

# HIV/AIDS-care and Support Competence of Secondary Schools in Western Uganda: A Qualitative Inquiry With School Stakeholders

**Emmanuel Kimera** (✉ [kimeraemma@yahoo.co.uk](mailto:kimeraemma@yahoo.co.uk))

Mountains of the Moon University <https://orcid.org/0000-0003-0836-8814>

**Sofie Vindevogel**

Hogeschool Gent

**Didier Reynaert**

Hogeschool Gent

**Anne-Mie Engelen**

Hogeschool Gent

**Kintu Mugenyi Justice**

Mountains of the Moon University

**John Rubaihayo**

Mountains of the Moon University

**Jessica De Maeyer**

Hogeschool Gent

**Johan Bilsen**

Vrije Universiteit Brussel

---

## Research

**Keywords:** HIV/AIDS, inclusive education, youth, qualitative, HIV/AIDS competence, Uganda

**Posted Date:** July 16th, 2020

**DOI:** <https://doi.org/10.21203/rs.3.rs-42840/v1>

**License:**   This work is licensed under a Creative Commons Attribution 4.0 International License. [Read Full License](#)

---

# Abstract

## Background

Although schools have been identified as significant settings in the response to the HIV/AIDS pandemic, limited research is available on how they can accommodate Youth Living with HIV/AIDS (YLWHA) especially in resource limited countries. In this study we explored how school stakeholders in western Uganda perceived of good practices to include and support YLWHA in their schools. We conceptualized an HIV/AIDS-care and support competent school community.

## Methods

This qualitative inquiry involved school stakeholders (parents/caretakers, school staff and students) purposively selected from 3 secondary schools in western Uganda. A total of 88 participants were involved in focus group discussions and individual interviews. Data analysis followed an inductive and deductive thematic strategy.

## Results

We identified 7 overarching interrelated themes in which participants reported practices to include and support YLWHA: counselling and guidance; social support networks and linkages; knowledge and skills; anti-stigma and anti-discrimination measures; disclosure of HIV status; treatment and management of HIV/AIDS; and affirmative actions for YLWHA. Stakeholders' perceptions of good practices often differed regarding what was considered appropriate, the approach and who to take lead in supporting YLWHA.

## Conclusion

Despite the meager support for YLWHA currently available in schools, our study points to optimism and high potential. We posit that building competent HIV/AIDS-care and support school communities is a gradual process requiring each school to develop a strong knowledge base about HIV/AIDS and support needs of YLWHA, develop a coherent and school-wide approach, and collaborate extensively with external stakeholders who are significant in supporting YLWHA.

## Background

International studies have shown that schools have the power to influence resilience processes in students affected by stressors around living with HIV/AIDS [1]. Also, international policies advocate for schools as strategic settings in securing quality of life of Youth Living with HIV/AIDS (YLWHA) [2]. They call for a comprehensive education response involving the entire school community (management, staff, students, and parents) and for school staff to go beyond their academic role and take up pastoral and supportive care [3]. Such an approach is deemed to facilitate a safe, healthy, and protective environment for all students including those with vulnerabilities [4, 5]. It can also promote an inclusive learning environment, wherein all students – irrespective of physical, cognitive, social, and emotional differences – can participate and belong. Similarly, the

Ugandan Ministry of Education and Sports national policy guidelines on HIV/AIDS promote inclusion of YLWHA in formal schooling and advocate for a multisectoral and multilevel approach to supporting the special needs of such students [6]. This is particularly relevant as the prevalence of HIV continues to rise among youth in Uganda and other countries of sub-Saharan Africa [7] due to high infection rates during adolescence [8] and the scaling up of access to Antiretroviral Therapies (ART) [9]. Both perinatally and behaviorally infected young people are now growing into adulthood [10] necessitating a critical assessment of the HIV/AIDS response strategies of the school environment where this growing number of YLWHA is expected to spend most of the time [11]. Major challenges in terms of access to and delivery of quality education for YLWHA and school staffs' resources to address special needs are being observed in Uganda [12] and elsewhere [13].

Previous research in Ugandan secondary schools has shown that YLWHA are particularly vulnerable to HIV-related stigma, abuse, poor nutrition, mental and physical health difficulties, and poverty [12, 14–17]. In addition, they often come from households that are economically challenged due to a high burden of healthcare-related costs and loss of income due to ill or deceased adult members [15]. As a consequence of the above, decline in school enrollment, attendance and academic progress have been conspicuous effects of HIV among YLWHA, with significant consequences on other life domains too [15, 16, 18]. The contextual and multidimensional nature of the challenges outlined above requires a localized involvement of the key school stakeholders to spur support around such vulnerable students.

School-based HIV/AIDS interventions in Uganda have been systematically skewed towards primary prevention and are increasingly criticized for ignoring care and support (secondary and tertiary prevention) of the youth already infected [19]. Such is the case with interventions by the Ministry of Education and Sports in Uganda such as peer education clubs [20], drama and mass media campaigns [21], and the Presidential Initiative on AIDS Strategy for Communication to Youth [22]. Care and support initiatives for YLWHA have been mainly provided in environs external to schools, denying the education system opportunity to fully exploit its potential to support and facilitate resilience and quality of life in YLWHA through inclusive education. Additionally, formal responses by government, non-governmental organizations and donor implementing partners have dominated the care and support domain, yet the bulk of the burden is borne by the communities wherein YLWHA spend their daily lives [23]. This has led to a disconnect in concerns between the care providers and the “cared for” and alienation of the immediate social structures from the care podium. The role of the school communities in providing care and support to YLWHA as well as supporting externally driven interventions and policies has received little attention despite its potential for good outcomes [14].

In this study we pursued the notion of HIV/AIDS competent communities as relevant to the secondary school communities of Uganda. Campbell and colleagues [23–25], define such as social settings in which people are more likely to work collaboratively to prevent new HIV infections and to optimize care and support for those living with HIV/AIDS. We focused the attention to care and support as this is applicable to YLWHA and we thus conceptualized an HIV/AIDS-care and support competent school. Rooted in the socio-ecological perspective [26] and the concept of social capital [27] in health promotion, HIV/AIDS competence emphasizes interrelatedness and interdependence of individuals and their social environment for better outcomes [28]. It provides a framework typified by six psycho-social resources whose presence or absence facilitates or hinders competence: knowledge and skills, safe social spaces, ownership and responsibility, confidence in local strength, solidarity, and bridging partnerships [24]. Moreover, it provides for communities to make right choices as intrinsic components of a durable and sustainable HIV/AIDS strategy [29]. While it is a long term process prone to

hinderances such as HIV stigma [16], community tensions [30] as well as lack of knowledge, skills and resources [31], evidence is available to suggest that building HIV/AIDS competent communities yields positive results such as more care and support and improved quality of life of those afflicted [23].

Little is known about the current and potential care and support to YLWHA in Ugandan secondary schools. This study was motivated by the country's aspirations of promoting inclusive education as a fulcrum for socio-economic development against the backdrop of schooling challenges for YLWHA expounded in the literature. We investigated how school stakeholders – key players in a competent school community - in secondary schools of western Uganda perceived the HIV/AIDS-care and support competence of their schools and how this competence could further be developed to realize inclusive education for YLWHA. The study was guided by the question 'how do stakeholders in the school community (school staff, parents and students) conceive of good practices to include and support YLWHA?'

## Methods

### Study design, settings and participants

This qualitative inquiry employed Focus Group Discussions (FGDs) and interviews, which were conducted in one district of western Uganda from May to October, 2019. FGDs were conducted in three secondary schools and involved homogeneously composed school stakeholder groups (school staff, students and parents). We purposively selected three secondary schools, that were accommodating both male and female students. One school in the urban setting was public and with only day scholars (students commuting from home every day). Another, in the peri-urban was private but not for profit and with both boarding scholars (students stay at school) and day scholars. The third school in the rural setting was public with day scholars. For each school, FGDs were conducted with representatives of each of the 3 stakeholder groups (student leaders, school staff with different leadership roles, and parents' committee members). We purposively choose to engage these representatives because by virtual of their positions, they could articulate the current and possible future strategies in their schools to support vulnerable students such as YLWHA. Additionally, they are in a privileged position to rally and champion change within the school community. FGDs were also held with YLWHA aged 12–19 years selected from one ART clinic in a peri-urban setting. This group was selected from prior research at this Health facility and included only those who were attending secondary school at that time though we were blinded to which school they were attending. After the FGDs with YLWHA, we sought the availability of their parents/caretakers to participate. Due to diversity in location of these parents/caretakers and lack of representation, we could not organize a homogenous focus group. We instead conducted individual interviews with them. The involvement of YLWHA and their parents/caretakers was because we did not ask students to disclose their status and parents to disclose the status of their children in the school stakeholder groups due to high HIV-related stigma within schools and broader society. We were hence not sure if the students and parents in the stakeholder groups would adequately represent YLWHA and parents/caretakers of YLWHA respectively.

### Data Collection

FGDs involved 10 mixed-gender groups with a total of 83 participants and each group with an average of 8 participants. At each school, we sought permission from the headteachers, who then selected a contact staff

member to support the identification of potential participants. This staff member linked the research team with the heads of the different school stakeholder groups. After explaining the purpose and procedure of the study to these heads and obtaining their permission, they convened a mixed gender and roles group of their members. All the 10 groups were involved in 2 separate sessions of FGDs with an interval of 1 or 2 days. In the first session, we explored the concern/challenges and resources/supports for YLWHA in school from the perspectives of these stakeholders. They were also engaged in participatory ranking [32] to identify the hierarchy/priority of these challenges and supports. In the second session, participants were probed to reflect on what an ideal supportive school environment would be for vulnerable students including those with HIV/AIDS and how their schools could be improved to accommodate the special needs of YLWHA. Additional individual interviews involved 5 parents/caretakers of school-going YLWHA, contacted via the ART clinic. We reached these parents/caretakers by phone calls using contacts provided by YLWHA in the focus group. One interview was conducted for each parent/caretaker at their homes or ART clinic as they preferred.

Two researchers conducted the FGDs and interviews in quiet private places, using the same semi-structured guide. The researchers' prior research experience in the schools and with YLWHA in these settings eased the process of reaching and engaging participants. No participant turned down the request to participate due to the trust that had been built. Each session of FGD lasted for averagely 110 minutes while interviews took about 75 minutes. FGDs and interviews were audio recorded with consent from participants. Note taking was also done to capture main ideas that arose as well as the non-verbal information. FGDs with students and school staff were conducted in English, an official language and medium of instruction in Ugandan schools. To avoid interrupting the learning and teaching, extracurricular time was utilized. FGDs with YLWHA were organized during school holiday and participants were encouraged to use a language of their choice. Interviews with parents and parents/caretakers of YLWHA were done on their ideal days and in the local language.

## Ethics

Ethical approval was obtained from Uganda National Council of Science and Technology (reference No. SS 4587) and the Institutional Review Boards of The AIDS Support Organization in Uganda (TASOREC/009/18-UG-REC-009) and Vrije Universiteit Brussel in Belgium (B.U.N 143,201,835,870). Informed written consent/assent was sought from YLWHA as well as the parents/caretakers of minors among YLWHA. All other participants provided verbal consent. Data were anonymized in the transcripts and reporting and were also confidentially kept. Parents/caretakers, school staff, and YLWHA were reimbursed for transport with the equivalent of 7 USD while all schools received games and sports materials as appreciation for participation of students.

## Data Management And Analysis

Data in audio files were transcribed verbatim by postgraduate students fluent in the languages used. FGDs and interviews conducted in local languages were translated to English and all transcripts were checked against the original audio recordings by the main researcher for accuracy. Data analysis followed a thematic strategy [33] involving both inductive and deductive coding. Initial analysis involved a group of 5 authors: EK, SV, DR, AE and JD who independently read through 8 FGD and 2 interview transcripts to get familiar with the data and develop initial ideas to code. They then converged to discuss and harmonize these potential codes. The developed

codebook was then used by EK to code all the transcripts in conformity with the research question, while remaining open to new emerging codes. Coding was done using the software NVivo 10. Next, the codes together with all extracts of data that had been coded in respect to them, were collated into potential themes and overarching themes, most of which were deductively derived from the HIV/AIDS competent community framework described in the introduction. EK and SV reviewed and refined the themes in an iterative way that led to collapsing, reordering, deletion and creation of themes. This ensured that data within themes was coherently meaningful, distinct from that in other themes and that the entire data breadth had been covered. Finally, we named the overarching themes, determined their essence, mapped their boundaries and established the intra-theme and inter-theme relationships to complete the analysis. Table 1 below, shows the themes and overarching themes derived from the analysis.

## Findings

We identified seven interrelated overarching themes in the participants' conceptions of good practices to include and support YLWHA and perceived strategies to create new good practices in their schools: counselling and guidance; social support networks and linkages; knowledge and skills; anti-stigma and anti-discrimination measures; disclosure of HIV status in school; treatment and management of HIV/AIDS; and affirmative actions for YLWHA.

Table 1  
Themes and overarching themes derived from the analysis.

<b>Themes</b>	<b>Main themes</b>
Peer counselling and guidance General counselling and guidance by teachers Professional counselling Spiritual counselling Sexuality and reproductive health counselling	Counselling and guidance
Peer friendships Clubs, games, and sports In-school mentors ('guardian teachers') Liaison with community resourceful people Liaison with nearby healthcare centres	Social support networks and linkages
Access to information Appropriate information about HIV/AIDS Sensitization of all school stakeholders Skills development Future prospects with schooling	Knowledge and skills
Non-discriminatory school policies Child protection policy Changing HIV/AIDS messages Attitude to normalize HIV/AIDS Rules and regulation against stigmatizing acts	Anti-stigma and anti-discrimination measures
Value of disclosure Partial disclosure Confidentiality and privacy Trust for disclosure Encouraging disclosure	Disclosure of HIV status

Themes	Main themes
School nurses Essential medicines/first aid Sickbay Medication adherence support Referrals to healthcare centres	Treatment and management of HIV
Special meals for YLWHA Remedial classes Financial support	Affirmative action for YLWHA

## Counselling And Guidance

In the Ugandan context, counselling and guidance is any form of advice given to a person with recognized or expected challenges to enable them surmount such challenges. It can be provided by peers, professionals and non-professionals. A diagnosis of HIV creates a huge emotional load on YLWHA and as such, psychosocial support is necessary.

All participants echoed the value of counselling and guidance for YLWHA and shared how it was provided in their schools. Students reported peer counselling to those who disclosed to them on a friendship level as very supportive. The school staff (teachers, school nurses, and matrons) perceived that the general guidance and counselling they give to all students focusing on career growth, life skills, personal hygiene, general health, and Sexuality and Reproductive Health (SRH) was important to all students including YLWHA. They reported doing this periodically during school assemblies, in class, during extracurricular activities, and seldomly to support-seeking students. Only two school staff reported instances where YLWHA sought counselling from them.

In one school, teachers and students reported presence of a fulltime professional counsellor who was not part of the teaching staff and they noted that this allowed students with sensitive issues like HIV/AIDS to be counselled in privacy. In other schools, counselling was a duty of all school staff and therefore students had opportunities to talk to a staff member of their choice as quoted below;

*“Such students [YLWHA] get guidance and counseling from teachers. They learn how to live with HIV/AIDS, they also learn how to live with other people. We have many male and female teachers and they [students] are free to talk to any of their choice. So, you cannot say that you failed to get someone to talk to”* (female student, urban school).

Students and school staff in all schools also reported spiritual counselling as helpful. This type, emphasizes the role of God in providing strength and power for one to navigate challenges. It was reportedly provided by religious groups that occasionally visit the schools and also listen to concerns from individual students in a private arrangement.

One caretaker of a YLWHA reported providing SRH counselling to her daughter, stressing that such youth are highly vulnerable to sex abuse by men and as such they need to be empowered to overcome temptations. All the other parents shied away from discussing SRH issues with their children, remarking that teachers were in the best position to do so. However, some parents noted lack of appropriate counselling for YLWHA in school as a top challenge, an indication that teachers were not providing it.

Parents and students expected teachers to give more and tailored counseling to YLWHA since they spend more time with these youth. On the contrary, teachers cited limitations that should be addressed for them to provide appropriate counselling to YLWHA: (1) these students are not disclosed to the school staff; (2) teachers lack the right information about HIV/AIDS and skills to deliver counseling; (3) their heavy workloads cannot allow for individualized counselling needed by YLWHA. The quote below partially illustrates the above concerns;

*“The school should have some counselors who can give the correct information to our children*

*whenever it is necessary. For us teaches we can provide some counseling but we may not have the right messages to pass on to these youth [YLWHA]. It would also be necessary if health workers can visit teachers and train them on the right information for these youth [YLWHA] and how to give it. So, a supportive school environment should be one where every teacher is equipped to handle these unique cases that can occur in school”* (Deputy headteacher, rural school).

In line with the above, students including YLWHA preferred an external professional counsellor. They perceived teachers as also lacking confidentiality. In one school, the parents offered to support the school-based counselling programs by linking the school to their workmates and colleagues who are experts in HIV/AIDS counseling.

## **Social Support Networks And Linkages**

Complex chronic health conditions like HIV/AIDS require support involving multiple individuals at different levels in society. The role of social support networks and linkages was a prominent theme reported by participants.

All the stakeholder perceived their schools as having diverse people which offers YLWHA opportunities to make friends. Students viewed friends for YLWHA as those who would stand by them through challenging moments such as when they are not feeling well in addition to providing guidance and counselling to them as already described in the previous theme. Caretakers of YLWHA stated that peer friends encourage YLWHA to stay in school and they support them as illustrated below;

*“They [YLWHA] can make good friends at school. Some students are not rude, for example I know one of them who is very supportive to my daughter. She comes to visit her here and bring notes to her for the lessons she misses when sick. Also, the school nurse and matron have supported my daughter especially when she gets sick, they quickly tell me”* (female caretaker of a YLWHA).

Caretakers proposed to promote these friendships by welcoming friends of their children in their homes and treating them like their own children.

All stakeholder groups upheld the role of school clubs such as scripture union, peer education clubs, and interact clubs together with games and sports as avenues for YLWHA to make friends, interact, and share ideas. Additionally, clubs and games were reported to offer substantial distractions that prevent YLWHA from worrying about their status as quoted below;

*“Also, at school, they [YLWHA] get engaged in different activities like classwork, games, sports, clubs and they are always busy. Therefore, there is little time for them to keep worrying about their problems. They can even forget that they have that disease [HIV]”* (male student, urban school).

As a way of enhancing such distractive activities, students proposed formation of other supportive clubs for vulnerable students in which they would discuss their concerns. However, YLWHA were against such clubs since they would be stigmatized but instead supported the idea of introducing various games, sports, and drama activities to encourage participation of all students. School staff and students proposed including indoor games like chess for students like YLWHA who they perceived to be weak and unable to engage in field activities.

In the urban school, students alluded to presence of mentors. These were reportedly school staff designated to support students with unique challenges. However, YLWHA did not report benefiting from any mentorship programme for their HIV/AIDS-related needs but for academic purposes. Students additionally perceived that introducing the ‘family’ concept at school would be beneficial to YLWHA. In such an arrangement, the school staff can take up the role of guardians to a group of students. In that ‘family’, challenges of individual members would be discussed and solutions sought. However, the school staff, parents and YLWHA were instead in support of promoting good linkages amongst themselves to create a network in which vital information can be shared to support YLWHA. This was illustrated in a few cases when caretakers reported that the school staff call and inform them when their children have problems. This only occurred for caretakers who had disclosed the HIV status of their children to the school staff.

Beyond the immediate school stakeholders, other supportive linkages took the form of external counsellors that visited the schools as reported by YLWHA and caretakers of YLWHA. Parents appreciated the cooperation of their schools with community-based HIV/AIDS organizations for awareness talks and counselling. Although YLWHA preferred such external counsellors as already discussed, they were reviled for visiting schools in vehicles and attires that revealed them as people involved in HIV/AIDS care and support. YLWHA alluded to the involuntarily disclosure that this often caused. Students additionally proposed inviting community members who have lived with HIV/AIDS to share their experiences and encourage YLWHA.

In the peri-urban school, supportive linkages were created with the nearby H/C. The quote below illustrates the kind of support this offers to YLWHA;

*“Another advantage we have is that we are near the health center IV and it is always open to us. We keep encouraging them [students] that if you have a health problem that you feel you do not want to disclose to us, then come and get permission and be escorted by the senior man or senior woman teacher to see a doctor at the healthcare centre. So, we take advantage of the health centre which is near the school”* (school staff, peri-urban school).

## Knowledge And Skills

This theme presents participants' views about their schools as sources of HIV/AIDS knowledge and a platform for socio-economic empowerment of YLWHA.

All students and school staff groups advocated for their schools as providing a good platform for YLWHA to learn more about their health condition. For instance, how to live longer, how to feed on a balanced diet and how to protect others. This is depicted in the quote below;

*"We also have a library which has a lot of materials. The school buys newspapers, we have books on health which can be a source of information for these people [YLWHA]. We also have a television set in the school they can watch. Sometimes there are talks on health on the TV"* (Female teacher, rural school).

YLWHA also emphasized that watching television at school availed them a lot of information about how to live with HIV through life stories. School staff were not reported as sources of supportive information to YLWHA possibly due to limitations reported in earlier themes. School staff felt that the health workers where YLWHA go for medication were giving the necessary information and as such, teachers' emphasis was always on primary prevention information.

All participants perceived that sensitization of all school stakeholders was necessary to raise knowledge about HIV/AIDS and for everyone to know their role in care and support for YLWHA. They suggested that through sensitization, appropriate information about HIV and those living with it can be provided, so that in-school support can be better tailored to their needs. For instance, YLWHA stated that many in the school community had never seen ARVs. The students and school staff also reported that some messages in the school compound and those provided by teachers about HIV/AIDS were obsolete and needed to be changed. They gave examples like 'HIV kills', 'avoid sex and avoid HIV' which have been overtaken by current knowledge about HIV as quoted below;

*"The posters, okay that one is two-sided. I can say that they're useful and sometimes they're not. They're useful to us who are not suffering from the disease [HIV/AIDS]. Of course, they're trying to help you and to inform you that you should protect yourself so as not to get the disease [HIV]. And another thing, it's bad to those who have the disease. Of course, they will be telling you that AIDS cannot be cured. Of course, you will neglect yourself, you'll have that feeling that can even lead you to commit suicide"* (female student, urban school).

All participants suggested 'edutainment' as the best approach to sensitization. It involves delivering educative information through music, dance, and drama. Participants motivated that the secondary benefits of entertainment and talent development associated with this approach make it more appealing to all stakeholders as stated by one school staff in the quote below;

*"The students can make concerts in villages, people would come, remember people like students' concerts. Then after that there can be some words passed on to people. Seeing what these children are acting can change the community. People from the community can even be invited here to watch those concerts"* (Male staff, peri-urban school).

In addition to the knowledge, school staff viewed their schools as centres of talent growth and development through extracurricular activities like games, sports and clubs. They further stated that beyond the interaction value, these activities benefit all students including YLWHA who may not stay long in school but can continue

earning a living from their talents. However, they also suggested that they should emphasize the importance of schooling as typified in the quote below;

*“The school should emphasize the importance of education to every one whether sick [has HIV] or not because everyone can study and achieve their goals in future. We develop all children to be very good doctors, teachers and leaders in their communities where they come from. It is only education that can open up doors to the world for everyone”* (Male school staff, rural school)

## **Anti-stigma And Anti-discrimination Measures**

In this theme, we report participants’ current and suggested practices to deal with HIV-related stigma and discrimination in their schools.

The school staff, students and parents stated that their schools do not discriminate those with HIV and hence all children are admitted and taught together despite their HIV status as illustrated in the quote below;

*“Teachers here, they always treat students equally. Because I have not yet seen any teacher chasing out anyone suffering from HIV from class. Even on admission, they cannot say we are not going to admit you because you have HIV. So, they treat us equally”* (Female student, urban school).

However, YLWHA and some students stated discrimination and isolation as key challenges for known and suspected YLWHA in their schools. This points to implicit and hidden stigma within schools that needs to be unearthed and addressed by all school stakeholders.

In the rural school, the school staff referred to their child protection policy that caters for the rights of all students. Regular counselling discussed already in previous themes was another anti-stigma measure currently in schools as reported by parents. School staff also applauded social interactions in their schools as a good practice that limit negative feelings in YLWHA as already discussed.

Students and school staff in all schools suggested replacement of all stigmatizing messages in their school compound by more informative and empowering ones. Proposed alternative messages were; “HIV is not the end of life”, “HIV should never determine one’s future”, “you can live a normal life with HIV”, and “HIV is a disease not a curse”, to tackle prevailing views of HIV/AIDS and the youth living with it. Together with the parents, students also suggested that stigmatizing language around HIV/AIDS should be dropped. They suggested avoiding words like “HIV victims”, “people with the virus”, and “people on drugs” commonly used by fellow students and some school staff. In the same vein, caretakers of YLWHA and YLWHA proposed that teachers should desist from using known and suspected YLWHA as examples in class while talking about HIV/AIDS.

Students further suggested that health workers and counsellors need to change the way they portray HIV/AIDS to students since it evokes too much fear leading to discrimination of YLWHA. They proposed that HIV should be normalized and appropriate information about it given instead of instilling fear as portrayed in the quote below;

*“I blame the healthcare workers. When they talk with young people, they want to show us that HIV is a very dangerous disease to scare us so that we do not engage in sex but now when we meet such people with HIV we fear them a lot”* (male student, peri-urban school).

All participants proposed instituting punitive measures for those who stigmatize and discriminate YLWHA. Rules and regulations against laughing at, abusing, teasing, mistreating, and unwarranted disclosing of YLWHA were proposed as illustrated below;

*“For me I think, there should be strict laws in school against abusing those who have HIV or laughing at them in school and when others see that those who do it are punished, then that habit can change. We can then motivate these students [with HIV] to work hard and be one of the best in school. Therefore, others will look at them at the same level. Because if they are performing very well then there will be no difference between them and other students”* (female student, rural school).

School staff additionally suggested that HIV stigma in the whole society should be addressed since what happens in schools is influenced by society in which school actors reside.

## Disclosure Of Hiv Status In School

Revealing the status of people living with HIV voluntarily to others around them is encouraged by the HIV testing service policy for Uganda and it has been found to arouse support. In this theme, we report how participants perceived the benefits to YLWHA accruing from disclosure and how they intend to promote disclosure in their schools.

Majority of the participants reported disclosure of YLWHA in school as necessary, to provide adequate support as also reported in previous themes. However, school staff in one school and YLWHA reported fear to be known as a top challenge for YLWHA in their schools. Indeed, only two participating YLWHA had disclosed their status and one caretaker of a YLWHA had disclosed the status of her child. The excerpts below illustrate the support that those who disclosed received;

*“The nurse keeps her medicine and reminds her every day to take it. You know my girl is very careless. So, to ensure that her medicine is safe, she keeps it with the nurse. They [nurse and matron] also inform me when she is very sick and I have to pick her from school. Sometimes I just call them [nurse and matron] to ask how she is doing especially when she has been sick. They even look for her around school and I talk to her”* (female caretaker of a YLWHA).

When I told my friends, they are the ones that now remind me to take my drugs. Sometimes they even bring drugs to me because they know where I keep it in my suitcase. They can even buy for me something to eat and say that ‘you need something to eat before taking your drugs

*They even make sure that I eat my food”* (18-year-old female YLWHA).

The above quotes further illustrate existing supportive social networks already discussed in the previous themes.

All participants proposed to promote partial disclosure but they differed regarding choice of who to disclose to. School staff and parents preferred disclosure to school administrators, perceiving them to be in a better supportive position as the quote below illustrates while students felt that it would be important for YLWHA to disclose to their peers.

*“We can encourage fellow parents with such students [YLWHA] in our parents meetings that if they have children who may need special attention then they should inform the school administration which can see how to support such children” (Male parent, urban school).*

However, YLWHA did not base their preference on the social closeness or position of authority in the school but rather the trust they perceived of someone. One YLWHA even proposed that it would be better to disclose only to others like them [other YLWHA] since these have similar experiences and can provide the necessary support while maintaining secrecy.

To avoid involuntary disclosure which seemed detrimental to YLWHA, it was suggested that confidentiality and privacy should always be ensured. In the rural school, the school staff planned to develop a policy that would guide them on how to handle sensitive information about students in a confidential manner. Additionally, some YLWHA proposed a private room in which they can keep and take their medicine at school but others felt that this would cause suspicions. The school staff and YLWHA suggested a need for privacy when checking students' suitcases and bags on arrival to school as a way of preventing importation of forbidden items into the school. They decried the unintended disclosure this practice caused to YLWHA as presented in the quote below;

*“Also, during the checking of our school luggage when we go back to school, it should be done in privacy. I know they check everyone and we would not want to be checked in a separate place but everyone should be checked in privacy. When a teacher finds drugs in your case, he should not throw them around asking ‘what are these for?’ when everyone is there. Students should be checked one by one alone and not in a group. The teacher should not ask what are these? They should know how ARVs look like” (16-year-old male YLWHA).*

In the urban school, school staff suggested that teachers ought to create a conducive atmosphere that would encourage YLWHA to disclose by being more approachable, loving, caring and knowledgeable about HIV/AIDS.

## **Treatment And Management Of Hiv/aids**

Living with HIV/AIDS requires lifelong treatment with ARVs in order to manage the HIV infection and prevent it from progressing to AIDS or to reverse AIDS. This however poses challenges for YLWHA within school. In this theme we explore practices currently in schools and in future to support YLWHA to adhere to their treatment and rightly manage HIV/AIDS.

Some school staff, parents and caretakers of YLWHA stated that their schools had a designated staff like a school nurse or a matron who was responsible for keeping and encouraging students to take their drugs as illustrated in the following quote;

*“Nurses have been able to seek HIV drugs for HIV victims [YLWHA]. Some students are shy to go there and get their drugs. So, nurses have been helping them to do that and we have a nurse who takes responsibility of those students in terms of getting drugs for them and encouraging them to take their drugs” (school staff, rural school).*

However, the YLWHA noted that such individuals require training on the medical needs of YLWHA such as timely medication. One YLWHA stated that he always had to wait for the nurse at the time he was supposed to take his

ARVs. Another, reported that the nurse was very rude and did not respect his privacy when giving him the drugs as this was often done in the presence of other students.

In other schools where nurses were not present, participants suggested that such essential staff should be included among school staff and they [nurses] should be adequately trained to handle unique medical conditions of students. Some school staff, students and parents reported presence of essential drugs for common ailments such as cough, flu, headaches, fevers and stomach upsets in their schools. These were given as first aid to all students including YLWHA who were noted to be prone to such ailments. They suggested that this could be further improved if their schools put in place a well-equipped sickbay (a designated room for treatment of students) manned by a competent school nurse in which drugs can be kept and where the sick can take a rest while recovering. The sickbay was additionally foreseen to address the problem of privacy for students with HIV/AIDS to take drugs that YLWHA and parents reported as a top challenge in schools. Parents and school staff in a rural school also suggested that more drugs such as ARVs could be added to the list of essential drugs that can be dispensed by nurses within the sickbay.

In the urban school, the school staff and one caretaker of a YLWHA reported presence of a school van that transports sick students to the hospital for treatment. They noted that such an arrangement could also benefit students with HIV/AIDS who often need to go for drug refills if they requested for it.

One caretaker of a YLWHA and one YLWHA also reported that at their schools, school staff and students encourage YLWHA to take their drugs. This however benefited only those who had disclosed as already discussed.

Treatment and management of HIV/AIDS was also reportedly supported by linkages and networks as already discussed. For instance, parents and teachers in the peri-urban school stated that their school refers students with health conditions they cannot manage to the nearby H/C.

## **Affirmative Action For Ylwaha**

Given that HIV/AIDS imposes unique needs and challenges for those living with it and their families, in this theme we report practices in schools that meet the unique academic and material needs of YLWHA.

Non-disclosure appeared to limit affirmative actions for YLWHA in respect to their academics and material needs and hence few practices were implemented or proposed. YLWHA proposed that schools should provide a balanced diet that includes vitamins and minerals necessary for YLWHA to build stronger defenses against the virus. Likewise, students suggested that school staff could link with parents of YLWHA to provide them with special meals at school but this was not supported by YLWHA due to the unintended disclosure it would cause.

In one school, the school staff stated that they provide remedial classes for the students who miss class with genuine stated reasons as illustrated bellow;

*"We cater for individual differences. We cater for unique challenges that are communicated to us. For instance when a child stays away for a term because they are sick and the parent tells us, we allow that child back to school and we give them some remedial classes to catch up with the rest even when the parent has not told us what the child was suffering from"* (Female school staff, peri urban school).

The students supported this and further suggested that examinations and tests could also be given to known YLWHA if they miss them.

To address the financial hardships that YLWHA are prone to, school staff in the peri-urban school reported offering part-time jobs at school during holiday for those students who expressed their financial needs and were willing to work. On the contrary, all student groups proposed provision of bursaries and fee waivers for known students with HIV as presented in the quote below;

*“But bursaries are given to the best performing students who at time do not need any support because their parents may be providing enough for them. Me I think that instead of giving bursaries to the best performers, they should give them to such children [YLWHA] so that they can also be able to attain education. Because you may find that in their families, they are not able to cater for themselves”* (male student, peri-urban school).

Some school staff reported exempting known students with HIV/AIDS from strenuous activities such as cleaning and sports but YLWHA felt that this was discriminatory.

## Discussion

We examined how school stakeholders perceived good practices to include and support YLWHA and by extension the HIV/AIDS-care and support competence of their schools. We also sought their suggestions on how this competence would further be developed. Our findings are highly nuanced and defy simple summarization. They also show tension between perceptions of various stakeholder groups and across settings. However, the findings portray inclusion and support of YLWHA to a less extent and high optimism and potential in the different themes that we elaborated. Although different stakeholders reported and suggested several practices, they often differed regarding the aptness, approach and leadership in such measures. We also found that some of the available and suggested measures were counterproductive or unfeasible. From our findings, it appears that not only HIV-specific practices provide inclusion and support of YLWHA but also well executed general practices that provide a safety net for all vulnerable students. Such practices were reported across all the theme and include among others; first aid, school nurses and sickbay, fee waivers, nutritious meals, distractive activities, anti-discrimination measures, general counselling and friendships. Three features of HIV/AIDS competence [24] were most relevant to our findings: knowledge about HIV/AIDS and support needs of YLWHA; solidarity and common purpose in addressing needs of YLWHA; linkages with external supportive individuals and groupings. We examine each of these aspects in light of our findings and we provide recommendations.

Facilitating HIV/AIDS-care and support competence in schools requires a clear understanding of HIV/AIDS and the special needs of YLWHA. Severally, participants alluded to schools as the right settings in which such knowledge would be built. However, we found that school staff lacked adequate knowledge about HIV/AIDS care and support and as such felt incapable of delivering it to students. Quite often, the school staff blamed their laxity on non-disclosure, claiming that they cannot plan for a group whose existence is undercover. They instead located support for these students in settings external to school environs such as ART clinics and other community-based organizations. Considering the community readiness model [34], we hold that school communities by default need to be ready to receive and support YLWHA rather than instituting supportive measures following in-school disclosures. Since HIV is prevalent in this locality [14] and it is a highly stigmatized condition [16], schools should be at a high level of readiness regardless of any disclosures. Regrettably, our

findings seem to place these schools at the level of vague awareness [35] in which the community is concerned about the health issue – in this case inclusion and support for YLWHA - but the motivation to address it is low. Most strategies that participants suggested would spur competence bordered on increasing knowledge about HIV/AIDS-care and support through training of teachers in HIV/AIDS counselling, reducing HIV stigma through regulations and changing language around HIV/AIDS to reflect current facts in HIV/AIDS-care and support. We view such strategies as significant in raising motivation and propelling the school communities into next phases of action on the readiness continuum for building HIV/AIDS-care and support competence. As suggested by other scholars, school communities should have factual knowledge of HIV/AIDS and sound awareness of all drivers of HIV-related stigma in their locality [36]. This would then enable them to gradually normalize and demystify HIV/AIDS [31]. Although we do not downplay the value of disclosure in determining the support provided or withheld from YLWHA, we hold a view that inclusive/competent schools would discern such support needs a priori and create a welcoming environment wherein disclosure can easily occur. We thus recommend partial disclosure as YLWHA and their caretakers find it fit.

Due to their privileged social and technical position within the school community [37], school staff (mainly teachers) were often placed at the frontline and expected to take a lead in supporting YLWHA. Although such leadership is necessary, highly competent communities bank on solidarity (mutual support) involving all stakeholders to build bonding social capital [38]. Our findings present individual labors of support by school staff, students and parents with less coordination and disharmony on what should be done and who should do it. As a result, some existing and suggested practices seemed redundant, counterproductive or unattainable with regards to supporting YLWHA. For instance, students in one school proposed that YLWHA need to form a club in which issues affecting them can be discussed but YLWHA perceived this to elicit stigma. Also, school staff reported exempting known and suspected YLWHA from engaging in strenuous activities as a way of safeguarding their wellbeing but the beneficiaries viewed this as discriminatory. Building solidarity requires regular interface among the key players not only to discuss eminent and likely needs of YLWHA as they evolve but also how to jointly address them. It also involves apportioning responsibility as individual members are able to bear. For instance, teachers can develop local policies and guidelines against discrimination of YLWHA but student leaders can sensitize fellow students about discrimination and enforce the guidelines. In that case, ownership and responsibility, an essential aspect of an HIV/AIDS competent community is achieved.

The involvement of persons and agencies external to the school community in support was extensively reported. Participants referred to visiting counsellors, visiting health workers and referrals to nearby health centers. Within the socioecological tenets [39], building competence entails strengthening such relationships with political, economic and technical power to facilitate effective community level response [25]. Such linking social capital [40] is foreseen to enhance bonding social capital described above through building knowledge, skills and confidence. For instance, farmers in the community can support the creation of vegetable gardens [41] to improve feeding in schools which several participants decried. The external counsellors that students and school staff clamored for can provide specialized training in HIV/AIDS counselling to teachers and address concerns of confidentiality and privacy so that students can receive adequate professional care as also proposed by Bhana and Morell [42]. Oftentimes, external agencies run out of resources since they rely on donor funds which are constrained by an array of societal needs and competing health priorities. In such instances, HIV/AIDS-care and support competent schools need to be effective support centres for YLWHA.

Lastly, since schools operate in a wider society within the policy and regulatory frameworks, the Ministry of Education should proactively support schools to build competence. As noted by Ainscow and colleagues [43], inclusive education practices require teachers to innovate new ways of working. The remedial classes, private counselling sessions and sensitization of the wider community suggested by participants in this study are extra workloads requiring additional resources and new skills from teachers. If such practices are not institutionalized or recognized, they remain to be implemented at the discretion of individual teachers and may not be sustained. While studying school response to child hardships in Kenya, Zimbabwe and Malawi, Kendall and O’Gara [44] found that teachers were overwhelmed and ill-equipped to deal with the emotional and psychosocial needs of children and thus recommended strategic investments by governments. We therefore propose an intersectoral approach in supporting the development of HIV/AIDS-care and support competent schools.

## **Study Strengths And Limitations**

Our findings are based on only responses from participants and therefore prone to selective reporting and recall biases. An ethnographic approach would have produced more credible data. However, we involved a wide range of participants that constitute school stakeholders together with schooling YLWHA and their parents. This enabled us to corroborate our finding and achieve reliability. We also did not involve policy makers such as local and national school governing authorities who are responsible for funding, supervising and appraising school performance. We believe that what occurs in schools is widely influenced by these bodies. We therefore recommend further research to explore those missed perspectives.

## **Conclusions**

Despite the meager support for YLWHA currently available in schools, our study points to optimism and high potential. The findings challenge the assumption that schools are intrinsically well-placed to respond to extraordinary complex and multifaceted challenges in children. We argue that building competent HIV/AIDS-care and support school communities is a gradual deliberate process requiring each school to develop a strong knowledge base about HIV/AIDS and support needs of YLWHA, rally solidarity within the school stakeholders to design a holistic approach since the strategies seem to be interdependent, and collaborate extensively with significant persons and organizations external to the school community. It also requires human and financial resources that are generated from within and without the school community.

## **List Of Abbreviations**

AIDS Acquired Immunodeficiency Syndrome

ART Antiretroviral Therapy

ARVs Antiretrovirals

FGD Focus Group Discussion

HIV Human Immunodeficiency Virus

SRH Sexuality and Reproductive Health

USD United States Dollar

YLWHA Youth Living With HIV/AIDS

## Declarations

### **Ethics approval and consent to participate**

Ethical approval was obtained from Uganda National Council of Science and Technology (approval number, SS4587), the Institutional Review Board of The AIDS Support Organization in Uganda (approval number, TASOREC/009/18-UG-REC-009), and the ethical committee of the Vrije Universiteit Brussel in Belgium (reference number, B.U.N. 143201835870). We obtained written informed consent/assent from all participants and written informed consent from parents/caretakers of minors.

### **Consent for publication**

Not applicable

### **Availability of data and materials**

The dataset generated and analyzed during the current study is not publicly available because we did not seek consent from participants to share the data publicly. However, this dataset is available from the corresponding author on reasonable request.

### **Competing interests**

All authors declare no competing interests.

### **Funding**

This study was supported by the Fund for Applied Research, from the University of Applied Sciences and Arts Gent (HoGent), Belgium. The funding body had no role in the design of the study, data collection, analysis and interpretation of data, and writing of the manuscript.

### **Authors' contributions**

EK conceptualized the study, developed the protocol and tools, collected and analyzed data, and drafted the manuscript. SV conceptualized the study, developed the protocol and tools, coordinated the research team and activities, analyzed data, and reviewed the manuscript. DR, AE, &JD, conceptualized the study, analyzed data and reviewed the manuscript. KMJ collected data, and reviewed the manuscript. JR reviewed the manuscript. JB provided overall guidance to the study and reviewed the manuscript. All authors have read and approved the manuscript.

### **Acknowledgements**

The authors sincerely thank the University of Applied Sciences and Arts (HoGent) for the funding that has enabled this study to be conducted.

## References

1. Theron LC. Teacher championship of resilience: Lessons from the pathways to resilience study, South Africa. In: Resilience in education. Cham: Springer; 2018. pp. 203–17.
2. AIDS on Children and Young People  
Wijngaarden J, Shaeffer S. (2005). The Impact of HIV/AIDS on Children and Young People: Reviewing Research Conducted and Distilling Implications for the Education Sector in Asia. Discussion Paper No. I. UNESCO Bangkok. Asia and Pacific Regional Bureau for Education, PO Box 967, Prakhanong Post Office, Bangkok 10110, Thailand.
3. UNESCO I. (2008, November). Inclusive education: The way of the future. In Conclusions and recommendations of the 48th session of the International Conference on Education (ICE),(págs. 25–28). Geneva.
4. UNICEF, Child-friendly schools manual. (2009). Accessed on 27th April 2020 via <https://www.unicef.org/media/66486/file/Child-Friendly-Schools-Manual.pdf>.
5. Orkodashvili M. (2013). Quality education through Child-Friendly Schools: resource allocation for the protection of children's rights. Revista Românească pentru Educație Multidimensională, (1), 101–109.
6. Ministry of Education and Sports. (2006). Education & sports sector national policy guidelines on HIV/AIDS. Accessed on 27th April 2020 via <https://hivhealthclearinghouse.unesco.org/sites/default/files/resources/Uganda%20National%20policy.pdf>.
7. Schuyler, A. C., Edelstein, Z. R., Mathur, S., Sekasanvu, J., Nalugoda, F., Gray,R., ... & Santelli, J. S. (2017). Mobility among youth in Rakai, Uganda: Trends, characteristics, and associations with behavioural risk factors for HIV. Global public health, 12(8),1033–1050.
8. Schaefer, R., Gregson, S., Eaton, J. W., Mugurungi, O., Rhead, R., Takaruza, A., ...Nyamukapa, C. (2017). Age-disparate relationships and HIV incidence in adolescent girls and young women: evidence from Zimbabwe. AIDS (London, England), 31(10), 1461.
9. Maartens G, Celum C, Lewin SR. HIV infection: epidemiology, pathogenesis, treatment, and prevention. The Lancet. 2014;384(9939):258–71.
10. Mofenson LM, Cotton MF. The challenges of success: adolescents with perinatal HIV infection. J Int AIDS Soc. 2013;16(1):18650.
11. Abubakar, A., Van de Vijver, F. J., Fischer, R., Hassan, A. S., Gona, J. K., Dzombo, J. T., ... & Newton, C. R. (2016). 'Everyone has a secret they keep close to their hearts': challenges faced by adolescents living with HIV infection at the Kenyan coast. BMC public health,16(1), 197.
12. Kimera, E., Vindevogel, S., De Maeyer, J., Reynaert, D., Engelen, A. M., Nuwaha, F.,... & Bilsen, J. (2019). Challenges and support for quality of life of youths living with HIV/AIDS in schools and larger community in East Africa: a systematic review. Systematic reviews, 8(1), 64.
13. Mitchell TD. Critical service-learning as social justice education: A case study of the citizen scholars program. Equity Excellence in Education. 2007;40(2):101–12.
14. Kimera E, Vindevogel S, Rubaihayo J, Reynaert D, De Maeyer J, Engelen AM, Bilsen J. (2019). Youth living with HIV/AIDS in secondary schools: perspectives of peer educators and patron teachers in Western Uganda on stressors and supports. SAHARA-J: Journal of Social Aspects of HIV/AIDS, 16(1), 51–61.

15. Kimera, E., Vindevogel, S., Kintu, M. J., Rubaihayo, J., De Maeyer, J., Reynaert, D., ... Bilsen, J. (2020). Experiences and perceptions of youth living with HIV in Western Uganda on school attendance: barriers and facilitators. *BMC Public Health*, 20(1), 1–12.
16. Kimera, E., Vindevogel, S., Reynaert, D., Justice, K. M., Rubaihayo, J., De Maeyer, J., ... Bilsen, J. (2020). Experiences and effects of HIV-related stigma among youth living with HIV/AIDS in Western Uganda: A photovoice study. *Plos one*, 15(4), e0232359.
17. Kembo J. (2010). Social and economic consequences of HIV and AIDS on children: case study of a high-density community in Harare, Zimbabwe. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, 7(4).
18. Kasirye I, Hisali E. The socioeconomic impact of HIV/AIDS on education outcomes in Uganda: School enrolment and the schooling gap in 2002/2003. *International Journal of Educational Development*. 2010;30(1):12–22.
19. Machawira P, Pillay V. Writing in policy, writing out lives. *Journal of Education Policy*. 2009;24(6):753–67.
20. Norton B, Mutonyi H. 'Talk what others think you can't talk': HIV/AIDS clubs as peer education in Ugandan schools. *Compare*. 2007;37(4):479–92.
21. Jacob WJ, Mosman SS, Hite SJ, Morisky DE, Nsubuga YK. Evaluating HIV/AIDS education programmes in Ugandan secondary schools. *Development in Practice*. 2007;17(1):114–23.
22. Stephen N, Costa NR. (2010). Educational Resources for HIV/AIDS Prevention in Uganda: The Role of PIASCY Program in Primary Schools. *Journal of Educational Research* (1027–9776), 13(1).
23. Campbell, C., Scott, K., Nhamo, M., Nyamukapa, C., Madanhire, C., Skovdal, M., ... Gregson, S. (2013). Social capital and HIV competent communities: the role of community groups in managing HIV/AIDS in rural Zimbabwe. *AIDS care*, 25(sup1), S114-S122.
24. Campbell C, Nair Y, Maimane S. Building contexts that support effective community responses to HIV/AIDS: a South African case study. *Am J Community Psychol*. 2007;39(3–4):347–63.
25. Campbell C, Foulis CA, Maimane S, Sibiyi Z. The impact of social environments on the effectiveness of youth HIV prevention: A South African case study. *AIDS care*. 2005;17(4):471–8.
26. Golden SD, McLeroy KR, Green LW, Earp JAL, Lieberman LD. (2015). Upending the social ecological model to guide health promotion efforts toward policy and environmental change.
27. Hawe P, Shiell A. Social capital and health promotion: a review. *Soc Sci Med*. 2000;51(6):871–85.
28. Latkin CA, Knowlton AR. Micro-social structural approaches to HIV prevention: a social ecological perspective. *Aids Care*. 2005;17(sup1):102–13.
29. Celletti, F., Wright, A., Palen, J., Frehywot, S., Markus, A., Greenberg, A., ... Samb, B. (2010). Can the deployment of community health workers for the delivery of HIV services represent an effective and sustainable response to health workforce shortages? Results of a multicountry study. *Aids*, 24, S45-S57.
30. Gruber J, Caffrey M. HIV/AIDS and community conflict in Nigeria: implications and challenges. *Soc Sci Med*. 2005;60(6):1209–18.
31. Masquillier C, Wouters E, Mortelmans D, Van Wyk B. On the road to HIV/AIDS competence in the household: building a health-enabling environment for people living with HIV/AIDS. *Int J Environ Res Public Health*. 2015;12(3):3264–92.
32. Ager A, Stark L, Sparling T, Ager W. Rapid appraisal in humanitarian emergencies using participatory ranking methodology (PRM). New York: Program on Forced Migration and Health, Columbia University Mailman

School of Public Health; 2011.

33. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative research in psychology*. 2006;3(2):77–101.
34. Plested BA, Edwards RW, Thurman PJ. Disparities in community readiness for HIV/AIDS prevention. *Subst Use Misuse*. 2007;42(4):729–39.
35. Thurman PJ, Vernon IS, Plested B. Advancing HIV/AIDS prevention among American Indians through capacity building and the community readiness model. *Journal of Public Health Management Practice*. 2007;13:49–54.
36. Skovdal M, Mwasiaji W, Webale A, Tomkins A. Building orphan competent communities: experiences from a community-based capital cash transfer initiative in Kenya. *Health policy planning*. 2011;26(3):233–41.
37. Clarke DJ. *Heroes and villains: Teachers in the education response to HIV*. Paris: International Institute for Educational Planning; 2008.
38. Kawachi I, Berkman L. (2000). Social cohesion, social capital, and health. *Social epidemiology*, 174 (7).
39. Bronfenbrenner U. (1979). *The ecology of human development*. Harvard university press.
40. Szreter S, Woolcock M. Health by association? Social capital, social theory, and the political economy of public health. *Int J Epidemiol*. 2004;33(4):650–67.
41. Ebersöhn L, Ferreira R. Coping in an HIV/AIDS-dominated context: teachers promoting resilience in schools. *Health Educ Res*. 2011;26(4):596–613.
42. Bhana D, Morrell R. The hidden work of caring: teachers and the maturing AIDS epidemic in diverse secondary schools in Durban. *Journal of Education*. 2006;38(1):5–24.
43. Ainscow M, Dyson A, Weiner S. (2013). *From Exclusion to Inclusion: Ways of Responding in Schools to Students with Special Educational Needs*. CfBT Education Trust. 60 Queens Road, Reading, RG1 4BS, England.
44. Kendall N, O'Gara C. Vulnerable children, communities and schools: lessons from three HIV / AIDS affected areas. *Compare: A Journal of Comparative International Education*. 2007;37(1):5–21.