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FACTORS DETERMINING EDUCATOR SUPPLY AND DEMAND IN SOUTH AFRICAN PUBLIC SCHOOLS



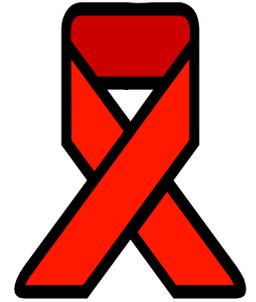
# The Health of our Educators

A focus on HIV/AIDS in South African public schools

Edited by O Shisana ScD, K Paltzer PhD, N Zungu-Dirwayi MA and J Louw BA



Report funded by and prepared for the  
Education Labour Relations Council



# *Presentation Outline*

- Background
- Research Questions
- Methods
- Results
  - HIV prevalence
  - Determinants of HIV
  - Attrition
- Conclusions
- Utilization of Findings
- Closing Remarks
- Acknowledgements



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# *Background*

- The study was prompted by worrying anecdotal reports that indicated that educators seem to be leaving the education profession in large numbers.
- The ELRC consist of:
  - Department of Education (DoE)
  - South African Democratic Teachers Union (SADTU)
  - National Professional Teachers Organisation of SA (NAPTOSA)
  - Suid- Afrikaanse Onderwysersunie (SAOU)
  - National Teachers Union of South Africa (NATU)
- ELRC commissioned a consortium to investigate the validity of these anecdotal reports, consisting of:
  - Human Sciences Research Council
  - Medical Research Council
  - UKZN's Mobile Task Team on the Impact of HIV/AIDS on Education (MTT)

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# *Research Questions*

1. **What is the prevalence of HIV/AIDS among educators in public schools?**
2. **What are the factors driving the HIV/AIDS epidemic amongst educators?**
3. **What is the attrition rate and profile of educators who intent to leave and what are the reasons for attrition?**

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# ***Method: Research Design***

- **Cross sectional study design (longitudinal design ideal)**
- **Quantitative using structured questionnaire (would have been good to collect qualitative information as well)**
- **HIV test: choice of blood or oral/ CD4 count**
- **Anonymous electronic link questionnaire data and HIV test results**
- **Ethical Clearance was obtained from the HSRC's Ethics Committee (REC/20/08/030)**

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# *Method: Sampling*

- Multi-stage stratified cluster random sampling
- Sample sites were public schools across nine provinces
- Sampling frames (not updated)
  - DOE's School Register of Needs (SRN) school database from 1996-2000
  - Government's Personnel Salary System (PERSAL) system
- No. of schools: 26 713
  - Sampled: 1770
  - Realized: 1714
- No. of educators on SRN: 356 749;
  - Sampled: 24 200
  - Realized: 20 626
- Educators who were absent missed interviews although revisits were made

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## *Results: HIV Prevalence*

- Sex
- Race
- Age
- Socioeconomic status
- Province
- District

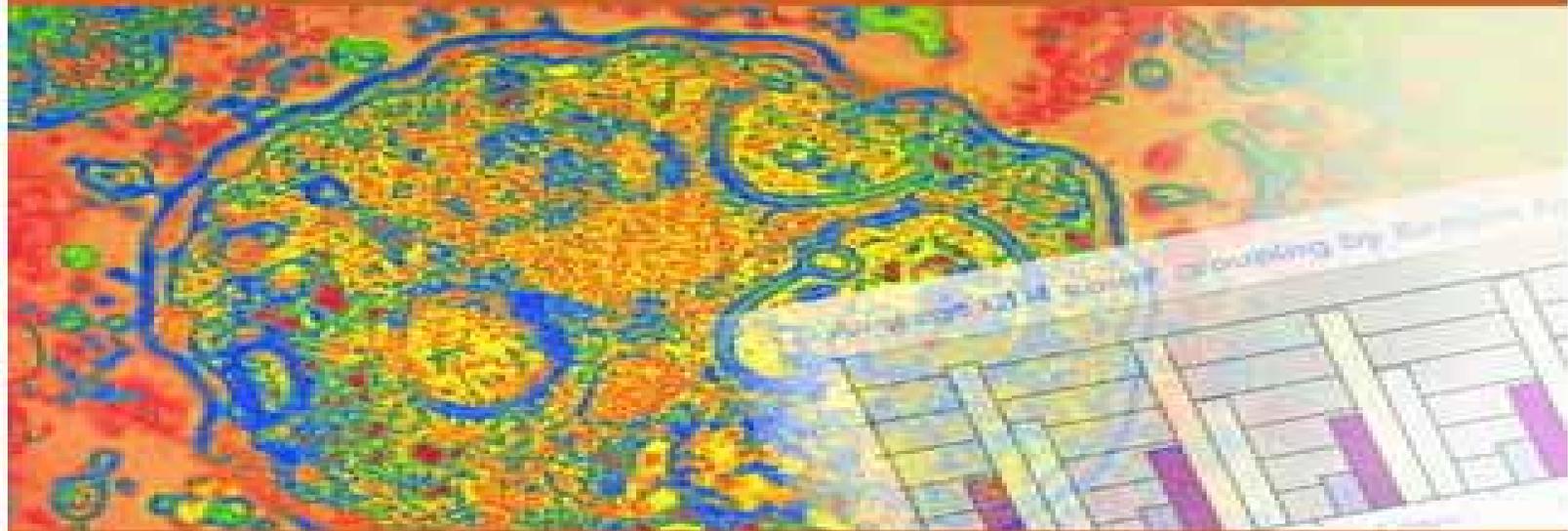


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# HIV-positive educators in South African public schools

Predictions for prophylaxis and antiretroviral therapy

Theresa Pienaar MEd PhD, David G. Brown PhD, Deborah Kaminer MEd, and Mark Cousins MEd, MEd, MEd



Report funded by and prepared for the Education, Labour and Training Council



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## *HIV prevalence by demographic characteristics*

Characteristics	n	HIV positive (%)	95% CI
<b>Total</b>	<b>17 088</b>	<b>12.7</b>	<b>12.0–13.5</b>
<b>Sex</b>			
Men	5 455	12.7	11.6–13.9
Women	11 621	12.8	12.0–13.6
<b>Race</b>			
African	12 022	16.3	15.5–17.1
White	2 165	0.4	0.2–0.8
Coloured	2 309	0.7	0.4–1.3
Indian	533	1.0	0.5–2.1
<b>Age</b>			
<24	240	6.5	3.4–12.0
25-34	4 282	21.4	19.9–23.0
35-44	7 443	12.8	11.8–13.8
45-54	4 274	5.8	5.0–6.7
55 and above	842	3.1	2.1–4.6

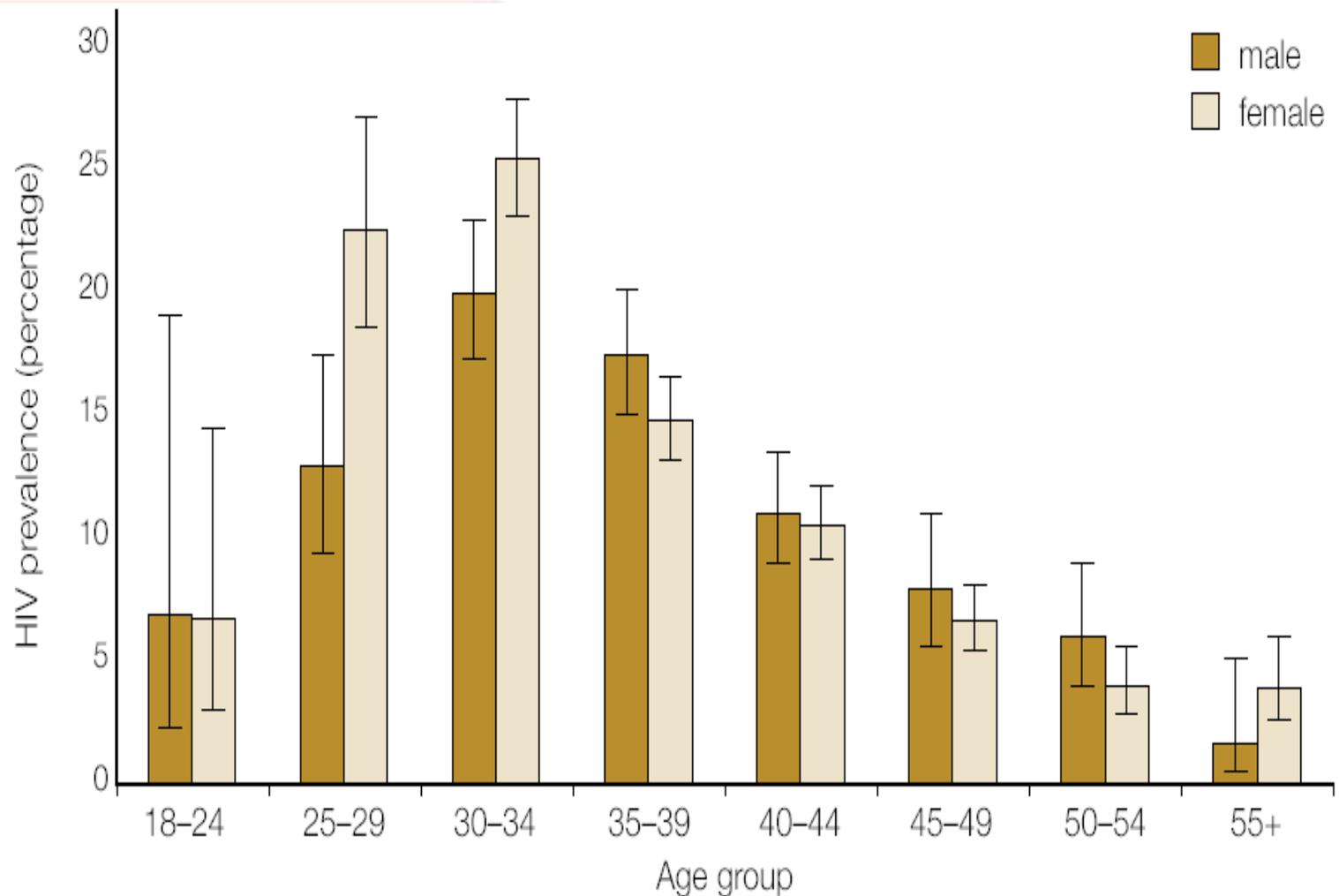
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# *HIV prevalence by age and sex, South Africa 2004*



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## *HIV prevalence by SES*

<b>Socio-economic status</b>	<b>n</b>	<b>HIV positive (%)</b>	<b>95% CI</b>
<b>Level of qualification</b>			
First degree and above	8 551	10.0	9.1–10.9
Diplomas	7 094	15.9	14.8–17.0
Grade 12 and under <sup>1</sup>	420	14.0	11.9–16.4
<b>Annual income</b>			
Low	2 915	17.5	16.0–19.2
Medium	13 231	12.1	11.3–12.9
High	813	5.4	4.0–7.4
<b>Household economy</b>			
Not enough money	1 253	15.5	13.3–18.0
Money for food etc	8 588	14.7	13.8–15.6
Have most important things	5 880	10.7	9.6–11.9
Some extra money	1 250	3.9	2.7–5.6

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## Overall HIV prevalence

Province	n	HIV positive (%)	95% CI
WC	2 134	1.1	0.6–2.0
EC	1 855	<b>13.8</b>	12.0–15.8
NC	891	4.3	2.9–6.5
FS	1 152	<b>12.4</b>	10.1–15.0
KZN	3 627	<b>21.8</b>	19.8–23.9
NW	1 437	10.4	8.7–12.4
GP	2 772	6.4	5.4–7.7
MP	1 315	<b>19.1</b>	16.2–22.3
LP	1 905	8.6	7.3–10.1

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## *High HIV prevalence Districts: South African educators*

Province	District Municipality	n	HIV+(%)	95% CI
KwaZulu Natal	Ugu	318	21.9	16.58-28.55
	Uthukela	354	28.2	21.07-36.65
	Umzinyathi	280	28.9	23.94-34.40
	Zululand	361	30.0	24.72-35.91
	Umkhanyakude	371	32.5	27.19-38.24
	Uthungulu	385	26.3	21.24-32.12
	iLembe	275	22.8	16.75-30.32
	Sisonke	155	27.4	16.38-42.15
	Mpumalanga	Govan Mbeki	326	24.8
Ehlanzeni		489	22.2	18.30-26.72
Eastern Cape	Alfred Nzo	362	22.1	17.59-27.17

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## ***Low HIV Prevalence Districts: South African Educators***

- **All Districts in the WC- under 3%**
- **NC 3 districts—under 4%**
- **All Metropolitan areas have HIV prevalence less than 10%.**

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# ***Results: Determinants of HIV/AIDS***

- **Sex Partners**
- **Condom Use**
- **Age Mixing**
- **Migration/Mobility**
- **Alcohol use**

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# *Determinants of HIV among South African Educators*

*AIDS Care*, November 2007; 19(10): 1296–1303

 Routledge  
Taylor & Francis Group

## **Social determinants for HIV prevalence among South African educators**

N. ZUNGU-DIRWAYI, O. SHISANA, J. LOUW, & P. DANA

*Human Sciences Research Council, Cape Town, South Africa*

### **Abstract**

HIV prevalence among women in South Africa continues to be high despite the availability of a comprehensive plan for the control of HIV/AIDS and a plethora of prevention programmes. Any explanation for the ongoing high HIV prevalence continues to be elusive. The objective of this study was to understand the relationship between HIV, gender, race and socioeconomic status among South African public sector educators in order to inform prevention programmes.

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## *Sex partners in the past 12 months by race*

Variable	Total	% of partners			
Race	n	no part	1 part	2 part	>2 part
African	14 349	20.6	69.9	6.8	2.7
White	2 736	25.7	72.3	1.5	0.4
Coloured	2 670	21.1	74.4	2.8	1.7
Asian	619	23.7	74.3	1.0	1.0

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## *Condom use at last sex with “regular” partner by awareness of HIV status*

Condom use at last sex with “regular” partner	All	HIV+	HIV-
	%	%	%
Know HIV results recently	32.4	58.9	28.8
Know HIV results more than 3 years ago	30.5	54.4	25.0
Do not know	32.0	51.6	28.4

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Variable	% Condom use with non-regular partner in the past year (HIV + respondents)			
	Every Time	Almost every time	Someti mes	Never
Know HIV status <sup>#</sup>	59.4	6.5	15.3	18.4
Don't know HIV status	54.9	8.6	17.8	18.2

# *Age Mixing by Gender & HIV Status*

Sex	More than 10 years older than oneself (%)	Age difference within 10 years (%)	More than 10 years younger than oneself (%)
<b>Men</b>			
Age mixing	0.2	85.7	14.1
HIV prevalence	9.7	12.4	<b>16.5</b>
<b>Women</b>			
Age mixing	4.7	94.8	0.6
HIV prevalence	8.9	12.3	8.5

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# *Migration and HIV Status*

	HIV Positive		
	n	Percentage	95% CI
<b>Migration after completion of training prior to 1994</b>			
Yes	464	23.5	21.4 – 25.8
No	547	18.9	17.3 – 20.6
<b>Migration after completion of training after 1994</b>			
To urban area	276	13.4	11.7 – 15.4
To rural area	739	25.3	23.6 – 27.1
<b>Marital status at beginning of teaching career</b>			
Married or engaged	178	13.9	11.9 – 16.1
Single	832	23.3	21.7 – 24.9

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## *Alcohol or drug use before last sex & HIV status*

	Drink alcohol or use drugs before last sex					
	HIV positive			HIV negative		
	n	%	95% CI	n	%	95% CI
<b>Total</b>						
Yes	108	18.5	15.2-22.4	652	81.5	77.7-84.8
No	1 575	12.3	11.9-13.6	11 619	87.3	86.4-88.2
<b>Men</b>						
Yes	95	20.1	16.9-25.3	429	79.2	74.7-83.1
No	489	12.1	10.9-13.4	3 911	87.9	86.6-89

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# *Attrition*

- **Attrition rate**
- **Factors attracting educators to alternative employment**
- **Educators who considered leaving profession**
  - **Province**
  - **Type of institution, location of school, position**
  - **Sex, race and highest qualification**
  - **Age and years of teaching experience**
  - **Satisfaction with salary**
  - **Job satisfaction**

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# Potential Attrition in Education

The impact of job satisfaction, morale, workload and HIV/AIDS

Esigwe M.A., van Niekerk M., Msimang M., Mkhomo M.



Report funded by and prepared for the Education Labour Relations Council II



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## *Attrition and Factors that attract educators to alternative employment options*

<b>Factors</b>	<b>Percent</b>
Attrition Rate	<b>55</b>
Teach outside SA	4.1
Teach at private institution	3.9
Change to another career	<b>24.6</b>
Go back to university/college and study something different	4.4
Better salary	<b>52.3</b>
Other	9.2
Unknown	1.5

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## ***Educators who considered leaving, by sex, race and highest qualification***

	Total N	Consider leaving education	
		%	95% CI
<b>Total</b>	<b>20 626</b>	<b>54.0</b>	<b>(53.1, 55.5)</b>
<b>Sex</b>			
Male	6 580	60.7	(59.1, 62.2)
Female	14 018	51.3	(49.9, 52.6)
<b>Race</b>			
African	14 439	49.7	(48.3, 51.1)
White	2 778	70.2	(67.2, 73.0)
Coloured	2 705	70.6	(67.8, 73.4)
Indian/Asian	623	69.5	(65.7, 73.1)
<b>Highest qualification</b>			
Higher diploma/first degree & higher	10 355	61.6	(60.2, 63.0)
Diploma/occupational certificate	8 457	48.9	(47.4, 50.4)
Grade 12 & lower	927	38.7	(35.0, 42.7)
Grade 8-11 & teacher's qualification	822	36.1	(32.2, 40.3)

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## ***Educators who considered leaving, by age and years of teaching experience***

	Total N	Consider leaving education	
		%	95% CI
<b>Total</b>	<b>20 626</b>	<b>54.0</b>	<b>(53.1, 55.5)</b>
<b>Age</b>			
22 & younger	107	56.1	(44.4, 67.2)
23-30	1 945	56.3	(53.4, 59.2)
31-40	9 133	59.2	(57.8, 60.6)
41-50	6 926	52.2	(50.6, 53.9)
51-60	2 348	40.6	(38.0, 43.3)
61-65	136	24.3	(16.7, 34.1)
Older than 65	6	33.7	(5.4, 82.0)
<b>Years of teaching experience</b>			
5 or less	2 823	44.9	(42.5, 47.2)
6-10	4 405	59.0	(56.9, 61.0)
11-20	7 898	60.1	(58.5, 61.7)
21-25	2 562	51.2	(48.7, 53.7)
More than 25	2 745	43.0	(40.5, 45.6)

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## ***Educators who considered leaving by type of institution, location of school and position***

	Total N	Consider leaving education	
		%	95% CI
<b>Total</b>	<b>20 626</b>	<b>54.0</b>	<b>(53.1, 55.5)</b>
<b>Type of Institution</b>			
Primary school	11 463	51.3	(49.7, 52.9)
Secondary/high school	7 275	<b>59.2</b>	(57.2, 61.2)
Combined/intermediate	1 719	51.6	(47.5, 55.6)
<b>Location of school</b>			
Rural	10 497	45.5	(43.9, 47.1)
Urban	10 027	<b>65.9</b>	(64.3, 67.5)
<b>Position</b>			
Teacher	15 363	54.0	(52.7, 55.3)
Senior teacher	2 200	<b>60.4</b>	(57.8, 62.9)
Education specialist	636	<b>60.0</b>	(55.6, 64.3)
Deputy principal/Principal	1 989	50.6	(47.8, 53.4)

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## ***Educators who believe their salary is inadequate***

Consider leaving	Earn an inadequate salary	
	Male (%)	Female (%)
Yes	62.3	51.4
No	37.7	48.5
Unknown	0.1	0.1
Total	100.0	100.0

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# *Conclusions*

## **1. Measure the prevalence of HIV and AIDS:**

Estimated Prevalence is 12.7%; 16% among Africans and <1% others; 11 Districts located in KZN, Mpumalanga and EC have prevalence >20%; All districts in WC and NC have prevalence <5%; all METRO areas have prevalence <10%.

## **2. Determine factors driving HIV/AIDS**

Multiple partners, low condom use and having partners who are 10 years younger

## **3. Assess attrition**

55% considered leaving the profession mainly due to inadequate remuneration: Non-Africans, Males, urban areas, Secondary school educators, aged 25–49, Have higher qualifications, medium to high income group

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## *Utilization of Findings*

Following high level briefings to the Presidency, ELRC, the Deans Forum and the DoE, the study's findings were used to develop:

- **SADTU's strategic plan – the delivery of the pilot programme in 3 provinces where HIV infections among educators are the highest.**
- **Peer-education programme in schools**
- **Plan for comprehensive medical aid for teachers and their dependants requiring ART.**
- **SADTU's newsletter called “The educators’ voice”**
- **SADTU's campaign against HIV and AIDS in the union and education institutions.**
- **SADTU's guiding document or a policy on HIV and AIDS.**

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# *Closing Remark*

**SADTU president in appreciation of study's findings, Mr Willy Madisha, said:**

***"The more we know about HIV/AIDS and how it affects teachers, the more we will be armed to fight the pandemic"***

**Mr Dhaya Govender, ELRC Gen. Secretary, in stressing the importance of the study, said:**

***"If South Africa cannot curtail the levels of infection and progression of HIV/AIDS among its teachers, the consequences will be bequeathed not just on the present generation of learners, but also on future learners, adding immeasurably and unnecessarily to poverty and social stagnation in the following decades"***

**Population-based Educator longitudinal studies needed!!**

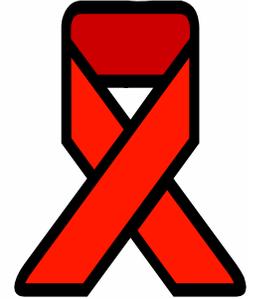
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**THANK  
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