Mixed results: the protective role of schooling in the HIV epidemic in Swaziland

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Swaziland has the highest HIV prevalence in the world. It is recognised that young women, especially adolescents, are particularly vulnerable to HIV infection and bear a disproportionate burden of HIV incidence. The HIV data from Swaziland show the location of the epidemic, which is particularly high among adolescent girls and young women. This paper is based on research in Swaziland, commissioned because of the perception that large numbers of children were dropping out of the school. It was assumed that these "dropouts" had increased risk of HIV exposure. This study carried out a detailed analysis using the Annual Education Census Reports from 2012 to 2014 produced by the Ministry of Education. In addition, this topic was explored, during fieldwork with key informants in the country. While HIV prevalence rises rapidly among young women in Swaziland, as is the case across most of Southern Africa, the data showed there were few dropouts. This was the case at all levels of education — primary, junior secondary and senior secondary. The major reason for dropping out of primary school was family reasons; and in junior and senior secondary, pregnancy was the leading cause. Swaziland is doing well in terms of getting its children into school, and, for the most part, keeping them there. This paper identifies the students who face increased vulnerability: the limited number of dropouts; repeaters who consequently were "out-of-age for grade"; and orphans and vulnerable children (OVC). The learners who were classified as repeaters and OVC greatly outnumbered the dropouts. We argue, on the basis of these data, for re-focussed attention and the need to develop a method for tracking children as they move across the vulnerable groups. We acknowledge schooling is protective in reducing children's vulnerability to HIV, and Swaziland is on the right track in education, although there are challenges.

Keywords: dropouts, education, orphans and vulnerable children, repeaters, young women

Swaziland is a small, middle income country in Southern Africa with a population estimated at 1 467 152 in 2017 (CIA, 2017). It is known for being the only remaining absolute monarchy in Africa and for having the worst HIV epidemic in the world. The earliest signs of AIDS in Swaziland were sporadic isolated cases in the 1980s. In 1992 the first sentinel surveillance survey of antenatal clinic (ANC) attenders gave cause for concern (Whiteside, Hickey, Ngcobo, & Tomlinson, 2003). The survey found that 3.9% of women attending these clinics were HIV infected. The epidemic spread rapidly, and by 1998 a total of 31.6% of ANC attenders tested HIV-positive (MOHSW, 2004). Since the early years of the new century the country has consistently recorded the world's highest HIV prevalence.

The country has been responsive to the epidemic. In February 1999 King Mswati declared it a "national disaster" and formed an HIV/AIDS Cabinet Committee and a multi-sectoral HIV/AIDS Crisis Management and Technical Committee under the office of the Deputy Prime Minister. In December 2001 the National Emergency Response Committee on HIV/AIDS (NERCHA) was established with a mandate to coordinate and mobilise resources. In 2003 it was placed under the Prime Minister's Office by an Act of Parliament.

Unfortunately, prevention efforts were not visibly successful and, by 2004, a total of 42.6% of ANC clients were infected (Whiteside et al., 2006). This was the peak prevalence, but there has been little decline since. The main gains have been in placing people on treatment; and by 2016, 80% of adults living with HIV were receiving treatment (UNAIDS, 2017).

The need for responses across all sectors was recognised from the earliest days and "multi-sectoral" has been one of the themes. The Swazi government recognised that the education sector had the potential to be adversely affected by AIDS. A study in 1999 identified the areas of concern as growing numbers of illnesses, absenteeism and deaths among teachers and other staff; a rise in the rates of orphanhood; and increased numbers of children leaving school (Whiteside et al., 2003). In 2016, the authors of this paper undertook a project under The Evidence for HIV Prevention Programme in Southern Africa (EHPSA). This four-year programme (2014-2018), funded by the UK Department for International Development, is aimed at HIV prevention for the most vulnerable populations: adolescents and specifically adolescent girls (10 to 19 years old); prisoners; and the lesbian, gay, bisexual and transsexual (LGBT) community. Included in the terms of reference for the project was a review of the numbers and vulnerability

of children who dropped out of school. They were deemed to be at a greater risk of infection because they were not receiving AIDS education through the school system; were believed to come from poorer families; and thought to be more likely to experience gender-based violence (GBV). This paper reports on this aspect of the study using the data from the Annual Education Census Reports from 2012 to 2014 produced by the Ministry of Education (Ministry of Education and Training, 2012, 2013, 2014).

HIV in Swaziland

During the early years of the epidemic the country experienced an almost exponential rise in the number of infections, which peaked in 2004. Initially, the main source of data was samples taken from pregnant women attending ANCs. The surveys were anonymous and unlinked, which meant individual women could not be identified; nor did they know their status. At the time, when no treatment was available, this was the "best practice" for collecting data and was routine in most developing countries. Using models, data were extrapolated to estimate the number of infections in other populations (i.e., women who were not pregnant, men and total adults). The results were reported as HIV prevalence. Prevalence is the number of infections in a population at a given time and, in the case of HIV, is expressed as a percentage.

The first survey to collect information on both genders was the demographic and health survey (DHS) carried out between July 2006 and March 2007 (CSO & Macro International, 2008). Figure 1 shows peak prevalence among women, which was 49% for the cohort aged 25 to 29. For males, the peak was in the 35 to 39 age cohort at 45%. Furthermore, the data showed that prevalence among females began to rise after the age of 10, was about 10% in the 15–19 age cohort and reached 38% in the 20–24 cohort. For males, the increase began in the 20–24 age cohort, and was lower and slower. The data from the DHS survey show HIV prevalence in children aged 2–4 years. These children were infected though mother-to-child transmission (prevention interventions were not widely available at that time). As Figure 1 indicates, prevalence fell in children in

older age groups, because many of these children died; there was very limited paediatric treatment available. The data illustrate the vulnerability of younger females, which has implications for schooling and the education sector.

The Swaziland HIV Incidence Measurement Survey (SHIMS) was carried out in 2011 and collected both HIV and socio-economic data (Ministry of Health, 2012), SHIMS combined with the education data, informs much of the discussion in this paper. At the time of writing (i.e., July 2017), the SHIMS was being repeated. Once the data have been collected and analysed, they will be used to assess progress and revisit interventions. Furthermore, the SHIMS study collected HIV prevalence and incidence (the number or rate of new infections) data for men and women aged between 18 and 49 years (Ministry of Health, 2012). This is summarised in Table 1, which shows that women aged between 18 and 19 have a prevalence rate of 14.3%, which rises to 31.5% by age 20-24. The comparative data for men are 0.8% at age 18–19 and 6.6% for the 20–24 age cohort. There are, unfortunately, no data for younger adolescents.

Table 1: SHIMS: HIV prevalence among adults (ages 18–49) by selected socio-demographic characteristics

_	HIV prevalence (%)			
	Women	Men	Both genders	
Age				
18–19	14.3	8.0	7.6	
20-24	31.5	6.6	20.1	
25-29	46.7	21.3	34.9	
30-34	53.8	36.6	45.5	
35-39	49.1	47.0	48.2	
40-44	39.7	45.5	42.2	
45-49	31.6	42.5	35.8	
Residence				
Urban	38.7	24.5	32.3	
Rural	38.9	23.9	32.0	
Education				
Did not attend	48.2	40.8	44.8	
Primary	45.9	31.3	39.4	
Secondary	36.8	20.6	29.6	
Tertiary	25.6	15.5	20.3	

Source: CSO & Macro International (2008)

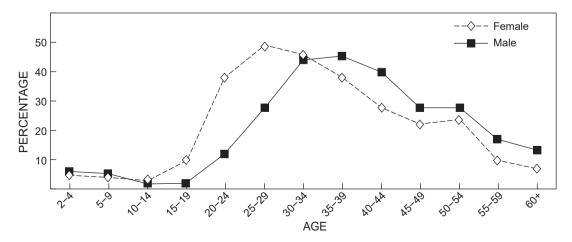


Figure 1: DHS Survey: HIV prevalence Swaziland in 2007. Source: CSO & Macro International (2008)

For men, incidence peaks at about 3% for age 30–34, and for women, incidence is about 4% for 20–24 and 35–39 age groups (Bicego et al., 2013). These rates are among the highest in the world.

The SHIMS data clearly demonstrates the protective effect of education. The less education people had, the more likely they were to be infected. Table 1 shows that women, who had not attended school, had the highest HIV prevalence — 48% falling to 25.6% for those had attended tertiary education. For males, 40.8% of those who had not attended school were HIV-positive. This fell to 20.3% for those with tertiary education. Providing education is in and of itself, an HIV intervention; schools are locations in which HIV and AIDS education can be given to children, adolescents and young adults both through the formal curriculum and informally (Boler & Archer, 2008).

The country, through its national response, developed strategies to guide the fight against the epidemic. A national multi-sector strategic framework for 2009 to 2014 was produced and in 2012, it was extended to 2018. In July 2016 Swaziland's Prime Minister, Dr Barnabas Sibusiso Dlamini, launched the country's Umgubudla HIV Investment Case, the national fast track strategy to end the AIDS epidemic by 2022 (NERCHA, 2016). This set out an investment case and identified five areas for prioritised high-impact action: accelerating access to HIV treatment; increasing the number of voluntary medical male circumcisions; expanding HIV prevention programmes for adolescent girls and young women; prevention of mother-to-child transmission of HIV; and managing co-infection cases of HIV and tuberculosis. Our paper focuses on understanding and preventing HIV among adolescents. We look at the data on enrolment, repetition and dropout rates, as well as numbers of orphans and vulnerable children (OVC) for both genders.

In classic terms, an orphan is a child who has lost both parents. The definition of "an orphan" changed largely due to AIDS. The current definition used by the United Nations Children's Fund (UNICEF), other international agencies, and most non-governmental organisations for an orphan, is a child under the age of 18, who has lost one or both parents (Whiteside, 2016). Vulnerability is more difficult to define. It can include children who live with someone who is chronically ill or dying; those whose caregivers are too old or frail to look after them; and children who live in households that are receiving orphans (Skinner et al., 2004).

Schooling has far-reaching benefits for children's health and wellbeing and as discussed above. In addition, a Human Science Research Council study notes "We know too that formal schooling plays a direct part. Educated young people have decreased rates of infection, and better educated girls in particular, since rates of infection amongst teenage girls are five times higher than boys" (McLauglin, Swartz, Kiragu, Walli, & Mohamed 2012, p. 5). As a higher level of education is associated with lower HIV prevalence the question is how to keep children in school. There have been several cash transfer trials in settings as diverse as Malawi, Lesotho, and KwaZulu-Natal in South Africa (Alcorn, 2015; Baird, Garfein, McIntosh, & Özler, 2012; Björkman Nygvist, Corno, de Walque, & Svensson, 2015). These are aimed at keeping targeted populations in school to have positive effects on health. In Botswana, there was a "natural experiment" when

educational reform increased compulsory schooling to 10 years. Those who stayed in school, for an additional year had an 8.1% lower risk of HIV infection (De Neve et al., 2015).

At the time of our original study, an estimated 220 000 people were living with HIV in Swaziland. The adult (15 to 49 years of age) prevalence rate was 28.8% and there were 47 000 orphans aged 0 to 17 due to AIDS. There were 8 800 new HIV infections and 3 900 AIDS-related deaths (UNAIDS, 2017).

Young females at heightened risk for HIV infection

Youth, specifically young women (15–24 years old), are particularly vulnerable to HIV infection and, globally, have high incidence levels. In 2015 young women worldwide comprised 11% of the adult population, while accounting for 20% of new infections among adults (UNAIDS, 2016). More recent estimates confirm that the gender disparity in HIV prevalence globally is highest for youth — 15.5% of young females are living with HIV, in comparison to 7.2% of males (Population Reference Bureau, 2015). At the same time, youth account for a large proportion of the population, 79% are 35 years old or younger and 39% are between 15 and 34 (CSO, 2007).

The youth bulge in Africa is a recognised phenomenon and much of the discussion has centred on the need for employment creation and the fears of a demographic "time bomb" (Yufu Lin, 2012). Further, what is generally not discussed, but is important to recognise, is these youth are also becoming sexually active, with all the risks that this entails. The DHS (Figure 1) shows the disproportionate infection rates for females beginning at ages 15–19 years. Unfortunately, SHIMS does not have data for people under the age of 18. However, the survey shows that women aged 18– 19 already had a prevalence rate of 14.3%, rising to 31.5% for those 20–24 years old. The comparative data for men was 0.8% for 18–19-year-olds and 6.6% for 20–24-year-olds. This confirms that adolescent girls are being disproportionately infected.

Many factors increase susceptibility to HIV infection, including age and gender. Younger women are at greater physiological risk, as their virginal tract is more vulnerable. Also, the issue of gender-based inequality and violence is particularly important for females. The risk during adolescence is further increased by the lack of accurate knowledge about sexual health, HIV transmission and treatment. These risk factors have the most significant impact in areas of high HIV prevalence (UNAIDS, 2016).

Swaziland has very high rates of gender-based violence (GBV) with disproportionate effects on young females (Reza et al., 2007). Research indicates one in three women experienced sexual violence as a child, and one in four experienced physical abuse before the age of 18 (Reza et al., 2007; UNICEF Swaziland, 2007). GBV increases physiological vulnerability to HIV transmission, and the likelihood of future physical and mental health problems (Reza et al., 2007; UNICEF Swaziland, 2007). Women who experienced physical or sexual intimate partner violence were up to 1.5 times more likely to be infected by HIV (UNAIDS, 2016).

GBV is a socio-cultural factor and a systemic issue that needs to be addressed through implementing policies and providing resources to empower young women. Currently, few children seek support services after experiencing abuse, and not all who try to find services receive them (Sumner et al., 2015). Changing the social norms would require bringing boys and young men into the conversation. Males are also affected by childhood violence and abuse, and men, who have experienced sexual victimisation, are more likely to be perpetrators of sexual violence (Tsai et al., 2011). Empowerment is critical for reducing all forms of GBV.

Reducing HIV infection requires putting in place biomedical interventions and addressing diverse socio-economic, cultural and physiological risk factors. This is a long and complex process because most interventions aimed at risk factors require a change at the systems level. Biomedical interventions include male circumcision, use of condoms, and treatment, which reduces viral load and hence infectivity. Circumcision is and condom usage tends to be male controlled. Behavioural interventions include being faithful to one partner, reducing the number of partners, delaying sexual debut, and abstaining from intergenerational sex (Ministry of Sports, Culture and Youth Affairs, 2015).

Schools and schooling have an important role in changing behaviour. One of the early responses to AIDS was forming anti-AIDS clubs in schools. Malawi had 3 200 such clubs established by 2002; the clubs aimed to provide in-school and out-of-school youth with tools and skills to avoid high-risk sexual behaviour (Reijer, Chalimba & Nakwagala, 2002). In the early 2000s in Zambia, government supported an initiative that established anti-AIDS clubs in every primary and secondary school, and in the community for out of school youth (Esu-Williams et al., 2006). In Swaziland, *Teen Club* was established in 2006 as part of the Baylor College of Medicine Children's Foundation, an international network of Baylor College of Medicine supported Teen Clubs ("About Teen Club", 2013). However, this initiative does not appear to be well integrated into government education activities.

Education in Swaziland

UNESCO notes: "Education is a fundamental human right and essential for the exercise of all other human rights. It promotes individual freedom and empowerment and yields important development benefits. UNESCO (2015) states that "education is a public good, a fundamental human right and a basis for guaranteeing the realization of other rights. It is essential for peace, tolerance, human fulfillment and sustainable development ... [efforts must be focused] on access, equity and inclusion, quality and learning outcomes, within a lifelong learning approach" (p. 7). Education is an economic and development tool; a way of creating productive, healthy, engaged citizens. Investing in education and the health and intellectual prosperity of youth has long-term benefits.

The Swaziland Government spends close to 9% of the gross domestic product (GDP) on education; has exceeded global universal primary education targets; and has significant numbers of students enrolled at all levels. Our analysis of the data showed Swaziland is doing well when measured by the standard of the absolute numbers in school, increasing coverage, progression rates and support to those most vulnerable. The data show relatively few dropouts. The main findings are discussed in the following sections.

Numbers of students

The education system is structured so children receive 7 years of free primary education. From 2012 to 2014 approximately 240 000 children were registered in primary school. In 2014 the net enrolment rate was 96%, well above the 90% needed for the Universal Primary Education¹ goal. There were consistently about 12 000 more males than females enrolled each year. The completion rate for primary school is 85% (Ministry of Education and Training, 2014). Once children complete primary school, if they are to continue in education, then fees have to be paid, but there is support for OVC. The first cohort to complete primary education under the Free Primary Education programme did so in 2015 and entered Junior Secondary School (JSS) in 2016. It will be informative to see if children face any difficulties continuing their education.

Basic education comprises 10 years of schooling: the seven primary grades and three years of JSS. Most students in Swaziland complete their education after 10 years. The number of male and female students is roughly equal through JSS and the completion rate is about 50% (Ministry of Education and Training, 2014). The final years of school—senior secondary school (SSS) comprise Form 4 and Form 5, and can lead to post-secondary and tertiary education in a vocational or university setting, or the school leavers can enter the workforce. In 2014 there were 30 931 students in SSS. The male–female ratio is approximately one to one.

We identify three major and inter-connected issues in the Swazi education system and hence the AIDS response. These are adolescents who are dropping out, repeating (which has an impact on the age for grade), and OVC. This is illustrated in Figures 3, 4 and 5, which shows total enrolment, OVC, repetition and dropouts by number and proportion at each level of schooling. There is an overlap between the categories, shown here purely for illustrative purposes, as we do not know what it is. This is an important area for future data collection, because a child who is orphaned or vulnerable may be more likely to repeat and then dropout. The links and causality need to be assessed.

Dropouts

The data by education level are presented in Figure 2. The largest group of dropouts in primary school are those who have transferred. They should not strictly be classified as dropouts since they have moved to other schools. The second biggest category is those who have left for unspecified family reasons. Further, in 2014 the number of pregnancies was 277 in primary school, 751 in JSS, and 379 in SSS. Pregnancy was the most common reasons for dropping out of SSS. At all levels, both females and males dropout because of pregnancy, however, it is unclear why this is the case. Most dropouts can return to school, but will then be older than their classmates.

Repetition and age for grade

There are high levels of repetition throughout the school system. This is a major concern as it is requires additional financial resources — up to 20% more at the primary level (Ministry of Education and Training, 2013). In primary school, as shown in Table 2, more males than females repeat, and numbers have remained high for the past 5

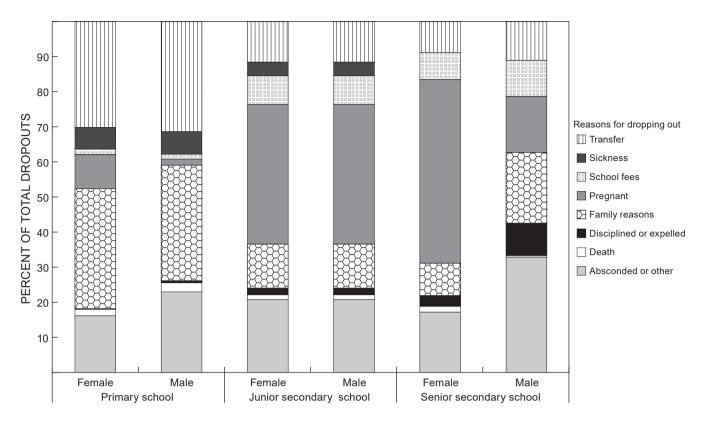


Figure 2: The proportions of student dropouts in 2014 by sex, reason and level of education

Table 2: Primary school repetition by year and gender (2010–2014)

Year	Male	Female	Total
2010	21 691	14 889	36 580
2011	21 859	14 689	36 548
2012	22 154	14 921	37 075
2013	24 058	16 312	40 375
2014	25 112	16 798	41 910

Source: Ministry of Education and Training (2012, 2013, 2014)

years. Most children entering first grade are 6 or 7 years old, but a significant number are 8 years old, and with boys tending to be older than girls. This means the pattern of repetition is set early.

Most of the repetition in JSS takes place in Forms 1 and 2, where youth should be aged 12–15. At this level, and in SSS, the number of students out-of-age is a major concern. This is shown for JSS on Table 3. The Ministry of Education and Training (2014) notes that 43 193 JSS students were 16 years or over and males dominated. There were 1 822 boys aged 20 years or older, as compared with 559 females. Further, the data on enrolment at SSS by age shows fewer out-of-age students at this level. In 2014 there were 18 178 aged 15 to 19 years, 4 876 aged 20 years, 3 388 aged 21 years, and 4 489 aged 22 years and above (this includes Form 6, Grade 11 and Grade 12.)

The issue of out-of-age children raises questions about motivation and commitment to education, as well as the effect these students have on the learning experience of those who are the appropriate age. This raises two concerns: sexual activity increases with age, and having

Table 3: Enrolment by age and gender in JSS in 2014

O = 11 = 11			Age (years	s)	
Gender	12–16	17	18	19	20 and above
Female	20 834	5 117	3 543	1 866	1 465
Male	15 279	5 584	4 812	3 548	3 909
Total	36 113	10 701	8 355	5 414	5 374

Source: Ministry of Education and Training (2014)

older boys in the same class with younger girls. However, the path of infection is generally from older men to young women and then from these women to males of the same age. There are also economic and resource considerations that result from repetition, for both families and the country.

Orphans and vulnerable children

The final issue identified in this paper is the HIV vulnerability of OVC. The data for children in primary school are shown in Figure 3, for JSS in Figure 4, and for SSS in Figure 5. The number of OVC rises by grade. This is not surprising as orphaning is a cumulative, non-reversible event over a life course. However, there has been a steady decrease in the absolute number of OVC. There are two possible reasons for this: first children are orphaned and not being registered or recognised; second, and more likely, with increased treatment, the number of adult deaths is declining and hence so are the number of OVC. Despite this, the numbers remain high. Of the total JSS enrolments of 63 775 students, 28 249 students are orphaned or vulnerable. In SSS, of the 30 931 students, nearly half (14 785) are classified as orphaned or vulnerable.

Being orphaned or vulnerable has significant impacts on children and their education. They are more likely to dropout of primary school and lack close relationships with their caregivers (Pufall et al., 2014; Ssewamala et al., 2016). The children who enter secondary school are less likely to be the correct age-for-grade and often have poor attendance, which further hampers their education (Pufall et al., 2014).

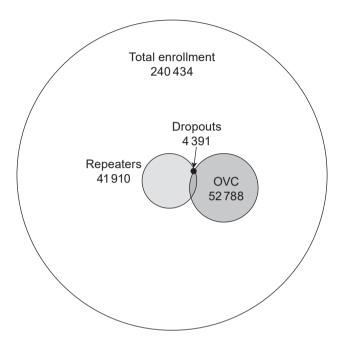


Figure 3: Primary school: orphans and vulnerable children, repeaters and dropouts as a proportion of total enrolment in 2014. Source: Ministry of Education and Training (2014)

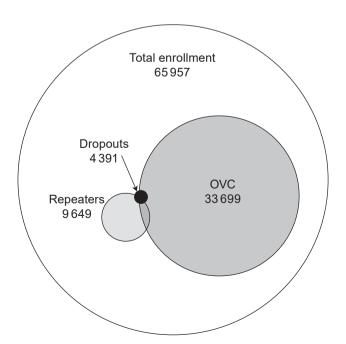


Figure 4: Junior secondary school: orphans and vulnerable children, repeaters and dropouts as a proportion of total enrolment in 2014 Source: Ministry of Education and Training (2014)

Discussion: understanding the education data

When the project was first conceived, it was thought the major issue was dropouts at all levels of schooling. Detailed data analysis has shown there are significantly fewer children dropping out than expected. The data show high progression rates between the different levels of schooling. However, major concerns arise around repetition rates, which result in a huge cost to the education system. Repetition can be seen as a consequence and cause of poor quality education, in addition to other community and family factors.

There are high levels of orphaning and vulnerability throughout the education system. Despite this, it is to the credit of the Ministry of Education and Training, and the Government of Swaziland that the education system is performing as well as it does. The opportunity to access and receive education is seen as a right for every child in Swaziland. The country committed to the Global Education for All policy and Millennium Development Declaration and made primary school education free and compulsory. The programme was implemented in 2010 with Grades 1 and 2, and reached Grade 7 in 2015. Swaziland is doing well in terms of getting and keeping children in school.

We found the number of learners dropping out of school was small. In primary school, only 4 391 students were dropouts out of the total enrolment of 240 434. There were similar low levels in JSS and SSS. However, the number of pregnancies increased and became the major cause of dropping out in SSS. This indicates increasing levels of unprotected sex.

The data show very high repetition rates. Only 10.6% of primary school students have never repeated a year (Ministry of Education and Training, 2013). The repercussions of repeating one or more grades should be further studied.

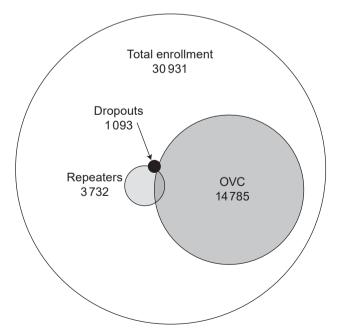


Figure 5: Senior secondary school: orphans and vulnerable children, repeaters and dropouts as a proportion of total enrolment in 2014. Source: Ministry of Education and Training (2014)

This may be associated with a higher likelihood for dropping out of school and it is certainly linked to poorer quality of education. The high levels of repetition lead to the students being out-of-age for grade. The data show more males than females are out-of-age. However, a high number of students in their early twenties are enrolled in school. The implications for HIV transmission are complex. Male students having sex with their female counterparts does not greatly increase risk of HIV transmission, as HIV prevalence among young males is low. However, having relatively older males in the same grades increases the likelihood of sexual encounters for young female learners. A large number of OVC are youth who are more likely to do poorly in school, repeat, dropout and engage in sex.

Having a comprehensive knowledge of HIV is crucial for reducing the risk of becoming infected. In Swaziland, only about half of the youth (ages 15-24) have accurate knowledge about HIV (CSO, 2015). Schools can provide access to reliable information along with opportunities discuss sexual health issues. A lack of education decreases the ability to make educated and informed decisions, while increasing poverty and unemployment. It affects the youth's power and ability to advocate for themselves, especially females who are less likely to be employed and more likely to be financially dependent on their partners (Ministry of Sports, Culture and Youth Affairs, 2015). Naidoo, Chirinda, Mchunu, Swartz, & Anderson (2015) found that formal education and talking to a partner about condom use predicted a decreased chance of being infected with HIV. Ultimately, younger, poorer and less educated young women are less likely to have access to or use contraceptives.

High numbers of children are enrolled at school in Swaziland, and education is perceived as a means to reduce HIV infections among the youth. However, dropping out of school still occurs and is significant at junior and senior secondary school, due mostly to pregnancy (Ministry of Education and Training, 2013). The risk factors of dropping out and experiencing childhood violence are interrelated and cumulative. Breiding et al. (2011) found that youth not attending school often have a have a poor relationship with their biological mother, and are more likely to have experienced sexual violence as a child. Thus, young females are at increased risk for HIV infection due to gender-based inequalities and violence, and limited access to health and reproductive services.

Conclusion: schooling as an HIV intervention

In general, it is expected that getting and keeping children in school is less likely to lead to them being HIV infected; evidence from other counties shows that this is indeed the case. Swaziland is doing well in the education sector, so the high levels of infection among adolescent girls are a concern. While education may be protective for them it is not achieving the outcomes expected.

The problems we identified relate not to the quantity and availability of education, but to the quality. The high levels of repetition and, consequently, the numbers of children who are out-of-age for grade is serious. An additional cause for concern is the high number of OVC. These factors may make education less protective for adolescent girls.

NERCHA and the Government of Swaziland have several initiatives aimed at supporting OVC and these are generally regarded as global best practices, but the numbers remain a challenge.

It is important to keep children in school. One of the strategies being explored and tried is cash transfers, both conditional and non-conditional. A review of these cash transfer programmes shows they have positive effects on health and schooling. In Swaziland, the Sitakhela Likusasa Impact Evaluation Randomised Control Trial is being rolled out by the Government of Swaziland and The World Bank. This is an outcome-based, controlled trial that looks at the impact of education and incentives on sexually transmitted infections in adolescent girls and young women. It asks if they are more effective in combination. The study began in December 2015 and is scheduled to run until November 2017.

A key question is how the groups of dropouts, repeaters and OVCs overlap, and all of whom are assumed to be more vulnerable. One innovation would be to track the children and see how and why these categories overlap, and if children are at greater risk of because they fall in any one of the groups. There needs to be a register that allows the changes in a child's status to be tracked. The paper confirms that the education sector is an important actor in the response to the epidemic. While the number of dropouts may be small, they, and all out-of-school youth, will not benefit from school-based activities and this needs attention. Within the school system there are issues of repetition and learners being out-of-age for grade and OVC numbers, all of which need attention.

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Note

1. The second United Nations MDG was Universal Primary Education, to "ensure that by 2015, children everywhere, boys and girls alike will be able to complete a full course of primary schooling." Swaziland comes very close to this.

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