

Full Length Research.

Stemming the tide from Africa: The impact of quality education on HIV and AIDS mitigation in Higher Education Institutions

By

Mupa Paul

Quality Assurance Coordinator: Zimbabwe Open University

E-mail: mupapaul@gmail.com or mupapaul@cooltoa.com

Accepted August 21st 2012.

HIV and AIDS pose a major threat to development and poverty alleviation, particularly in Sub-Saharan Africa. Education has been declared an effective preventative approach and the single most powerful weapon against HIV transmission. However, there is a paucity of research on the type of education required, the appropriate teaching and learning methods, and generally how such education influences change of attitudes and behaviour on the part of the students. This study sought to explore the impact of quality education on HIV and AIDS mitigation. The study was qualitative by nature and employed the descriptive survey design. Purposive sampling was used to select 50 higher education lecturers and staff. Open-ended questionnaire was employed as the data gathering instrument. The study found out that the provision of quality education reduces the spread of HIV and AIDS. Quality education is likely to stem the tide if provided to students in their formative stages. The study recommends the provision of a quality curriculum, provision of lecturers with knowledge of subject matter and pedagogical skills in HIV and AIDS teaching, allocation of time for the subject, workshops and resource allocation bring behaviour change.

Key terms: Quality education; HIV and AIDS; mitigation.

Background

The disease that has come to be known as Human Immunodeficiency Virus or Acquired Immune Deficiency Syndrome (HIV and AIDS) first emerged in the early 1980s. HIV refers to the virus, which is transmitted mainly but not exclusively through unprotected sexual contact, and AIDS refers to an advanced form of the condition, which follows infection and is characterised by a severe breakdown of the body's ability to fight disease. HIV and AIDS now constitutes a global pandemic that has impacted on individuals, families and national and regional economies through the stress it places on key social systems. Nowhere has this impact been greater than in sub-Saharan Africa, where a number of factors have elided to create a crisis of previously unimagined proportions (Torstensson and Brundrett, 2009).

The Emergence of HIV and AIDS

Since HIV/AIDS was first discovered in 1981, infection rates have soared from just a few cases in 1997 to

approximately 39.5 million in 2006, with 4.5 million new infections alone in that same year (UNAIDS and WHO 2006). Sub-Saharan Africa, which is hardest hit and hosts 63 per cent of the world's AIDS-infected people, has its epicentre in Southern Africa, with an infection rate of 33.4 per cent in Botswana (Seipore 2006), 30.2 per cent in South Africa (Department of Health, South Africa 2006), 24 per cent in Zimbabwe (UNAIDS 2005) and 10-25 per cent in Zambia (Ministry of Health 2005). In the age group of many primary children's parents (30-35), infection rates continues to escalate (Seipore 2006), leaving many school-age children orphans.

Worldwide, 13.2 million children were orphaned between 1992 and 2001. By 2005, Sub-Saharan Africa had 12 million orphans alone (UNAIDS and WHO 2006). In that same year, 57,964 children were registered as orphans in Botswana (NACA 2005). Already in the late 1990s Zambia had more than 130,000 child-headed families, and 860,000 South African children had become teacherless (Coombe 2001). While early predicative

studies suggested that AIDS would have an impact on the supply, demand and financial resources available to education - the goal, content and process within schools (Kelly, 1999) - later studies, which indicated that early studies had grossly overestimated AIDS' impact, concluded that since the teacher death and orphan ratios were still relatively low within each school, the education system would have the capacity to cope with the increased mortality rates (Bennell 2005). Conclusions like these and others that suggest that the AIDS pandemic has stagnated, as the new infection rates now mirrors death rates (UNAIDS and WHO 2006), do not sufficiently take into account the loss of human life and the potential societal development that these people would have contributed. Nor do they sufficiently reflect the quantitative impact that AIDS is having on pupil and classroom-level factors that correlate positively with academic achievements and the consequent long-term implications on all pupils' learning and attainments.

Efforts of governments and numerous charities, aid organisations and HIV and AIDS education programmes have been developed and delivered; testing centres are established and condoms distributed with the aim of trying to curb these trends and mitigate the impact. Though these efforts have played a vital role, still the infection rates continue to rise in all continents of the world (UNAIDS and WHO 2006). Whilst keeping children in education and helping them to strive for high academic grades have been recognised as an important key to keep children HIV negative, the current content and form of education has not sufficiently made a dent in the current HIV and AIDS trend.

Teachers, to a large extent, influence the quality of education in any school system. Principles for devising school quality education have to be employed. Institutions or school-based programmes constitute one of the recommended HIV and AIDS prevention strategies that target young people (Kirby *et al.*, 2005). However, there is limited evidence that such programmes yield positive results, particularly in low- and middle-income countries such as those in sub-Saharan Africa (Kaaya *et al.*, 2002; Kirby *et al.*, 2005; World Health Organisation 2006).

Focusing on Pupils and on Learning

At the outset, schools have to decide who is setting the quality agenda. Is it the teachers? The head? The governors? The pupils? Loder has argued strongly that quality is essentially a professional matter and that quality is not easily assessed, especially by students and other consumers, and it is almost impossible for them to make reliable judgements before they have experienced it (Loder in Freeman, 1994). It is not clear here whether Loder is making a statement of principle or reporting experience of technical difficulty. On the other hand Sallis argues that the primary focus of any educational institution should be the needs and views of its learners.

This does not mean that the views of other stakeholder groups should be ignored. Their views count. However, the learners are the reason why the institution exists and they carry its reputation (Sallis in Freeman, 1994). While such a view might appear to undervalue teaching, the researcher does not think this is so. Teaching is important but we judge its quality through the outcome of learning. To focus on learning is not to ignore teaching; it is simply to view it from another angle. Nor, does the focus stop at learners. The quality of learning, too, is a central issue, as Knight points out that teaching becomes everything which academics do to facilitate effective learning. Indeed, it is arguable that teaching is important only as a function of learning, and it is learning, not teaching quality, which is paramount (Knight in Freeman, 1994).

Quality education is the continuous improvement of systems to enable optimum state of personal, social, physical and intellectual development of each individual which will result in society and colleague loyalty now and in the future (Greenwood and Gaunt, 1994). Quality is further defined as meeting customers' requirements, fitness for purpose and perhaps even delighting our customers. Customer requirements refer to the following:

- Availability

The product or service must be there when the customer requires it, not just when the producer is willing to put it on offer.

- Delivery

The product or service must be delivered to the customer requirements at all times and place which is convenient to him.

- Reliability

The product or service must live up to customer requirements at all times. It must never let him down.

- Cost effectiveness'

The product or service must satisfy the customer's needs at the lowest possible cost.

- Performance

Above all else, it must do what the customer wants it to do. The customers of the school are the pupils, parents, institutions of higher education and further education, employers and the nation or society at large (Greenwood and Gaunt, 1994). All these need an HIV and AIDS free person who has knowledge of its impact so that the individual can contribute to the development of the nation.

Statement of the problem

The government of Zimbabwe and many other governments in Africa mandated all educational institutions to teach HIV and AIDS to students.

Surprisingly, students in higher education are at high risk of HIV and AIDS in most countries yet they are the mature people who see the risk of contracting with the epidemic. The removal of grants from the tertiary education system exposes students who in turn seek for survival through engaging in sexual practices. This trend has seen many of the conventional students being at risk of contracting the HIV and AIDS pandemic. Surprisingly, these are the people in higher education where society expects education to be taking its impact of behaviour change. The existing strategies to eradicate the HIV and AIDS epidemic are piecemeal, of small scale, health-focused, and weakly integrated into related efforts. A successful response is therefore required to inject behaviour change among the many players in Africa who might perish due to this monster. It is true that education plays a very important role in stemming the tide from society but what remains is the issue of the quality of the education. Quality education and not education in general is the motive behind stemming the HIV and AIDS from society. This study therefore targets at quality education strategies that can be used to stem the tide from society. The problem can be stated thus:

WHAT IS THE IMPACT OF QUALITY EDUCATION ON HIV AND AIDS MITIGATION IN HIGHER EDUCATION INSTITUTIONS?

Theoretical Frameworks: A Systems Thinking Framework of Quality Education

Senge championed the systems framework. A systems framework refers to a set of interrelated and interdependent parts arranged in a manner that produces a unified whole (Robbins and Coulter, 2005). It is a discipline for seeing the whole. Senge emphasizes system dynamics paradigm. In this concept he argues that things are interconnected in complex patterns that can be captured into a model without loss of relevance (Masinde 2006). Systemic thinking is the conceptual cornerstone of Peter Senge's approach. Systems theory's ability to comprehend and address the whole, and examine the interrelationship between the parts provides for Peter Senge, both the incentive and the means to integrate the disciplines. Three things need noting here. First, systems theory looks to connections and to the whole. In this respect it allows people to look beyond the immediate context and to appreciate the impact of their actions upon others. To this extent it holds the possibility of achieving a more holistic understanding. Second, while the building blocks of systems theory are relatively simple, they can build into a rather more sophisticated model than are current in many organizations. Senge argues that one of the key problems with much that is written about, and done in the name of management, is that rather simplistic frameworks are applied to what are complex systems. When we add these two points together it is possible to move beyond a focus on the parts, to begin to see the

whole and to appreciate organization as a dynamic process. Thus, the argument runs, a better appreciation of systems will lead to more appropriate action. Third, system thinking, according to Senge, allows us to realize the significance of feedback mechanisms in organizations. Systems thinking is a framework for seeing interrelationships and repeated events rather than things. It is seeing patterns of change rather than static snapshots. It embodies the idea that the interrelationships among parts relative to a common purpose of a system are what is important. He concludes that the system's viewpoint is generally oriented towards the long-term view. That is why delays and feedback loops are so important. In the short term, you can often ignore them; they are inconsequential. They only come back to haunt you in the long run (Senge cited in Smith, 2001). The Systems thinking considers many different perspectives such as quality education considerations. Quality factors such as reliability, availability, expandability, testability, among others, are considered.

The existence of many players in the teaching of HIV and AIDS in schools demonstrates the relevance of the systems thinking in quality education of the HIV and AIDS programme. System members include students, teachers, leadership, policy makers, Curriculum Development Unit (CDU), parents, School Development Committees, resources and the community at large, among others. What it means is that leadership or management should coordinate the activities of the various parts of the organization or system to ensure that all the interdependent parts of the system are working together for effective teaching and learning of the subject. The research will be guided by this theory.

HIV and AIDS theoretical framework: AIDS Risk Reduction Model

The AIDS Risk Reduction Model (ARRM), introduced by Catania *et al.*, in Family Health International (2002) provides a framework for explaining and predicting the behaviour change efforts of individuals specifically in relationship to the sexual transmission of HIV and AIDS. A three-stage model, the ARRM incorporates several variables like efficacy, emotional influences and interpersonal processes. The model identifies three stages involved in reducing risk for HIV transmission, including behaviour labelling, commitment to change and taking action. The stages are as follows:

Stage 1: Recognition and labelling of one's behaviour as high risk.

Hypothesized Influences:

- knowledge of sexual activities associated with HIV transmission;
- believing that one is personally susceptible to contracting HIV;

- believing that having AIDS is undesirable;
- social norms and networking

Stage 2: Making a commitment to reduce high-risk sexual contacts and to increase low risk activities.

Hypothesized Influences:

- costs and benefits
- enjoyment
- response efficacy
- self-efficacy
- knowledge of the health utility and enjoyability of a sexual, as well as social factors (group norms and social support) are believed to influence an individual's cost and benefit and self-efficacy beliefs.

Stage 3: Taking action. This stage is broken down into three phases:

- information seeking
- obtaining remedies
- enacting solutions.

Hypothesized Influences

- social networks and problem-solving choices
- prior experiences with problems and solutions
- level of self-esteem
- resource requirements of acquiring help
- ability to communicate verbally with sexual partner
- sexual partner's beliefs and behaviours

(Catania *et al.*, in Family Health International, 2002).

This research is guided by the theory since the objective of the study is to reduce and stem the tide of the HIV and AIDS epidemic.

Literature

A quality education understands the past, is relevant to the present, and has a view to the future. Quality education relates to knowledge building and the skillful application of all forms of knowledge by unique individuals who function both independently and in relation to others. A quality education reflects the dynamic nature of culture and languages, the value of the individual in relation to the larger context, and the importance of living in a way that promotes equality in the present and fosters a sustainable future (Pigozzi 2009). In this study, the argument advanced is that quality education has to create a future for people through equipping them with behaviour change skills that fight the HIV and AIDS epidemic.

The goal of quality education for all which is accessible, inclusive, equitable and relevant to individual, national, and global needs and value systems has to be operationalized in the educational reform programme (Ministry of Education as cited in Robsona and Kanyanta,

2007). The precise meaning of education quality and the path to improvement of quality are often left unexplained. Examined within context, education quality apparently may refer to inputs (numbers of teachers, amount of teacher training, number of textbooks), processes (amount of direct instructional time, extent of active learning), outputs (test scores, graduation rates), and outcomes (performance in subsequent employment). Additionally, quality education may imply simply the attaining of specified targets and objectives. More comprehensive views are also found, and interpretation of quality may be based on an institution's or program's reputation, the extent to which schooling has influenced change in student knowledge, attitudes, values, and behaviour, or a complete theory or ideology of acquisition and application of learning (Adams 1998).

Various studies done on quality of education suggest a growing quality gap within school system. About 25,000 primary schools in Parkistan are without school buildings and many schools are without walls. In rural areas most schools are one room without water and latrine facilities. Books are expensive and do not get distributed on time, implying that 40 percent of the poorest households have little or no access to textbooks in primary and lower secondary schools (World Bank, 1991). Of concern in this study is shortage of textbooks in teaching and learning. Countries with satellite or newly established schools which have no resources are likely to be affected in terms of quality of teaching HIV and AIDS. Quality is about provision of textbooks so that the process of teaching and learning is enhanced. Lack of such basic resources impacts negatively in terms of knowledge acquisition about a particular subject, which in this case, is HIV and AIDS. It is argued in educational theory and practice that teaching-learning environment, can be influenced by resources and ideas from many sources (Chapman and Adams, 2002).

Characteristics of a Quality School

It is important to establish characteristics of a quality school in this study. It is only after having taken cognisance of these characteristics that quality education for HIV and AIDS can be realised. The following characteristics are considered useful for schools to provide quality HIV and AIDS education that stems the epidemic from society:

- teaching methodologies designed to encourage independent thinking;
- capable, motivated, well-trained teachers;
- appropriate, well-designed curriculum;
- effective learning materials including, but not limited to, textbooks;
- a safe, well-maintained learning environment;
- a valid, reliable examination system;

- effective school leadership, including instructional supervision;
- ample direct instructional time;
- adequate financing; and
- effective organisational structure and support (World Bank, 1997).

In order to have quality education in the teaching of HIV and AIDS in schools and in order for that quality education to make an impact to stem the tide, there is need for teachers with knowledge of the subject. Teachers' knowledge of the subject matter is essential for effective classroom instruction. In addition, they also need information regarding the (a) educational, psychosocial, and medical effects of HIV or AIDS on children and families; (b) universal precautions related to infection control in school settings; and (c) ethical and legal requirements for confidentiality. Moreover, teachers must understand students' attitudes, beliefs, and perceptions regarding susceptibility to HIV infection and their sociocultural attitudes and values as a foundation for developing culturally and developmentally competent curriculum and instruction (Sileo, 2005).

Research Methodology

The study was qualitative by nature and employed the qualitative paradigm.

Qualitative Paradigm

Qualitative research means any kind of research that produces findings not arrived at by means of quantification (Strauss and Corbin, 1990). Qualitative research is viewed as a collection of approaches to inquiry "all of which rely on verbal, visual, auditory and olfactory data" (Ramphela as cited in Chindanya 2002, p). The qualitative approach uses familiar techniques for handling verbal materials that make situations "come alive", it keeps the investigator close to the data and markedly facilitate understanding of the phenomenon being studied (Krathwohl, 1993). The use of a qualitative approach to research studies relies on the data production methods that are flexible and sensitive to the social context that such data is derived from, without losing any of the standardization or structure, and on data analysis methods that presuppose the understanding of the complexity that is entailed onto the details (Mason and Pauleen, 2003). This research falls under the phenomenology perspective.

Research design

The ethnographic research design was adopted in this research. The ethnographic method of research can be used to investigate student leadership roles, pupil-teacher relationships, social relationships, changes in attitudes and behaviour and staff-parent interactions in education (Best and Kahn, 1993). It is a method of study

that is used to study behaviour change in society which is the object of this research. In the light of the above observations, the researcher adopted the ethnographic research design as the real design to employ in this research.

Population

The population for this study were lecturers and students in higher education in Zimbabwe.

Sampling and sampling procedures

Purposive sampling was used to select 50 higher education lecturers and staff from Zimbabwean colleges and universities on a national sample. This type of non-probability sampling method seeks information-rich cases which can be studied in depth. Patton (1990) argues that the logic and power of purposeful sampling lies in selecting information rich cases for study in depth. The information rich participants who are selected are knowledgeable and informative about the phenomena the researcher is investigating. The participants should be willing to talk. The researcher went into the colleges and universities and selected staff who were willing to participate in the study and who had information about what they see as strategies to stem the tide.

Open-ended questionnaire

This research employed open-ended questionnaires as data gathering instrument. Questionnaires can be used to gather qualitative data (Best and Kahn, 1993). Open-ended questionnaires provide a response format that gives respondents the freedom to provide any answer which they care to make. The researcher then has to make sense of all the response given, construct appropriate categories and then code the categories so that the data can be analysed. Open-ended questions are the most important questions on the survey by offering important and unpredictable insights into human behaviour (Burton, 2000). In the light of the above advantages, the open-ended questionnaire was used as a strategy to collect data in this research.

Focus group discussion

In the focus group discussion, data are generated by interaction between group participants. Participants present their own views and experience, but they also here from other people. Focus groups are synergistic in the sense that the group works together: the group interaction is explicitly used to generate data and insights. In responding to each other, participants reveal more of their own frame of reference on the subject of study (Ritchie and Lewis, 2004).

The focus group presents a more natural environment than that of the individual interview because participants are influencing and influenced by others—just as they are in real life (Casey and Kreuger, 2000). It is also noted that focus groups are naturalistic rather than natural events and cannot and should not be left to chance and circumstance; their naturalism has to be carefully contrived by the researcher (Bloor et al., 2001.).

The key element here is the involvement of people where their disclosures are encouraged in a nurturing environment. It taps into human tendencies where attitudes and perceptions are developed through interaction with other people. Some topics are better discussed by a small group of people who know each other while some people need company to be emboldened to talk (Maree, 2007).

The focus group interview strategy is based on the assumption that group interaction will be productive in widening the range of responses, activating forgotten details of experience and releasing inhibitions that may otherwise discourage participants from disclosing information (Maree, 2007). The focus group discussions in this study produced data rich in detail that is difficult to achieve with other research methods. Group dynamics in focus group interviews enabled participants to be able to build on each other's ideas, experiences and comments to produce data that is rich in detail and not attainable from individual interviews (Maree, 2007). Unexpected comments and new perspectives could be explored easily within the focus group and added value to the study. The focus group discussions enabled participants in this study to interact with each other rather than with the interviewer, such that the views of the participants emerged and the participants' rather than the researchers' agenda prevailed (Cohen, *et al.*, 2006). It was from the interaction of the group that the data emerged. In the light of the above advantages, this research also used focus group discussion as one of the data gathering instruments.

Qualitative methods can be used to uncover and understand what lies behind any phenomenon about which little is yet known (Strauss and Corbin, 1990). Little is yet known as regards how education can prevent the spread of HIV and AIDS programme. To this end, the open-ended questionnaire and focus group discussion were seen as useful methods of data collection in this research. This would be of importance in terms of triangulation of instrumentation.

Results

Quality education improves lifeskills instudents

Respondents had the following to say as regards role of quality education in stemming HIV and AIDS from society:

Quality education aims at improving literacy, numeracy, communication and lifeskills for students and enhances systems to provide learning and teaching resources and adequate numbers of teachers for all schools

If people are literate and numerate, it means they are able to read and write. These skills are needed by an individual to read what is on newspapers, textbooks and any other reading material that is made available. HIV and AIDS information is usually put on such print media for people to read. Thus, if a person is able to read for oneself information about the disease, he or she is likely to see the dangers of indulging in any unwanted sexual activity because of knowledge and information read. The World Education Forum in Dakar set important goals that imply a major effort to expand the quality of education and it also made a commitment to tackling HIV and AIDS as a matter of extreme urgency. To that end, good quality education was considered as a powerful weapon against HIV and AIDS (World Bank, 2002).

Quality education enhances provision of resources in schools

Respondents were of the view that there is need to inject teaching and learning resources in most educational institutions to support the teaching of the subject, particularly in higher education where students are at a very high risk. These findings are in consistency with those from the Global Education Report (2004) which highlight that various studies into the quality of HIV and AIDS education programmes have been carried out in recent years. These studies looked into how ministries of education, schools and teachers in a range of countries and continents address HIV and AIDS education. They describe the progress made, but also identify a range of common shortcomings related to the delivery of HIV and AIDS education. The Deadly inertia report provides an overview of the quality of delivery and content of HIV and AIDS education within the framework of the quality of education in general (Global Campaign for Education, 2004). The report makes a very important point, stating that "in practice it is impossible to teach children about HIV in classrooms that lack the essential ingredients for successful teaching and learning about any subject" (Global Campaign for Education, 2004). In most of the 18 countries studied, it was found that classrooms were overcrowded and management systems under-resourced.

Quality education ensures availability of knowledgeable teachers

Respondents pointed out the issue of need for knowledge of what to teach by lectures as important. Lack of subject matter knowledge contributes towards poor quality service delivery by teachers. Teachers highlighted that they did not possess adequate information to speak with confidence about HIV and AIDS. On the teachers'

practices of teaching HIV and AIDS, teachers reported that:

We are supposed to teach HIV and AIDS curriculum, we do not know how to teach it. We have only two reference books and they are for the whole school. So you find it very hard. In most schools, it is not taught because we do not know what to teach.

One other lecturer said, 'outside what we read from newspapers and any other material we just come across, we are just novices in the area.'

If the situation in the lecture or lesson is that both the teacher and the student are novices, then quality education to bring about behaviour change is questionable. Teachers are living with this mandated HIV and AIDS curriculum not knowing what to do with it, uneasy to teach the subject matter about which they possess very little knowledge. Teachers are living in the midst of tension, uncertain what to do with this mandated HIV and AIDS curriculum. Their tension often leads to their curricular silence on the subject matter. Silin in Mwebi (2007) found out that teachers were in a "quandary" and "silence" when required to teach HIV and AIDS in American schools. Just as these American teachers, Kenyan teachers believed they did not possess adequate knowledge to teach the subject matter of HIV and AIDS. It seems to be a trend that most teachers or lecturers lack adequate knowledge to teach HIV and AIDS. Such a trend does not breed quality education.

Quality education improves teacher quality in the subject pedagogy

Teachers are expected to adhere to the curriculum policy and support its implementation. They are responsible for the provision of accurate and up – to – date information on HIV and AIDS, as provided to them. They are also responsible for the promotion of caring and supportive relationships between students (ILO and UNESCO, 2006).

Teachers had this to say as regards knowledge of subject matter:

We lack first of all the knowledge to handle the subject in class, in that you know in learning, like other subjects, you must have undergone the training, you must have undergone the training to get that knowledge that you have. Now in HIV/AIDS, it is a disease which has come and people need to know about it and you have not been given that knowledge and you are supposed to handle that in class and also you give to the children. So it becomes very hard for teachers, more especially for those ones who have not been exposed to any seminars of this kind, it becomes very hard in that you now try to avoid teaching it. You find the teacher doing something

else because maybe she has taught whatever she had known and is finished. And so that is the end of it. So the first problem is that we don't really have knowledge about the subject to teach in class. (Conversation with lecturers)

Teachers can adhere to a policy which is known to them and to which basic training has been given to them. To effectively teach the subject, teachers need syllabuses with information to be used for teaching grade by grade so as to be effective in their pedagogical skills. Lack of syllabuses is likely to negatively affect the quality of teaching and learning of the subject, HIV and AIDS. Teachers also find it easy to implement a curriculum subject they have been trained in at college, and then they are likely to implement the subject effectively. It is argued (Martens, 1998) that the focus is to ensure that those teaching the subject reflect on and make recommendations for further improvement of the subject.

Quality education improves provision of resources in institutions

Respondents highlighted the need for provision of resources for effective teaching of HIV and AIDS. They had this to say:

Textbooks that are scarce or nonexistent in many educational institutions and schools have to be provided in order to provide adequate knowledge to learners about the epidemic and how best to stem it. Access to instructional materials is a quality dimension that has to be ensured by educational institutions as a useful strategy.

The HIV and AIDS epidemic cannot be reduced without the effective delivery of a full range of products to support it, hence the need to provide adequate teaching and learning facilities for its proper teaching. Instructional media makes the learning process more effective in the classroom through stimulating pupils' interest, capturing pupils' attention, evoking responses, clarifying abstract concepts, providing variety, encouraging discussion and displays that improve the classroom learning (Shumbayaonda and Maringe, 2000). Provision of well designed teaching and learning materials would enhance quality teaching of the HIV and AIDS subject (World Education Centre for HIV and AIDS, 2010).

Quality education is all about having viable curricula

It came from the respondents that for quality teaching and learning of HIV and AIDS, there is need for a quality curriculum. The teachers' colleges take the subject as life skills orientation. They had this to say:

'experience shows that colleges and schools do not adhere to the life orientation curriculum, that specialist life orientation teachers are not used,

that teaching is fragmented and often misunderstood, or that the time allocated to it is often regarded as a free period. Furthermore, many teachers are not comfortable with the curriculum due to their own personal values and beliefs.

Research indicates that life orientation is not achieving its objectives. In sum, it fails to be recognized as an important subject. (Kollapen *et al.*, 2006,)

Quality education is all about effective leadership

The implementation of any subject in the school requires leadership commitment. Similarly, the implementation of the HIV and AIDS programme in schools, as a new innovation in the curriculum requires leaders who take up the challenge to change the existing work culture to that which is accommodative of the teaching of HIV and AIDS. HMIE (2006) argues that quality delivery also focuses on the role of leaders in bringing about change and improvement. This shows that leadership plays a vital role in the teaching of HIV and AIDS.

Quality education ensures involvement of parents and other community members

Success or failure of a new idea or subject depends, furthermore, on the support the teachers receive from the relevant administrators and other colleagues. Respondents in the Greek study referred to the lack of cooperation with experts as well as to potential conflicts among members of the school community as obstructing factors for implementing sex education. Perceptions on the support from colleagues have been found as positively influential in past research (Buston *et al.*, 2002; Wight and Buston, 2003). Additional data from Greece has emphasized the supportive role of administrators in teachers' decisions to implement sex education programs (Gerouki, 2009).

Sufficient time for HIV and AIDS on school time-table

It is worth noting that to ensure that students develop the comprehensive understanding and skills needed to cope with or avoid infection through necessary risk-reducing behaviour changes, it is essential that schools or institutions allocate sufficient time within the work hours and the curriculum to assist students to gain the knowledge and skills needed to prevent HIV and AIDS (ILO and UNESCO, 2006). Evidently HIV and AIDS is taken on as a secondary function by most coordinators of the HIV and AIDS in higher education. Teachers who use the time for HIV and AIDS to teach other subjects which they feel important are not likely to instil knowledge and skills needed by students for behaviour change now and in the future. HIV and AIDS as a subject is a positive innovation towards the reduction of the epidemic in society. A successfully introduced innovation is one that

teachers have adopted, that is, teachers are able and willing to implement the innovation in class and are confident in their ability to adapt it to the needs and abilities of their students (Bitan-Friedlander *et al.*, 2004). Teachers, therefore, have been recognized as significant agents for successful innovation implementation. Their attitudes and concerns towards specific innovations have been found crucial for adopting the particular innovation (Buston *et al.*, 2002; Cheung, 2002; Stevens, 2004; Bitan-Friedlander *et al.*, 2004).

Quality education enhances the use of effective teaching methods

The methods that are used to teach HIV and AIDS impact strongly on quality service delivery. In many colleges, the teaching of the HIV and AIDS curriculum pose a challenge to the traditional kind of teaching, which is geared to providing information and is examination focused. Effective teaching of the HIV and AIDS curriculum requires teachers to dispense with their traditional lecture method and to adopt creative and innovative teaching approaches (Kiiru in Mwebi, 2007). This is a problem to college lecturers who are used to the traditional lecture method. A United Nations population study of 24 countries in Africa including Kenya, found that teachers and schools appeared to play a limited role in AIDS awareness. Some reasons for the limited role of schooling included a heavy reliance on the traditional lecture method, overemphasis on medical and biological facts, and failure to address the real-life situations that young people find in their homes, communities and the world. Such instructional practices contributed to the limited teaching of HIV and AIDS prevention in Kenyan schools.

Quality education ensures improvement of teacher training

Respondents highlighted the need for improved teacher training for quality teaching of the subject. In their research on factors that contribute towards the implementation of HIV and AIDS in schools, Mathews *et al.*, (2006) found that one of the strongest predictors of the implementation of HIV and AIDS education was teacher training. This finding is consistent with that of Blake *et al.*, (2005), and also with that of McCormick and colleagues in Mathews *et al.*, (2006) in their school-based tobacco prevention research. Teacher training is likely to improve the implementation of HIV/AIDS education by raising awareness among teachers about the HIV and AIDS problem and the importance of responding to it. Further, it may encourage the belief that something can be done, and provide concrete information and ideas about what interventions teachers can implement. The effect of training on the implementation of HIV/AIDS education may be teacher's self-efficacy so they believe they are more capable of teaching about HIV and AIDS. This could be achieved through the provision of vicarious

experiences (modelling with feedback), the provision of enactive mastery experience with feedback, and verbal persuasion (Bandura, 1997).

Quality education improves classroom instructional practices

Respondents highlighted that there is need to improve classroom instructional practices as an important quality dimension. They had this to say:

The classroom instructional practices in most schools are still very poor and schools are yet to be reformed to run properly.

Instructional practices are the bedrock upon which quality education can operate. Central to the processes of teaching and learning and to education reform is the role of the teacher when engaging students in development of their intellectual and emotional strengths and in examination of learning within the context of their everyday experiences and the society around them. Teaching roles change over time in response to new patterns of education governance and management, new kinds of students, new theories of teaching and learning, and new technologies. As the functions of school management change, the meaning of teacher effectiveness may change. Nevertheless, certain basic ingredients of "quality" teaching tend to persist. These include knowledge of substantive curriculum areas; pedagogic skills; familiarity with multiple instructional strategies for use with individual and group activities requiring problem solving; application of concepts and higher-order thinking; ability to be reflective and self-critical; and motivation to help students learn (Harding 1996; Irvine 1995).

Developing and implementing a well-designed curriculum

Respondents highlighted that quality education in HIV and AIDS hinges on the quality of the curriculum. Perhaps one of the simplest and least expensive actions that could be taken over the next decade to improve HIV and AIDS education quality is to ensure that all teachers have and know how to use a well-designed curriculum and correlative textbooks for the grades they teach. One approach to the implementation and coordination of new curricula and related changes is through a national instructional strategy prepared by national or provincial authorities with input from local administrators and teachers. Included would be a set of guidelines and action plans related to the use of instructional time, development of instructional materials, and instructional support roles of school heads, teachers and even parents.

Conclusions

Several quality education dimensions were raised in this study and are relevant in stemming the tide from Africa.

- Quality is essentially the basic academic skills which are enforced through a quality curriculum in HIV and AIDS;
- Quality is much broader than basic academic skills and includes life skills such as communication, teamwork, the ability to negotiate and the ability to function in a diverse environment
- Quality is all about closing the implementation loop of the subject through improved teacher pedagogy in the subject
- Quality should include notions of instructional time for the subject HIV and AIDS;
- Quality for HIV and AIDS can be ensured by making the subject examinable in institutions thus monitoring students' learning achievement;
- Quality is about effective leadership that monitors the provision of the subject in the educational institutions
- Quality should not be measured by learning achievement alone as that measure includes the innate abilities of individuals that are not necessarily a component of quality;
- Quality can be measured as the sum of all or some of the inputs that go into education that includes textbooks, material and non-material resources;
- Quality is a result of much more than inputs and should also include processes and outputs;
- Quality education provides an extraordinary opportunity to prevent transmission of the HIV virus through prevention education; and
- Quality is about positioning HIV and AIDS education in a proper context in the education system in order to meet the Millennium Development Goal of eradicating the epidemic.

Recommendations

The study recommends the provision of a quality curriculum, provision of lecturers with knowledge of subject matter and pedagogical skills in HIV and AIDS teaching, allocation of time for the subject, workshops and resource allocation in order to bring behaviour change among students and all of society. The study recommends improvement of teacher training practices.

References

- Adams, D. (1998). Defining Educational Quality: Educational Planning. *Educational Planning* 11(2):3-18.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

- Bennell, P. (2005), The Impact of the AIDS Pandemic on Teachers in Sub-Saharan Africa, *Journal of Development Studies* 41(3): 440-466.
- Best J.W and Kahn, J.V (1993) *Research in Education*. Boston, Allyn and Bacon; p197-202
- Bitan-Friedlander, N., Dreyfus, A. and Milgrom, Z. (2004), "Types of 'teachers in training': the reactions of primary school science teachers when confronted with the task of implementing an innovation", *Teaching and Teacher Education*, Vol. 20 No. 6, pp. 607-19.
- Blake, S.M., Ledsy, R.A., Sawyer, R.J., Goodenow, C., Banspach, S., Lohrmann, D.K., & Hack, T. (2005). Local school district adoption of state-recommended policies on HIV prevention education. *Preventive Medicine*, 40(2), 239-48.
- Bloor, M., Frankland, J., Robson, K. and Thomas, M. (2001). *Focus Groups in Social Research*, London: Sage. p. 57
- Burton, D (2000) *Research Training for Social Sciences*, London, SAGE.
- Buston, K., Wight, D., Hart, G. and Scott, S. (2002). "Implementation of a teacher-delivered sex education programme: obstacles and facilitating factors", *Health Education Research Theory and Practice*, Vol. 17 No. 1, pp. 59-72.
- Casey, M.A. and Krueger, R.A. (2000). *Focus Groups: A Practical Guide for Applied Research*, Thousand Oaks, CA: Sage; p11.
- Chapman, D. and Adams, D. (2002). *Education in Developing Asia Volume 5: The Quality of Education: Dimensions and Strategies*. Asian Development Bank Comparative Education Research Centre: The University of Hong Kong.
- Cheung, D. (2002), "Refining a stage model for studying teacher concerns about educational innovations", *Australian Journal of Education*. Vol. 46 No. 3.
- Chindanya, A. (2002) *Motivating Professional Staff as a Managerial Task at Higher Education Institutions*. Unpublished M. Ed dissertation: University of South Africa. P.41
- Cohen, L., Manion, L. and Morrison, K. (2000), *Research Methods in Education*, 5th ed.
- Coombe, C. (2001), *HIV/AIDS and Trauma Among Learners*. Pretoria: National Union of Educators.
- Family Health International (2002) *Behaviour Change – A Summary of Four Major Theories*. Retrieved August 20, 2010 from <http://www.fhi.org>.
- Freeman, R. (1994) *Quality Assurance in Secondary Education*. Vol. 2 No. 1, pp. 21-25.
- Gerouki, M. (2009) "Innovations" on hold: sex education in the Greek primary School Health Education. Vol. 109 No. 1, pp. 49-65.
- Global Campaign for Education.(2004). *Deadly inertia? A cross-country study of educational responses to HIV/AIDS*. www.campaignforeducation.org/resources/Nov2005/ENGLISHdeadlyinertia.pdf
- Greenwood, M.S and Gaunt, H.J (1994) *Total Quality Management for Schools*. London, Casell; p.13.
- Harding, D. (1996). *Teacher Empowerment: An Analysis of the Indian Experience*. In *Partnerships in Teacher Development for a New Asia*. Report of an International Conference. Bangkok: UNESCO/United Nations Children's Fund (UNICEF).
- HMIE (2006) *A Framework for Evaluating the quality of Services and Organisations. Improving Scottish Education*. HM Inspectorate of Education.
- Irvine, J. (1995). *UNICEF and Education in South Asia*. Kathmandu: UNICEF Regional Office for South Asia.
- International Labour Organisation and United Nations Educational, Scientific and Cultural Organization (2006) *An HIV and AIDS Workplace Policy for The Education Sector in Southern Africa*. Geneva 22, Switzerland. ILO Publications.
- Kaaya, S.,W. Mukoma, A.J. Flisher, and K-I. Klepp (2002) *School-based sexual health interventions in Sub-Saharan Africa: A review*. *Social Dynamics* 28, no. 1: 64-88.
- Kelly, M.J. (1999), *UNESCO Nairobi Cluster: Consultation on HIV/AIDS and Education*, MTT Report, Durban.
- Kirby, D., B. Laris, and L. Roller (2005) *Impact of sex and HIV education programmes on sexual behaviours of youth in developing and developed countries*. *Youth Research Working Paper No. 2*. North Carolina, NC: Family Health International.
- Kollapen, J., Chaane, T., Manthata, T. and Chisholm, L. (2006) *Report of the Public Hearing on the Right to Basic Education (Johannesburg, South African Human Rights Commission)*;p.15
- Krathwoll, D.R (1993) *Methods of Educational and Social Science Research : An Integrated Approach* . New York: Longman; p.159.
- Maree, K. (Ed). (2007). *First Steps in Research*. Pretoria: van Schaik.
- Martens, E (1998) "What constitutes high quality teaching and learning and how to assure it", *Quality Assurance in Education*, Vol. 6 ISS: 1, pp. 28 – 36.
- Masinde, E. M (2006) *A 'System Thinking' Framework for Quality Assurance In Transnational Education. The Case of Kenya University of Nairobi. A Paper Presented at 1st International UNISTAFFG Conference and Workshop at Kenyatta University , 6 – 10th November , 2006*.
- Mason, D. and Pauleen, D.J. (2003), "Perceptions of knowledge management: a qualitative analysis", *Journal of Knowledge Management*, Vol. 7 No. 4, pp. 38-48.
- Mathews, C., Boon, H., Flisher, A. J. and Schaalma, H. P. (2006) *Factors associated with teachers' implementation of HIV/AIDS education in secondary schools in Cape Town, South Africa*. *AIDS Care*, 18(4): 388-397.

- Mwebi, B. M. (2007) One Teacher's Practice in a Kenyan Classroom: Overcoming Barriers to Teaching HIV and AIDS Curriculum. Vol. 9, No.1 & 2, pp.79-95.
- NACA (2005). Second Generation HIV/AIDS Surveillance. Gaborone: NACA
- Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.) Newbury Park, CA: Sage. p. 169
- Pigozzi, M. J. (2009). Quality education for all: Approaches to monitoring and improving the quality of education. In Education quality: Definitions and indicators. Berlin: GTZ.
- Ritchie, J. and Lewis, J. (2004) Qualitative Research Practice: A Guide for Social Science Students and Researchers, London: Sage
- Robbins, S. P and Coulter, M. (2005) Management. London: New Delhi, Prentice-Hall of India Private Limited. p.34
- Robsona, S. and Kanyanta, S. B. (2007). Moving towards inclusive education policies and practices? Basic education for AIDS orphans and other vulnerable children in Zambia. International Journal of Inclusive Education Vol. 11, No. 4, pp. 417–430.
- Seipore, K.M.D. (2006), Trends of HIV Prevalence in Botswana: Department of HIV/AIDS Prevention and Care. Gaborone: Ministry of Health, Botswana.
- Shumbayaonda, W. and Maringe, F. (2000) A Guide to School Experiences. Harare, Zimbabwe Open University.
- Sileo, N. M. (2005). Design HIV/AIDS Prevention Education: What Are the Roles and Responsibilities of Classroom Teachers? Intervention in school and clinic Vol. 40, No.3,(pp. 177–181).
- Smith, M.K. (2001) "The learning organization", the encyclopaedia of informal education, <http://www.infed.org/biblio/learning-organization.htm>.
- Stevens, R. (2004), "Why do educational innovations come and go? What do we know? What can we do?", Teaching and Teacher Education, Vol. 20 No. 4, pp. 389-96.
- Strauss, A and Corbin, J (1990) Basics of Qualitative Research, A Grounded Theory Procedures and Techniques. London. SAGE; p17-19.
- Torstensson, G. and Brundrett, M. (2009) The Challenges to Primary School Leadership of HIV/AIDS in Botswana: The Inadequacy Of School Effectiveness Models in the Context of the Pandemic. ISEA Volume 37, Number 1. pp. 74- 90.
- UNAIDS (2005), HIV-related Stigma, Discrimination and Human Rights Violations: Case Studies of Successful Programmes, available at: http://data.unaids.org/publications/irc-pub06/JC999-HumRightsViol_en.pdf (accessed 10 January 2010).
- UNAIDS and WHO (2006). *Education Sector Global HIV&AIDS Readiness Survey 2004: Policy Implications for Education & Development*, UNESCO, Paris, available at: <http://unesdoc.unesco.org/images/0014/001446/144625e.pdf>.
- Wight, D. and Buston, K. (2003), "Meeting needs but not changing goals: evaluation of in-service teacher training for sex education", Oxford Review of Education, Vol. 29 No. 4, pp. 521-43.
- World Bank(1991). Islamic Republic of Pakistan: Review of Secondary and Intermediate Education. Population and Human Resources Division, Country Department 3, Washington, DC: World Bank.
- World Bank (1997). Primary Education in India. Washington, DC: World Bank.
- World Bank (2002), Second Multi Country HIV/AIDS Program (MAPS) for Africa, World Bank, Washington, DC.
- World Education Centre for HIV/AIDS (2010) Building the Capacity of Public and Private Sectors to Provide Better HIV/AIDS Services. Retrieved August 22, 2010 from www.jsi.com.
- World Health Organisation (2006) Preventing HIV/AIDS in young people: A systematic review of evidence from developing countries. Geneva, Switzerland: Author.