ASPECTS OF HIV/AIDS AND HEALTH (SAHA) RESEARCH SCIENCES RESEARCH COUNCIL'S (HSRC) SOCIAL INTRODUCTION TO THE SOUTH AFRICAN HUMAN PROGRAMME

AND

THE SOUTH AFRICAN HIV PREVALENCE, INCIDENCE, BEHAVIOUR AND COMMUNICATION SURVEY 2005

Prof Leickness Chisamu Simbayi, D. Phil.

Research Director, Behavioural and Social Aspects of HIV/AIDS Unit Social Aspects of HIV/AIDS and Health

Po

Regional Coordinator of Social Aspects of HIV/AIDS Research Alliance (SAHARA) for Southern Africa Human Sciences Research Council Cape Town, South Africa

Presentation to the Australian Research Centre on Sex, LaTrobe University, Melbourne on 27 July 2007 Health and Society at

HSRC RESEARCH OUTPUTS

THE SOUTH AFRICAN HUMAN SCIENCES RESEARCH COUNCIL (HSRC)

- What we do: vision and mission
- The HSRC Council
- The structure of the HSRC
- Thumbnail stats: HSRC 2005

The PAITECS Performance Indicators

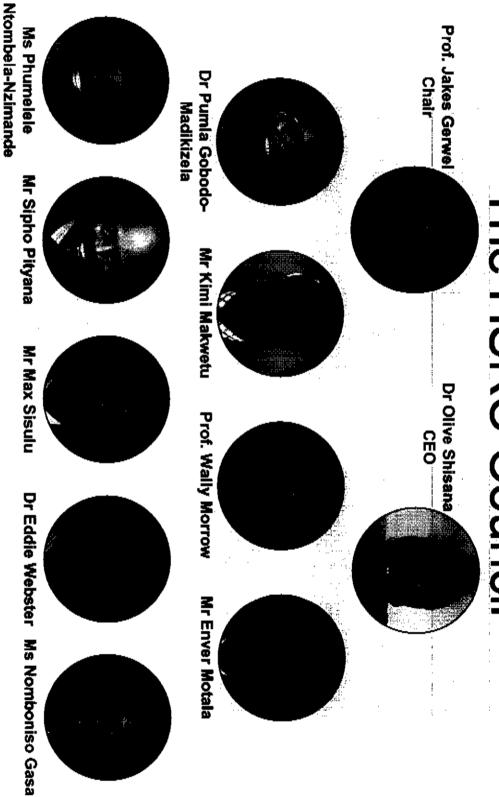
What we do: vision and mission

- The HSRC intends to become
- a human and social sciences research council serving as a knowledge hub
- where public policy and discourse on informed, and independently researched, analysed and Africa and the African continent are current and future challenges for South
- where research-based solutions to human and social problems are developed

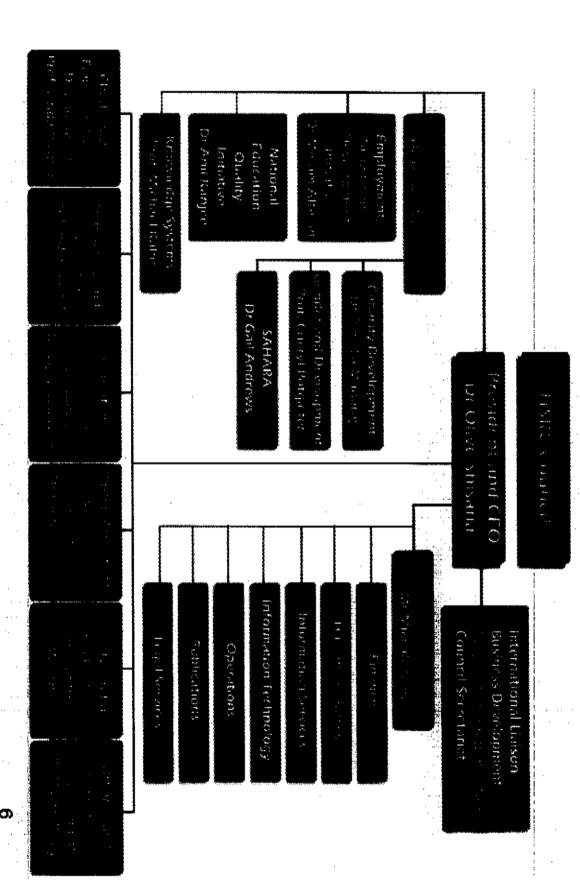
What we do: vision and mission

- The HSRC is
- a non-partisan organisation
- and human sciences, that generates scientific knowledge through its research and analytical work in the social
- to provide critical and independent information decisions debates so that they can make informed development, media analysis, advocacy or in to different role players, whether in policy

The HSRC Council



The structure of the HSRC

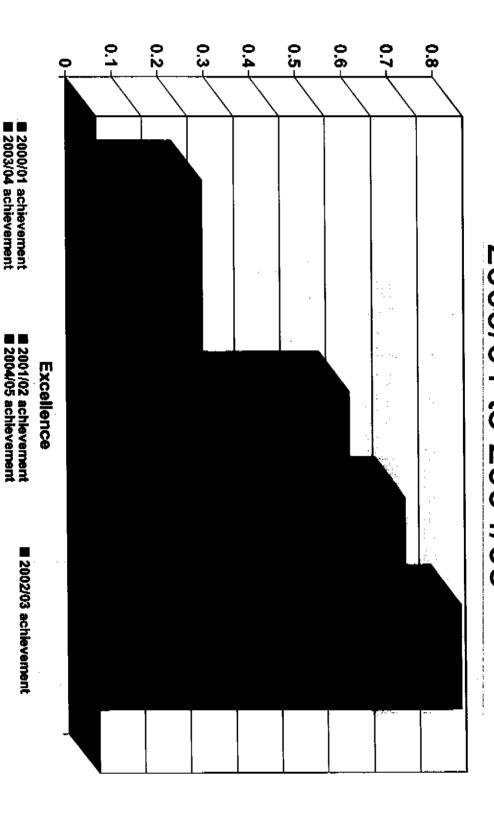


The PAITECS Performance Indicators

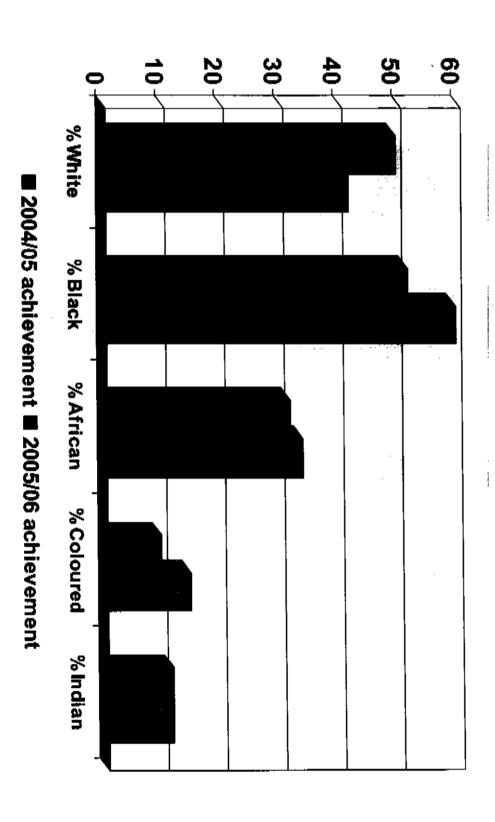
- Public purpose
- Africa focus
- Implementation networking
- Transformation: Equity and Representativeness
- Excellence
- Capacity building
- Sustainability: Contracts or Grants obtained

Excellence

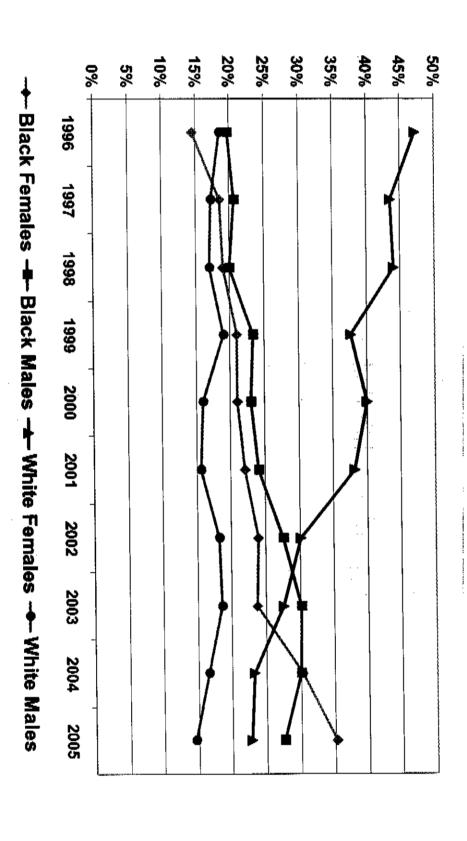
(Peer-reviewed articles per researcher) 2000/01 to 2004/05



Equity (researchers)



HSRC broad representivity trends, 1996 to 2005



Thumbnail stats: HSRC 2005

- Staffing (63% Black, 58% female)
- 129 researchers, mainly senior, three centres, 90% with Masters or PhD, spread across 0.79 refereed journal articles per senior researcher
- 25 interns, mostly doing Masters, some PhD
- 136 support services staff

Thumbnail stats: HSRC 2005

- Earnings from foundation grants (half R79m Parliamentary grant international) and tenders of R137m exceeded
- Half of projects conducted collaboratively
- Project collaborations in some 30 other African countries
- "Blue chip" list of users especially in national, provincial and local government and public entities
- Some 350 outputs, many disseminated tree on the web and widely publicised in the media; 144 journal articles

SOCIAL ASPECTS OF HIV/AIDS AND HEALTH (SAHA)

- What we do: vision and mission
- Focus areas
- Organogram of SAHA
- SAHA areas of expertise
- Staffing: Thumbnail statistics
- 2007/8 research areas
- Key Stakeholders

What we do: vision and mission

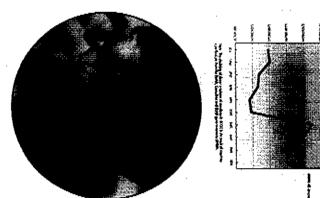
SAHA is a multi-disciplinary research programme

Strives to undertake scientifically sound and innovative research

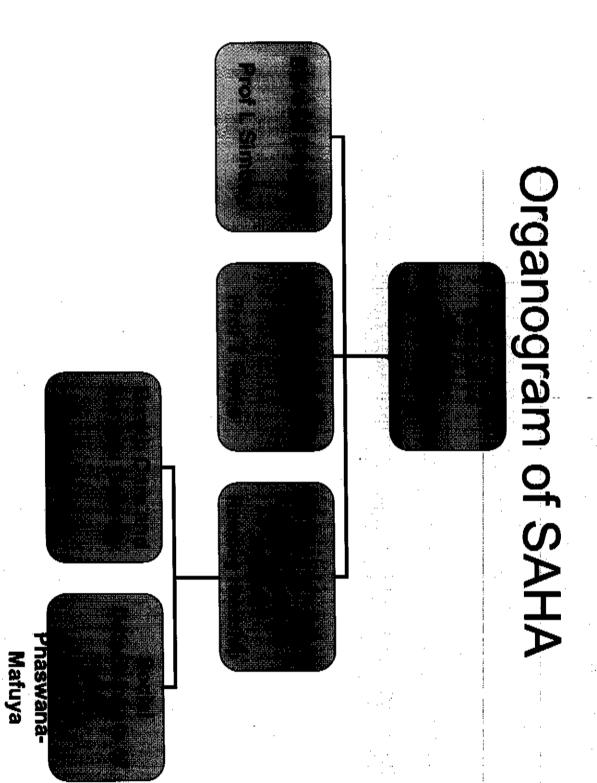
determinants of health Pioneered research on the social

Best known for HIV/AIDS work

Also focus on public health in general paradigm and going beyond bio-medical



Mission statement Social Aspects of HIV/AIDS and



Focus areas

- Behavioural and Social Aspects of HIV/AIDS
- Epidemiology, strategic and health policy research
- Health system research
- Evidence-based health care provision
- Demography
- Social determinants of health
- Capacity building through research training programme
- Other aspects e.g. consultancies, expert advice and support, etc

Behavioural and Social Aspects of HIV/AIDS

Understanding social and behavioural factors driving the HIV/AIDS epidemic in South Africa as well as in other African countries as part of the SAHARA initiative

THEMATIC THRUSTS

- Determinants of vulnerability to HIV infection, risky behaviour and factors influencing care
- Behavioural risk reduction interventions in different settings
- Orphans and vulnerable children (OVC)
- HIV/AIDS impact assessments
- Understanding stigma and discrimination Positive prevention

CURRENT PROJECTS

- 070
- HIV/AIDS Impact Assessment in the private security and legal services industry
- Capacity Building for Research on HIV Stigma
- HIV/AIDS-related stigma in Anglican Church
- Alcohol and HIV/AIDS
 Intervention in both clinic and
 community settings
- Gender and behavioural risk reduction intervention
- Positive prevention (x2)
- Preparation for 2008 national survey

HIV/AIDS survey methodology and epidemiological Epidemiology, Strategic Research and Health-Policy Infectious disease epidemiology with focus on modelling

THEMATIC THRUSTS

- Infectious Disease Epidemiology
- Monitoring and Evaluation
- National programme impact assessment.
- Epidemiological support and expertise (including biostatistics)
- Applied epidemiological and strategic research that address the needs and challenges facing South Africa and other African partner countries.

CURRENT PROJECTS

- Comparing Oral Fluid to Dried Blood Spots for HIV Testing among Children
- HIV/AIDS programme impact assessment
- Technical support in Eastern Cape on Prevention of mother to child transmission of HIV transmission
- Medical transmission (infection control practices) in health facility and traditional settings
- Preparation for 2008 national survey

Health systems development

sectors and examines social and demographic determinants health care provision in both formal and traditional health Research which facilitates or promotes evidence-based of health

THEMATIC THRUSTS

- Evaluation of national health policy interventions
- Access to health services
- Indigenous health practices
- Various aspects of health systems transformation
- Social determinants of health
- Nuptiality and mortality
- Population projections
- Models the demographic impact of HIV/AIDS

CURRENT PROJECTS

- Controlled study of an HIV / AIDS/ STI/ TB intervention with traditional healers
- Ageing study
- WHO Social exclusion
- EU PHC partnership evaluation
- Marriage and divorce series evaluation
- Development of simple tool for PHC professionals to identify people at risk of alcohol abuse and apply a brief intervention

SAHA areas of expertise

- surveys Large scale community based
- Applied, social and behavioural, research health services and health systems
- Operations research (descriptive and intervention)

SAHA areas of expertise

- Programme evaluation
- Qualitative research (Ethnographic, focusgroups)
- Surveillance and analysis of epidemiologic trends
- Extensive networks and networking
- Nationally (researchers & other stakeholders)
- Continental Africa (SAHARA)
- Internationally (bilateral)

Staffing: Thumbnail statistics

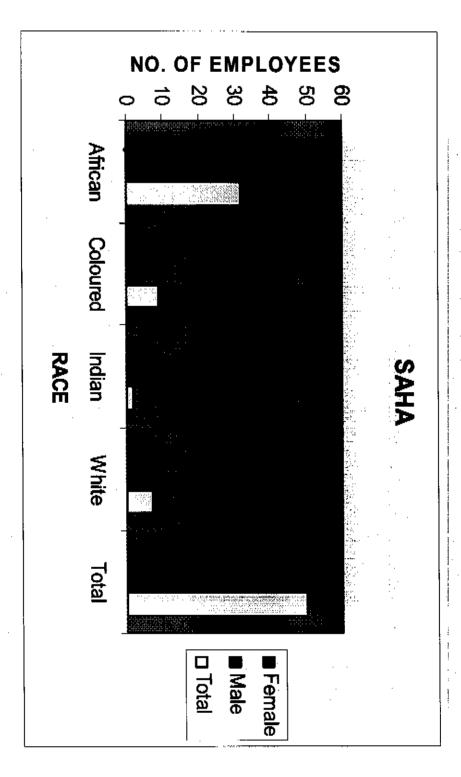
excluding fieldworkers (both permanent and contract), but At end of December 2006, 50 FTEs

86% Black (EEA)

56% women

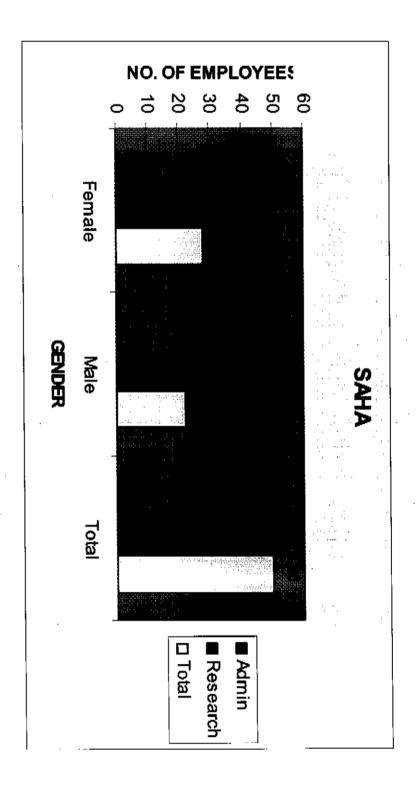
8% admin

SAHA Head count: December 06

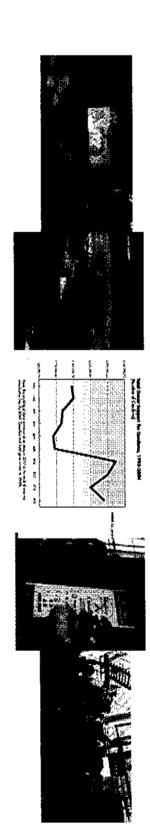


SAHA Research vs Administration

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2007/8 research areas

HIV and AIDS

- Behavioural and Social Aspects of HIV and AIDS (BSAHA)
- Epidemiology , strategic and health policy of HIV and AIDS
- Demography ('Cross Cutter')

Determinants of Health

- General Health, including possibly collaborative work on burden of disease
- Ageing: health of people over 50 years
- Mental Health
- Substance abuse
- Demography

Health Systems

- Traditional Health settings
- Tuberculosis (collaboration)
- Reproductive Health
- Health Service Delivery and Impact

'Cross-cutters'

- Demography
- Methodological expertise





Key Stakeholders

Government at national, provincial and local levels (Health, Education, Social Development)

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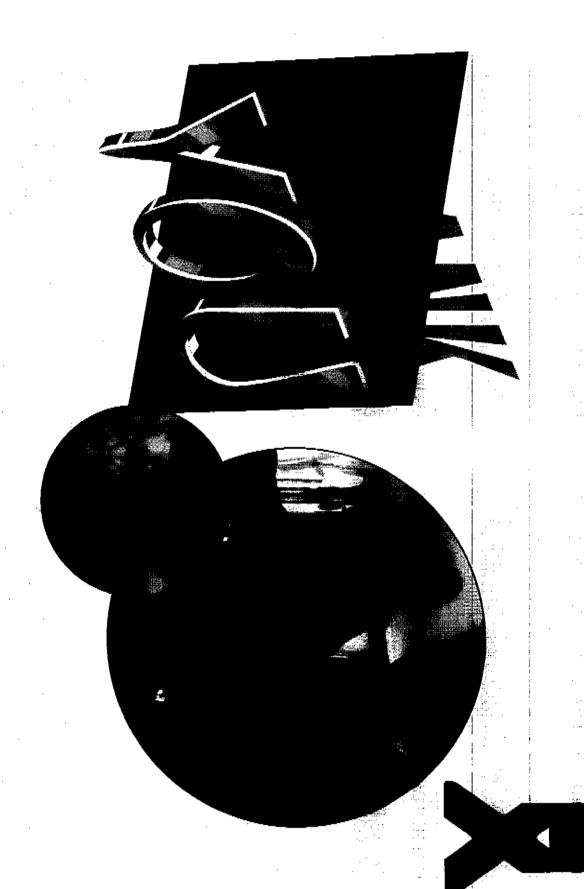
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CDC, Unive Ity of Connecticut, Penn/State University, g WK Kellogg Foundation, PEPFAR

science

NDRI, etc.

councils; private research companies



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Outline of presentation

- Background to the study
- Comparison of main HIV study types
- HSRC's Survey design
- Findings
- Conclusions
- Recommendations

Background to the study

- 2002 using the same methodology The present study is a follow-on from a study conducted in
- complement findings of annual antenatal surveys understand the broader aspects of HIV prevalence and Population-based studies are increasingly used to
- Kenya, Mali, Niger, Uganda, Zambia, Zimbabwe Population-based studies have been conducted in a number of countries including Botswana, Burundi, Guinea,
- This is the first national population-based repeat survey

Comparison of two main HIV study types

A. Population-based studies:

- residence geotype, age, race, etc. Provide direct measures of HIV for the overall population including by sex, province,
- attitudes to people living with HIV/AIDS, provision of care and support, etc knowledge, condom use uptake of VCT, also trends in relation to response including vulnerabilities that influence HIV infection, but Provide insights into underlying factors and

Comparison of main HIV study types (contd)

B. Antenatal studies

- Gather information from pregnant women only
- modelling Estimate prevalence in other groups through
- Provide trends of HIV prevalence over time

Limitations of each of the two methods:

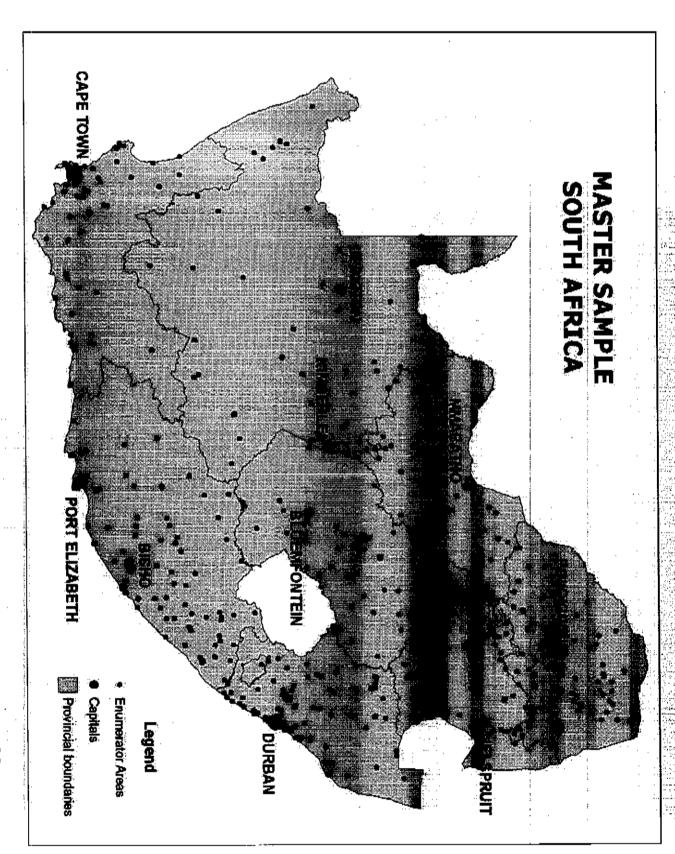
- Antenatal data limited by over-representation of poorer African females as baseline population
- Population-based limited by response rates

HSRC's Survey design

- African population aged two years and older A cross-sectional survey of the entire South living in households
- barracks, university residences, patients in hospitals and children under 2 years of age excluded prisoners, military and police Sample included people living in hostels, but
- Sampling is based on a master sample of the 2001 census households developed by the HSRC based on

HSRC's Survey design (contd)

- This sample is stratified by province and
- through finger-pricks In 2002 an oral specimen collection device was used, whereas in 2005 blood spots were taken
- Blood spots allowed for incidence testing
- Similar questionnaires used in both surveys



Response rates in 2005 vs. 2002 **HSRC Surveys**

Aspect of the survey	2005	2002
Household level response	84.1%	71.1%
Individuals interviewed	96.0%	73.7%
Sample of respondents tested	15,851	8,428
Interviewed and tested for HIV	65.4%	62.3%
African interviewed and tested	69.8%	64.8%
White interviewed and tested	45.3%	46.4%
Coloured interviewed and tested	72.3%	68.0%
Indian interviewed and tested	51.3%	56.1%

Integrity and generalisability

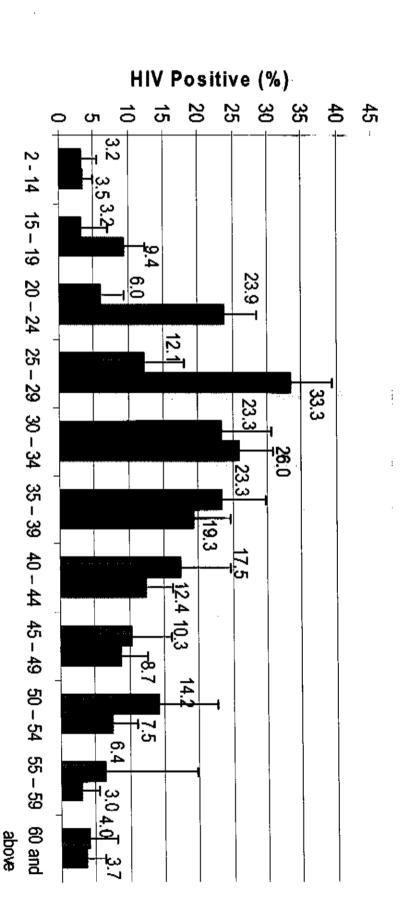
- 2005 findings have been compared with antenatal data pregnant women in this survey and antenatal survey and there is close correspondence between HIV rates of
- youth aged 15-24 conducted by the Reproductive Health Findings consistent with the population-based survey of Research Unit in 2003/4
- similar to those of other studies Distribution of HIV by key demographic variables are

Integrity and generalisability

- Behavioural and communication data contributes new knowledge in key areas consistent with previous findings, and
- Response rates of Whites and Indians understanding of HIV in these groups make it difficult to provide a definitive
- Data for Western Cape need more analysis

Main Findings

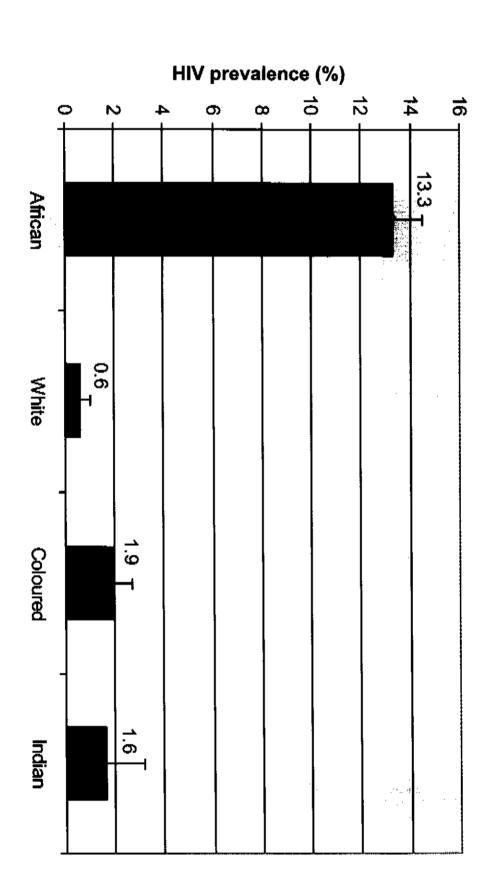
HIV prevalence by sex and age: 2005



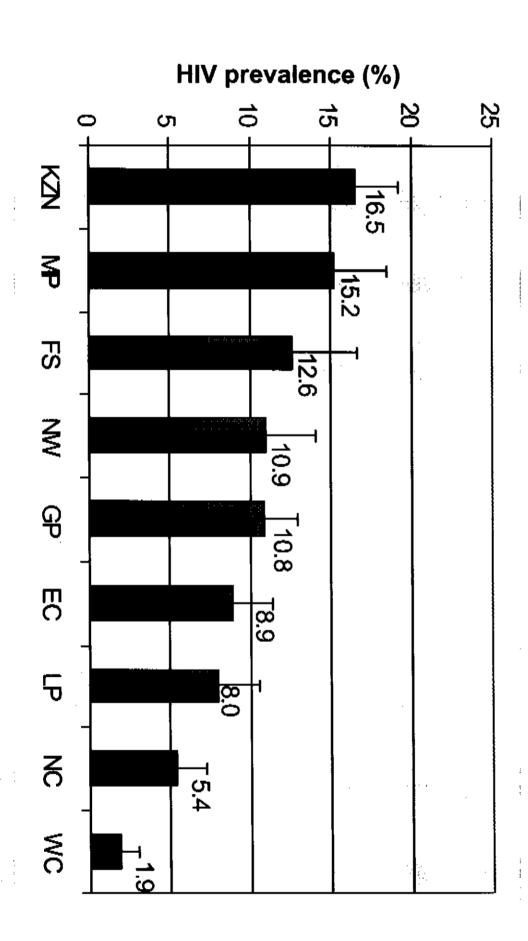
Age group (years)

■ Males ■ Females

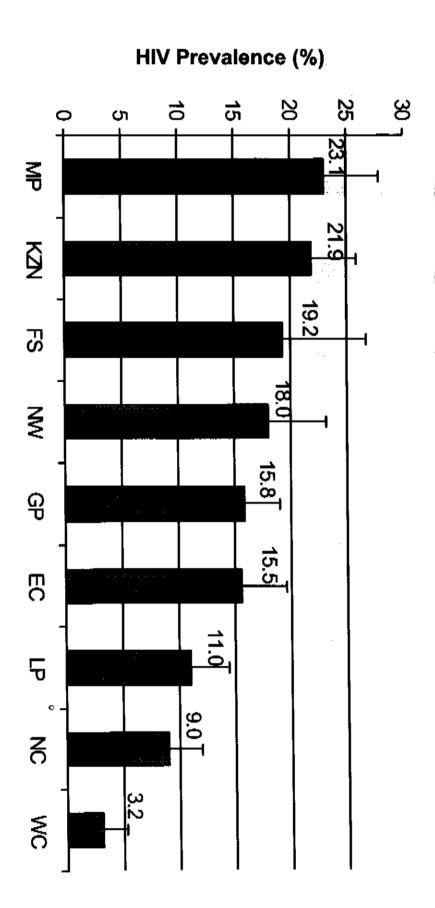
HIV prevalence by race, ≥ 2 years: 2005



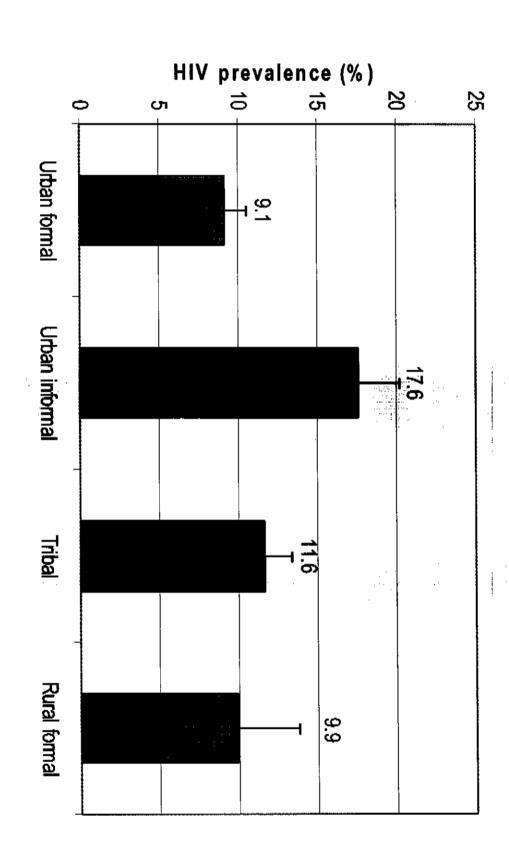
HIV prevalence by province, ≥ 2 years: 2005



HIV prevalence by province, 15-49 years: 2005



HIV prevalence by geotype, ≥ 2 years : 2005

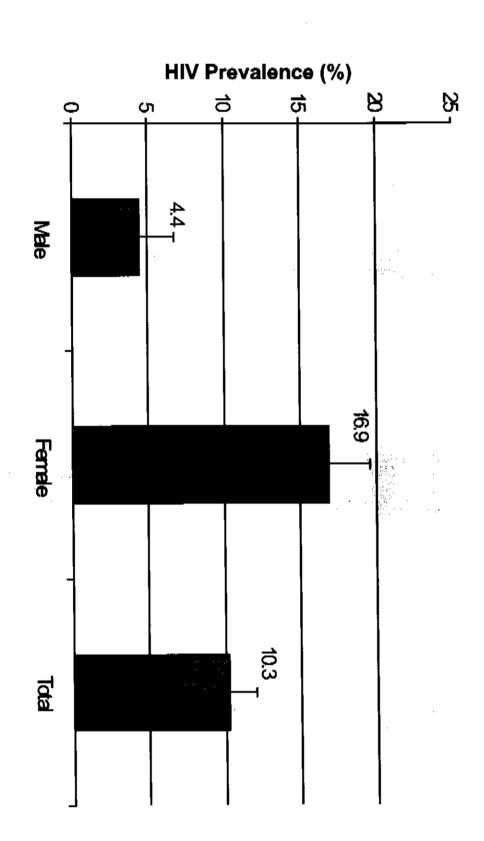


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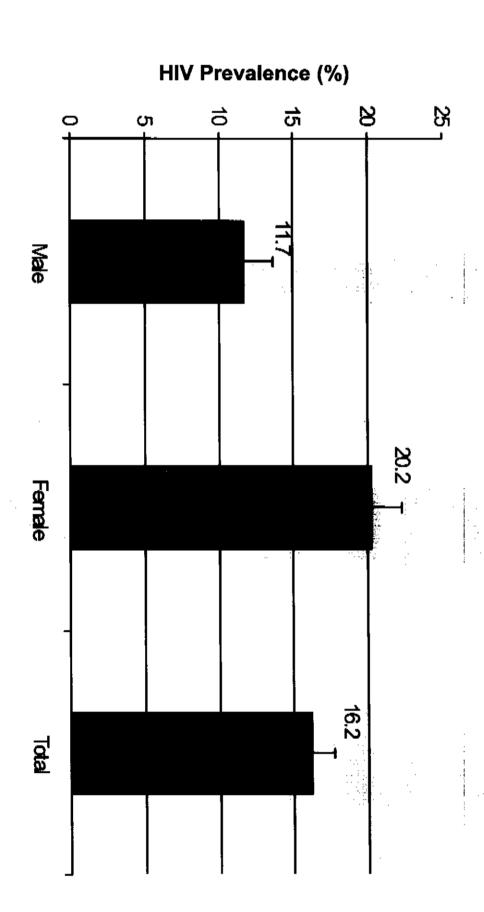
Child HIV prevalence: 2005

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

HIV prevalence - youth 15-24 years: 2005

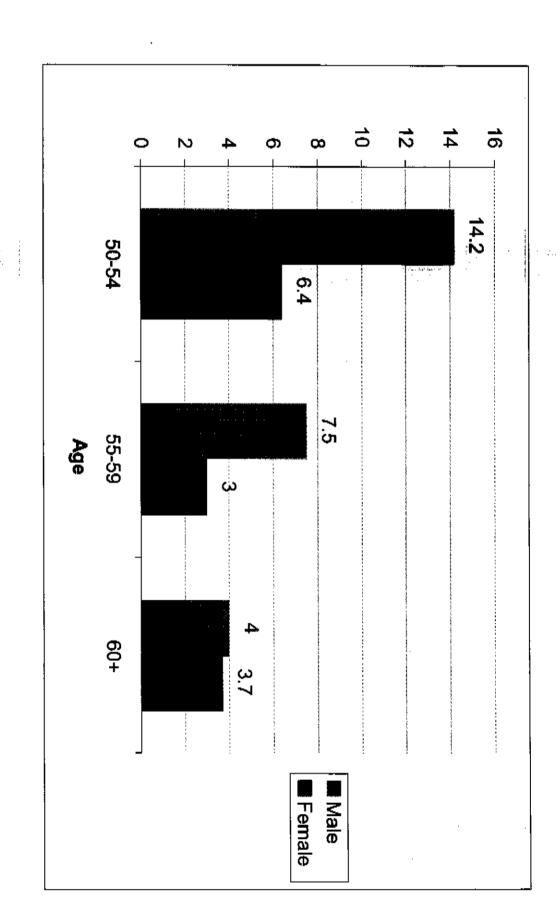


HIV prevalence - adults 15-49 years: 2005



HIV prevalence – adults ≥ 50 years: 2005

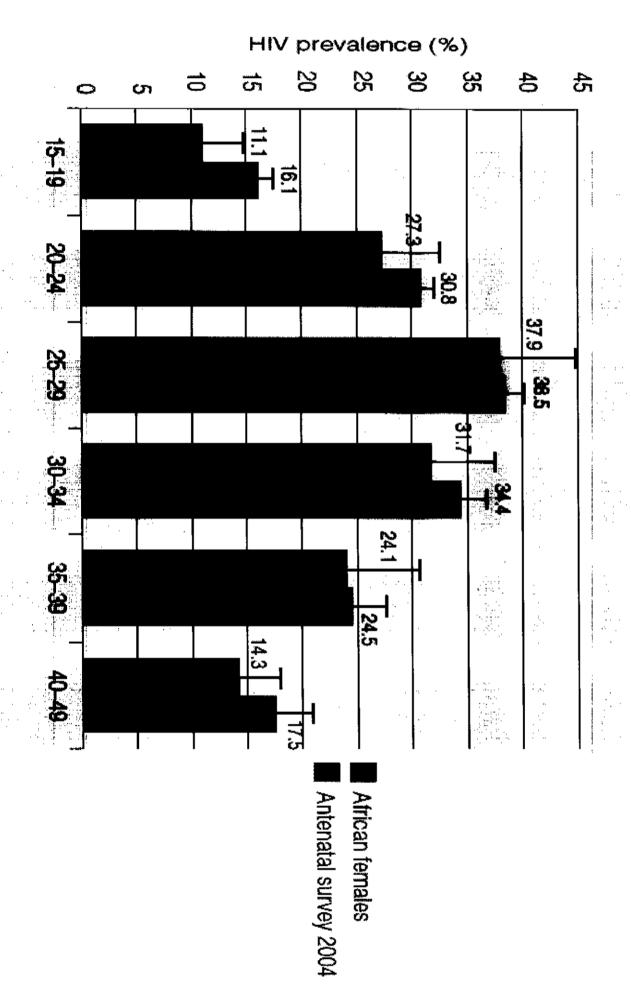
SPERIOR STATE



Females 15-49 years in 2005, compared to antenatal study 2004

Age group (Years)	African females 2005 (n=3,699)	African females pregnant in the last 24 months 2005 (n=630)	Antenatal survey 2004 (n=15,976)
	HIV+ % (n)	HIV+ % (n)	HIV+ % (n)
15 to 19	11.1 (766)	21.8 (58)	16.1 (3,130)
20 to 24	27.3 (819)	27.8 (215)	30.8 (4,991)
25 to 29	37.9 (435)	37.2 (126)	38.5 (3,702)
30 to 34	31.7 (454)	25.1 (98)	34.4 (2,510)
35 to 39	24.1 (458)	18.7 (84)	24.5 (1,261)
40 to 49	14.3 (767)	12.9 (49)	17.5 (382)
Total	24.4	26.8	29.5

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



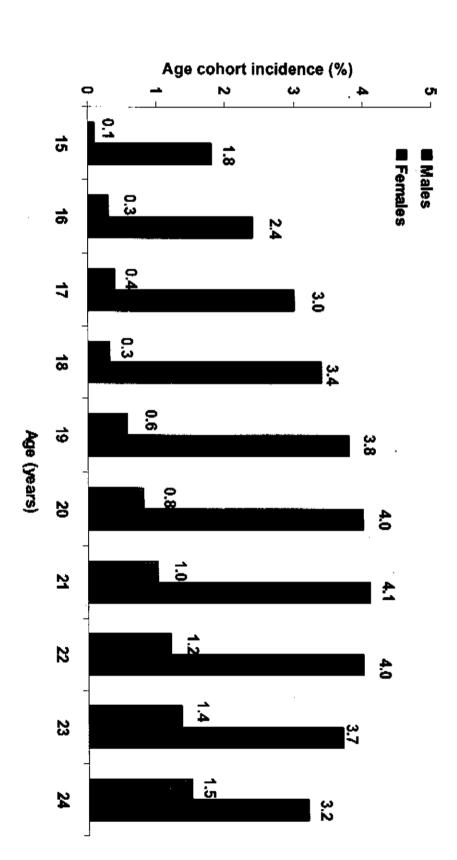
Estimation of HIV incidence

- New tests allow for identification of recent intection using blood samples (including from BED capture EIA blood spots)
- Control and Prevention (CDC) Developed by USA's Centers for Disease
- Technology is still new, still need validation
- Almost 16,000 specimens in survey allowed tor identification of recent infection - ie. Past 180 days
- 181 samples with recent infection identified

Comparison of adjusted HIV incidence estimates, South Africa 2005

Female	Male	Adult (15-49 years)	Female	Male	Youth (15-24 years)	Female	Male	Overall (≥2 years)	
6.3	2.4	4.4	6.5	0.8	ယ ယ	3.9	1.5	2.7	BED ODn=0.8
2.8	<u>:</u>	1.9	3.8	0.3	1.9	1.9	0.7	1.3	BED ODn=0.4
4.0	1	2.6	4.9	0.3	2.3	2.5	0.5	1.5	BED Hargrove
3.8	1.0	2.4	4.6	0.3	2.2	2.4	0.5	1.4	BED McDougal
2.5	1.9	2.2	4.1	1.8	2.9	. <u>.</u> 5	1.2	1.3	ASSA 2003

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



Behavioural determinants

Sexual debut

- incidence and prevalence of HIV in younger age groups Delayed onset of sexual activity (sexual debut) reduces
- Very few 12-14 year olds reported having had sex (<2%)
- Amongst 15 year olds surveyed, 11.7% of males and 7.9% of females had previously had sex
- Amongst 20 year olds surveyed, 74.8% of males and 80.0% of females had previously had sex
- Of those who had not had sex before, 71% said they were not ready, and 22.9% said they were not interested in sex
- sex is becoming younger with each generation The current trend identified is that the average age of first

Secondary abstinence

- sex in the past year Secondary abstinence refers to those individuals who have had sex before, but who have not had
- Secondary abstinence reduces HIV infection risk
- Secondary abstinence levels:
- 23.0% of males & 20.0% of females aged 15-24 years
- 9.8% of males & 21.3% of females aged 25-49 years
- 30.3% of males & 71.3% of females aged ≥50 years

Multiple sexual partnerships

- Having frequent sexual partner turnover, even if one is faithful to one's partner, increases HIV risk
- More than any variet in past year amongst those sexually active in past year:
- 27% for males & 6% for females aged 15-24
- 14.4% for males & 1.8% for females aged 25-49
- 9.8% for males & 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 ın past year was higher
- 20.6% for >1 partner, 16.3% for 1 partner

Age mixing

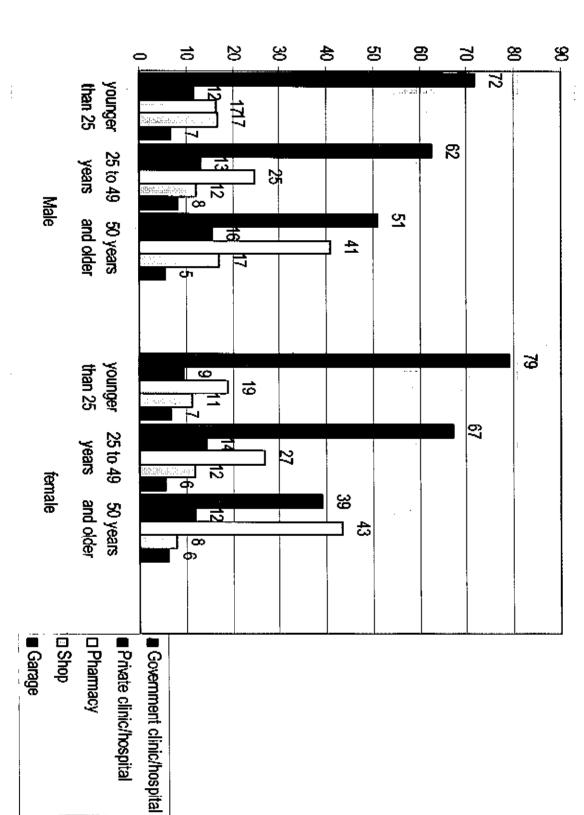
- age group risk for youth, as it exposes them to a higher prevalence Having a partner 5 years or older poses high HIV infection
- Only 2.0% of sexually active males aged 15-19 had female partners 5 or more years older
- partners 5 or more years older 18.5% of sexually active females aged 15-19 had male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

Condom access and use

- public sector condom programme Main source of condoms is the Department of Health's
- 2001 to 346 million in 2004 Condom distribution has increased from 267 million in

27.2%	Other or don't know
3.4%	Trust (social marketing brand)
8.2%	Durex (commercial brand)
17.6%	Lovers Plus (social marketing brand)
17.9%	Red ribbon (previous government brand)
25.8%	Choice condom (government brand)
<u>%</u>	Condom Brand most recently used

Source of condoms



Condom use at last sex

- Consistent condom use protects against HIV Infection
- and impact of condom promotion programmes Condom use at last sex is used to measure uptake
- Reported condom use at last sex is high in South Atrica
- 38% of males & 32.8% of females ≥15 years used a condom at last sex
- 72.8% of males & 55.7% of females 15-24 yearsused a condom at last sex

Condom use at last sex

- Condom use rates are highest amongst Africans ≥15 years
- 43.6% for males & 38.1% for females
- 16.7% Rates for males were lowest amongst whites -
- year 62.3% Rates were higher for those with >1 partner in last

Contraceptive Use

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

Method used by 25-49 year old females	3	<u>HIV+ %</u>
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%

Perceived vulnerability to HIV infection

- for HIV 66% of respondents think they are at not at risk
- 20.8% of those who thought they were at high risk were found to be HIV positive
- 51% of HIV positive respondents thought they with HIV would probably or definitely not get infected

HIV testing

- Most people aware of VCT services nearby (78.8%)
- Of those who have never been tested for HIV, 12.8% are HIV positive
- year Of those ever tested, over one third were tested in the past
- Only 4.6% of those tested in government facilities were neutral or unsatisfied with the service
- insurance, being pregnant, or feeling ill their HIV status, but other reasons included applying for Most people were tested because they wanted to know
- risk to HIV infection The main reason for not testing was a perception of low

HIV/AIDS knowledge and awareness

- are also an indication of good awareness levels of condom use and VCT service uptake Overall basic HIV/AIDS knowledge is high, and
- There are however gaps in knowledge:
- Uncertainty about HIV causing AIDS
- Uncertainty about a cure for AIDS
- Uncertainty about condoms preventing HIV intection
- Uncertainty about HIV transmission from mother to child

HIV/AIDS knowledge and awareness (contd)

- fewer sexual partners reduces HIV risk High degree of uncertainty that having
- beliefs that AIDS can be cured persist Awareness of Antiretrovirals is high,
- Knowledge of research on vaccines low

HIV/AIDS attitudes

- Overall positive perceptions towards people living with HIV/AIDS
- 90.7% are willing to care for a family member with AIDS
- other children to prevent infection 79.8% feel HIV+ children should *not* be kept separate from
- an HIV+ person 74.7% believe it is not a waste of money to train or promote
- 46.5% say it is not foolish to marry a person with HIV/AIDS
- 35.3% would not have a problem having protected sex with an HIV+ person

HIV/AIDS Communication

The state of the s

- Overall access to mass media is high but only 83% of television households had a working radio and 70% had a working
- Radio and television access a few days a week or more is high >60%
- Newspaper and magazine access is low <40%
- Internet access is very low
- HIV/AIDS seriously Radio and television emphasised in relation to taking
- and AIDS statistics also stimulate sense of seriousness Knowing people who have died of AIDS, talking to friends

National HIV/AIDS Campaigns

- Campaigns and programmes contribute to overall knowledge and awareness and impact in some areas (e.g. Condoms, VCT)
- Measured awareness of campaigns, not impact
- Differ in terms of goals, scale and budgets
- Khomanani found to have lower reach than others
- Soul City highest overall, followed by loveLife and Soul Buddyz
- awareness relative to budget TV series, Takalani Sesame, Gazlam and Tsha Tsha had high
- All interventions have poor awareness amongst ≥50 age group
- Overall, most interventions have low reach into rural areas

Other sources of HIV/AIDS information

- and locales Health facilities most important overall for all age ranges
- Schools perceived as useful for youth audiences
- Friends and other family important
- Workplaces useful over half of employed persons
- Parents important to around a third of youth age groups
- of all age groups Faith-based organisations important for more than a third
- Traditional healers rated relatively low

Mental health and HIV/AIDS

- Mental health of PLHA is an under-explored area
- Problems include depression, anxiety and fear of stigma
- Questions compared partitions of HIV positive and negative respondents who knew their status
- Amongst HIV+, 41% felt sad empty or depressed, compared to 29.6% of
- Overall higher rates of sleeping, eating and anxiety problems

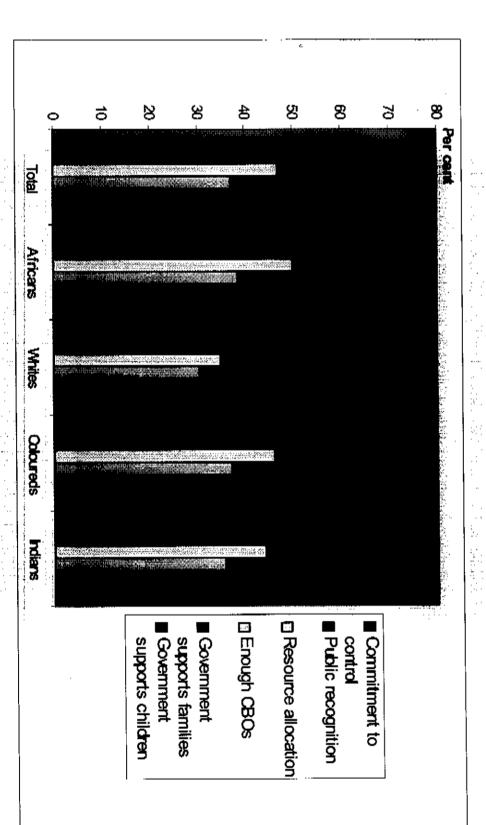
Orphans

- Orphaning exacerbated by HIV/AIDS
- 2005 Estimate of Orphans in SA: 2.5 million
- and that there are 330,125 double orphans Estimates are that there are 455,970 maternal orphans
- 2.6% of children 12-18 identified themselves as heads of households

Orphans

10.0 (841) 10.2 (377) 10.8 (464)

Perceptions of government



Perceptions of hypothetical AIDS tax

Some degree of willingness amongst employed persons to pay and AIDS tax

30.0%	1,312	White
36.4%	1,096	Indian
53.1%	1,636	Coloured
51.4%	4,594	African
<u>%</u>	<u>n</u>	Race

Conclusions

- HIV prevalence has levelled off
- youth, and younger adults and pregnant women and incidence levels are high amongst, women, Females significantly more vulnerable to infection
- High infections among children 5-9 are of concern
- HIV prevalence amongst children 2-9 and people ≥50 confirmed

Conclusions (contd)

- Behavioural response is positive and increasing in relation to condoms and VCT
- Partner turnover is high and not perceived as a major risk
- are major risk factors for youth Early sexual debut and sex with older partners
- attitudes and involvement in community-level activities Good response in relation to non-stigmatising

Recommendations

- Still a false sense of security needs to be addressed
- HIV disclosure and community action Reduction in stigma provides opportunity for
- Integration of family planning and HIV/AIDS
- Women encouraged to increase condom use
- Periodic HIV testing is crucial

Recommendations (contd)

- Young people should be encouraged to delay sexual debut
- Sexually active youth should avoid older partners
- Avoid high partner turnover and concurrent sexual partnerships
- Getting treated for STIs and never having sex when one has
- Warn older South Africans that they too are at risk of HIV

Recommendations (contd)

- HIV infection among children is real and needs emphasis
- modelling the HIV/AIDS epidente Include children and older people in surveillance and
- Positive Prevention is an important tool for HIV prevention
- Refocus communication strategy to expand areas of focus
- Study implications of ARVs
- Investigate dedicated tax for HIV/AIDS

Full reference of the main research report

Zuma, K., Connoly, C., Jooste, S., Pillay, V. et al. (2005). Shisana, O., Rehle, T., Simbayi, L., Parker, W., Bhana, A., **Human Sciences Research Council Press.** Behaviour and Communication Survey 2005. Cape Town: South African National HIV Prevalence, Incidence,

Available on www.hsrc.ac.za or www.hsrcpress.ac.za

