

# **Is Education the “window of hope” to reducing HIV transmissions in Southern Africa? Evidence from Six Recent Country DHS Data.**

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## **Introduction**

Statistics are now familiar, but still staggering. Globally, since its discovery in the 1980s, the Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) has claimed about 32 million people [5]. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates indicate that about 37.9 million people were living with HIV in 2019, and of these, 28.5 million are in sub-Saharan Africa. UNAIDS estimates that over 70% of the global total of HIV-positive people live in sub-Saharan Africa. HIV prevalence for males age 15-55 years in Southern Africa about 14% [5]. HIV prevention campaigns for men are targeting at access to comprehensive knowledge, encouraging abstinence from sex for non-married, sticking to one equally faithful and uninfected partner, and consistent use of condoms. Some studies have pointed out that education can be a social vaccine against contracting HIV. For instance, available research suggests a negative linear relationship between educational attainment (years of education) and HIV infection rate [2, 4]. The study sought to answer the research question: is education “a window of hope to reducing HIV infection among men? It against this background that this study investigated the role of education in the fight against HIV in Southern Africa.

## **Methods and Data**

We conducted analyses based on recent demographic surveys from six countries namely; South Africa, Zambia, Zimbabwe, Namibia, Lesotho and Eswatini. The target group for the analysis was men age 15-59. Survey weights were applied to account for the degree of respondents' chance being in the sample. Bivariate analysis was conducted to ascertain the relationship between outcome variables with education variables. Multiple logistic regressions were employed on one dataset to examine relative risk of education variables on outcomes indicators; condom use, HIV prevalence rates, male circumcision, mean number of sexual partners and HIV testing. All analyses were conducted using Stata software 14.0 with 5% level of significance.

## Key Results

Overall HIV prevalence rates in five of the six countries surveyed show that men with secondary education or higher have lower HIV prevalence rates compared with those who had only primary or no education. See table 1.

**Table 1: HIV prevalence rate for Men age 15-55 years, DHS**

Country	No education or Primary	Secondary or Higher	Total
<b>Zimbabwe</b>			
2015 -DHS	11.6	10.2	10.9
<b>South Africa</b>			
2016 -DHS	15.3	14.2	14.8
<b>Namibia</b>			
2013 -DHS	14.4	9.2	11.8
<b>Eswatini</b>			
2006-07	20.4	19.2	19.8
<b>Zambia</b>			
2018 -DHS	6.8	8.0	7.4
<b>Lesotho</b>			
2014-DHS	21.0	15.9	18.5

While DHS results reveal that comprehensive knowledge about HIV prevention is almost universal among respondents in all countries surveyed. Findings show that men with secondary or higher level of education tend to practice safer sexual behaviors compared their counterparts with only primary or no formal level of education ( $p < 0.05$ ).

**Table 2: Proportion of men by risk behaviors factors, DHS**

Country	Condom use during high-risk sex (%)		Never had sex (Young men) %		Ever tested for HIV and Received test result %		Condom use during last paid sex %	
	No education or Primary	Secondary or Higher	No education or Primary	Secondary or Higher	No education or Primary	Secondary or Higher	No education or Primary	Secondary or Higher
<b>Zambia</b>								
2018 -DHS	21.3	32.5	6.9	14.7	66.9	81.5	47.1	61.2
<b>Zimbabwe</b>								
2015 DHS	31.2	38.9	19.8	23.3	48.0	66.7	86.5	91.1
<b>South Africa</b>								
2016 -DHS	49.3	66.6	9.4	8.1	57.0	71.0	–	81.2
<b>Namibia</b>								
2013 -DHS	70.7	72.7	8.4	7.3	51.9	65.4	–	70.5
<b>Eswatini</b>								
2006-07 -DHS	42.0	63.0	16.1	23.9	11.9	20.9	–	–
<b>Lesotho</b>								
2014 -DHS	56.8	72.9	8.3	8.2	54.5	72.3	82.0	96.2

Data from all six countries consistently show that men with secondary education or higher were less likely to engage in HIV risk behaviors. For example, in Zambia 2018 DHS findings reveal that more than half men with secondary or higher level of education compared to 47% of those with primary or no education level reported to have used a condom during last paid sex. This finding is similar in the other five countries. In all the six countries men with secondary or higher education reported high proportions of condom use during high-risk sexual encounter. Multivariate logistic regression analysis shows that men with secondary or higher level of education were twice more likely to use condom during paid sexual encounter compared to those with less primary or no education.

### **Conclusions/Recommendations**

Can education be considered as a “window of hope” to ending HIV transmission in Southern Africa? It is evident from the findings of this study that education should be considered as a “social vaccine” to reduce HIV infections in men. Study results indicate that in all the six countries observed men with at least secondary education or higher are less likely to engage in risk sexual behaviour. It seems that HIV campaigns aimed at disseminating prevention messaging are yield greater results in in men with secondary or higher level of education. There is also need for the countries in the region to consider strengthening education policy reforms that will enhance access and provision of secondary education for all especially to the most vulnerable communities such as rural areas. There is also need to strengthen sex and reproductive health services to everyone regardless of education status.

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