



HIPSS

HIV Incidence Provincial
Surveillance System Project

Contraception methods, pregnancy, STIs and HIV among adolescents and young people: findings from a community wide survey in KwaZulu-Natal

Candace Davidson

Ayesha BM Kharsany, Cherie Cawood, David Khanyile, Anneke Grobler, Lara Lewis

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Background

- Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates
 - globally 15% of women living with HIV/AIDS are aged 15-24 years
 - 80% of these live in sub-Saharan Africa
- HIV in young women
 - leading cause of premature death
 - affects own well-being including welfare of their children and community
- Problem will be intensified over time
 - as proportion of population in this age band grows
 - places larger numbers at risk
- Extensive research ongoing
 - behavioural, biological, socioeconomic, cultural, and structural factors to understand and contextualize HIV acquisition
- Goal
 - improving individual and public health for adolescents

Purpose of this presentation

- **To report on**
 - Contraception methods
 - Pregnancies
 - Sexually Transmitted Infections
 - HIV

Among adolescents (15-24 years) participating in the HIV Incidence Provincial Survey System (HIPSS) – a community wide survey

HIPSS study design and site

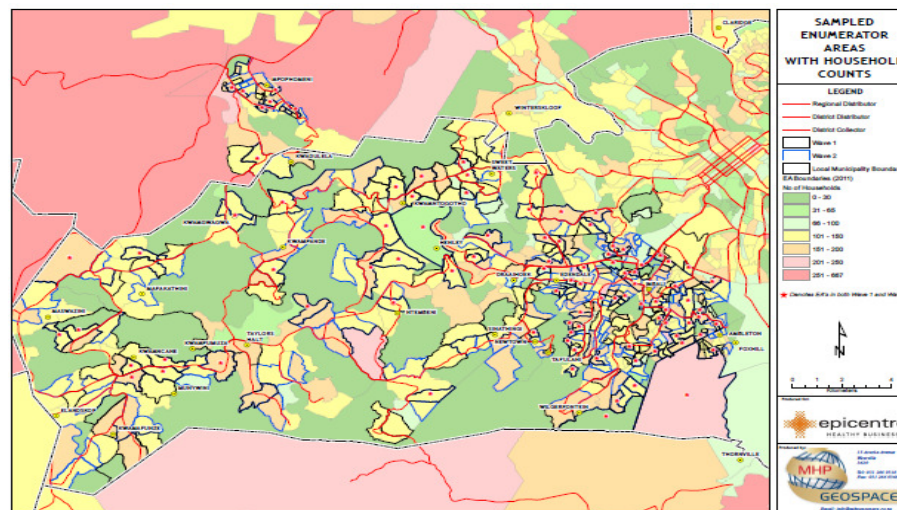
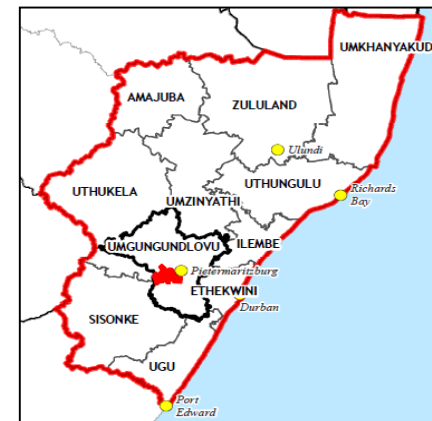
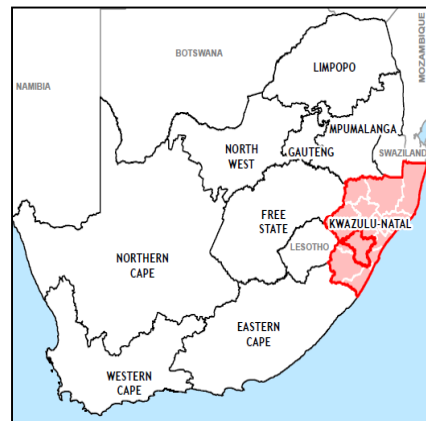
Purpose: HIPSS was established to understand the population impact of programmatic scale-up of combination prevention in rural KwaZulu-Natal

Design: Cross-sectional multistage random sampling

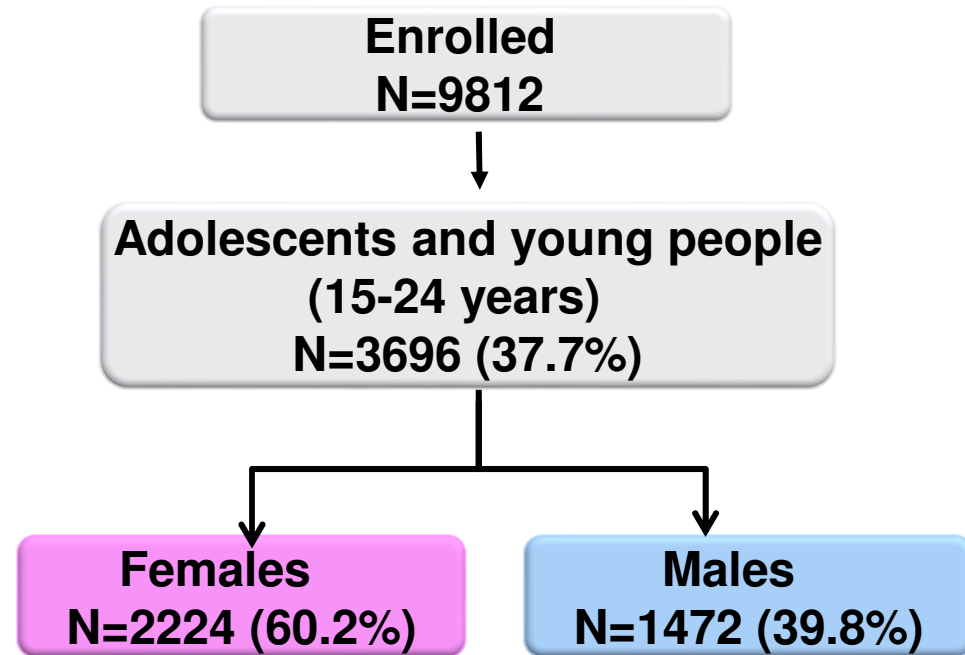
Site: Vulindlela and the Greater Edendale, uMgungundlovu district, KZN, South Africa

- Highest HIV burden district in SA
- (SA DOH_ANC prevalence- 40.7% in 2012)

Sample Population: 15-49 years



Study Population



Median age (IQR)	19.2 (17.3-21.2)	19.1 (17.3-21.4)
Completed 12 years of schooling, n (%)	1133 (48.6)	680 (42.9)
Single/not married or living together, n (%)	2146 (96.9)	1453 (98.4)
Sexual debut n, (%)	1557 (67.4)	934 (63.3)
Median age (IQR) at first sex	16.9 (15.7-18.1)	16.2 (14.9-17.4)
Median age (IQR) of partner at first sex	19.6 (18.0-21.7)	16.0 (14.8-17.3)
Median (IQR) number of lifetime sex partners	1.1 (1.0-2.2)	2.5 (1.1-4.7)

Contraceptive method used

Contraceptive Method	Females (N=2224)		Males (N=1472)	
	n **	%*	n	%*
3 month injectable (Depo-Provera)	578	27.3	-	-
Condoms	318	14.8	321	23.8
2 month injectable (Nur-Isterate)	82	3.1	-	-
Daily pill	23	1.1	-	-
IUCD	14	0.5	-	-
Female sterilization	6	0.1	1	<0.1
Emergency contraception	3	0.2	-	-
Rhythm//calendar/thigh sex	1	<0.1	3	0.2
Other	92	4.1	6	0.7

*population weighted proportion

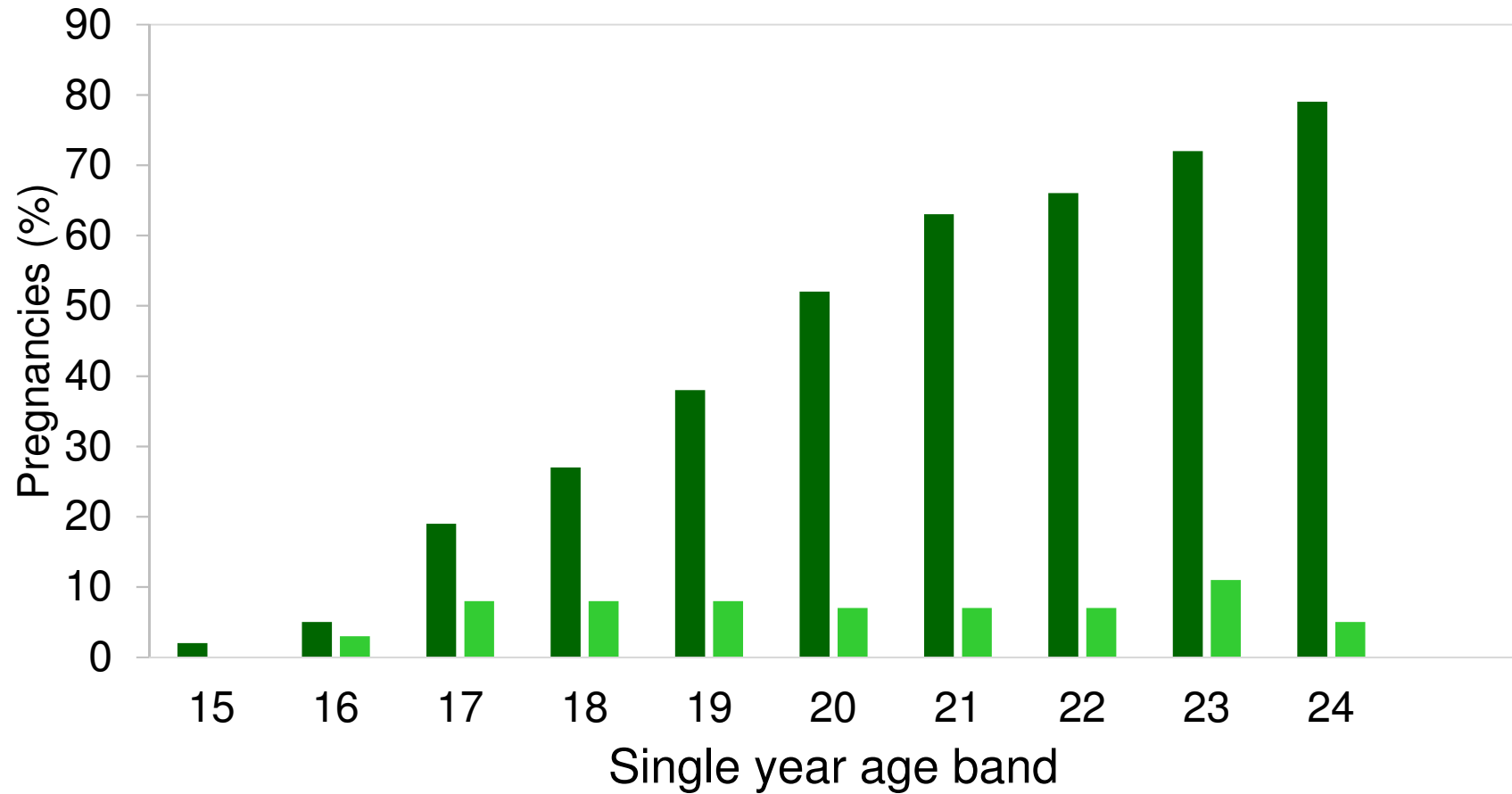
**participants could select more than 1 option

Reasons for not using contraceptives

Reason	Females (N=1203)	%*
No reason	937	73.8
Abstaining/no partner	173	17.9
Trying to have a baby	51	4.1
Currently pregnant	13	1.2
Negative side affects	12	1.0
Access issues	5	0.5
Scared	5	0.6
No time to go to clinic	3	0.6
Menopausal	1	<0.1
Other	3	0.3

*population weighted proportion

Ever been pregnant and currently pregnant

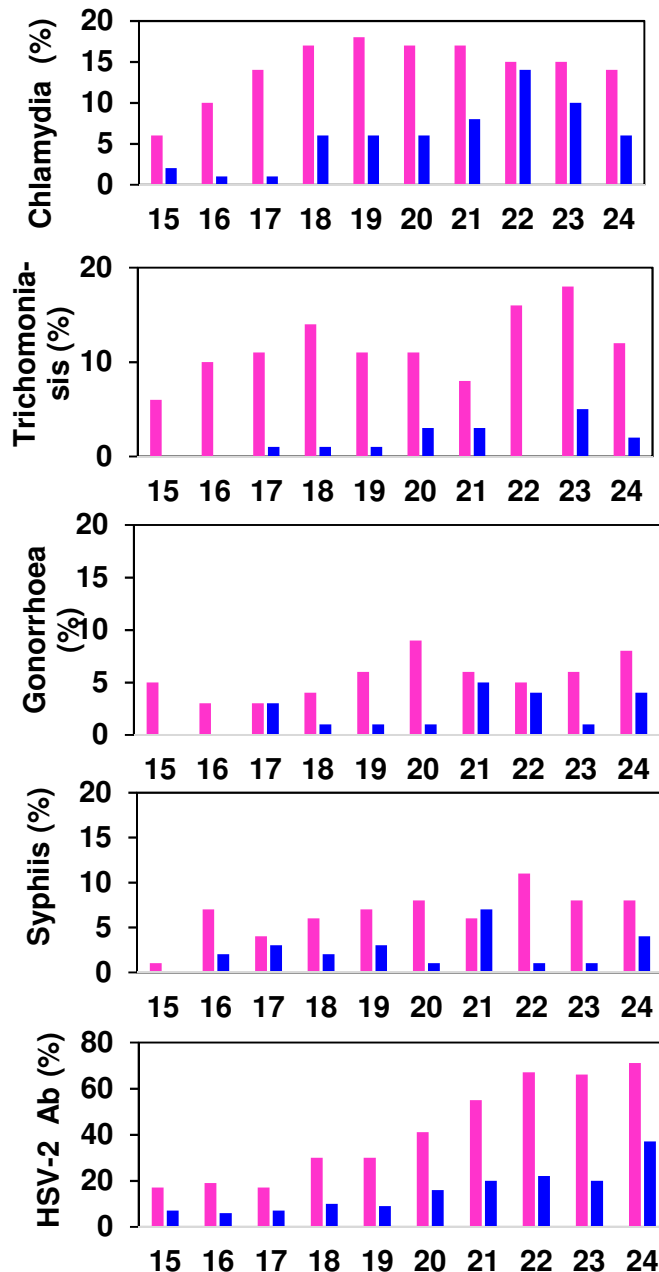


■ Ever pregnant ■ Currently pregnant

Factors associated with previous or current pregnancy

Variable	Ref		Adjusted Odds Ratio (95%CI)*
Education	Grade 12 complete	Grade 12 incomplete	1.41 (1.01-1.97)
Age	15-17 years	18-20 years	2.40 (1.46-3.93)
		21-24 years	5.71 (3.57-9.16)
HIV test	Not tested	Tested	2.18 (1.53-3.40)
HIV result	Negative	Positive	1.16 (0.82-1.65)
HSV 2 result	Negative	Positive	1.47 (1.10-1.87)
Perceived risk of HIV	No perceived risk	At risk	1.14 (0.80-1.62)
Contraception use	No	Yes	2.19 (1.57-3.04)
Contraception use choice	Not using	3-mo. DMPA	4.92 (3.48-6.94)
		Condoms	0.23 (0.16-0.32)
Condom use at sexual debut	Yes	No	1.90 (1.35-2.69)
Condom use always in past 12 months	Yes	No /Sometimes	1.95 (1.32-2.87)

Sexually transmitted infections by age and gender



Overall prevalence

Chlamydia

Females = 15%

Males = 7%

Trichomoniasis

Females = 12%

Males = 1%

Gonorrhoea

Females = 5%

Males = 2%

Syphilis Ab

Females = 3%

Males = 2%

HSV-2 Ab

Females = 43%

Males = 15%

Age specific prevalence

- Significantly higher in females compared to males

- Consistently high prevalence in females compared to males in each age band

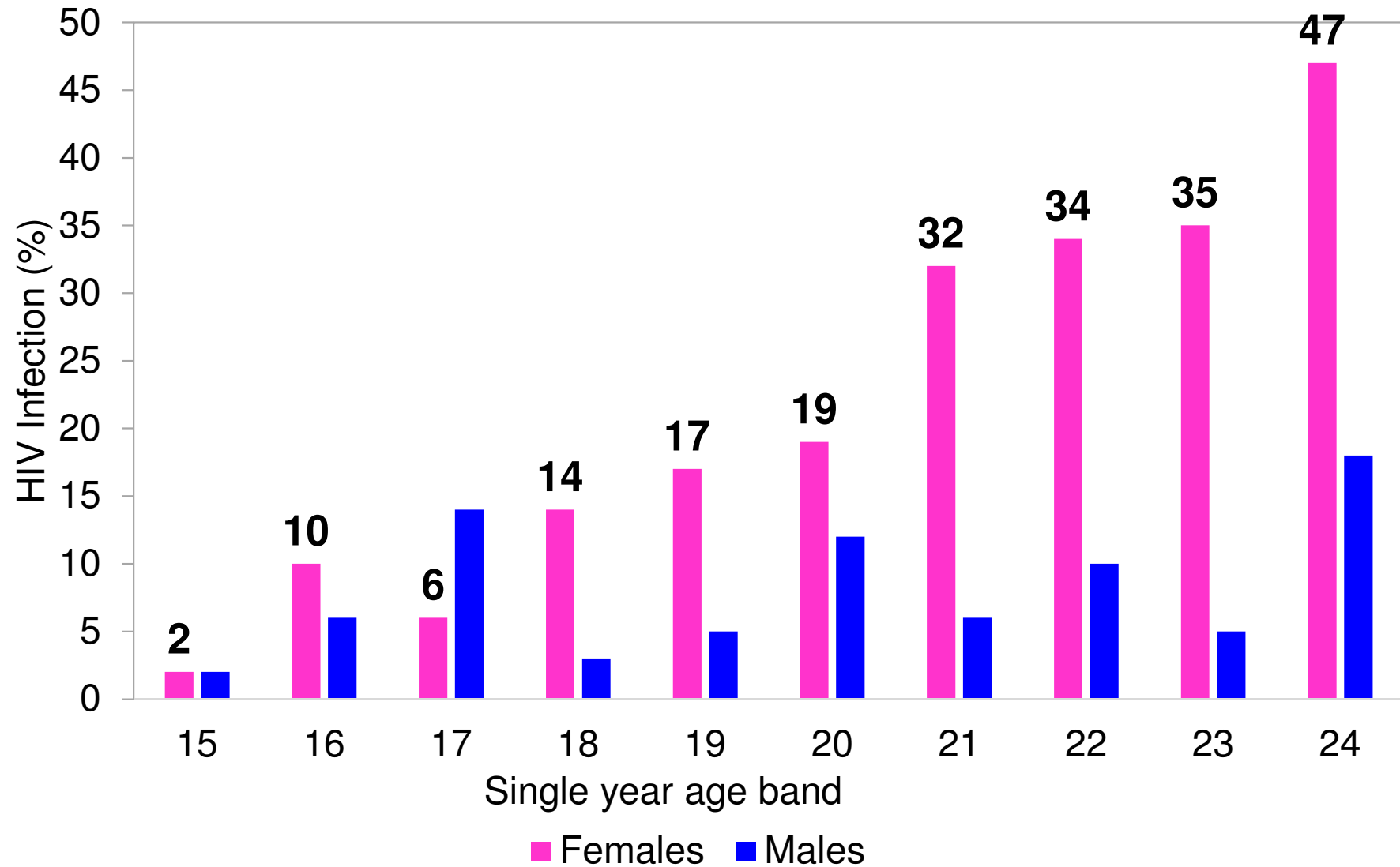
- Younger females have a higher prevalence compared to males in the same age group



HIV Status

	Overall		Female		Male		P=value
	n/N	%	n/N	%	n/N	%	
HIV Prevalence	690/3696	15.0	567/2224	22.3	123/1472	4.6	<.0001
Tested for HIV	2506/3696	70.2	1582/2224	73.1	924/1472	67.3	.0022
Received result of test	2473/2506	98.6	1566/1582	99.1	907/924	98.1	.0515
Self-report HIV+	256/2473	8.0	220/1566	12.2	36/907	3.4	<.0001

HIV infection by gender and age band



Conclusions and Take Away Messages

- Unacceptably high prevalence of pregnancies, STIs and HIV infection
- Low uptake of contraception methods and condoms
- High prevalence of Depo-Provera use – potential to enhance thinning of epithelial lining and increase risk of HIV
- Adolescent girls (15-19 years) have different needs and realities than young women (20-24 years)

Recommendations

- Promote and scale up integrated school health services
- Encourage health seeking behaviour among adolescents to include test and treat for STIs and HIV
- Increase uptake of contraception
- Identify and target key populations for information and education (delaying sexual debut, use of dual protection, prioritizing education post pregnancy)
- Strengthen surveillance to identify high risk locations
- Develop health seeking behaviors, partner notifications and referrals
- Facilitative access to existing services

HIPSS (CAPRISA 251) Study Team and acknowledgements

Investigators

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