4)
Condom use at last sex			
15 - 24 years			
Yes	1 011	14.3 [(11.0 - 18.4)	2.9 (0.5 - 5.2)
No	392	20.8 (15.3 - 27.8)	6.1 (0.0 - 12.9)
25 - 49 years			
Yes	1 049	24.9 (21.1 - 29.1)	2.2 (0.4 - 4.0)
No	1 068	16.0 (12.3 - 20.6)	1.9 (0.0 - 3.7)

Educational attainment and HIV prevalence

Social Aspect of HIV/AIDS and Health

Educational attainment	n	HIV pos %	95% CI
No school	1163	10.90%	8.6 - 13.8
Primary	2572	16.20%	13.9 - 18.7
Secondary	4707	15.20%	13.4 - 17.1
Matriculation	2409	14.40%	12.0 - 17.2
Tertiary	1024	5.50%	3.8 - 8.7

Employment Status and HIV prevalence

Social Aspect of HIV/AIDS and Health

Employment Status	n	HIV+	95% CI
Housewife, homemaker, not looking for work	1073	9.20%	7.0 - 12.0
Housewife, homemaker, looking for work	634	17.90%	13.9 - 22.8
Unemployed, looking for work	2197	24.50%	21.8 - 27.5
Unemployed, not looking for work	560	21.40%	15.6 - 28.7
Work in informal sector, not looking for permanent work	68	19.30%	7.9 - 39.9
Old age pensioner	1004	3.00%	1.7 - 5.2
sick/disabled and unable to work	395	17.50%	12.1 - 24.5
Student/pupil/learner	2093	6.40%	4.7 - 8.8
Self-employed- full time	393	8.40%	4.9 - 14.0
Self-employed - part time	257	14.20%	8.3 - 23.0
Employed part time	675	16.50%	11.6 - 22.9
Employed full time	2295	12.40%	10.4 - 14.7
Other	200	12.30%	6.6 - 21.8
Total	11844		

Source of household income and HIV prevalence

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Source of household income	n	HIV+	95% CI
Formal salary/earnings, taxed	3623	10.80%	9.3 - 12.7
Contributions from adult family or relatives	4028	16.20%	14.2 - 18.5
Contributions by younger family members/relatives	150	18.40%	9.7 - 32.2
Govt pensions/grants	1874	10.30%	8.2 - 12.8
Grants/donations by private welfare org	156	20.60%	13.3 - 30.6
Other	1291	16.00%	12.8 - 19.8
No income	521	16.20%	11.7 - 22.1
Total	11643		

Conclusions

- The predominance of HIV among females also found in 2002 was still evident in 2005 reflecting the feminisation of the epidemic seen in the Southern African region.
- This suggests the need for the following:
  - to promote the use female condoms
  - to develop interventions targeting men or women or both in order to reduce risks faced by women due to both cultural and economic gender inequalities in society
  - to both develop and promote new and female-friendly long-term prevention tools especially microbicides, particularly for women who lack the power to negotiate condom use or other preventive measures.

Conclusions (contd)

- There is a need for structural interventions to also address socio-economic inequalities that make women more vulnerable to HIV infection through the following activities:
  - improving the general economic well-being of women through education, employment opportunities and other income generating activities to reduce women's economic dependence on men.
  - discouraging young women to have sex with men 5 years older than them especially sugar daddies.
  - discouraging older men especially sugar daddies to have sex with women 5 years younger than them.

Conclusions (contd)

Social Aspect of HIV/AIDS and Health

- There is a need to develop structural-level interventions that target people of all ages living in urban informal areas (informal settlements) and rural informal (tribal) areas through strengthening bonds of "civil society" (social capital or social cohesion) and positively influencing change in some of socio-cultural norms and values that increase the risks of HIV infection respectively.
- Young people should be encouraged to delay sexual debut
- Sexually active youth be encouraged to avoid high partner turnover and concurrent multiple sexual partnerships.
- They should also avoid older partners.

Conclusions (contd)

- Elderly South Africans should be warned that they too are at risk of HIV and not only the young as has long been believed. They too need to practice safe sex.
  - In particular, they must avoid having sex with women who are very young compared to themselves if they wish to avoid becoming infected with HIV and in turn passing on the infections to their innocent wives.
- Given the estimated large number of PLWHA in South Africa, there is a strong need to promote HIV testing through the "Know your status" campaign especially for young people and mothers.

Conclusions (contd)

Social Aspect of HIV/AIDS and Health

- The main advantage of young people knowing their status is because those who are negative can be motivated to prevent the further spread of new HIV infections through condom use.
- Those people who are HIV positive and know of their status should be encouraged to also practice safe sex to prevent infecting their partners and/or getting super-infections. This is known as positive prevention.
- As for mothers they can both access ART and prevent mother-to-child transmission by participating in the PMTCT programme. This is especially critical for females living with HIV/AIDS as they face double stigmatisation compared to their male counterparts.

Conclusions (contd)

- In order to facilitate behaviour change, there is a need for structural interventions in both health settings and the broad community to begin to make the disease more normal like other chronic diseases and removing the negative impact of stigma and discrimination surrounding the disease.

- One possible way to do this would be through routine or provider-initiated HIV testing of everyone whenever they visit health institutions.

- Another is through promoting the use of ARV treatment through community mobilisation by highlighting the benefits to everyone in the community especially insofar as ART prolongs the lives of females living with HIV/AIDS and also prevents vertical transmission to their children through PMTCT programmes.

Acknowledgements

Funding:

SABSSM2 was funded by:

- **The Nelson Mandela Foundation**
- **The Swiss Agency for Development and Cooperation**
- **USA's Centers for Disease Control and Prevention (CDC)**

Research consortium:

SABSSM2 was a collaborative research effort of:

- **Human Sciences Research Council (HSRC),**
- **Medical Research Council (MRC) &**
- **Centre for AIDS Development, Research and Evaluation (CADRE)**

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