

## **CHAPTER 4**

### **LITERATURE REVIEW**

#### **4.1 INTRODUCTION**

It has been concluded in the previous chapter that HIV/AIDS poses a possible risk to organisations. Management has specific legal and statutory duties regarding risk management, including HIV/AIDS, as well as the control system. It has also been argued that internal auditing, which plays a consulting role to management regarding risk management and corporate governance, should assist management in determining the possible effect of HIV/AIDS on the organisation. The effects of HIV/AIDS could threaten various components of an organisation, including the control system. Therefore internal auditors as control experts should, in a consulting capacity, assist management to put in place an effective control system.

The basis for the control system (see the discussion in 2.6.1) is the control environment, which consists of various elements. Internal auditors should thus first understand the effect of HIV/AIDS on the various elements of the control environment before trying to determine the effect on the rest of the control system. The control environment, with its various elements, is a broad concept. This chapter therefore focuses on the elements most likely to be affected by HIV/AIDS, namely personnel's commitment to competence, the organisational structure, and human resources policies and practices.

A thorough search performed of the relevant literature and information resources such as libraries and the Internet, it was established that no formal research has been conducted to date on the role of the internal auditing function regarding the management of the potential risk of HIV/AIDS to an organisation. Furthermore, no formal research could be

found on the effect of HIV/AIDS on the control environment as a whole. Hence, this chapter aims to determine whether internal auditing is currently playing a role in the management of the risk of HIV/AIDS in organisations, what the role of internal auditors is or should be, and whether the control environment is affected by this disease. The results can then be used to develop guidelines for internal auditors to assist management with this risk.

This chapter first investigates the literature to establish what the professional responsibility of internal auditors regarding risk management is, with specific reference to HIV/AIDS. As can be seen from the discussions in the previous chapters, internal auditors as control specialists must assist management in determining risks threatening the control environment. Therefore, the next step would be to investigate the literature dealing with the effects of HIV/AIDS on the most affected elements of the control environment.

#### **4.2 THE ROLE OF INTERNAL AUDITING IN DETERMINING THE EFFECTS OF HIV/AIDS ON AN ORGANISATION**

As mentioned above, no formal research has yet been conducted on the role of the internal auditing function regarding the management of the potential threat HIV/AIDS poses to an organisation, particularly in achieving organisational objectives. The question arises whether internal auditors, in an assurance or consulting capacity, are aware of their professional responsibility regarding the effect of HIV/AIDS as a risk or potential risk to organisations. If not, should they be informed? If they are aware, what is being done about the problem and is it sufficient in supplying management with the necessary information to address this risk?

The Institute of Internal Auditors Research Foundation has conducted various studies (Walker, Shenkir & Barton 2002; Miccolis, Hively & Merkley 2001) on enterprise risk, which is defined as 'any action or event that will

adversely affect an organisation's ability to achieve its business objectives and execute its strategies successfully' (Walker *et al* 2002:2). Managing risk, in terms of this definition, means that resources (for example, people, technology, knowledge), business strategy and processes should be aligned to manage the uncertainties that an organisation faces. The IIA Board has approved the new definition of internal auditing and *standards* (see 2.3). Internal auditors have clearly been made aware that they have an important role to play regarding risk management. In particular, Performance Standard 2110 suggests that the internal auditing activity should assist management in identifying and evaluating risks (Institute of Internal Auditors Inc 2003). Therefore, one can conclude that the internal auditing profession (and by implication professional internal auditors) is(are) aware of its(their) professional responsibility regarding the management of risk.

It was concluded in Chapter 3 that HIV/AIDS is a threat to the world, countries, governments, society and individuals. Statistics indicate that certain countries, communities, age groups, organisations, business sectors, and so on will be more severely affected by this disease than others (Barnett & Whiteside 2002). Internal auditors thus have to investigate (or to suggest such an investigation to management) the effects of HIV/AIDS on the specific organisation to be able to identify whether this disease is an enterprise risk or not. Although research has been conducted by the IIA Research Foundation on the risk poses by people to an organisation (Miccolis *et al* 2001:33), no formal proof could be found to suggest that an investigation of the effects of HIV/AIDS by internal auditing is currently standard practice in organisations. Therefore this issue was investigated further in this study by means of interviews with chief audit executives in various internal auditing activities in South Africa. The results of this investigation are discussed in Chapter 6 of this study.

The impact of epidemics such as HIV/AIDS can be history-changing. So, for example, North America would have been very different if most of the indigenous population had not been wiped out by microbes brought in over

a period of time by immigrants from Europe (Barnett & Whiteside 2002:24). All organisations will most definitely be affected by this epidemic, and certain organisations could be eliminated if this risk is not addressed in time. The internal auditing profession should thus consider the investigation of the epidemic and the role the internal auditing activity has to play. If necessary, it should develop guidelines in the form of Guidance - Development and Practice Aids of the Professional Practices Framework (see 2.4.6).

Members of the internal auditing profession, being control specialists and according to Performance Standard 2120, being responsible for promoting improvements to the control system in general on a continuous basis (Institute of Internal Auditors Inc 2003), should further this investigation by researching the effects of HIV/AIDS on the control system.

### **4.3 THE EFFECTS OF HIV/AIDS ON THE CONTROL SYSTEM**

The control system of an organisation is a very broad concept. COSO (see 2.6.1) divides the control system into six elements. It states that the control environment forms the basis for the rest of the elements (COSO 1992). It is thus logical for internal auditors first to investigate the effects of HIV/AIDS on the control environment before studying its effects on the rest of the control system. The control environment consists of various elements. Although all of those elements play an important role in contributing to the soundness of the control system, certain elements would probably be more affected by HIV/AIDS than others, for example, management's commitment to competent personnel, the organisational structure and human resources policies and practices. This study therefore focuses on these three areas. As previously mentioned in 4.1, no formal research has as yet been done on the effects of HIV/AIDS on the control environment, but various studies have included certain factors influencing the above three elements. These studies are discussed briefly to identify relevant findings, as well as gaps where further investigation is required.

#### **4.3.1 The effects of HIV/AIDS on personnel's commitment to competence**

Personnel's commitment to competence encompasses the need for employees to have the necessary knowledge and competence to perform their duties properly (COSO 1992:26). A study performed by Moore, Cheng and Dainty (2002:318) regarding the competence of the workforces of organisations concluded that competence is more than only knowledge and the ability to perform a specific job or task. It includes individuals' behaviour and attitudes regarding their duties. One need to ask oneself whether HIV/AIDS could affect the competence of the workforce of a specific organisation and, if so, whether internal auditors know this and are drawing this problem to management's attention.

Factors such as poor employee performance (as a result of illness, illness or death at home or of someone close to the employee), absenteeism of employees (and the effects thereof on the morale and attitude of the workforce), the loss of personnel, technical skills and experiential knowledge (death or serious illness amongst employees, especially highly skilled workers), increased staff turnover and the cost of recruiting and training new personnel (especially where the possible pool of new recruitments could become smaller), and the effects of the above on production output should be investigated to be able to conclude whether HIV/AIDS could affect the competence of the employees of a particular organisation. According to a study by Morris and Cheevers (2000) on the primary needs of a sugar mill's employees infected with HIV/AIDS, it is clear that the cost involved for the company regarding the competence of the workforce is much higher than direct medical costs (see Table 3 below).

Table 3: Direct cost of HIV/AIDS per worker per year (% of total)

<u>COST</u>	<u>% of TOTAL</u>
Replacement worker	28
Lost productivity	28
Training of new employees	5
Hospitalisation	1
Clinic and physician visits	10
<u>Absenteeism</u>	<u>28</u>
TOTAL	100

Source: Morris and Cheevers (2000:7)

As can be seen from the above table, it can cost a company 33% of the total direct cost of an HIV/AIDS worker to make sure the job is getting done (getting replacement workers and training them) and 56% on a lower competence level of the workforce as a result of lost productivity and absenteeism.

Absenteeism is the greatest problem faced by organisations, according to Barnett and Whiteside (2002:17). A study performed by Roberts, Rau and Emery (1996) has indicated that 37% of increased labour cost is a direct result of HIV-related absenteeism, and 15% is a result of AIDS absenteeism. The lower AIDS absenteeism figure could probably be linked to the fact that people with AIDS are very ill and thus tend to resign or retire. A comprehensive study was performed during 1995 at five different hospital sites in California, in the United States of America, to investigate differences in the hours worked by HIV/AIDS-infected as well as non-infected patients (Leigh, Lubeck, Farnham & Fries 199:855). Approximately 28% of the study group has been diagnosed with AIDS, 40% were HIV-positive but did not have AIDS, and 31% were HIV-negative. The study concluded that there was no difference between the hours worked by patients without HIV/AIDS and those that are HIV-positive. However, there was a difference of 14 work hours per week between AIDS patients and the other two groups. This was the result of

the fact that most of the AIDS patients were too ill to work. Those with full-time employment worked three hours per week less than members of the other two groups.

Although the result is significant for management in respect of the workforce, the results of the study are limited because of the non-randomness of the sample - patients were recruited from well-known hospitals and clinics and were dominantly white men with higher education qualifications who could afford medicine and health care. It may therefore not be possible to generalise the results to the general population. A further limitation is the non-measurement of the quality of the work performed by the AIDS patients and that done by the HIV-positive patients.

A study performed by Deloitte & Touche (2002:13) on behalf of SABCOHA (South African Business Coalition on HIV/AIDS) to assess HIV/AIDS initiatives in the private sector included the following question: 'Have staff been encouraged and trained to become more multi-skilled to permit work to continue despite staff losses?' Only 33,6% of the 110 respondents answered 'yes' to this question. This indicates that managements are not aware of the possible threat to the commitment to competence by the workforce if a significant number of employees die as a result of HIV/AIDS.

Barac and Otter (2001:10) have performed a study on the financial accountability of HIV/AIDS. Questionnaires were sent to 50 top companies identified by the *Financial Mail* Special Survey of Top Companies in June 2000, and 28 responded. Companies were requested to rank the costs most influenced by HIV/AIDS. The relevant costs to commitment to competency were a decline in productivity as a result of illness (ranked highest), on-the-job training (ranked third), a decline in productivity as a result of morbidity on the job (ranked fourth), recruitment costs (ranked fifth) and pre-employment training costs (ranked sixth).

To the question whether absenteeism was taken into account in budgets (Barac & Otter 2001:27), only 35,65% of the respondents indicated that this was done. One has to ask whether the remaining 64,35% of the participants are aware that absenteeism is increasing as a result of HIV/AIDS, and how this could affect the organisation financially and otherwise. To the question whether employee losses occurred amongst unskilled workers rather than skilled ones (Barac & Otter 2001:27), only 57,1% indicated they did, which suggests that 42,9% of respondents thought that employee losses occurred mainly amongst medium to high-skilled workers and even key personnel, which is more difficult to replace. On the other hand, only 10% of the respondents (Barac & Otter 2001:27) indicated that they foresaw the appointment of more than one person for each job to compensate in advance for future HIV/AIDS replacements and only 7,1% indicated that they are taking out key personnel insurance to cover the cost of recruiting replacements for people in critical positions due to the HIV/AIDS threat.

The only research that could be found on the effects of HIV/AIDS on the productivity of the workforce was a study performed at a Kenyan tea plantation (Fox, Simon, Rosen, MacLeod, Bii, Foglia and Wasunna 2003) where the workers are paid per kilogram of tea leaves picked per day. The productivity of 54 workers who had either died of AIDS-related illnesses or had retired due to HIV/AIDS was compared to that of 217 non-infected workers who were working in the same field over the same period of time as the HIV/AIDS workers. There were no significant differences between the healthy and the ill workers in terms of age, years of experience, or gender. The study concluded that workers' productivity declined by an average of 18% from three years before death, measuring an average of 7,6 kilograms per day six months before their death.

In terms of the above studies, the quantitative costs involved for an organisation as a result of HIV/AIDS have been discussed. However, qualitative costs are also involved, namely the impact of HIV/AIDS on the

mental and physical efforts of an employee with HIV/AIDS. No direct research could be found on this topic. The aim of a study performed by Massagali, Weissman, Seage and Epstein (1994:1979) was to determine the impact of HIV/AIDS on personal (mental effort) and job characteristics (physical effort) from the time of AIDS diagnosis to employment loss. Interviews were held with patients at three medical care sites in Boston, in the United States of America. Although mental and physical efforts were not tested, the study investigated how long employees stayed employed after AIDS was diagnosed. Respondents who held a job that required high mental effort and little physical effort were employed much longer after AIDS was diagnosed than people with a job that required low mental effort but needed high physical effort. This could indicate that employee performance by HIV/AIDS sufferers in a job requiring a high level of physical input could be lower than that of employees in a job that needed a high level of mental input. If this is true, this will directly affect the competency level of unskilled employees and thus the control environment.

Although the studies cited above address certain factors influencing the commitment of management to a competent workforce, no study has identified the implications for the control system, especially the control environment. In Chapter 6, this study therefore identifies all the direct and indirect factors influencing commitment to a competent workforce and the cost thereof. The Centre for International Health at the Boston University School of Public Health has developed a model for analysing the cost of HIV/AIDS to organisations (ARCH Project Annual Report 2000:2 - see Table 4) and with the help of UNAIDS and various organisations in the private sector, is monitoring six large companies in Southern Africa. The information from this study will be used to address the first problem, namely to determine whether HIV/AIDS has an effect on the competency of the workforce. Secondly, if it is proven that HIV/AIDS does affect the competence of the workforce, this study will aim to determine whether internal auditors are aware of this and are bringing it to management's attention. These questions are empirically investigated by means of

interviews with chief audit executives in various internal auditing activities in South Africa.

A competent workforce is needed to do the job, but this competent workforce and other areas of an organisation (such as activities and functions) should be planned, controlled and monitored in such a way that the organisation's objectives are achieved. The second element of the control environment that could possibly be affected by HIV/AIDS is thus the organisational structure.

#### **4.3.2 The effects of HIV/AIDS on the organisational structure**

An organisational structure consists of a framework used for the planning, execution, controlling and monitoring of the activities of an organisation to ensure the organisation reaches its objectives. This includes the structuring of authority and responsibility (COSO 1992:27) and it should be designed in such a way that the organisation's strategies and objectives are achieved (Locke 2000:291). According to a study performed (Hunter 2002:14) on organisations of different sizes and at different stages of their business life cycle, the design of an organisation can be divided into two categories. The first includes contextual elements (for example, strategy, technology, culture and business environment). The second refers to structural elements (such as the reporting relationship, decision-making processes, communication processes and the co-ordination of work). It is management's responsibility to design an organisation in such a way that these elements are addressed effectively. HIV/AIDS could affect the way management structures the organisation, as a result of absenteeism (the effect on the delegation of rights and responsibilities, and the co-ordination of tasks performed) and the diminishing competent workforce (due to the death of key personnel and the effect on decision-making processes, and increased use of technology to reduce labour dependency). The question to be asked is whether internal auditors are aware of these possible influences on the organisational structure and are drawing them to management's attention.

As previously mentioned, HIV/AIDS could play an important role in the increase of absenteeism and the diminishing competent workforce. Very little literature could be found on the effects of this disease on the day-to-day running of businesses, including the delegation of tasks, rights and responsibilities and the co-ordination of activities. The only document that recognises this risk is the UNAIDS's Business Response to HIV/AIDS, where increased organisational disruption and the possible effects thereof on the decline in production are briefly mentioned (UNAIDS 2000:3).

The study performed by Barac and Otter (2001:27) touched on the issue of the increased use of technology to replace dependence on employees. To the question whether organisations invest in machinery and equipment to address the possible effects of HIV/AIDS on the organisation, 32% of the respondents indicated that this practice was increasing in their organisations. However, two-thirds either did not know of this practice or did not think it important enough. No further literature could be found on this topic.

Various gaps exist in research on the effects of HIV/AIDS on organisational structure, particularly the effects on the delegation of rights and responsibilities, the co-ordination of tasks, the death of key personnel and the effects thereof on decision-making processes and on increased use of technology to replace labour input. In Chapter 6, the information gathered by the Boston University School of Public Health (see 4.3.1 above for a more detailed discussion) is used to identify possible costs related to the effects of HIV/AIDS on organisational structure. Then, having proved that HIV/AIDS does affect the organisational structure of an organisation, this study explores whether internal auditors are aware of this and is drawing management's attention to it. This was investigated by means of interviews with chief audit executives in various internal auditing activities in South Africa.

Organisational structure, although it may involve a formal framework, in practice represents people: management must do the planning, managing, controlling and directing of the workforce, to perform certain tasks effectively and efficiently. Therefore, the handling of the workforce is very important for organisational structure. The third element of the control environment that could possibly be effected by HIV/AIDS is the human resources policies and practices of an organisation.

#### **4.3.3 The effects of HIV/AIDS on human resources policies and practices**

Proper human resource policies and practices should achieve the employment of sufficient and capable people, as well as the development and well-being of these employees to ensure that the organisation's objectives and goals are met. This includes hiring, training, evaluating, promoting and compensating employees (COSO 1992:29). The personnel of an organisation are regarded by many authors as the most important aspect of internal control: a simple system of control with a few competent and trustworthy personnel is more valuable than a complex and well-planned control system managed by people who are negative, incompetent and dishonest (Van der Merwe 1996).

As seen in Chapter 3 of this study, HIV/AIDS is a threat to the world, countries, communities and therefore organisations, through their workforces. According to a study performed by Family Health International (Rau 2002:19), there are specific factors relating to a workforce that increase the risk of HIV/AIDS to an organisation. The most important of these are a large number of employees who live without their families or away from home; long-distance transport as an important part of the organisation; middle- and upper-level employees who travel frequently; and being situated in a country or region that is undergoing rapid economic change. If these factors are present, human resources policies and practices regarding HIV/AIDS must be managed accordingly. The organisation should develop a pro-active strategic plan and establish

appropriate policies and practices for personnel issues (Evian 1998:4), such as recruitment processes and the training of new employees, HIV/AIDS prevention training, personnel evaluation, testing of all personnel and treatment for HIV/AIDS positive employees, employee benefits such as sick and compassionate leave, medical aid and pension funds and remuneration policies.

As discussed in 3.5, the government of South Africa has implemented various forms of legislation to protect employees or potential employees with HIV/AIDS from unfair discrimination. According to the Code of Good Practices on key aspects of HIV/AIDS and employment (National Economic Development and Labour Council 2000:2), no person with HIV or AIDS shall be unfairly discriminated against within the employment relationship. This includes issues such as recruitment procedures, appointments, job classifications, remuneration and other benefits, training and development, performance evaluation, promotions, termination of services, and many more.

Management is responsible for ensuring that the applicable legislation is adhered to (King Report on Corporate Governance 2002:158). In addition to a possible legal department, management may ask internal auditors to perform compliance audits to evaluate compliance. Currently, it is common practice for internal auditing functions to perform audits on human resources policies and practices and these should include audits of compliance with relevant labour legislation. It is not clear whether these audits do include HIV/AIDS legislation.

It must be noted that HIV/AIDS is a non-notifiable disease (Department of Health 1997:33). This means that a person does not have to inform an employer or potential employer that he or she is HIV positive. Furthermore, employers may not force employees to undergo a test to determine whether they are HIV positive. They can therefore only determine the extent of the disease amongst their workforce by performing voluntarily prevalence studies (Evian 1998:2). With this in mind, management needs

to manage HIV/AIDS in the workplace by implementing policies and practices for the management of human resources, without knowing its real presence and scope.

With HIV/AIDS being a non-notifiable disease, a person does not have to disclose his or her HIV/AIDS status when applying for a position at an organisation. This means that people with HIV/AIDS may be employed without management's knowing of the additional cost that could follow. According to the study performed by Barac and Otter (2001:29), most organisations do not see this as a problem, as 48% of the respondents indicated that, even if it were legally permitted, they would not ask job applicants to undergo a HIV/AIDS test.

The hiring of especially skilled labour could become a problem as the pool of potential employees with knowledge becomes smaller as people die of AIDS. According to Barnett and Whiteside (2002:243-244), there is consistent evidence of the impact of AIDS in companies across Southern Africa due to deaths amongst workers. In 1999, it was calculated that 9,41 per 1000 workers in a sugar mill in Swaziland died of AIDS-related illnesses. Based on a study performed in Botswana on five companies, the average cost to recruit and train a replacement for an employee lost to AIDS is R8 405 (Greener 1997). This is most possibly an understatement in South Africa, as tertiary costs and personnel search firms' costs are higher according to Greener's study. The implications of recruitment and training costs versus the possible employment of a person with HIV/AIDS must be investigated by internal auditors and brought to management's attention. Managements have to be informed of these problems in order to provide for future increases in salaries, hiring costs and the cost of training new employees.

Various studies have been performed to determine the extent and the costs of HIV prevention and training programmes. According to the study performed for SABCOHA by Deloitte & Touche (2002:9-10), although 65,5% of the organisations indicated that they do have a HIV/AIDS

awareness or education programme, only 36% of the respondents indicated that managers or supervisors had been trained to manage HIV/AIDS-related matters in the workplace. Furthermore, the study observed that only 19% of the responding organisations had conducted an employee survey to determine knowledge, attitudes and practices surrounding HIV/AIDS. This again indicates that most organisations' awareness and education programmes are not functioning effectively or efficiently.

None of the above studies indicated what the role of internal auditing is or should be, although human resources policies and practices are part of normal internal auditing activities. Good internal auditing practices suggest that internal auditors should investigate their organisations' current activities regarding this issue and inform management of the prevailing situation.

A further area of human resources policies and practices that will most probably be affected by HIV/AIDS is the compensation to and benefits for employees. As previously mentioned, salaries of employees could increase as the pool of knowledge decreases, especially for skilled labour. Other areas that could be affected are medical aid, pension fund, leave, and the treatment cost for employees diagnosed with HIV/AIDS. According to the study performed by Deloitte & Touche (2002:11-12), most companies' medical aids have a HIV/AIDS disease programme and provide death and disability benefits for HIV/AIDS employees. The larger companies (with more than 500 employees) have indicated a 16% increase in their benefit contributions.

According to research gathered by Family Health International (Rau 2002:25), the medical costs at an agro-estate in Kenya jumped 150% from 1989 to 1993 and even more to 1997. Barac and Otter (2001:26) confirm this trend, as 72,4% of the respondents in their study had experienced a material increase in the payment of medical services and/or health insurance in the past five years. Furthermore, 55% of the respondents

indicated that the impact of HIV/AIDS had to be taken into account in the actuarial assumptions used to calculate retirement benefits (Barac & Otter 2001:26). A large South African insurance company's estimate of potential benefit liabilities for lump-sum payments on death, spouse pension funds and disability pensions, indicated an increase from 7% in 1995 to 18% in 2010 (Barnett & Whiteside 2002:282). Management, with the help of internal auditors, should investigate the effects of the above costs to their specific organisations to be able to manage this potential risk.

As discussed in 4.3.1, absenteeism is the greatest problem related to HIV/AIDS. Although sick and normal leave is monitored by most organisations, absenteeism is not only the result of employee illness. The study by Barac and Otter (2001:26) indicates that most responding employers have accepted a policy whereby compassionate leave is regulated for taking care of sick family members, attendance at funerals of close family members, colleagues and friends. The cost of this should be calculated and properly managed. Internal auditors currently performing compliance tests on the leave system should assist management in this task.

The above studies highlight the impact that HIV/AIDS has on an organisation's human resources policies and practices. Again, no specific study addresses the implications for the control environment. This study, in Chapter 6, identifies, using information gathered by the Centre for International Health at the Boston University School of Public Health (2002), factors influenced by HIV/AIDS with regard to human resources policies and practices in an organisation. Hence, if proved that HIV/AIDS does affect the human resources policies and practices of an organisation, the role of internal auditors is investigated by means of interviews with chief audit executives in various internal auditing activities in South Africa.

#### 4.4 CONCLUSION

Internal auditors, the right hand of management regarding risk management, control and corporate governance, must be aware of the potential risk poses by HIV/AIDS to organisations. This study therefore first investigates the knowledge of internal auditors of the effects of HIV/AIDS on an organisation and the role they should play in informing management of the effects by interviewing chief audit executives of prominent internal auditing activities in South Africa. This study suggests the development of internal auditing guidelines in this regard published as Guidance - Development and Practice Aids of the Professional Framework by the Institute of Internal Auditors Inc.

Factors such as absenteeism, employee performance, staff turnover, the hiring of employees, the training of staff, medical aid and pension fund contributions, and others are affected by HIV/AIDS. These factors influence certain elements of the control environment, namely the maintaining of a competent workforce, organisational structure and human resources policies and practices. As discussed in this chapter, previous studies performed do not address the role of internal auditing regarding these matters. Internal auditors, as control experts, should investigate the effect of HIV/AIDS on the control system, and more specifically the control environment. This study therefore also investigates the direct and indirect factors influencing the elements of the control environment probably most affected, as mentioned above, as well as the cost of the effects to organisations, using the information gathered by the Centre for International Health at the Boston University School of Public Health.

Since HIV/AIDS does affect the control environment, the study investigated whether internal auditors are aware of this effect and are bringing it to management's attention, as well as the role internal auditors have to play in an assurance and consulting activity. This information was gathered by interviewing chief audit executives of prominent internal audit activities.