

CHAPTER 1: INTRODUCTION

This dissertation reports on the results of a cross-sectional survey carried out among primary and secondary school teachers in Mozambique. The purpose of the study was to identify key individual difference variables that impact on teachers' decisions to address HIV/AIDS in the classroom, outside the classroom and in the community at large¹. This first chapter of the dissertation presents the problem statement, outlines the purpose of the study, and provides information on the context of the problem.

Problem Statement

Seventy percent of all new HIV infections take place in Africa (UNAIDS, 2003) and there can be no doubt that HIV/AIDS is no longer only a public health challenge, and it is having a devastating impact on the continent. Poverty, lack of adequate medical facilities, inadequate education, cultural/social barriers and political inertia are but a few of the complex factors that facilitate the spread of this disease which is undermining the hard-won economic and social gains that many African countries were able to make in the last two to three decades (IBRD/World Bank, 2000). The impact of HIV/AIDS is pervasive and far-reaching, affecting individuals and communities not only psychologically but also economically and socially². Families lose their most productive members to this disease, leaving children and elderly people without means of support. The high cost of the disease wreaks havoc within communities where the already fragile structures are not capable of absorbing further strain.

By now startling statistics are driving home the reality of this disease³ and most of the countries that are affected by HIV/AIDS have – although often with significant delay – put in place programs and activities aimed at combating the spread of HIV/AIDS. Such action plans frequently include a combination of the following elements: mass media campaigns, improved health

¹ The three domains of discussion (the classroom, informally in school and in the community) will henceforth be referred to as the “educational setting”. The educational setting is thus interpreted in the broad sense as the various physical spaces in which teachers play a role in communicating and creating awareness of HIV/AIDS.

² UNAIDS estimates that HIV/AIDS will result in a loss of more than 20% of gross domestic product in countries most affected by the disease by the year 2020 (IBRD/World Bank, 2002).

³ In 2003 there were 26.6 million adults and children living with HIV/AIDS in Sub Saharan Africa and the adult prevalence rate was estimated at 8.8%. HIV affects women disproportionately, who are 2.5 times more likely than men to contract the disease (UNAIDS, 2003).

services for early detection and treatment of sexually transmitted diseases that facilitate HIV infection, voluntary HIV testing, peer education, counseling and awareness activities within the schools, community level awareness building, etc.

Initially, the focus of HIV/AIDS interventions was on specific traditionally risk-laden population groups, such as sex workers, truck drivers, and pregnant women. More recently, this approach has shifted to include prevention efforts targeted at larger community groups (Verma, Surender Guruswamy, 1997), and in particular at children between the ages of 5-14, the so-called “window of hope” (IBRD/World Bank, 2002) for the countries in Southern Africa that have been so severely affected by HIV/AIDS. These children have escaped infection at birth⁴ and are assumed not yet to be sexually active⁵. In addition, at this stage children are still developing attitudes and behavioral patterns and are therefore more easily compared to adults (UNAIDS, 1997).



Figure 1 - Children in a primary school in Mozambique

One of the easiest and most direct ways of reaching this large target group is through the school system. In a number of countries in Africa – but certainly not all – a majority of children in this age group go to school at least for some years. And so, by focusing on schools - and particularly on the primary level and lower secondary level - it is hoped that it will be possible to reach children before they drop out from school and before they become sexually active (UNAIDS, 1997). Arguments for the importance of

focusing on education are based not only on “the window of hope” but also on a consistently demonstrated strong inverse association between incidence of the disease and level of education (c.f. Pinckney, 1996; Weir & Knight, 2000) – an association that also exists for other diseases such as malaria and cholera (Vandemoortele & Delamonica, 2000). In addition, HIV/AIDS affects young girls and women disproportionately and since they are often easier taken out of school, it becomes important to catch them before they leave (in countries with high levels of infection, such as Botswana, Malawi, Swaziland, and Zimbabwe for every 15-19 year old boy infected there are five to six girls infected in the same age group).

⁴ There is a 35% chance of transmission of HIV from mother to child during delivery or through breast milk if no preventive action is taken (UNICEF, www.unicef.org/aids/index_preventionMTICT accessed 03/27/04).

⁵ 60% of all new HIV infections are among those in the age-group of 15-24 (UNAIDS, 2003).

Within this strategy of reaching children in schools and in their communities, teachers are expected to play a very important role as educators about the risk of HIV/AIDS and as facilitators of key knowledge, skills and attitudes. The focus on education as a vehicle for change in HIV/AIDS has generated an increasing volume of research. However, the focus of these studies has generally been on the attitudes, knowledge and behavioral intentions and change among *students and young people* (cf. Venier, Ross & Akande, 1997; Nwokocho & Nwakoby, 2002; Brook, 1999, Sikand, Fisher & Friedman, 1996, Davis, Noel, Chan & Wing, 1998; Mkumba & Edwards, 1992). Only very few studies have examined the current and potential role of teachers in this context of HIV/AIDS (c.f. Lin & Wilson, 1998; Action Aid, 2003).

Purpose

This study seeks to identify and further understand key factors that may contribute to teachers' willingness/intent to communicate about HIV/AIDS in the educational setting. The term "willingness to communicate about HIV/AIDS in the educational setting" is used deliberately to reflect the broad scope of knowledge, attitudes, and skills that teachers are expected to advocate in the overall educational setting. The educational setting is interpreted as the broad set of physical spaces within which teachers interact with students, in other words, formally in the classroom, informally in school, and on formal and informal occasions in the community.

The literature review presented in Chapter 2 highlights a number of limitations to the research as it has been conducted to date. Specifically, as was mentioned above, research on HIV/AIDS education has been largely restricted to studying the students. In addition, most research on HIV/AIDS education in African countries (as opposed to western settings) has neglected to test key models and theories that may provide useful indications as to how to plan or further refine communication and education interventions (Kelly, 1999). Furthermore research in HIV/AIDS education as a whole has mostly neglected to examine how teachers' attitudes and perceptions of the disease affect the crucial role that they are expected to play as mediators of the learning process for their students. As a consequence, no research has been done in the African context to understand individual and contextual factors that may contribute to the interpretation teachers have of their role in combating HIV/AIDS and how this affects their practice as teachers. In much of the literature there appears to be an implicit assumption that given the right conditions – time, training, curricular "space" and materials (cf. UNAIDS, 1997) teachers will – regardless of their individual characteristics - be the right vehicles to deliver the message and to ensure that students acquire the knowledge and develop the attitudes and skills that they need to effectively address the threat of HIV. This stands in contrast with what we know today about how variables such as attitudes, experience, social norms, among others, can influence behavioral intent and on behavior.

This study addresses some of the limitations of HIV/AIDS research by using a theoretical framework as the basis for the initial inquiry of these contributing factors and by studying a target group that has traditionally been neglected in HIV/AIDS education research. A combination of two theoretical frameworks which in other behavioral research have been relatively stable and consistent predictors of behavior and behavioral intent are used. Specifically, this study combines Attitude Function Theory (Katz, 1960) and key elements of the Theory of Planned Behavior (Ajzen, 1985) to examine how the attitudes, perceptions of social norms and perceived behavioral control of primary and secondary school teachers in Mozambique impact on their willingness to communicate about HIV/AIDS in the broad educational context (formally and informally in schools and in communities). In addition, the study examines how a number of other individual characteristics of teachers (such as their level of experience with HIV/AIDS) impact on willingness to communicate about HIV/AIDS. In summary, the study is intended to:

- Examine to which extent the three “traditional predictors” of behavioral intent in the Theory of Planned Behavior (Ajzen, 1988) – attitudes, perceived social norms, and perceived behavioral control - predict teachers’ willingness to communicate about HIV/AIDS.
- Establish whether a number of additional variables that have been linked to behavioral intent in HIV/AIDS research affect this complex relationship, such as: the impact of personal experience with HIV/AIDS, the impact of personal behavior, the role of HIV/AIDS knowledge, age, and gender.
- Assess whether attitude functions (Fazio, 1986) provides a plausible explanation for differences in teachers’ willingness to communicate about HIV/AIDS in the classroom.
- Inform selected conclusions about the individual difference variables in this study with qualitative accounts of the individual experiences of teachers regarding their confrontation with the HIV/AIDS pandemic in schools and communities.
- Draw conclusions and formulating recommendations from the study for policies and practices in education.

The results of this study constitute an initial step in identifying personal and contextual variables that impact on teachers’ willingness to communicate about HIV/AIDS in the broad educational setting (school and community). Understanding how such individual and environmental differences influence teachers’ approach can provide a key input into designing interventions that will strengthen teachers’ role in addressing HIV/AIDS within schools and communities.

Context of the Problem

Mozambique

Mozambique has the dubious distinction of being one of the countries in Southern Africa that has been severely affected by the HIV/AIDS pandemic. Present HIV prevalence rates⁶ are estimated to be 13% (UNAIDS, 2003) of the adult population (15 – 49 years) which puts Mozambique in a somewhat better position than other countries in the region, such as Botswana (with 38.8% prevalence, the highest rate in the world), Zimbabwe (33.7%), Swaziland (33.4%) and South Africa (20%) (UNAIDS, 2003).

HIV prevalence in Mozambique is higher in areas bordering other seriously affected countries (such as Malawi, South Africa and Zimbabwe) and along the three main transport corridors of Maputo, Beira, and Nacala (Verde Azul Consult Lda, 2000). For the southern and central provinces where the HIV prevalence is between 13 and 21% (Arndt, 2003), and which are both economically very important regions, the impact of HIV/AIDS is expected to reduce life expectancy from 50 years in the absence of HIV/AIDS to 36 years in the next 10 years (Ministry of Health et al., 2001). Because HIV/AIDS affects the economically active population, the economic impact of the pandemic is expected to be severe, with the economy declining by up to 23% by the year 2010, resulting in a 1% annual expected decline of the GDP (Arndt, 2002).

Mozambique has been slow to react to the threat of HIV/AIDS. There are many explanations for this. To some extent this delay echoes trends in other countries where it seems that a critical mass of infections needs to be achieved – the pandemic has to become “visible” - before governments and organizations are spurred into action (ADF 2000). In the case of Mozambique, HIV/AIDS is also a relatively recent phenomenon. The extreme poverty of the country – it is the sixth poorest country in the world (UNDP, 2000) – has meant that people often simply die of something else before they die of AIDS. Also, it was only at the end of the 16-year civil war in 1992 that formerly isolated population groups could resume their migratory activities, which have contributed to the spread of the disease. In addition, with the end of the war, large groups of refugees returned from neighboring (and much more severely affected countries) which further contributed to spreading the disease.

⁶ Prevalence refers to the estimated percentage of the adult population living with HIV at a specific time, regardless of when infection occurred, whereas incidence reflects only the number of new cases of a disease in a defined time period.



Figure 2 - Improvised HIV/AIDS awareness sign in southern Mozambique

However, alarming statistics have been driving home the message. Mozambicans, and particularly the young, are increasingly dying of AIDS. In a population of 16 million there are currently 400,000 AIDS orphans and this number is expected to grow to 1,000,000 by the year 2010 (Verde Azul Consult, Lda, 2000). Since 1998, the Government has accorded the status of “key priority” (MINED, 2003) to the issue of HIV/AIDS and has operationalized this by establishing a National HIV/AIDS Council that responds directly to the Prime Minister. A considerable amount of effort has been spent on preparing a national approach to fighting HIV/AIDS and on developing sectoral strategies in the areas of health, education, social

action, and others, and concrete activities on the ground to deal with HIV/AIDS, both in terms of prevention and mitigation, are gradually emerging.

Impact on Education

A number of ministries play a key role in the implementation of the national HIV/AIDS strategy. One of these is the Ministry of Education. Since teachers are found even in the most remote areas of the country where no other government staff can be found⁷, it makes sense that they should therefore play a key role in enhancing awareness and in providing children and the community at large with vital information and skills in combating HIV/AIDS.

As in other countries of the region, however, the education system in Mozambique itself is in crisis as a direct result of HIV/AIDS. The projected statistics are startling. It is estimated that there will be 13% fewer children in primary education by 2010 and that 17% of the teachers will die in the same period (Verde Azul Consult Lda, 2000). The current rate of teacher training and deployment will not be sufficient to make up for the loss of teachers due to HIV/AIDS (Arndt, 2003). Once again, girls in the system are expected to be disproportionately affected since they are more vulnerable to becoming infected with the disease and since families need their labor to

⁷ Teachers comprise 55% of the total civil service in Mozambique.

take care of the sick which means they will be under pressure to leave school. As teachers and pupils get infected, the quality of education is expected to decline further. As in other countries in the region, HIV/AIDS will affect enrollments in education demographically (Gachuhi, 1999). One of the foreseen impacts is the reduction in the size and changing the characteristics of the student and teacher population. Thus it is projected that by 2010 18% of children in lower primary education (which is known as *Ensino Primário do Primeiro Grau* or EP1 and covers Grades 1 through 5) and 25% of children in upper primary will have lost one or both parents (MOZ ESSP, 2003). Currently 10% of EP1 pupils and 12% of EP2 (*Ensino Primário do Segundo Grau*, Grades 6 and 7) children have lost either one or both parents. The teaching force will also slowly decline as teachers die as a result of HIV/AIDS and cannot be replaced. Projections of teacher deaths predict that 9,600 teachers will die by 2015 (the total workforce is currently around 45,000 teachers). The pandemic is also expected to have a socio-economic impact by affecting the household arrangements and the very social fabric of society, as well as a psychological price, through its impact on the emotional state of both students and teachers (ADF, 2000). In financial terms, the conservative estimate is that the Ministry of Education will need to budget at least US\$ 110 million in additional funds for the next 5 years to cover for losses as a result of HIV/AIDS (Carr Hill et al., 2001).

The Role of Teachers

The Ministry of Education has identified four strategic areas for addressing HIV/AIDS, which focus on: a) the Ministry of Education as an employer; b) the Ministry of Education as a provider of education with responsibilities toward children and communities; c) the Ministry of Education as a system; and d) the Ministry of Education as part of a broader national response (MINED, 2002). As a provider of education the Ministry of Education's strategy and action plan for addressing HIV/AIDS defines the training of teachers as a key activity. The aim is to ensure that all 45,000 primary and secondary school teachers in the system are provided with basic training in HIV/AIDS prevention so that they know what the pandemic is, how it is caused, how it can be avoided, and what support is available to both teachers and students who are affected. Teachers are expected to use their knowledge and skills to integrate HIV/AIDS related activities in the extended educational context (classroom, extra-curricular activities, and in contacts/dialogue with communities). They are expected to cover a wide variety of HIV/AIDS related topics and issues ranging from origin, symptoms and prevention of HIV/AIDS to the social and economic impact of the disease, stigmatization and living positively with HIV/AIDS (MINED, 2002; IAP, 2002). The new curriculum that will be implemented in 2004 progressively integrates this content into the different Grades and also offers the possibility of including locally relevant materials (the so-called "local curriculum" which is the 10% of the curriculum over which

provinces can decide). In addition, the Ministry of Education is in the process of developing a Communication Strategy (MINED, 2003) which outlines in some detail the communication approach for different levels of target groups (adults, adolescents over 15 years of age, adolescents between 12 and 15 years old, and children under 12). One of the main differences between the different groups is the level of explicitness with which issues such as condoms and sexuality are discussed.

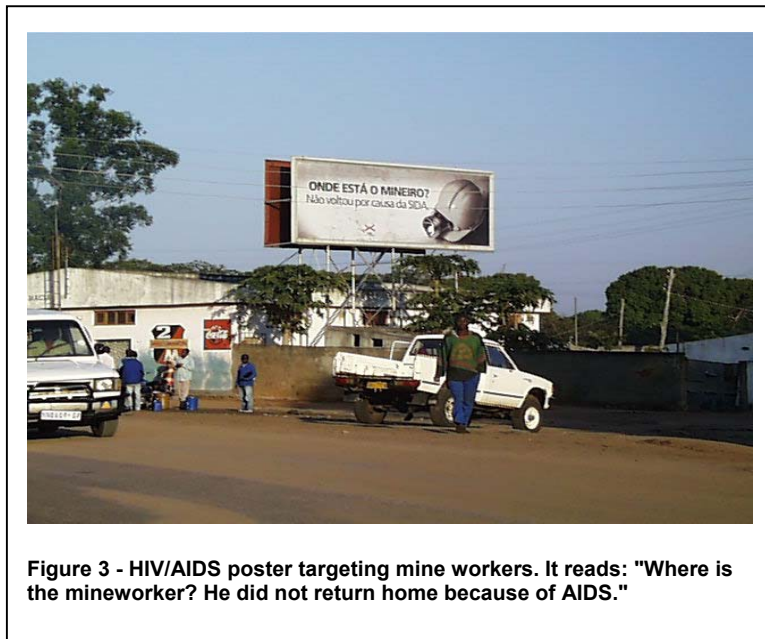
Gaza Province

The specific context in which this study took place is Gaza province. This province is located in the south of the country, has an area of approximately 75.000 km² and a population of just over 1,061,000 (around 8% of the total population in Mozambique), of which 57% are women. Gaza has 12 administrative districts, however, over 85% of the population in the province is concentrated in the southern six districts of the province which comprises only 15% of its total surface area. Much of the income in the province comes from emigration of labor to the mines and other activities in South Africa (the emigration rate for Gaza is the highest in the country), but agriculture and cattle production also provide significant sources of income.

Gaza province has the fourth highest HIV/AIDS prevalence rate in Mozambique and is the most affected province in the south of the country (Arndt, 2003). In 2003 alone, it was expected that 19,500 children would become orphaned as a result of the pandemic. The relatively high prevalence is related to the migratory activity, but also to the transport corridor between the south and the north which cuts through the province, and the fact that large contingents of soldiers from countries with very high levels of HIV/AIDS prevalence (such as Malawi and Zimbabwe) were stationed in the province in the mid-1990's as part of the peace keeping efforts of the United Nations.

Various initiatives have been put in place in this province to combat the spread of HIV/AIDS and to address its impact. A Provincial Office for HIV/AIDS was created in 2001 and coordinates the initiatives of the Government in the various sectors, such as health, education, social work, labor, etc. Communication and awareness campaigns are being run by various national and international organizations of which the most prominent are the Jeito program which uses social marketing to advocate the use of condoms, FDC (which is run by the widow of the first president of Mozambique), and the BIZ program. These campaigns use a combination of posters, radio programs, theatre groups, and peer support activities among others. The most visible part of these campaigns is the posters, many of which have a predominantly pessimistic

message about the consequences of HIV/AIDS. The messages are mostly kept simple given the high percentage of illiterate people in the province.



HIV testing has only been available in the province in the past two years and facilities for voluntary testing are only available in three of the largest cities in the province. Pre and post-test counseling is available at each of the testing sites. Two of the sites that were visited in the course of this study, however, are in highly visible locations (next to the hospital in the main street of the town) which does little to guarantee the anonymity of the people that seek to use the services.

There are approximately 110,000 students in primary education in Gaza province, most of who study in the densely populated southern area of the province. A total of just over 3,000 teachers teach classes from Grades 1 through 12. Working conditions for teachers are hard, with many teachers working double or triple shifts to cover the high need for education, particularly in the densely populated urban areas of the province. As a result the number of contact hours between teachers and students is very small (an average of 2 hours and 50 minutes per day) and teachers are hard pressed to find time to deal with the full requirements of the curriculum. Class sizes are high (with an average of 71 students per teacher) and pose a considerable challenge to teachers. Most teachers simply lecture to their pupils and assume that they learn by endlessly repeating out loud the phrases that are recited to them.

There is considerable variation in the extent to which teachers are aware of the impact of HIV/AIDS. As will be discussed later on, some teachers are acutely aware of the impact of the disease and talk forlornly of the numerous funerals that they have to attend, and of the people

that they know have been affected by the disease. Other teachers have only heard of examples through the mass media. HIV/AIDS training for teachers is still in its infancy and usually takes the form of an extra hour or two in an existing training course. The Ministry of Education does not have a data base to monitor the impact of HIV/AIDS or even to keep track of the deaths of teachers. Support for teachers that are affected by HIV/AIDS is practically non-existent and efforts to recruit teachers as HIV/AIDS activists have met with mixed success. As the provincial coordinator for one of the communication campaigns noted, it is hard to find people who are willing to volunteer for such a complex and demanding activity given that teachers face both at work and at home complex and stressful situations.

Summary

The continued spread of HIV/AIDS is a major threat to Sub-Saharan Africa. In Mozambique, teachers have been given a major role in providing information, improving awareness and contributing to attitude and behavior change in schools and community. However, very little research has been done to examine teachers' perceptions of this disease and their approach to addressing this challenge.

This study aims at addressing this shortcoming in the literature by systematically examining various factors that may impact on the willingness of teachers to address HIV/AIDS in their schools and communities. The identification of these factors is of importance in identifying teachers that show particular potential in addressing HIV/AIDS and should provide a basis for fine-tuning training and other support interventions to the specific characteristics and needs of teachers. Two theoretical frameworks, namely the Theory of Planned Behavior and Attitude Function Theory are used as a basis for the inquiry into the individual difference variables of teachers that impact on their willingness to communicate about HIV/AIDS. Finally, the study covers both primary and secondary level teachers but is limited to the southern province of Gaza.