

LSE Research Online

Louise Andersen, Constance Nyamukapa, Simon Gregson, Erica Pufall, Claudius Mandanhire, Alice Mutsikiwa, Ralph Gawa, Morten Skovdal and Catherine Campbell The role of schools in supporting children affected by HIV: stakeholder report 2014

Report

Original citation:

Andersen, Louise, Nyamukapa, Constance, Gregson, Simon, Pufall, Erica, Mandanhire, Claudius, Mutsikiwa, Alice, Gawa, Ralph, Skovdal, Morten and Campbell, Catherine (2014) *The role of schools in supporting children affected by HIV: stakeholder report 2014.* Biomedical Research and Training Institute, Harare, Zimbabwe.

Originally available from Biomedical Research and Training Institute

This version available at: http://eprints.lse.ac.uk/57266/

Available in LSE Research Online: June 2014

© 2014 Biomedical Research and Training Institute

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LSE Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the URL (http://eprints.lse.ac.uk) of the LSE Research Online website.





The role of schools in supporting children affected by HIV

Stakeholder report 2014

The Biomedical Research and Training Institute has carried out a study on Community Perceptions of Schools and their role in supporting HIV-affected children in Manicaland province in collaboration with Department of Infectious Disease Epidemiology, Imperial College School of Public Health, (London, UK) and Department of Social Psychology, The London School of Economic (London, UK).

The study received approval from The Medical Research Council of Zimbabwe (MRCZ) - reference number MRCZ/A/1661 and MRCZ/A/681 as well as from the Zimbabwe Ministry of Education and from the Zimbabwe Ministry of Health.

This report covers key research findings from this study, which were shared on dissemination workshops held in Zimbabwe during February and March 2014. For these workshops stakeholders linked to children, health and education at national, district and community level were invited to share ideas and discuss the possibilities and implications for schools to optimise the care and support for HIV-affected children. This report also includes a summary of the feedback and input received from participants during these workshops.

This report has been written by Louise Andersen, Project Researcher, with input from Constance Nyamukapa, Simon Gregson, Erica Pufall, Claudius Mandanhire, Alice Mutsikiwa, Ralph Gawa, Morten Skovdal and Catherine Campbell.

Table of content

1. Background	3			
1.1 Introduction	3			
1.2 Rationale and objective	3			
2. Methods2.1 Quantitative research methods2.2 Qualitative research methods	4 4 5			
 3. Results from quantitative research 3.1 Background trends in the HIV epidemic in Manicaland 3.2 The wider effects of HIV-related orphanhood on children in Manicaland 3.3 HIV burden in children in Manicaland 3.4 Education outcomes for HIV-infected children and other OVC 3.5 School support for vulnerable children 	6 6 6 7 8 8			
 4. Key findings from qualitative case studies 4.1 How HIV impact on children's school experiences 4.2 Challenges for schools in supporting children affected by HIV and poverty 4.3 Opportunities for schools in supporting HIV-affected children 	9 9 11 14			
5. How can schools be strengthened to support children affected by HIV? Summary of dissemination workshops in Zimbabwe	18			
6. Conclusion	20			
7. Further reading	21			
Acknowledgements	22			
Appendix 1: Information on dissemination workshops, Zimbabwe 2014				
References	25			

1. Background

1.1 Introduction

What role can schools play in the care and support of children affected by HIV?

International policies point to schools as key actors in securing the inclusion, protection and well-being of HIV-affected children (UNESCO, 2008; UNESCO, 2012; UNICEF, 2013). Accordingly, the Ministry of Education, Sport, Art and Culture (MoESAC) of Zimbabwe recently launched the 'Life Skills, Sexuality, HIV and AIDS Education Strategic Plan 2012-2015 to implement programmes on HIV prevention, care, support and treatment within the school environment (MoESAC, 2012). We report on a study, which sought to explore the capacity of schools to play a role in supporting the inclusion, health and wellbeing of children affected by poverty and HIV.

1.2 Rationale and objectives

The HIV epidemic continues to impact on children's lives. The households of children affected by HIV (HIV infected children, orphans, children with HIV infected relatives) are often poverty-stricken with members lacking basic needs (food, clothes, medicine) and children living under conditions of limited adult care and support (Evans and. Becker, 2009 2012; Skovdal et al, 2009). In Zimbabwe around 17% of children have lost one or both parents to the epidemic and around 2.5% of children under 14 are themselves HIV-positive (UNAIDS, 2012) leaving children affected by HIV particularly vulnerable to malnutrition, poor physical health, sexual abuse, lack of basic essentials and poor mental health (Nyamukapa et al, 2010; Parsons, 2013).

International policies advocate that teachers go beyond their traditional academic role and assist in mitigating HIV impact on children through pastoral care and support (including child protection and social protection roles). UNESCO calls for more comprehensive education sector responses to HIV and AIDS stating that the school community (including management, staff, learners and parents) should be sensitized to issues relating to prevention, care and treatment, and identify schools as potential to play a key part of this support with flexible systems adopted alongside linkages with health services (UNESCO, 2012; UNESCO 2008). The Child-Friendly Schools model developed by UNICEF advocates that educational environments need to be safe, healthy and protective, with trained teachers, adequate resources and appropriate physical, emotional and social conditions for children to learn (UNICEF, 2013).

The government of Zimbabwe has addressed the HIV epidemic through policies, strategic plans and programs with multi-sectoral involvement (Rembe, 2006; ZNASP II: 2011-2015). The 'Life Skills, Sexuality, HIV and AIDS Education Strategic Plan 2012-2015' by MoESAC, Zimbabwe (2012) was launched with the objectives of: i) ensuring that the education sector supports all learners with access to correct information and skills related to SRH, HIV prevention, care, treatment and support by the end of 2015, ii) ensure that learners living with HIV are supported to realise their personal, social and educational potential by end of 2015, and iii) to promote HIV workplace policies and activities that will support teachers and other educational personnel in HIV prevention, treatment, care and support by end of 2015 (MoESAC, 2012).

In the HIV/AIDS policy for teachers colleges, the Ministry of Higher and Tertiary Education, Zimbabwe states that HIV and AIDS prevention, care, and support programs should be fully integrated into the teacher college curricula. The strategy aims to produce teachers who are i) trained and skilled to help prevent the spread of HIV, ii) able to cope with HIV and AIDS infected and affected people in the classroom and community; iii) equipped with information to provide care and support for infected and affected people; iv) trained to provide effective responses to the new challenges that HIV and AIDS poses on the education sector (Ministry of higher and tertiary education, 2005).

Ansell (2008) argues that initiatives looking at ways in which schools can substitute for the diminishing capacities of families remain small in scale. She emphasizes that if the needs of children affected by HIV or children living in low resource and high HIV prevalent communities are to be met through schooling, the education sector's role needs to be expanded to include an 'ethic of care', in addition to teachers' traditional role in training children to take their place in a future workforce (Ansell, 2008). Thus, government institutions, NGOs and the academic field are pointing to the need for schools to go beyond their educational function and play a much wider role in the mitigation and prevention of HIV and AIDS.

The aim of our research was i) to explore the role of schools in including and supporting the well-being of girls and boys affected by severe poverty and HIV, and ii) to explore how children, teachers and community members themselves understand and experience possibilities – as well as barriers - for schools to provide care and support for children affected by HIV.

2. Methods

The study was conducted in predominantly rural areas in Manicaland province in eastern Zimbabwe. A multi-method approach was employed with a combination of qualitative and quantitative research methods.

2.1 Quantitative research methods

The data for the study were taken from a cross-sectional household survey of 4,577 children (2,328 girls and 2249 boys, aged 6-17) conducted between 2009 and 2011 in 12 sites (two small towns, four agricultural estates, two roadside settlements and four subsistence farming areas), spread across three districts in Manicaland province, and linked data on the characteristics of 28 primary and 18 secondary schools from a parallel facility survey in the same districts.

These data were used to measure and compare levels of attendance and well-being of orphans and vulnerable children in schools with varying scores on an 'HIV competence' index. For these analyses, child wellbeing was calculated as an index using principal components analysis to integrate the variables in each domain (health behaviours, risk and safety, physical health, psychological health, material situation, and social wellbeing) together to obtain a score for each child in that domain. The final score is then a weighted average of the different components that takes into account the variability and dependencies in the data. The HIV-competent school index was calculated based on data collected in the M&E facility survey on a range of HIV-specific and wider characteristics including basic facilities, student-teacher ratio, HIV policies, HIV/AIDS teaching, support for OVC, and links with local community and external organisations.

2.2 Qualitative research methods

Drawing on experiences from 3 primary schools, and 3 secondary schools in rural Zimbabwe, qualitative case studies were carried out in three rural Zimbabwean communities during the period July 2012 to June 2013 (see Table 1). The qualitative study explored:

- Community perceptions of possibilities and barriers for schools to play a role in the support and inclusion of children affected by HIV. We here we include the views of local residents surrounding schools (many themselves parents or guardians), teachers, head-teachers, children in primary and secondary schools, and children out of school.
- Children's accounts of their school-related experience
- Community understandings of factors determining qualities of response (e.g. school leadership, qualities of particular teachers, and opportunities for supportive peer relations, models of school-community interface).

Table 1: Methods and participants for qualitative data collection

Participants	HIV-affected children	Primary Students (12- 14)	Secondary Students (15- 17)	Community members including teachers
Methods	Interviews	Draw-and- Write	Photovoice, interviews	Focus group discussions, interviews
Community 1 Primary School Secondary School	n=10 (12-14) n=11 (15-17)	n=150		n=34
Community 2 Primary School Secondary School	n=13 (12-14) n=7 (15-17)		n=46	n=24
Community 3 Primary School Secondary School	n=5 (12-14) n=4 (15-17)	n=150		n=22
Total	n=50	n=300	n=46	n=80

3. Results from quantitative research

3.1 Background trends in the HIV epidemic in Manicaland

HIV prevalence in adults in the Manicaland study sites has fallen from 23.6% in the late 1990s to 14.2% between 2009 and 2011(see Figure 1, Gregson et al, 2010). These overall levels and trends are similar to those estimated for Zimbabwe as a whole (Zimbabwe Ministry of Health and Child Welfare, 2012). Between 2009 and 2011, HIV prevalence in the study areas was 11.7% in men and 15.9% in women, and varied from 12.9% in subsistence farming areas to 13.7% in estates and 18.4% in small towns.

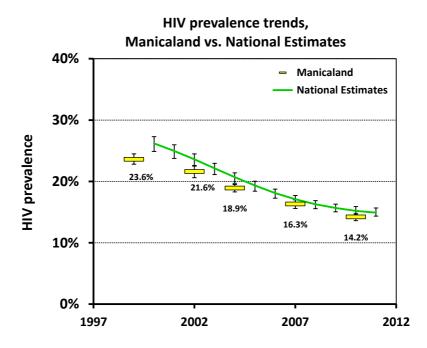


Figure 1: HIV prevalence in Manicaland province

The rate of new infections has also been dropping in recent years due largely to reductions in casual partnerships and other sexual risk behaviours. Death rates have fallen substantially following the scale-up of the national anti-retroviral treatment programme but continue to be higher amongst people living with HIV than in uninfected individuals.

3.2 The wider effects of HIV-related orphanhood on children in Manicaland

Following the extended period of high adult deaths rates in the Manicaland study areas, due largely to AIDS (Smith et al, 2007), orphanhood remains common, with 6% of children having lost both parents, 3.5% having lost their mother, and 14% having lost their father at the time of the 2009-2011 survey.

In earlier studies, we found that orphaned children tend to have poorer nutrition (greater stunting – particularly amongst maternal orphans) (Watts et al, 2007), more psychological distress (Nyamukapa et al, 2010), greater sexual risk behaviour, and increased risk of HIV infection (Gregson et al, 2005). However, some of these effects could be mitigated by

regular school attendance and may have been reduced in recent years following increases in the coverage and effectiveness of PMTCT and programmes to support OVC. For example, we found recently that, whilst orphans are less likely to be in the correct gradefor-age at school than non-orphans (see s3.4 below), those living in households that receive external support are considerably more likely to be in the correct grade (77% versus 50%) (Pufall et al, 2014). Furthermore, children in school are less likely to suffer from psychological distress (Nyamukapa et al, 2008) and less likely to be infected with HIV than out-of-school youth of similar ages (Gregson et al, 2001).

In a recently published trial of cash transfers to support OVC, both primary and secondary school-age children living in households receiving cash payments were significantly more likely to be attending school regularly (more than 80% of days in the last school month) than counterparts from households not receiving these payments (Robertson et al, 2013).

3.3 HIV burden in children in Manicaland

To characterise the epidemiology of HIV in children in Manicaland, we examined the prevalence, likely source of infection, and effects of HIV in children (aged 6-17 years) in the Manicaland province of Zimbabwe. HIV prevalence was 2.1% (41/1,914) in primary school-aged children and 1.9% (49/2,553) in secondary school-aged children. Prevalence did not differ significantly by sex, socio-economic status, location, religion, or age (see Figure 2).

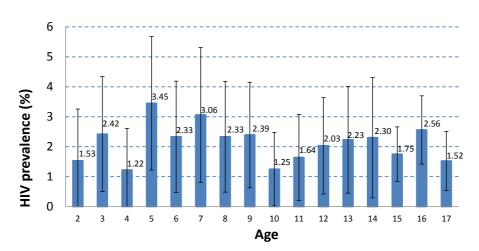


Figure 2: HIV prevalence in children (aged 2-17 years) by single year of age, Manicaland, 2009-2011

The mothers of most infected children were either deceased or HIV-positive (88/90), consistent with mother-to-child transmission being the primary mode of infection. One infected child (male, aged 3 years) and one infected adolescent (female, aged 15 years) were identified with surviving uninfected women as their biological mothers. It is unclear how the young boy became infected but the infected adolescent girl reported having had sex so could have acquired infection through this route.

HIV-infected children were found to be more likely to be malnourished (20.8% versus 10.0%, p=0.01) and stunted (41.5% versus 30.6%, p=0.04) than other children. HIV infection was not correlated with physical or self-reported psychological ill-health in

children, but infected adolescents were more likely to report episodes of illness than their uninfected counterparts (23.1% versus 9.5%, p=0.004).

3.4 Education outcomes for HIV-infected children and other OVC

Overall education outcomes appear to have held up quite well in the face of the large HIV epidemic and severe economic instability in Zimbabwe. For example, in 2011, three quarters of boys and two-thirds of girls aged 15-18 years old reported that they were still enrolled in school. Of those enrolled (aged 15-20 years), 80% of girls and two-thirds of boys were in the correct grade-for-age.

To understand the relationship between HIV-related vulnerability and education in children, we used multi-variable logistic regression to determine the correlates between different forms of OVC (being HIV-positive, having an HIV-positive parent, being a young-carer, or being a maternal, paternal, or double orphan) and a number of education outcomes (regular attendance in primary and secondary school, and being in the correct grade-forage), in children aged 6-17 from the Manicaland study areas.

Although HIV infection status had no significant association with any of the education outcomes, being a young-carer was associated with lower attendance in secondary school (AOR: 0.44; p=0.02), whilst being a maternal (AOR: 0.66; p<0.01), paternal (AOR: 0.75; p=0.02), or double (AOR: 0.68; p=0.02) orphan was associated with decreased odds of being in the correct grade-for-age. These findings suggest that HIV infection does not affect children's education, but provide further evidence that orphans experience worse education outcomes than other children.

3.5 School support for vulnerable children

We examined whether schools that possessed more of the qualities hypothesised to be indicative of HIV competence were better able to include and support OVC. For this analysis, OVC were taken to be children who were HIV-positive, maternal, paternal or double orphans, and/or children living in the poorest quintile of households. Overall, 45% of primary school-aged children and 50% of secondary school-aged children were classified as vulnerable. Whether or not a child was vulnerable did not differ by gender (p=0.8) but older children were more likely to be classified as vulnerable (p<0.001). In adolescents, vulnerability did not differ by age (p=0.4) or gender (p=0.7).

A school's level of HIV competence did not appear to have an effect on vulnerable children's attendance at either primary or secondary school level. However, OVC in the catchment areas of schools with higher HIV-competence index scores were significantly less likely to be behind in school than children from areas served by less HIV competent schools (p=0.04).

The average wellbeing index score for primary school-age children was lower for vulnerable children than for non-vulnerable children (adjusted p<0.001), but no significant difference was found for secondary school-aged children (p=0.5). Primary schools' level of HIV competence was associated with better wellbeing of children overall; however, the strength of this association did not differ significantly between vulnerable and non-vulnerable children (i.e. no <u>additional</u> benefit for OVC). No effect of school HIV competence on wellbeing was seen among secondary school children.

Two schools were examined in more detail as part of the qualitative case studies, and the results from the quantitative analysis suggested that schools with a higher percentage of OVC in their student body, and located in communities that have higher HIV burdens, are less successful at including and supporting the wellbeing of vulnerable children. This suggests that schools cannot act in isolation to support child wellbeing but rather are influenced by the context of the communities in which they are located.

4. Key findings from qualitative case studies

4.1 How HIV impacts on children's school experiences

Before turning to challenges and possibilities for schools to optimise support, we first explore how HIV and AIDS impact on the daily school experiences of children.

The HIV epidemic continues to have a negative impact on children. In our study, the homes of children affected by HIV were said to lack essential basic needs (food, clothes, medicine). Households were depicted as lacking adult care and support with children often experiencing social challenges in their communities. This appeared to have negative impact on their education and school experiences:

Barriers to school attendance:

- Poverty: Poverty itself was reported to be a significant cause of school absence due to inability to pay school fees and other school related expenses.
- HIV: Illness and hospital visits often disrupted school attendance for HIV infected children. Children living with sick relatives usually had heavy responsibilities such as caring for the sick, heavy chores and income generating activities to sustain the household. These caused children to be late for school, skip school temporarily or completely drop out.

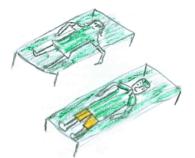




"Her parents are suffering from HIV. Every weekend she goes to the river to wash blankets that are spoiled by her parents' faeces. At times she comes late to school as she first bathes and clothes her parents."

Primary school student, rural Zimbabwe





"Her parents are in hospital. She does all the household chores."

Primary School student, rural Zimbabwe

Impact on participation in school:

For children able to attend school – some aspects of the school experience constituted barriers to their academic and social participation and development.

- Lack of school materials: Materially deprived children often attended class without adequate schoolbooks and pens, which compromised their learning opportunities.
- Lack of food: Many children were reported to come to school hungry and without food, compromising their ability to concentrate and learn, and impairing the health of HIV infected children on ARVs.



"This illness makes her miserable. She always faints when she is walking. At times she starts to vomit when she is at school this makes her sad because people will be laughing at her."

Primary school student, rural Zimbabwe

Emotional barriers to concentration and participation: When in school, many children were distracted by worries about challenges such as ailing or dying parents, how to ensure food for the household, or how to raise money for school fees. These worries compromised their emotional well-being and impacted on their concentration and participation in class.

"It takes time for me to catch up with the others because I will be thinking if there will be food at home."

Child affected by HIV, rural Zimbabwe

Bullying and social exclusion: Stigma related bullying of HIV-affected children was common in many schools leaving children socially excluded. Whilst the teachers in both in the quantitative and qualitative component of the study reported that bullying was limited in schools – children themselves frequently reported on bullying in the qualitative study. Children expressed that bullying often occurred in the absence of teachers.



"She is sitting while the others are playing. I feel sorry for Maria because the other girls don't want to play with her because they say that she has HIV."

Primary school student, rural Zimbabwe

"Bullying is a problem at our school and makes me dislike coming to school. It causes me not to learn well because I will be afraid."

Child affected by HIV, rural Zimbabwe

4.2 Challenges for schools in supporting children affected by HIV and poverty

Throughout the study, teachers expressed concerns about the impact of HIV on the physical and emotional well-being of children in their classes, as well as on their school attendance and performance. Despite common recognition of how these challenges impacted on children's ability to learn, several obstacles limited schools and teachers in going beyond their academic duties to respond to these by offering non-academic support to children. Drawing on the interviews with teachers, community members and children themselves, the following factors were commonly reported to challenge schools' ability to support children:

Limited understanding and awareness of children's home circumstances: Many teachers had limited or no knowledge of the background of any of the pupils in their classes. Given high levels of stigma, HIV-affected children and their families were often reluctant to disclose their problems. Lack of knowledge of children's home circumstances compromised teachers' understanding of children's behaviour in school and limited their flexibility and the likelihood of supportive responses. At times this lead to misunderstandings between teachers and pupils.

"You must create a bond between you and the children... Go an extra mile to help them...
Once you know their backgrounds and the children trust you, then you can start teaching...
However in most cases you find that the problems of HIV-affected children are ignored. A teacher may be teaching forty pupils and you find that they tend to concentrate on the children that are participating most in the lesson. For those who are not participating, teachers do not 'go that extra mile' to find out what is really happening to that child."

Primary school teacher, rural Zimbabwe

Lack of communication, collaboration and mutual understanding between teachers and guardians: Lack of communication between teachers and guardians hampered their mutual understanding and the possibility of collaborating in tackling issues regarding children. Some teachers said that lack of parental involvement and attendance at meetings limited opportunities for them to discuss and follow up on issues regarding children's school performance and well-being. Guardians on the other hand, often said they felt misunderstood by teachers and called for better teacher-guardian dialogue - and more opportunities for regular contact with teachers.

"There is no collaboration with the schools. The way that children are being chased away is because we do not understand each other"

Community member, rural Zimbabwe

Lack of support for school from wider communities, unsupportive context for schools and children. Teachers stated that the surrounding communities showed very little commitment or initiative to support their school. Most children in the study said that they received no or very limited support from their communities. Community members themselves said they were too constrained by their own life challenges to assist others.

"There is nothing to support the children. There is not even a single thing that is being done by the community. I won't be able to help another child, because I am failing to take my child to school, I am struggling. I am just a person living in this place."

Community member, rural Zimbabwe

- Limited knowledge of support available for HIV-affected children: Some teachers had little awareness of sources of support available for children in the local community such as NGOs, CBOs, community groups and church groups. This undermined their ability to mobilise support for children in need. Weak networks between schools and external sources of support were common barriers preventing teachers and schools from acting as referral sources for children in need of outside sources of support.
- Teachers ill-equipped to tackle HIV related challenges: Lack of time, no updated materials on HIV and inadequate HIV training were commonly reported as barriers to the delivery of health and HIV education in schools. Furthermore, some teachers found it difficult to deliver sensitive messages on HIV in a classroom where some of the pupils were affected themselves. Most teachers interviewed had little or no knowledge of HIV policies at their schools. Some schools had afternoon health clubs with creative initiatives for HIV education, however in one of the schools it was reported that only the most resourceful children attended the afternoon clubs, often excluding those in greatest need of help. Most teachers said they lacked counselling skills and the necessary experience to deal with children's psychological challenges.

"The Ministry says that AIDS education should be compulsory, but in reality it is difficult to slot it on the timetable. I just feel that the time allocated for the things to do with HIV/ AIDS is too little."

Primary school teacher, rural Zimbabwe

Lack of open communication about HIV at schools: Lack of disclosure of children's (or their parents') HIV status was a common barrier preventing teachers from attending to children's needs. Some teachers were unable to identify children in need. Others explained that even when they suspected that a child needed help, they were reluctant to assist for fear of stigmatizing the child by singling them out.

"I had a case with a child that I did not know how to deal with who wanted to cry as we were discussing. The child did not want to disclose a lot of information so I was unable to help that child."

Primary school teacher, rural Zimbabwe

"I am not sure of anything that the school has done to help HIV affected children. The problem is that some children have not disclosed their status, and so it is difficult for the school to offer support in such circumstances as the information seems too sensitive... giving them special treatment that they have not asked for may make them feel inferior." Primary school teacher, rural Zimbabwe

Lack of opportunities for confidential teacher-pupil dialogue: Although in the quantitative component of the study, all schools reported to offer counselling – majority of children participating in the qualitative study expressed that they had never attending any counselling with teachers and said they lacked opportunities for one-to-one dialogue with teachers to share concerns and explain their circumstances.

Aggressive teacher attitudes and harsh punishments: Harsh punishment by some teachers made some children fearful of them. This fear hampered their participation in class, prevented them from approaching teachers to report sensitive problems they were facing, or even made them stay away from school.

"There are some teachers that can respond in a rough manner when you talk to them so you would not want to tell them anything again. If you have something that you want to tell him, he might say that he doesn't even want to hear about it. There are some teachers who are always frowning so we will be afraid to approach them... The teachers have to be open to the students so that we can feel comfortable to tell them about our problems. I cannot be able to tell my problems to a teacher who is always frowning. A teacher has to treat the students as his own children."

Child affected by HIV, rural Zimbabwe

"These boys were late for school and the gate was closed whilst they were outside. Others are scared of being beaten so they return home."

Secondary school learner, rural Zimbabwe

Teachers' personal restrictions: Teachers said that they often faced the very same challenges of poverty and personal or family illness as the children, and felt helpless to support children in coping with problems they were unable to cope with in their own lives. Some teachers said that although they wished to support children, they were restricted by their own personal economic constraints and emotional challenges.

"I can say that usually a child might not be aware of which channel to use in order to get assistance on the challenge they will be facing. Also, a child might come to me whilst I have my own social problems. So when the child approaches me, he might find me in a bad mood, and will then be scared away."

Primary school teacher, rural Zimbabwe

- Poor teacher motivation, morale and self-esteem: It was a commonly reported that teachers felt unrecognised, unappreciated and had lost their motivation to teach. This was reported to lead some to teachers being absent from classes, turning up drunk for lessons or beating up children for no apparent reason.
- Lack of flexibility and school willingness to assist vulnerable children academically: If children failed to pay school expenses some teachers responded with punishment - sending them away from school or refusing to mark their study work. Lack of extra willingness to help children back on track after absence, and limited attention to underlying reasons for children's inadequate school equipment, also caused some children to fall even further behind.

"If you hand in an uncovered book, the teacher will not mark it and return it unmarked." Child affected by HIV, rural Zimbabwe

"When we are at school Chipo steals my books all the time. I will be beaten by the headmaster because he will be saying I am not submitting my books to my teacher." Child affected by HIV, rural Zimbabwe

• **Teachers' demands for incentives:** Some community members complained that their children were punished academically if they failed to top up teachers' salaries with extra. Incentives, which impoverished families could ill afford.

"If you ask the teacher to allow your child to attend school even though you can't pay the incentive, the teacher will agree to your face. But when your child goes to school he will be told to sit with his back to the teacher and to the black board. The teacher will teach the children who paid. The children who did not pay will be told to teach each other."

Community member, rural Zimbabwe

No systematic HIV-related responses or guidelines: At all study schools there
were no systematic responses of support, or strategies in place to guide teachers in
how to provide or mobilise support for HIV-affected children in their classes.

"There isn't a place where we can say they (HIV-affected children) can get that direct support. There are no structures in the school or community."

Primary school teacher, rural Zimbabwe

4.3 Opportunities for schools in supporting HIV-affected children

Despite constraints as stated above, our study has also taught us several good practices to learn from and build on – which could strengthen schools' capacity to support children affected by HIV and poverty. Learning from the daily experiences of teachers, community members and children – we here bring together the study participants' own suggestions of how schools could strengthen their support.

Showing greater understanding and flexibility to HIV-affected children:

• Increasing teacher awareness of children's home situations and making efforts to understand underlying reasons for children's behaviour and performance were seen to be an important first step for teachers to respond in a supportive way. Social records, regular teacher-guardian meetings and home visits were said to be useful tools in helping teachers to follow up on children's school attendance, performance, and general well-being.

"You should be able to know the background of each child even if you have forty five pupils. It is important for the class teacher to know because the performance of children in class or behaviour is influenced by the way they are living at home"

Primary School teacher, rural Zimbabwe

- Exempting vulnerable children from heavy chores at school: children affected by HIV often carried out heavy chores in their households, which were said to pose a challenge when they were sick and/or malnourished. Relieving sick and undernourished children from heavy duties at school was suggested help to protect their well-being.
- Showing flexibility in supporting children's academic development even if they are unable to pay fees: Some schools allowed children to stay in school despite late payment of fees or offered guardians to work for the school as compensation for fees.

Helping children to catch up after HIV-related school absences: When children needed to stay at home to care for sick parents, some teachers gave them special homework so that they did not fall behind. Children commonly expressed their need for teachers to help them catch up academically after absence and to take time to carefully explain material they had missed until they understood it.

"I told my teacher when my mother was very sick so I was no longer coming back to school, I would be given homework that others did and I would go and write at home so that I could help my mother."

Child affected by HIV, rural Zimbabwe

HIV specific support by teachers and schools:

- Facilitating opportunities for children to talk about HIV related challenges: Schools were encouraged to facilitate opportunities for one-to-one dialogue between teachers and children to give children an opportunity to share concerns and help teachers identify and attend children's needs.
- Supporting HIV infected children on ARVs: Teachers were encouraged to show flexibility allowing children's hospital visits during school hours. Furthermore, in terms of playing a role in supporting children's ARV adherence, it was suggested that teachers might play a role by referring sick children to health clinics for HIV testing and treatment, reminding children to take pills on time, and mobilising food for children on ARVs.
- Facilitating peer support groups for children affected by HIV: One of the study schools had facilitated support groups for HIV-affected children, giving them an opportunity to share life experiences, give each other encouragement, and strengthen friendships.

Emotional Care and Support:

- Emotional support: Some teachers showed efforts to understand underlying reasons for children's emotional behaviour, listened to children's concerns, and gave emotional encouragement and support.
- Friendly trusting teacher-pupil relations: Children commonly expressed the importance of teachers with a friendly caring attitude, enabling children to feel comfortable about approaching teachers. Trusting relationships promoted better teacher-pupil dialogue and understanding.

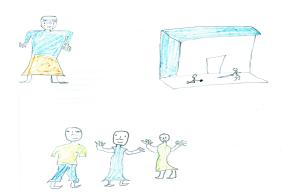
Community member, rural Zimbabwe

"A teacher can help you only if you have told him or her your problem because he or she cannot just guess."

Child affected by HIV, rural Zimbabwe

[&]quot;Some children make friends with their teachers they feel comfortable to talk to. I have a daughter at home, who does not want to talk she is quiet but with her teacher she talks about anything."

- Appointing specific teachers for counselling roles: One of the study schools had appointed specific teachers at the school to carry out one-to-one counselling with children. This created an opportunity to build trusting confidential relationships where children felt freer to share any difficulties they experienced.
- Moral guidance: Teachers with good moral behaviour were said to act as role models for children and play an essential role in their moral guidance.
- Encouraging peer support and social inclusion in class: Peer friendships played an important role for children at all the study schools. Through friendships children comforted each other, shared food and school equipment, and helped with studies. Furthermore, peers were sometimes reported to play a central role in notifying adults of classmates that needed support. In order to strengthen peer support teachers were encouraged to facilitate a good social environment in class, encouraging social inclusion and actively challenging bullying and social exclusion.



"The classroom is where I meet with my friends. When I share lunch with friends I feel happy. They tell me not to give up in my school work. When I have friends to comfort me I feel schooling is good. They comfort me just like my mother and I feel loved."

Child affected by HIV, rural Zimbabwe

"Children can open up to fellow children if they have got a problem. They feel comfortable and better understood by their peers. Those peers can help but if they cannot help they can tell their teacher and the teacher can find out a way to help."

Primary school teacher, rural Zimbabwe

Networking and referral - schools as platforms for external support:

Throughout our study it was clear that the Zimbabwean governmental social protection programme Basic Education Assistance Module (BEAM) has played a very central role in securing the school attendance of vulnerable children. In the communities around the schools, local NGO and CBO assistance had also played a role in providing material for vulnerable children. Finally, Child Protection Committees had played a important role in the communities in terms of acting on violations of children's rights and well-being.

However the likelihood that children would access and derive optimal benefit from such sources of support was heavily influenced by factors such as: i) teachers' ability to identify and refer children in need for support, ii) teachers awareness of opportunities for external support, iii) communication and collaboration between schools and external sources of support, and iv) smooth channels of referral between schools and health clinics. Here the following factors were commonly reported to be central to help schools refer children in need to support:

- Teacher awareness and networks with external sources of support: Teachers and head teachers with good links with external sources of support available for children (health clinics, NGO's/CBOs, church and community support groups.) were better prepared at referring children in need for support. Head masters were suggested to help teachers referring children in need to external sources of support.
- School-community communication and collaboration: A supportive community strengthened the ability of schools to deal with children's HIV-related challenges.
 Strong links between schools and communities were reported to promote better collaboration in referring children in need for support.

Supportive context for teachers: the role of Head masters

- Facilitating collaboration between teachers: It was suggested that head masters could facilitate regular meetings between teachers to coordinate supportive responses for children in need.
- Optimising teachers' skills: Head masters were encouraged to seek out possibilities to optimise teachers' skills (e.g. HIV training, counselling training) to handle HIV-related issues.
- Support teachers: Teachers emphasized the need for head masters to support and motivate them during their daily work. Head masters were therefore encouraged to find ways to ensure a good environment for teachers to work in, and to find ways to strengthen the recognition and value of teachers' work. Teachers were more likely to care for children if they feel that they themselves were cared for.

Promoting supportive contexts for schools: the role of the community

- Regular teacher-guardians dialogue and collaboration: Regular meetings and dialogue between teachers and guardians potentially play a key role in following up on children's school performance, attendance and well-being - and strengthening understanding between teachers, guardians and children.
- Assisting children with chores: Community members could play a vital role in helping children with chores and with looking after domestic animals -- to enable children access school and focus on studies.
- **Support for schools:** Community members were encouraged to help teachers create a safe and supportive school environment and help to improve facilities at schools or helping set up vegetable gardens and income generating projects at the school to raise money for vulnerable children.
- Cohesion and solidarity within community: The ability of schools to support children was strongly influenced by the degree of social cohesion in the wider community (including general levels of trust and helpfulness, and membership of informal groups such as church and women's groups).
- Appreciation of teachers in local community: All study participants recognised the important task teachers carry in terms of teaching children, preparing them for

their future lives and potentially supporting children in facing their general life challenges. Teachers emphasised that it is crucial for community members to acknowledge and respect teachers' important work and to find ways to encourage, support and motivate teachers.



"For teachers to help students they need support from the community so that teachers are in a position to assist. Communities should have a positive attitude towards teachers in order for the teacher to be motivated. Community should help teachers in order for teachers to help the kids."

Primary school teacher, rural Zimbabwe

5. How can schools be strengthened to support children affected by HIV? Summary of dissemination workshops in Zimbabwe.

During February and March 2014 The Biomedical Research and Training Institute hosted dissemination workshops in Zimbabwe at National, District and Community level inviting stakeholders linked to child welfare, health and education representing a wide range of organisations including MoPSE, MoHTE, NAC Save the Children, UNICEF, SAFAIDS. For further information about these workshops and full attendant lists, please see Appendix 1. After presenting research findings, workshop participants were encouraged to take their own institutions and experiences as a starting point, and discuss possibilities and implications of, schools playing a role in the prevention and mitigation of HIV and AIDS.

Workshop participants at National, District and Community level commonly supported the research findings and stated that they resonated with their experiences from their respective fields. In addition, they added the following key points:

More systematic approaches to address HIV and AIDS within schools

- There are good policies in place, but translation of policy into practical implementation is challenging.
- Systematic strategies need to be established and visible within schools, so teachers are better guided in how to address HIV within schools.
- Policies need to be accompanied with adequate resources to enable schools and teachers to implement in them practice.
- Schoolteachers need to keep more systematic records of child health's and wellbeing.

Recognition of the constraints on teachers

Workshop participants at all levels recognised the constraints on schools in supporting children affected by HIV. Based on workshop participants' own experiences on the ground, it was emphasised that schools are under incredible stress, economically and socially, and

support for children affected by HIV within schools was said to be weak. Workshop participants emphasised that:

- It needs to be recognised that teachers are parents themselves and often affected by the same economic, emotional and health challenges as the children they teach and are expected to support.
- More attention, recognition and support needs to be given to teachers so they are better positioned to help vulnerable children in their classes.

Can schools play a role in the scale up of HIV testing and ARV adherence among children? Challenge of HIV disclosure

Whilst ARV uptake has increased in the adult Zimbabwean population, levels of HIV testing and ARV uptake amongst children have been low (ZNASP_II_2011-2015). During the workshops, it was discussed whether it would be feasible to encourage HIV testing for sick children within schools, and whether schools could play a role in scaling up ARV uptake and adherence among children. In this regard, workshop raised the following points:

- Many HIV infected children on ARVs remain unaware of their own status and what they are taking medicine for. This leaves teachers in a difficult position, limiting their possibilities for referring sick children for HIV testing and supporting HIV infected children on ARVs.
- If schools are to play a role in encouraging HIV testing and ARV adherence for children, initially the high level of stigma needs to be addressed in the wider families and communities that children come from. Work needs to be put into involving guardians in HIV/AIDS education and encourage guardians to disclose their children's HIV status. More open communication between teachers, guardians and children must be promoted.

Wider supportive school context

There is currently too little collaboration between schools and institutions (NGOs, local groups etc.) in their surrounding communities – and lack of collaborations between the capacitating organisations were stated to be a barrier for setting up referral systems with schools. In this matter, the following points and suggestions were raised:

- It was suggested that a full list of all supportive institutions (NGOs, CBOs, community groups, church groups etc.) registered in the local communities needs to be made available to all schools. This would help teachers keeping aware of support available when encountering needy pupils. There is a need for the establishment of systems that keep teachers informed about how to access sources of support within local communities and how to refer needy pupils to these.
- In order for school-community support systems to be sustainable they must be integrated within local community structures, and involve chiefs, village heads and other community leaders, and be sensitive to local cultural norms.

School health programmes:

In the quantitative component of the study, only 6% of teachers were reported as having received HIV training. In the qualitative component of the study teachers explained that they lacked updated resources, time and training for delivering HIV education in schools, and at times they found it difficult to talk of sensitive issues around HIV in classes where several of

their pupils are affected. Workshop participants raised the following ideas in order to strengthen school health programmes:

- It was suggested that HIV/AIDS lessons could be made compulsory in schools, be taught and learnt like other regular subjects and included in the syllabus for examinations— to motivate teachers to prioritising it.
- Teachers need to be better equipped at *delivering* health education. It is not enough to simply transmit factual knowledge; teachers also need to be trained in how to talk about sensitive issues in class.
- Workshop participants advocated strengthening the Zimbabwean school health programme by having nurses aligned to schools to i) help teachers deliver HIV education, and to ii) observe children's health and well-being, and refer children to health clinics when needed.
- In the district meetings it was suggested that collaboration between village health workers and teachers could be strengthened. Given that village health workers have access to information of the general life circumstances and health of individual children, sharing this knowledge with teachers could potentially help teachers in their daily encounters with children in their classes, and promote better understanding and flexibility between teachers and pupils affected by HIV.

6. Conclusion

At schools teachers have first-hand daily contact with children and therefore potentially are in a position to help them cope better with difficulties in their lives, and to play a key role in the prevention and mitigation of HIV and AIDS. However, learning from teachers, community members and children participating in this study, several barriers limited the potential for schools in going beyond their traditional educational role to play an active role in the battle against HIV and AIDS. This study taught us several examples of good practice to learn from and build on. However these were limited in two ways. Firstly they tended to represent initiatives by individual teachers to support children – rather than being evidence for systematic school responses. Secondly participants in our study said that these good suggestions remained at the level of *ideas* for ways in which schools might be more responsive, but ideas that were seldom put into action. Generally, across the schools, teachers had little or no awareness of AIDS policies, and were unaware of any strategies in place at the schools to guide teachers through their daily encounter with children's HIV-related challenges.

Throughout the study it was clear that providing daily care and support for children takes time and energy, and teachers were already very busy with their traditional educational roles. If teachers are expected to stretch beyond their academic duties and take on additional caring roles, they need to be comprehensively supported and incentivized to do so. One of the key lessons learned from both the qualitative and quantitative components of this study is that schools cannot stand alone in their encounters with children's HIV-related challenges. Schools are greatly influenced by the context in which they are situated and a supportive context can strengthen school responses. Accordingly, it is essential: i) to build bridges and referral systems between schools and sources of support in their surrounding communities such as NGOs, health services, community groups, and church groups – and make sure that these are visible and accessible to help teachers refer children in need for adequate support, ii) to make continuous efforts to overcome persisting HIV-related stigma and barriers to HIV disclosure, iii) to strengthen dialogue between teachers, community members, guardians and children to encourage better communication, understanding and collaboration in tackling children's HIV-related

challenges, and iv) to comprehensively support, encourage and motivate teachers in their daily activities with children. Hence, the wider supportive contexts for schools must be strengthened - if schools are to play a role assisting in the prevention and mitigation of the impact of HIV and AIDS on children during the daily functions of schools.

7. Further reading

Peer reviewed publications:

Campbell C, Andersen L, Skovdal M, Mutikiwa A, Madanhire C, Gregson S. (2014) Children's representations of school support for HIV-affected peers in rural Zimbabwe. In *BMC Public Health*, 14: 402 http://www.biomedcentral.com/1471-2458/14/402

Pufall EL, Nyamukapa C, Eaton JW, Campbell C, Skovdal M, Munyati S, Robertson L, Gregson S. The impact of HIV on children's education in eastern Zimbabwe. *AIDS Care*. 2014; DOI: 10.1080/09540121.2014.892564

Pufall E, Gregson S, Eaton JW, Masoka T, Mpandaguta E, Andersen L, Skovdal M, Nyamukapa CA, Campbell CA. The contribution of schools to supporting the wellbeing of children affected by HIV in eastern Zimbabwe. *AIDS*. In press.

Websites:

http://www.brti.co.zw

www.manicalandhivproject.org

http://www.psych.lse.ac.uk/beyondeducation

Acknowledgements:

We would like to thank everyone who participated in this study for sharing their experiences with us, and for all participants attending the dissemination workshop for sharing valuable input. We are grateful for the ESRC-DFID for funding this research and making the research and workshops possible, as well as for the Biomedical Research and Training Institute for their support and collaboration.

Finally, we sincerely thank the Ministry of Primary and Secondary Education for their support and interest in this research.

Appendix 1: Information on dissemination workshops, Zimbabwe 2014

All dissemination workshops were funded by the ESRC-DFID.

The following dissemination workshops took place:

- **20**th **of February 2014:** National level workshop at Cresta Lodge, Harare. This workshop was co-hosted with The Ministry of Primary and Secondary Education.
- 25th of February 2014: District level workshop at Professor Chandiwana Public Health Centre in Mutasa DC.
- 3rd to 7th of March 2014: Community workshops carried out in each of the 3 qualitative research locations in Manicaland.
- 22nd to 23rd of March: Youth workshops carried out in each of the 3 qualitative research locations in Manicaland.

The research findings outlined in this report were presented as follows:

- Trends in HIV, orphans and vulnerable children and education in Manicaland [Professor Simon Gregson, Department of Infectious Disease Epidemiology, Imperial College School of Public Health, United Kingdom]
- Results from quantitative research: The Contribution of Schools to Supporting the Wellbeing of Children Affected by HIV in Eastern Zimbabwe [Dr. Constance Nyamukapa, Research Operations Director Manicaland HIV/STD Prevention Project – BRTI, Harare]
- Qualitative research findings: Community Perceptions of Schools and their role in supporting HIV-affected children [Louise Andersen, Research officer, London School of Economics, UK; Claudius Madanhire, School of Applied Human Sciences, University of KwaZulu Natal, South Africa; Ralph Gawa Munyaradzi]

Comments from Workshop attendants:

"Impressive work-and much needed. I was absolutely thrilled to hear about such fantastic data. I haven't come across anything that focuses on schools in such a thoughtful mannerit's an incredible and ignored opportunity to intervene."

Researcher at London School of Hygiene and Tropical Medicine

"Many thanks to BRTI for this morning's presentations, which were comprehensive and detailed. Congratulations to BRTI on a job well done in unpacking the roles schools can play in the support and protection of HIV affected children."

HIV/AIDS Specialist (Education) Basic Education and Gender Equality, UNICEF

Attendance lists:

National level workshop at Cresta Lodge, Harare, 20th of February 2014:

Organisation	Position		
World Vision	Health Coordinator		
Action Aid	Intern		
BRTI-Zenith	Project Doctor		
MoPSE	Provincial Education Director		
Life Empowerment	Executive Director		
Supporting Org./ZNCWC	Executive Director		
MoHCC	Provincial Health Promotions Officer		
CRS	Project Manager		
SAFAIDS	Senior Project Officer		
Save the Children	CP Advisor		
UNICEF	Evaluation Specialist		
NAC	Provincial AIDS Coordinator		
CPS	Assistant Programme Officer		
NAC	Research communications coordinator		
UNICEF			
WUA	Lecturer		
SHAZ-PANGEA			
BRTI-Zenith	Project Lead & Principal Investigator of the ZENITH Project		
PANGEA-SHAZ	Data Manager		
UNICEF	HIV&AIDS Npo		
MoPSE	Principal Director		
MoHTE,S&T	Science & Tech Officer		
London School of			
Economics, BRTI	Research Officer		
BRTI	The Operations Director, Manicaland HIV/STD Project		
BRTI	The Programmes Coordinator		
BRTI, Imperial College	PI, Manicaland HIV/STD Prevention Project		
BRTI	PA, Manicaland HIV/STD Prevention Project		
BRTI	RA Manicaland HIV/STD Prevention Project		
BRTI	The Deputy Director General		

District level workshop at Professor Chandiwana Public Health Centre in Mutasa DC, $20^{\rm th}$ of February 2014

Organization	Position	
NAC	DAC	
Local Primary school (MoPSE)	Deputy Head	
ZRP Rusape DHQ	DVFU	
Local highschool (MoPSE)	Senior Teacher	
FACT Rusape	Project Officer	
MoHCC	Community Nurse	
NAC-Makoni	DAC	
MoPSE	Remedial Tutor	
CHIEDZA	Programme Officer	
Mandeya 2 Dev. Org SOIR	Programme Coordinator	
MoHCC	GMO- Makoni	
MoHCC	CHS- Mutasa	
ZRPMutasa	VFU	
Plan International	CR&PC	
ZNNP+	PC	
NAC-Manicaland Provincial	M&E	
FACT Rusape	Intern	
Local High school (MoPSE)	Acting Head	
Local Primary school	Headmaster	
PD	Officer	
Local Govt.	Assistant District Administrator	
President's Dept.	OIC	
Childline	Project Officer	
ZNNP+	Field Officer	
NAC	DAC	
Simukai Child Protection	Programme Officer	
FACT VB	Intern	
MoHCC	A/DMO	
London School of Economics, BRTI	Research Officer	
BRTI	The Operations Director, Manicaland HIV/STD Project	
BRTI	The Programmes Coordinator	
BRTI, Imperial College	PI, Manicaland HIV/STD Prevention Project	
BRTI	PA, Manicaland HIV/STD Prevention Project	
BRTI	RA Manicaland HIV/STD Prevention Project	
BRTI	The Fieldwork Manager Manicaland HIV/STD Prevention Project	

References

Ansell, N. (2008) Substituting for Families? Schools and Social Reproduction in AIDS-affected Lesotho. *Antipode* 2008, 40 (5): 802-824.

Evans, R. And Becker, S. (2009) Children caring for parents with HIV and AIDS – Global issues and policy responses, Bristol: The Policy Press

Gregson, S., et al. (2010). HIV decline due to reductions in risky sex in Zimbabwe? Evidence from a comprehensive epidemiological review. *International Journal of Epidemiology* 39(5): 1311-1323.

Gregson, S., et al. (2005). HIV infection and reproductive health in teenage women orphaned and made vulnerable by AIDS in eastern Zimbabwe. AIDS Care 17(7): 785-794.

Gregson, S., et al. (2001). School education and HIV control in sub-Saharan Africa: from discord to harmony? *Journal of International Development* 13: 467-485.

Nyamukapa, C. S. Gregson, et al. (2010). Causes and consequences of psychological distress among orphans in eastern Zimbabwe. *Aids Care-Psychological and Socio-Medical Aspects of Aids/Hiv* 22(8): 988-996.

Nyamukapa, C., Gregson, S. et al. (2008). HIV-associated orphanhood and children's psychosocial distress: theoretical framework tested with data from Zimbabwe. *American Journal of Public Health*, *98*, 133-141

Parsons, R. (2012): *Growing up with HIV in Zimbabwe: one day this will all be over.* Suffolk: James Currey

Rembe, S. (2006) An Assessment of the Policies And Programmes of

Zimbabwe in addressing the HIV/Aids Epidemic in the Education Sector. *In Educational Research and Reviews* Vol. 1 (7), pp. 234-255,

Pufall, E. L., et al. (2014). The impact of HIV on children's education in eastern Zimbabwe. AIDS Care.

Robertson, L., et al. (2013). Effects of unconditional and conditional cash transfers on child health and development: a cluster-randomised trial in Zimbabwe. The Lancet 381(9874): 1283-1294.

Skovdal, M. and Daniel, M. (2012). Resilience through participation and coping-enabling social environments: the case of HIV-affected children in Africa. *African Journal of AIDS Research*, 11, 153-164.

Smith, J., et al. (2007). "Changing patterns of adult mortality as the HIV epidemic matures in Manicaland, eastern Zimbabwe." <u>AIDS</u> **21**(Supplement): S81-S86.

Ministry of Education, Sport, Art and Culture (MoESAC) 2012: Life Skills, Sexuality, HIV and AIDS Education Strategic Plan 2012-2015

Ministry of higher and tertiary education (2005): *Policy on HIV and AIDS for Teachers' Colleges*, http://www.safaids.net/content/policy-hiv-and-aids-teachers%E2%80%99-colleges-2005-zimbawe

UNAIDS, Global AIDS response progress report 2012, Zimbabwe Country report https://www.unaids.org/en/dataanalysis/knowyourresponse/countryprogressreports/2012c ountries/ce ZW Narrative Report.pdf

UNESCO 2012: Positive Learning: Meeting the needs of young people living with HIV (YPLHIV) in the education sector http://unesdoc.unesco.org/images/0021/002164/216485e.pdf

UNESCO 2008: Good policy and in HIV and AIDS and Education – HIV and AIDS and supportive learning environments http://unesdoc.unesco.org/images/0014/001461/146122e.pdf

UNICEF, Child Friendly Schools (2013) http://www.unicef.org/education/index_focus_schools.html

Watts, H., et al. (2007). Poorer health and nutritional outcomes for orphans and vulnerable young children not explained by greater exposure to extreme poverty in Zimbabwe. Tropical Medicine and International Health 12 (5): 584-593.

Zimbabwe Ministry of Health and Child Welfare (2012). Zimbabwe National HIV and AIDS Estimates 2011. Harare, Zimbabwe Ministry of Health and Child Welfare.

ZNASP II: 2011-2015 http://www.nac.org.zw/sites/default/files/Zimbabwe-National-HIV-AIDS-Strategic-2011-2015-Plan.pdf