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Surgeons and HIV: a South African study

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SURGEONS AND HIV : A SOUTH AFRICAN STUDY

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfillment of requirements for the degree of Master of Science in Medicine in Bioethics and Health Law

November 2007

DECLARATION

I, Christopher Paul Szabo declare that this research report is my own work. It is being submitted for the degree of Master of Science in Medicine in Bioethics and Health Law in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

……

……..day of……..2007

DEDICATION

As always, to those who believed in me.

PUBLICATIONS ARISING FROM THIS STUDY

Szabo CP, Dhai A, Veller M. HIV positive surgeons: an ethical dilemma. South African Medical Journal 2006, 96: 1072-1075

Abstract

A contentious area of clinical practice in the discipline of surgery, with ethical implications, relates to disclosure of clinician HIV status to patients, specifically where exposure prone procedures, performed in a confined body space using sharp instruments without full vision of the operative area, carrying a technical risk of blood borne pathogen transmission are being performed by HIV positive surgeons. Within the context of patient informed consent, it has been proposed that surgeons who are HIV positive make their status known to patients on whom they would perform such procedures. Failing which it is proposed that surgeons who are HIV positive should refrain from such procedures. It has been counter-argued that such disclosure is an infringement on clinician privacy and that curtailing the scope of practice is prejudicial to both surgeon and patient. The former in terms of employment prospects and the latter based on the lack of data supporting a significant risk of clinician to patient transmission with a resultant unnecessary loss of surgical skills. Existing recommendations appear to be informed more by sentiment than science and are thus potentially unsatisfactory, more so in that they do not seem to confer benefit to either patients or clinicians. Further, whilst such policies emanate from developed countries they may not address the clinical realities or sentiment of the South African situation. Where such policies do exist, it is not clear to what extent the recommendations accord with clinician views. Against this background the current study surveyed views of practicing South African surgeons regarding aspects of this issue i.e. HIV and surgeons. Some of the salient findings included the view that a patient centred approach requiring HIV status disclosure to patients would be discriminatory to surgeons whilst not clearly of benefit to patients. Further that HIV positive surgeons should determine their own scope of practice. Certainly it appears that patient centered approaches and restrictive policies, related to this issue, do not appear to accord with clinician sentiment. In the absence of any comparable data either locally or internationally, the current study provides a preliminary indication

of clinician views with implications for the development of locally relevant guidelines.

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1.0 Introduction

The emergence of Acquired Immune Deficiency Syndrome (AIDS), caused by the Human Immunodeficiency Virus (HIV) has had a powerful impact on society, in both the developed and developing worlds.[1] South Africa has the highest estimated number of people living with HIV/AIDS in the world (5.3 million as of the end of 2003) with a prevalence rate of 21.5%, compared to a global rate of 1.1%, and with an estimated 370 000 South Africans having died from HIV/AIDS in 2003.[2] Enormous scientific energy and funding has seen the emergence of an AIDS industry, dedicated to both prevention and treatment. Such efforts have yielded tremendous advances that have turned a killer disease into a condition that is readily manageable with a reasonable expectation that affected individuals might be able to experience both reduced mortality and morbidity, even those with advanced AIDS.[3] Within the socio-political context of the illness, there has been a very strong emphasis on human rights issues especially in relation to discrimination which has seemingly been influenced more by emotion than science. The issue of discrimination in South Africa would appear, to some extent, to be addressed in section 9 of the Bill of Rights of the Constitution of the Republic of South Africa (1996)[4], as well as the Employment Equity Act (1998)[5] whereby unfair discrimination is censured and unfair discrimination on the basis of HIV status is specifically prohibited. However, discrimination remains, even within the scientific community where the risk of infection has resulted in reluctance to treat HIV positive individuals.[6] Aside from moral arguments, scientific evidence has not been able to support such a position. But what of the HIV positive health care worker e.g. a surgeon ? Here we are confronted with a somewhat different scenario, but with the same issue i.e. the risk of HIV transmission during a procedure. Does the patient have a right to know ? Does the employer have a right to know ? Is the surgeon obliged to disclose and to whom is he/she expected to disclose their status ?

With regard to the Employment Equity Act (1998)[5], although in Chapter II Section 6(1), discrimination on the basis of HIV status is technically unlawful,

Section 6(2)(b) states that excluding “any person on the basis of an inherent requirement of a job” is not unfair discrimination. Further, in terms of Section7(2) the Act states that if the Labour Court (in terms of Section 50(4) of the Act) deems it justifiable then testing of an employee to determine their HIV status is not prohibited. In this instance, any decision by a hospital to impose testing on surgeons would require permission from the Labour Court and it would have to be shown why it is not unfair discrimination i.e. why it is vital for both the hospital and patients to know the surgeon’s HIV status. So, whilst there is an apparent non-discriminatory ethos in the Employment Equity Act (1998)[5], such a position is not absolute. It is possible, it seems, that in certain instances legislation may impose mandatory HIV status testing and disclosure to an employer. The specific section of the Act, 50(4), states that the Court may make an order as appropriate in the circumstances whereby it imposes conditions related to the job “in respect of which authorization for testing applies”. This implies that limitations, regarding the nature of the work they may undertake, might be placed on employees as a consequence of their HIV status.

In pursuit of answers to the questions posed, one might adopt an approach governed by policy, influenced by ethics and morality or guided by scientific evidence. Whichever approach one adopts, it would appear that the central issue relates to risk and ultimately informed consent. The argument being that in order for a patient to make a fully informed decision to consent to a procedure, they should have at their disposal information related to all risks they face while undergoing that procedure. The clinician’s HIV status can potentially be construed as a risk. The specific risk is that of virus transmission. It is within the context of the HIV positive surgeon that this issue will be explored and addressed.

1.1 Virus transmission in the health care setting

The risk of virus transmission is a critical issue for a host of reasons. Firstly, containment of the illness requires transmission control i.e. identifying modes and routes of transmission, informing the population accordingly and thus implementing and monitoring programs and policies designed to contain spread. This would generally relate more to person to person transmission within a social context. However, the possibility of fluid exchange in intimate, but non-social, professional settings has introduced a more contentious element into a situation vulnerable to emotion driven responses. Whilst the initial focus regarding risk in the medical setting was orientated towards the health care worker (and surgeons in particular e.g. orthopaedic surgeons [7]), an awareness of the emergence of HIV positive health care workers has broadened the scope of such concerns to include patient safety. This is potentially no less emotion laden, requiring sober reflection of the evidence at hand to support or refute concerns and accordingly influence action. The emotion in question appears to be fear, based on the legitimate concern that in the process of treatment no harm is done through health care worker to patient transmission of the virus. Concerns shifted towards health care worker (HCW) to patient transmission in the wake of the much publicized Florida (United States of America) dentist transmitting HIV to a patient, where the circumstances of the infection were not conclusively determined.[8]To date there appears to have been only one subsequent instance of health care worker to patient transmission reported, specifically involving an orthopaedic surgeon in France.[9]

1.2 The risk

Research into patient exposure to health care worker blood , cited by the CDC (1991)[10], found that this might occur in about one third of such incidents i.e. percutaneous injuries, which were found to occur in about 7% of all procedures performed in a range of surgical disciplines. Estimates of the chance of a patient contracting HIV from invasive procedures have been determined by the CDC as 1:263 000- 2.6 million from dental surgery and 1: 41 000- 416 000 from general surgery, in the decade before 1991 without universal precautions being applied .[11] A risk analysis of acquiring HIV from a HCW demonstrated that this was 2000 times less likely to occur than of dying from a car accident, and 700 times less likely than perishing from being struck by lightning or suffering a fatal fall.[12] It was further noted that if the then CDC guidelines for HIV positive HCW's were implemented, the AIDS epidemic would be reduced by 0.0006 %.[12] Understandably, this data led to questioning the value of the existing guidelines. Research into transmission of HIV from known HIV positive health care workers to patients established a zero transmission rate from worker to patient for surgeons and dental workers.[10] A study of a cardiothoracic surgeon, known to be HIV positive, involved a review of 612 patients. Of these patients, 189 had received counseling and undergone HIV testing with no positive results obtained.[13] Further, a study conducted by the CDC of 53 HIV positive HCW's demonstrated no transmission to the 22 759 patients under their care.[14] In addition, at a time where anti-retroviral treatment is both available and effective in terms of reducing viral load and infectivity, the risk to patients (if it indeed exists) would appear to be even further reduced.[15]

1.3 Guidelines

Following the initial reports of health care worker to patient transmission, it was deemed necessary for the Centers for Disease Control and Prevention (CDC) to issue guidelines for HIV-positive HCW's. The CDC guidelines (1991)[10] are quite specific for the prevention of transmission of not only HIV but also the Hepatitis B virus. Along these lines, one should bear in mind that amidst the apparent "hysteria" about HIV the reality of blood borne pathogens includes forms of viral Hepatitis (B and C) and that transmission of at least 20 pathogens by needle stick injury or injury with a sharp instrument has been reported.[16] Compared to HIV, Hepatitis B appears to be not only more prevalent amongst health care workers but also more contagious and potentially more dangerous in terms of health care worker to patient transmission.[9] The CDC recommendations were that there needed to be adherence to universal precautions (hand washing, protective barriers, care in the use and disposal of needles and sharp instruments, optimal infection control practice), that health care workers who performed exposure-prone procedures should know their HIV status, that such workers who were infected with HIV should *not* perform exposure-prone procedures unless they had consulted an expert review panel who would advise on performing procedures, and that performing of such procedures would require informing patients of their HIV status.[10] Mandatory testing was not recommended in the guidelines because it was felt that the guidelines as set out would lead to HIV positive professionals concealing their status.[10,17] The guidelines were later criticized for promoting discrimination and ruining careers of HCW's [18] with others having questioned whether recommendations that surgeons either restrict their practice or inform patients of their status had any value.[19] It is interesting to reflect on how many such clinically active HIV positive surgeons there are, aware - or not - of their status and performing life altering and life saving procedures.

In a matter involving a surgical technician with AIDS, his employer (a Michigan hospital, United States of America) had upon discovering his diagnosis and condition offered him alternative work not involving direct patient contact

which he refused. He was subsequently dismissed having turned down the alternative employment position for a second time. This led to his initiating legal action, against the hospital, for wrongful dismissal. The basis of his legal claim was framed within the context of both the *Americans with Disabilities Act* and the *Rehabilitation Act*. Both of these Acts (United States of America) specifically exclude individuals who pose a direct threat to others in terms of health and safety. The plaintiff lost on the basis of the CDC guidelines which stated that HIV positive workers should not be allowed to perform exposure prone procedures. Such procedures were in this instance determined by the hospital concerned, and the court agreed.[20] Based on this matter it seems clear that whilst no binding standard is set by the legal system per se, that the courts will uphold standards set by recognized medical bodies such as the CDC. This is indeed part of South African case law i.e. Jansen V Vuuren NNO v. Kruger; 1993(4) SA 842 (AD), where in the aforementioned case it was held that patients have a right to expect doctors to know and comply with professional ethical standards. Hence the emerging debate on the restrictiveness of such guidelines. A review of various other guidelines both from the United Kingdom and North America demonstrated no consensus regarding informing patients of health care workers known to be infected and practicing.[21] In addition, the Society for Healthcare Epidemiology of America (SHEA) whilst in agreement with universal precautions and infection control measures as recommended by the CDC (1991) is opposed, as have been others[22], to any measures that restrict clinical practice or that impinge on clinician privacy or confidentiality .[23] In the United Kingdom it must be noted that the General Medical Council, in 1988, stated that where a doctor was aware of a 'serious and identifiable' risk to an individual by virtue of their not knowing the HIV status of someone who might pose a threat of infection to them, the doctor has an obligation to inform the threatened party i.e. breach the confidentiality of the person whose HIV status is known to them. In the case where the person whose HIV status was known to the doctor might be a fellow doctor e.g. a cardiac surgeon, the doctor 'has a duty to inform an appropriate body'.[24] However, the

issue turns on the remainder of the statement related to the 'serious and identifiable risk' whereby it categorically states that the person potentially at risk 'would be exposed to infection'. Would they ?

The Health Professions Council of South Africa (HPCSA) *Guidelines for the Management of Patients with HIV Infection or AIDS* **(http://www.hpcsa.co.za/hpcsa/userfiles/file/Professional Guidelines.doc)** recommends that while infected practitioners may continue to practice, and are under no obligation to disclose their HIV status to their employer, they are encouraged to seek counseling and must seek and implement advice from counselors on the extent to which they should limit or adjust their professional practice in order to protect their patients. Moreover, counselors involved in the management of health care workers with HIV infection should be familiar with the CDC guidelines. A recent South African Medical Association publication related to human rights and ethics in relation to HIV suggests that practitioners who are HIV positive could be regarded as impaired and should on this basis modify their practice so as not to place patients at risk.[25] In addition, the same publication also states that there is no obligation for disclosure to either employers or co-workers. Any restrictions imposed on such practitioners should only be those which are "scientifically justifiable" [26] which accords with the HPCSA guidelines which state that counselors must ensure that restrictions placed on the HIV positive doctor are necessary and not onerous or *scientifically unjustifiable*. Legally, non-discrimination is addressed in section 9 of the Bill of Rights of the Constitution where it is affirmed that there shall be no unfair discrimination on one or more grounds and that national legislation must be enacted to prevent or prohibit unfair discrimination. Accordingly, the issue of non-discrimination has been legislated on in the National Health Act (No. 61 of 2003; Government Gazette, 23 July 2004), albeit in a more general way, whereby it is clearly stated that "*Health care personnel may not be discriminated against on the basis of their health status*.." However, provision is made with this Act for the head of a health establishment to, in accordance with guidelines determined by the Minister of

Health and subject to any applicable law, impose conditions of service in accordance with the health status of the worker.

1.4 Informed consent: ethics and the law

Surgeon HIV status, in relation to their patients, raise issues of informed consent and confidentiality, both of which have a basis in ethics and the law.

1.4.1 Ethics

Within an ethical context, and utilizing a principles- based approach [27], which incorporates a number of principles without any hierarchy and where no one principle overrides any of the others as a rule, a fundamental obligation to actively promote and respect the need for informed consent is clearly articulated. The so-called principles-based approach proposes that there are four fundamental principles that should guide physician action. Whilst such an approach has been described as the most influential in bioethics [28] , it is not without its critics. Specifically that such an approach does not guide action as the principles are too vague.[29] This as opposed to utilitarian approaches whereby any action that produces the greatest good for the most number of people is not only correct but also obligatory i.e. action is clearly guided. Such approaches are ultimately consequentialist whereby an action is deemed right or wrong on the basis of the actual consequences thereof.[30] Within the context of consequentialism it should be borne in mind that this approach is both ‘act’ and ‘rule’ governed but that these are variations on the theme of consequences whereby in terms of act-utilitarianism it is the consequences of an act that determines whether it is good or bad [30] whereas in terms of rule consequentialism (which encompasses rule-utilitarianism), an act is deemed good or bad on founded on rules that have been chosen on the basis of their good consequences.[31] An example of how these differ would be to consider the concept of murder. In a given situation the murder of a brutal dictator would see the end of the suffering of a nation. Under such circumstances, act-utilitarianism would potentially condone murder, whereas those adhering to a rule-

consequentialist approach would argue that as a rule murder is never justified, specifically on the basis that internalizing such a moral code is more beneficial than internalizing one that accepts murder albeit in selected situations.[31] Against this background, it is easier to analyze the merits of the principle-based approach. As mentioned, this approach encompasses four fundamental principles: respect for autonomy, non-malificence, beneficence and justice.[27] The specific principle of interest, in relation to informed consent, is that of respect for autonomy which is based on liberal traditions, both moral and political, that value individual freedom and choice.[32] The concept of autonomy is not simply about individual wishes but also individual capacity, such that the ability to make independent choices is neither prevented by others nor impaired by individual incapacity.[32] However, the application of the principle of autonomy does not seemingly take individual capacity into account but where such capacity is indeed limited, principles of beneficence, non-maleficence and justice would guide clinician action. An example to illustrate such a situation is readily found in psychiatric practice where psychotic individuals refuse treatment. Refusal might be perfectly legitimate if one ignores the psychosis and simply focuses on the patient's choice to refuse medication. However, to comply with such a wish is to ultimately deny the patient appropriate treatment which would be a contravention of doing good (beneficence), not doing harm (nonmaleficence) and ensuring that patients receive what they are rightfully due (justice) i.e. appropriate treatment. Hence, whilst there is no hierarchy of one principle over another to guide action, there is indeed a synergy between the principles that allows for thoughtful, prudent and justifiable decision making. It is interesting that for the aforementioned scenario and within the context of consequentialist approaches, act-utilitarianism would most likely dictate treatment on the basis of no treatment leading to poor outcome not only to the patient but with negative consequences for the immediate family and broader society too. However if one were to strictly adhere to a liberal pursuit of individual freedom and choice as a rule, without consideration of individual capacity to decide rationally, then accepting such a

patient's refusal of treatment would be perfectly justified. In relation to participation in research, four specific requirements to ensure genuine informed consent exist. These requirements are: the capacity by a participant to consent, full disclosure of *relevant* information by the researcher, the ability to comprehend information on the part of the participant (patient) and the patient's right to voluntary participation/withdrawal at any time without prejudice and without the need to justify withdrawal.[33] Each of these requirements deal with aspects of autonomy. Ensuring that such requirements are fulfilled contributes to ethical participation. However, the issue at hand does not relate to participation in research but to receiving treatment which is necessary but where the possible risk to the patient on the basis of surgeon HIV status is a potential issue. To what extent might withholding such information compromise patient autonomy and to what extent is the HIV status of a surgeon indeed relevant information, specifically within the context of risk to the patient ? Is such information necessary to make an informed decision ? Is the patient's right to know greater than the surgeon's right to privacy ? How might disclosure or non-disclosure prejudice either party, and if it does (in any way) can it be justified ? In essence, the aforementioned discussion refers to what Faden and Beauchamp (1986) would call $Sense_1$ consent in that it relates to so-called "autonomous authorization" which stands somewhat in contrast to $Sense_2$ consent that is termed "effective consent" and refers more to legally or institutionally effective authorization on the basis that the process has complied with procedures satisfying rules and requirements of either clinical practice or research.[34] The relevance of such a distinction is that the morally driven $Sense_1$ requirements for informed consent should inform the legally/policy driven $Sense_2$ requirements, thus ensuring that the moral adequacy of $Sense_2$ requirements can be clearly assessed.

1.4.2 The law

The term “informed consent” was first introduced as part of judicial terminology in California in 1957 ,[35] yet consent to treatment within a professional context has it’s origins in the British judicial system since the 18th century .[35] Considering the issue of the HIV positive surgeon, the critical issue is one of status disclosure. Although it might be assumed that the law is a far more concrete animal, a review of the issue of disclosure in relation to informed consent reveals that there is divergent legal opinion. Specifically that there are two apparent standards i.e. that of the “reasonable medical practitioner” and that of the “reasonable patient”. The former leaves the decision as to what is necessary to disclose to the patient in the hands of the practitioner on the basis of serving the patient’s best interests. It has been referred to as the “professional community” standard. The latter refers to what a reasonable patient would want to know in terms of making a decision and relates to the significance that patients attach to information in this regard.[1] In either instance, within the USA, there have been landmark judgements that have motivated either position.[1] The “professional community” standard emanated from a Kansas Supreme Court decision (Natanson v. Kline, 1960) and the “reasonable patient” approach from the United States Court of appeal for the District of Columbia Circuit (Canterbury v. Spence, 1972). Clearly the direction of legal judgement appears to have moved towards a patient centred approach, yet in the USA there is a fairly even split between the states in terms of the approach followed.[35] A recent South African judgement (Oldwage v. Louwrens; Supreme Court of Appeal of South Africa) delivered in 2005 is illuminating in this regard insofar as the judge took a decidedly “reasonable medical practitioner” approach in stating that in relation to surgical procedures there is no obligation, on the surgeon, to highlight every single risk to the patient and that they are entitled to exercise professional judgement in this regard. Specifically where the likelihood of the risk is small. This is a shift away from the “reasonable patient” approach. With regard to surgeon HIV status it has been

argued that patients would want to know about this particular risk i.e. HIV transmission during a procedure.[1] But what if it isn't a risk ? The assumption of risk is not borne out by evidence (as discussed earlier), hence why raise it ? Clearly the relative risk should determine what a patient should reasonably expect to be informed of and what the surgeon, in this instance, should discuss. In this regard, quantifying the risk actually influences both practice and expectations such that either legal approach is respected. From a purely South African legal perspective, two additional pieces of legislation provide a perspective with respect to informed consent , namely the National Health Act (Act No. 61, 2003; Government Gazette, 23 July 2004) and the Bill of Rights contained in the South African Constitution, 1996. In addition, the Health Professionals Council of South Africa has published guidelines that relate to informed consent. The National Health Act is clear in stating that no health service can be rendered without informed consent and that all reasonable steps should be taken to secure such consent. In defining "informed consent", the Act refers to patients having "full knowledge" and that that this includes benefits, *risks,* and costs *generally* associated with treatment options. To what extent the HIV status of a surgeon constitutes a *risk* or is indeed one that is *generally* associated with a given treatment option could be argued. The Bill of Rights (Chapter 2 of the South African Constitution, 1996) appears less helpful insofar as the reference to informed consent (section 2) relates to medical or scientific experiments. *However,* Section 12(2) affirms the right of all to bodily and psychological integrity which includes the right to make reproductive decisions, to security in and control over their bodies – this control therefore establishes individual autonomy and hence informed consent for any transaction.

Finally, the HPCSA guidelines related to informed consent and falling under General Ethical Duties/Professional Guidelines specify that practitioners must refrain from withholding information that they know would be in their patient's best interests. Would informing the patient of the HIV status of the surgeon

indeed be in the patient's best interests given the negligible, to non-existent, risk of viral transmission to the patient as a consequence of a surgical procedure ?

1.5 South Africa and the CDC guidelines

Between 1997-2001, an estimated 13% of deaths among health workers in South Africa were due to AIDS .[36] It has been projected that a country with a stable 15% prevalence could expect to see 1.6-3.3 % of its health workers die of AIDS each year resulting in a cumulative mortality rate of 8-16% over five years.[37] In a 2002 survey, the HIV prevalence rate among health care workers in both private and public facilities was 16%.[36] This figure correlated with the adult HIV prevalence reported in the Nelson Mandela/HSRC 2002 household survey.[36] The HIV prevalence among health workers in South Africa increasing in line with the trend in the general population will have significant implications for this sector, with need for service far outstripping supply.[38] Three out of four health workers reported an increase in their workload and one third reported that their workloads had increased by 75%. The value of the CDC guidelines, including the need to inform one's patient of HIV status prior to an exposure-prone procedure is highly questionable in the South African developing world context especially in light of research demonstrating zero transmission from health care worker to patient.[10] A detailed study of surgical patients operated on by a surgeon who was HIV positive revealed that in 369 person-hours of surgical exposure (invasive surgical procedures) there was no HIV transmission. [39]

Physicians should be encouraged to take responsibility for their own health and to behave responsibly within their clinical practice. While the requirement of universal precautions and prevention of transmission of blood borne pathogens is central, the emphasis should be on physician responsibility, with the only restriction on practice being where it is determined that a given physician by virtue of either mental or physical impairment is incapable of conducting themselves in a responsible manner. In South Africa, the HPCSA has clear guidelines for impaired physicians. Inherent to such an approach is the

respect for clinician privacy and a specific rebuttal of the requirement for disclosure to either patient or employer. Not least of all because current recommendations pose a human rights threat to clinicians whilst not contributing to patient safety.[26,36] Similar sentiments were expressed in the early 1990's regarding the potential harm to clinicians, the lack of benefit to patients and the probability that such guidelines would do nothing to prevent the spread of HIV .[40,41]

The extent to which the AIDS epidemic would be reduced by removing all HIV positive medical personnel from the workforce is miniscule. This must be balanced against the numbers of patients who might suffer or die as a consequence of inadequate service delivery resulting from attrition of such personnel. A utilitarian perspective would most certainly argue against removal of HIV positive personnel. There is limited likelihood that surgeons would undergo voluntary testing which might lead to restriction of their ability to practice. That being the case, the CDC (1991) requirement of restriction within the context of HIV positive status is self defeating.[10] That individual surgeons should know their status is not in dispute, but whether they should be obliged to disclose their status is. To what extent the latter would confer benefit on a patient is not clear as such research appears non-existent within the context of HIV. Further, such disclosure, against a background of limited risk of HIV transmission, may add to the complexity of decision making on the part of the patient in regard to the proposed surgery. Of concern is that amidst all the debate on the issue, there does not appear to be any information related to how clinicians, who are affected by any policy related to their practice, feel about such a policy. Against this background the current study sought to survey views of practicing South African surgeons regarding aspects of this issue i.e. HIV and surgeons.

2.0 Method

The study employed a cross sectional postal survey of practicing surgeons in South Africa utilizing a questionnaire created by the researcher for the purpose of the study. There are approximately 500 registered general surgeons, including plastic and vascular surgeons. The questionnaires were sent to surgeons on the Association of Surgeons of South Africa database. Whilst the Health Professional Council of South Africa (HPCSA) would have such a database, which might have been more inclusive given that registration with a regulatory body is a practice requirement whereas membership of a professional association is not, it was not possible to acquire this from the HPCSA. Respondents were required to complete and return the questionnaires, anonymously, in return addressed envelopes. In addition a separate return addressed postcard was returned simultaneously for the purposes of checking who had responded. This postcard was coded and referenced to the main database with no link to the questionnaire. The only purpose was to establish who had responded so that follow up reminders could be sent only to those who had not apparently responded. The aim was to improve the response rate. Postal based surveys are known to have generally poor response rates. A covering letter detailing the purpose of the research and inviting participation was sent with each questionnaire (Appendix A). The questionnaire (Appendix B) comprised two components. The first addressed issues of age, gender, surgical discipline and years of surgical practice. The second consisted of questions based on existing issues highlighted by the relevant literature. Permission to conduct the study was granted by the Human Research Ethics Committee (Medical) of the Faculty of Health Sciences, University of the Witwatersrand.

2.1 Data Analysis

The researcher consulted with both Paul Nesara and Eustasius Musenge at the Epidemiology Data Centre, Faculty of Health Sciences, University of the Witwatersrand. As the study was primarily descriptive in nature, use was made of frequency distributions based on responses to the questionnaire. Means and standard deviations were calculated for continuous variables (e.g. age, years in practice).

3.0 Results

From the database listing of 574 surgeons, a total of 529 questionnaires were sent out in November 2006. Those that were sent were to those whose postal address was in South Africa. There were 191 responses, with 2 responses that were not included as the respondents felt unable to contribute. 11 of the questionnaires were returned to sender. By the end of January 2007 no further responses had been received. In February 2007 reminders were sent to 370 surgeons, who on the basis of the return of the post cards by those who had responded, were understood to have potentially not responded. A further 67 responses were received with 1 refusal to participate and a further 7 returned to sender. By the end of March 2007 there were no further responses. Data entry and analysis took place in April 2007 after which a further 5 responses arrived and an additional 5 questionnaires returned to sender, were received. The 5 responses were not included in the analysis. There were thus 266 actual responses (including those who felt unable to contribute and the respondent who refused to participate). This out of a total of 506 possible responders (taking into account the number of questionnaires sent out and those that were returned to sender) which gave a response rate of 53 %. Response rates to postal surveys of physicians are inclined to be low and in the published literature it has been established that postal surveys have a mean response rate of 62 % (SD=15%)[42], specifically that surveys of surgeons elicit rates anywhere from 15% to 77 %.[43] A concern is the impact of non response bias whereby low response rates undermine the validity of a survey.[44] On the basis of documented response rates to postal surveys of physicians, the response rate of the current study fell comfortably within the range described for surveys of surgeons. The current study had employed the use of a targeted reminder on the basis of presumed non-responders. In addition, the covering letter had most of the elements suggested by Dillman [45] (as cited by Leece et al, 2006)[43] to enhance the response rate, which included: the date, recipients name and address on the envelope, an appropriate greeting, a description of what is being requested and

why, the enclosing of a stamped return envelope and a statement of who to contact with questions. Elements missing were the recipients name and address on the letter, a token of appreciation and a written signature (the current study used a scanned signature).

Age/ Gender

The mean age of the respondents (n=257) was 53.05 years (SD= 12.30) with a range of 28-85. Of the respondents (n=255), 94.7% (n=232) were male and 5.3 % (n=13) were female. The mean age of male respondents was 52.99 (SD=12.08) and that of female respondents was 43.84 (SD=10.70). [Table I]

Years in surgical practice

The mean number of years in surgical practice for all respondents (n=241) was 20.73 (SD=11.65) with a range of 1-52 years. Amongst the male respondents (n=228), the mean number of years in surgical practice was 20.52 (SD=11.59) with a range of 1-52 years; for female respondents (n=13) the mean was 15.38 (SD=9.8) with a range of 2-33 years. [Table 1]

Table 3.1 Features of sample

	Male	**Female**
Age	**52.99 (SD=12.08)**	**43.84 (SD=10.70)**
Gender	**94.7% (n=232)**	**5.3% (n=13)**
Years in practice	**20.52 (SD=11.59)**	**15.38 (SD=9.8)**

Surgical discipline

The vast majority of respondents, 78.1 % (n=200) described themselves as General Surgeons with the next specific designations being Paediatric (4.3%; n=11), Trauma (3.9%; n=10), Vascular (5.5%; n=14) and Gastroenterology (2 %; n=5), with various other areas of surgical practice noted e.g. Transplantation and Ear, Nose and Throat.

Disclosure of status

- **Colleagues**: 78.4% (n=182) of respondents did not believe that HIV positive surgeons should disclose their status to colleagues; 21.6% (n=50) believed they should.
- **Patients**: 76% (n=174) of respondents did not believe that HIV positive colleagues should disclose their status to patients; 24% (n=55) believed they should.
- **Hospital advisory board**: 51.1% (n=120) of respondents did not believe that HIV positive colleagues should disclose their status to a hospital advisory board, bound by confidentiality; 48.9% (n=115) believed they should. [Table 2]
- **Unsure**: 8.5% (n=22) of respondents were unsure about disclosure to anyone.

Table 3.2 Disclosure of status

	Yes	**No**
To colleagues	**21.6 % (n=50)**	**78.4 % (n=182)**
To patients	**24 % (n=55)**	**76 % (n=174)**
To hospital advisory board	**48.9 % (n=115)**	**51.1 % (n=120)**

Exposure prone procedures

43.2 % (n=112) of respondents believed that HIV positive surgeons should refrain from undertaking exposure prone procedures with 47.1% (n=122) believing that they should not refrain from such procedures. 9.7% (n=25) were unsure. [Table III]

Scope of practice

74.1% (n=192) believed that HIV positive surgeons should be left to determine their own scope of practice with 20.5% (n=53) believing that this should not be the case and 5.4%(n=14) being unsure. [Table 3]

Table 3.3 Practice of HIV positive surgeons

	Yes	**No**	**Unsure**
Perform exposure prone procedures	**47.1 % (n=122)**	**43.2 % (n=112)**	**9.7 % (n=25)**
Limit scope of practice	**20.5 % (n=53)**	**74.1% (n=192)**	**5.4 % (n=14)**

Exposure to blood products

Only 16.9% (n=42) had patients exposed to their blood products with 83.1% (n=207) not having had patients exposed to their blood products. However, 91.8% (n=254) had been exposed to patient blood products with only 8.2% (n=21) reporting not having been exposed to patient blood products. [Table 4]

Table 3.4 Exposure to blood products

	Yes	**No**
Surgeon to patient's	**91.8 % (n=254)**	**8.2 % (n=21)**
Patient to surgeon's	**16.9 % (n=42)**	**83.1 % (n=207)**

Mandatory testing

61.4% (n=159) of respondents did not agree with mandatory HIV testing for surgeons whilst 34% (n=88) felt that this should be the case. 4.6% (n=12) were unsure. [Table V]

HIV status

90.7% (n=235) were aware of their HIV status whilst 9.3% (n=24) were not. [Table 5]

Table 3.5 HIV: surgeon mandatory testing/ knowledge of status

	Yes	**No**	**Unsure**
Agree with mandatory testing	**34 % (n=88)**	**61.4 % (n=159)**	**4.6 % (n=12)**
Know HIV status	**90.7 % (n=235)**	**9.3 % (n=24)**	

HIV testing

9.3 % (n=24) of respondents had never had themselves tested for HIV, whereas 12% (n=31) had been tested once with 78.7% (n=203) having been tested more than once.

Frequency of HIV testing

60% (n=141) were tested less than annually, 34.9% were tested annually, 3.8% (n=9) were tested quarterly with 1.3% (n=3) reporting more than quarterly testing.

Awareness of policy

94.9% (n=244) of respondents were not aware of any policy giving clear guidelines regarding the practice of HIV positive surgeons, whereas 5.1% (n=13) stated that they were aware of such a policy.

The questionnaire allowed for respondents to elaborate on their answers to the question related to whether or not HIV testing should be mandatory for surgeons, as well as providing for the opportunity to express any opinions or views generally in relation to the issue. Analysis of the responses was undertaken and yielded information that added “qualitatively” (without characterizing the opportunity to respond in this way as constituting actual qualitative research) to the quantitative data and thereby enriching it. Not all respondents chose to add comments. Of those who did, in each situation, very specific themes emerged.

Responses related to mandatory HIV testing for surgeons

162 respondents i.e. 62.5 % added comments related to whether or not respondents believed that testing should be mandatory or not. Specifically highlighting the issue of the doctor's right to privacy and ultimately their autonomy to act responsibly versus the patient's right to know in terms of their autonomy related to informed decision making

For those who felt testing should be mandatory, the following sentiments were expressed:

- that everyone should know their status,
- that there would be destigmatization through testing,
- that surgeon knowledge of status would both reduce risk of spread as well as guide appropriate interventions and scope of practice for an infected surgeon,
- that it would promote transparency and protect both surgeon and patient,
- that the primary duty is to the patient,
- that those who do not test are irresponsible.

For those who felt that testing should not be mandatory, the following sentiments were expressed:

- that the risk to patients was low and in fact risk of infection was greater for surgeons,
- that mandatory testing was discriminatory (as it was not mandatory for patients or the general population), unconstitutional and undermined surgeon's autonomy,
- that surgeons were responsible, could assess risk and test accordingly,
- that surgeons were testing on a regular basis due to insurance policy requirements anyway.

Responses related to "further comments"

78 i.e. 30% of respondents added further comments which once again highlighted, amongst other issues, the surgeon's right to privacy versus the patient's right to know, with a specific issue related to undue emphasis on patient rights with a sense of little consideration for surgeon rights. Specifically, as evidenced from the following sentiments:

- that testing should be on an as needed basis,
- that knowledge of surgeon's status would be prejudicial to the surgeon,
- that patient's rights in terms of testing and disclosure should apply equally to surgeons,
- that good surgical practice should negate HIV status of either patient or surgeon,
- that policies/guidelines are required,
- that appropriate support is made available to HIV positive surgeons in terms of both treatment and career planning,
- that if patients are indeed at risk then they have a right to know the risk exists,
- that disclosure should exist both ways with the right of refusal to operate on or be operated on where one of the parties was HIV positive
- that too much was being made of HIV which had resulted in reduced funding for other illnesses

4.0 Discussion

Amidst all of the discussion regarding the clinical position of the HIV positive surgeon, both in relation to their patients as well as their scope of practice the voice of the surgeon has had a limited role to play in shaping the debate. It appears that a patient centered approach has dominated both deliberations and policy with somewhat scant regard for the clinician. Yet a careful review of existing data suggest that concerns are informed more by emotion than science, under the guise of respect for patient autonomy and consequent informed decision making. Subsequent policies have demonstrated a somewhat prejudicial position in relation to the clinician insofar as disclosure to patient of HIV status (if known, and positive) as well altering scope of practice to limit risk of doctor to patient transmission. To some extent it appears that contemporary attitudes towards medical professionalism with an emphasis on patient advocacy and respect for patient rights has been influential in framing policy.[46] Such an approach, whilst readily justifiable, ignores the very constituency whose lives are ultimately most affected by such policies i.e. the clinician, given the limited or non-existent risks. In attempting to safeguard patient autonomy, that of the clinician is seemingly sacrificed. In this regard, the current study has attempted to provide a sense of surgeon attitudes towards aspects of existing policies related to HIV positive clinicians, and surgeons in particular. Given the status quo in relation to the AIDS epidemic in South Africa, these clinicians could well be viewed as being at the “cutting edge” of the dilemma.

The demographic data revealed that the respondents were predominantly male, older and with decades of surgical experience predominantly as general surgeons but with a variety of surgical sub-specialties represented within the sample of respondents. Regarding disclosure of HIV status, the overwhelming majority of respondents were against informing either patients or colleagues but were more divided when it came to hospital advisory boards bound by confidentiality. Very few were unsure. Such attitudes would appear to be contrary

to a patient centred approach whereby such information would seemingly be deemed to be in the best interests of the patent in terms of informed consent. Specifically one would need to consider whether, within the context of Chapter 2, Section 6.1 (c) of the National Health Act (Act No. 61, 2003), such information (surgeon HIV status) would represent a *risk, cost* or *consequence* associated with a *treatment option* i.e. a surgical procedure. Further, whether in terms of the Health Professionals Council of South Africa guidelines on informed consent and in relation to General Ethical Duties such *information* would be in the best interests of the patient to know i.e. would it be acceptable to refrain from disclosing **(http://www.hpcsa.co.za/hpcsa/userfiles/file/Professional Guidelines.doc)**,? If there is no risk, then surely there is no cost or consequence. Further, it does not appear that knowledge of status would necessarily be in the best interests of the patient to know as it would serve no purpose other than to potentially deter the patient from undergoing a procedure undertaken by a particular surgeon who might be uniquely skilled to perform a specific procedure on that patient. From a consequentialist/utilitarian perspective the question would be how knowledge of surgeon HIV status might benefit the patient. Not least of all because any such policy requiring disclosure might result in a loss of professionals to the discipline. Moreover, given that patients are not bound by the same confidentiality rulings and ethical codes of conduct as health practitioners, such information might readily be disseminated with further destructive consequence for the surgeon. Taking all of this into account, it appears that such information should not be shared and that to do so would more likely do harm than good. The tension appears to be between informed consent on the one hand and antidiscrimination on the other.[47] In reality, given the facts, there should be no tension in that based on the risk of surgeon to patient transmission of HIV, knowledge of surgeon HIV status is not required by the patient to give informed consent. Such a view accords with that of the American College of Surgeons i.e. that surgeon HIV status is “personal health information and does not need to be disclosed to anyone”. [48]

Whilst the majority of respondents in the current study were against HIV positive surgeons having a limited scope of practice, the opinion was more divided as to whether HIV positive surgeons should be performing exposure prone procedures. A Nigerian study of specialist surgeon trainees established that 91.1 % of their sample did not think that HIV positive surgeons should be barred from practice but 53.2% thought they should be barred from performing invasive procedures .[49] Regarding mandatory HIV testing, those against it constituted a substantial majority compared to those in favour. Notwithstanding this, the comments that followed responses to this question were most illuminating in terms of arguing for either position. For those advocating mandatory testing, their reasoning encompassed both general and specific aspects of HIV testing insofar as motivating their position on the basis of everyone needing to know their status both in terms of destigmatizing the situation as well as promoting safer practices. This within the context of behaving responsibly. Those against mandatory testing were motivated primarily by surgeon related concerns specifically as such testing was perceived as discriminatory and undermining of surgeon autonomy. Within the context of physicians living with HIV/AIDS, a paper written on the basis of interviews with affected physicians revealed significant levels of anxiety with regard to revealing their status based on concerns of a prejudicial response to their status which would compromise their ability to practice professionally. Yet at the same time, these same physicians experienced a dilemma related to disclosure versus the need to be self protective. Clearly articulated, through the interviews, was a strong sense of not behaving in a manner prejudicial to patients, a commitment to standards of care and a desire to continue practicing. There was a also a clear sense of vulnerability due to a perception of lack of support from within the profession, and an interpretation of existing guidelines as hostile.[8] In contrast, a recently published study of health care workers in South Africa demonstrated that having ascertained the HIV prevalence amongst health care workers at specific facilities (through anonymous/unlinked testing), 11.5%, and in response to

requests of HIV positive employees, HIV clinics were established solely for the health care workers.[50] Such an approach should only lead to benefits for health care workers, the institution and patients, serving as a model for determining the problem and responding supportively.

In spite of the majority sentiment being against mandatory testing of surgeons there appears to be a shift in attitude towards HIV testing generally, with recent calls and arguments for both compulsory [51] and routine testing (on an opt out basis)[52] respectively. A much earlier study related to mandatory testing and patient notification , amongst occupational therapists, found that more than a third of the sample studied supported mandatory HIV testing of all health care workers and notifying patients if their occupational therapist was HIV positive.[53] With specific reference to surgeons and HIV screening, a study designed to assess the impact of such screening determined that it would be a costly undertaking (with costs extending beyond testing and counseling) which whilst potentially reducing the risk, of HIV transmission to patients from surgeons, would not eliminate it.[54] Within the context of the current study, the fact that 91% of the sample were aware of their HIV status suggests that there is in fact no need for mandatory testing insofar as this happens as a matter of course. To impose such testing upon surgeons would unquestionably constitute discrimination. Indeed, the American College of Surgeons most recent statement on surgeons and HIV infection (2004) is quite specific in recommending that surgeons should know their HIV status with no mention of such knowledge arising as a consequence of mandatory testing.[48] It does not appear that any similar statements exist emanating from Africa.

Whilst the vast majority of surgeons had been exposed to patient blood products, a minority of patients had been exposed to surgeon blood products (as far as could be ascertained by the surgeon). Given this situation it was not suprising that over 90 % of respondents knew their HIV status, with the majority having been tested more than once. However, the majority of respondents had been tested less than annually. Over 95 % of respondents were unaware of any

policy that specifically gave guidance as to how HIV positive surgeons should practice, this in spite of the existence of various policies that have provided best practice approaches under such circumstances.

The findings raise a critical issue, namely the role of practicing clinicians in formulating policy that governs their practice. A major concern voiced by respondents in the current study was that of discrimination against doctors and the sense that doctors were increasingly susceptible to escalating outside regulation. The basis for such a situation appears to be an increasing perception that medicine as a profession can no longer be trusted to regulate itself in the best interests of patient care.[55] As a consequence there have been various attempts from within the discipline to explore, redefine and address the issue of medical professionalism.[46] To date, within the context of the HIV positive surgeon, there is no evidence that surgeons have or are inclined to behave irresponsibly regarding their own health or indeed that of any patient. Yet the issue has aroused what one might view as undue attention. However, recent research has found that with regard to compliance with prescribed “universal precautions”, theatre staff - including surgeons – in a UK National Health Service trust established that only 1.5% of respondents employed such precautions for all patients irrespective of whether their blood-borne viral status was known.[56] Earlier, similar, work in this regard noted that some 5 years after adoption of “universal precautions” 29% of surveyed surgeons at a specific medical centre estimated having at least one or more significant exposures to blood or bodily fluid but that reporting of such events was uncommon. Specifically on the basis of perceived low risk of acquiring blood borne infections.[57] A study amongst plastic and thoracic surgeons found that most surgeons in their sample had only slight or moderate concerns about contracting HIV, again demonstrating a tendency to underestimate the risk of contracting a blood-borne pathogen.[58] This study also established that in their sample, most surgeons do not make routine use of double gloves. It is not clear whether such underestimation exists in the current sample, although based on the level of awareness of the issue of blood

borne pathogens it seems unlikely. It has been estimated that the relative risk of sero-conversion for surgeons working in tropical Africa is 15 times higher than for surgeons working in western countries.[59] Whilst the current study did not survey "universal precautions" a number of the respondents cited this as a standard practice that would preclude any requirement for either mandatory testing or limiting scope of practice of HIV positive surgeons. Such sentiments echo earlier pronouncements on this issue, in relation to HIV positive health care professionals, where it was felt that policies regarding adherence to universal precautions rather than mandatory HIV testing or disclosure of HIV status would best protect patients. [60] More recently a similar sentiment has been expressed in relation to whether surgeons positive for hepatitis C should be barred from undertaking exposure prone procedures i.e. that effort should be directed at ensuring simple preventative measures are employed rather than limit the practice of infected surgeons. [61] Almost a decade ago, the issue of HIV in relation to surgeons was understood to be a controversial issue requiring an approach based on "objective information". [62] Such an approach is not only desirable, but critical given that policy development must be cognizant of evidence generally but more specifically as there are calls for policies that impact upon patient care to be transparent i.e. available to patients. This being both on the basis of promoting patient autonomy and informed consent [63] as well as access to new knowledge that should not only be for medical professionals.[64] The latter point was made in response to an online discussion about HIV Policy and Ethics in relation to accessing information that might guide a surgeon, positive for HIV, who discovered blood on the inside of the first of their double gloves after surgery. When attempting to access a recent South African Medical Association publication related to ethical guidelines on HIV and AIDS, it was not freely available to non members.[64] Based on what appears to be a legitimate call for transparency and availability of policies, those related to controversial issues such as the HIV positive surgeon require very careful consideration in terms of their provisions. It seems that the time has come for South African surgeons to

either create, or endorse, practice guidelines akin to those of the American College of Surgeons (2004)[48], the content of which incorporates all that is known on the subject and rationally advances the position espoused.

5.0 Conclusion

How does one reconcile science, policy and ultimately ethics ? Regarding the latter two, science must inform policy and ultimately ethics, by virtue of informing the most beneficial and least harmful practice in a given situation, especially where there are competing interests, as, after all we exist in an increasingly evidence based world. From a bioethics perspective such a position has been actively promoted, this in contrast to often encountered ethical writing that posits on the basis of unproven assumptions.[65] An understandable, yet seemingly unjustified, concern exists regarding health care worker to patient transmission of HIV, specifically with regards to HIV positive surgeons. The HPCSA guidelines with their quasi legal status, in adopting CDC policy, could be more harmful than beneficial to health systems. In light of the increasing number of HIV positive health workers, revision of such guidelines is called for, taking into account both scientific evidence and the local South African context. Science should both inform policy and guide morality including the dilemma regarding the HIV positive surgeon. A clear, unequivocal policy that safeguards the rights of physicians as well as the wellbeing of patients is not only required but also possible. It should articulate the problem and the risk as well as state best practice whilst outlining responsibilities and obligations of all parties. All of this on the basis of current knowledge, being mindful of prevailing concerns related to trust in medicine and not least of all with awareness of the attitudes and concerns of those whose practice will be influenced by such a policy.

In relation to the HIV positive health care worker and the threat posed to patients it is fitting to close with the following statement, that "*the fear of harm ought to be proportional not merely to the gravity of harm, but also the probability of harm*". [66] Herein lies the essence of formulating appropriate policy.

APPENDIX A

Information sheet

Dear Colleague, my name is Christopher Paul Szabo and I am conducting a research project as part of the requirement for completion of the MSc Med Bioethics and Health Law for which I am registered at the University of the Witwatersrand. One of my co-supervisors is Prof. Martin Veller (Academic Head, Department of Surgery, University of the Witwatersrand). The study is a preliminary attempt to determine your views regarding colleagues who are HIV positive, your opinion of guidelines related to HIV positive surgeons as well as your knowledge of your own HIV status. The issue is clearly a sensitive and contentious one. Whilst you are under no obligation to participate I would like to invite you to do so. This would entail questionnaire completion and return in the self addressed envelope provided. Such completion is completely anonymous. I have also enclosed a self addressed postcard which I would like you to return simultaneously. This will allow me to ascertain who has responded as it is coded to link to the database, however it is in no way linked to the questionnaire and I will not know the identity of those respondents who have returned completed questionnaires. The purpose of the postcard is to enable me to determine to whom I should send follow up requests i.e. to those who have not responded. The study has been approved by the Human Research Ethics Committee in the Faculty of Health Sciences at the University of the Witwatersrand. Beyond establishing your views it is hoped that the findings will contribute towards the development of South African guidelines related to HIV positive surgeons. Your time in considering the invitation is much appreciated. Should you wish to contact me directly with any queries, my contact details are as follows:

Christopher P. Szabo
Professor & Head of Clinical Psychiatry
Division of Psychiatry
011-7172249
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Many thanks.

Yours sincerely,

_____
Christopher P. Szabo

APPENDIX B

Questionnaire

Age: _____

Gender: MALE⎸FEMALE⎸

Surgical discipline: _____

Years in surgical practice (any discipline):_____

1. In your opinion, should HIV positive surgeons disclose their status to:
   - Colleagues ? YES⎸NO⎸
   - Patients ? YES⎸NO⎸
   - Hospital advisory committee (bound by confidentiality) YES⎸NO⎸
   - Unsure⎸

2. In your opinion, should HIV positive surgeons refrain from undertaking “exposure prone procedures” ?

   YES⎸
   NO ⎸
   UNSURE⎸

3. In your opinion, should HIV positive surgeons be left to determine their own scope of practice ?

   YES⎸
   NO⎸
   UNSURE⎸

4. In your opinion, should HIV testing be mandatory for surgeons ?

   YES⎸
   NO⎸
   UNSURE⎸

4.1 If YES/NO, please elaborate:

_____
_____
_____
_____
_____

5. Have you ever experienced a situation whilst undertaking a surgical procedure that led to:
   - Patient exposure to your blood products ? YES⎥NO⎥
   - Your own exposure to patient blood products ? YES⎥NO⎥
   -

6. Are you aware of your HIV status ? YES ⎥ NO⎥

7. How often have you ever had yourself tested to determine HIV status ?

   - Never⎥
   - Once⎥
   - More then once⎥
   -

8. How often do you have yourself tested to determine HIV status ?

   - Less then Annually⎥
   - Annually⎥
   - Quarterly⎥
   - More than quarterly⎥

9. Are you aware of a South African policy that gives clear guidelines regarding the practice of HIV positive surgeons ? YES⎥NO⎥

10. If you have any further comments you would like to make please feel free to do so:

_____
_____
_____
_____
_____
_____
_____

REFERENCES

1. Lieberman JD, Derse AR. HIV-Positive health care workers and the obligation to disclose. Do patients have a right to know ? The Journal of Legal Medicine 1992; 13: 333-356.

2. The Henry J. Kaiser Family Foundation. HIV/AIDS policy fact sheet. The HIV/AIDS Epidemic in South Africa. October 2005.

3. Murphy EL, Collier AC, Kalish LA, Assmann SF, Para MF, Flanigan TP et al. Highly active antiretroviral therapy decreases mortality and morbidity in patients with advanced HIV disease. Ann Intern Med 2001; 135(1): 17-26.

4. Constitution of the Republic of South Africa. Act 108 of 1996. Constitutional Assembly.

5. Employment Equity Act, No. 55, 1998. Parliament of the Republic of South Africa.

6. Schecter WP. Surgical care of the HIV-infected patient: a moral imperative. Camb Q Healthc Ethics 1992; 1(3): 223-228.

7. Wright JG, McGeer A. Human immunodeficiency virus transmission between surgeons and patients in orthopaedic surgery. Clin Orthop Relat Res 1993; 297: 272-281.

8. Shernoff M. Physicians living with HIV/AIDS. The Journal of the International Association of Physicians in AIDS Care 1996; 2(11): 20-24.

9. Beltrami EM, Williams IT, Shapiro CN, Chamberland ME. Risk and Management of Blood-Borne Infections in Health Care Workers. Clinical Microbiology Reviews 2000; 13(3): 385-407.

10.Centers for Disease Control. Recommendations for Preventing Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Patients During Exposure-Prone Invasive Procedures. Morbid Mortal Weekly Rep 1991; 40 (RR08):1-9.

11. Lutz B. Prevention of transmission of blood borne pathogens to patients during invasive procedures. AIDS Inf Exch 1991; 8(3): 2-11.

12. Robinson EN Jr, de Bliek R. The college student, the dentist, and the North Carolina senator: risk analysis and risk management of HIV transmission from health care worker to patient. Med Decis Making 1996; 16(1): 86-91.

13. Babinchak TJ, Renner C. Patients treated by a thoracic surgeon with HIV. A review. Chest 1994; 106(3): 681-683.

14. Anonymous. Pressure mounts for CDC to change guidelines for infected HCWs. Centers for Disease Control and Prevention. AIDS Alert 1998b; 13(5): 49-52.

15. Porco TC, Martin JN, Page-Shafer KA, Cherlebois E, Grant RM, Osmond DH. Decline in HIV infectivity following the introduction of highly active antiretroviral therapy. AIDS 2004; 18(1): 81-88.

16. Collins CH, Kennedy DA. Microbiological hazards of occupational needlestick and ‘sharps’ injuries. J Appl bacterial 1987; 62: 385- 402.

17. Boyd KM. HIV infection and AIDS: the ethics of medical confidentiality. J Med Ethics 1992; 18: 173-179.

18. Anonymous. Rules for infected health care workers criticized. AIDS Alert 1998a; 13(2): 18-19.

19. Rhodes RS. Human immunodeficiency virus transmission and surgeons: update. South Med J 1995; 88(30: 251-255.

20. Anonymous. Surgical technician's HIV deemed to be too risky for patients. AIDS Policy Law 1998c; 13(5):1,12-13.

21. Blanchford O, O'Brien SJ, Blatchford M, Taylor A. Infectious health care workers: should patients be told ? J Med Ethics 2000; 26: 27-33.

22. Glantz LH, Mariner WK, annas GJ. Risky business: setting public health policy for HIV-infected health care professionals. Milbank Q 1992; 70(1): 43-79.

23. Anonymous. Management of healthcare workers infected with hepatitis B virus, hepatitis C virus, human immunodeficiency virus , or other bloodborne pathogens. AIDS/TB Committee of the Society for Healthcare Epidemiology of America. Infect Control Hosp Epidemiol 1997a; 18(5): 349-363.

24. O'Rourke KD, deBlois J. The right to know. Ethical issues related to mandatory testing of healthcare workers for HIV. Health Prog 1991; 72(10): 39-43.

25. The South African Medical Association. Basic rights and ethical duties. In: Human Rights and Ethical Guidelines on HIV and AIDS. A Manual for medical Practitioners. 2006. 5.

26. The South African Medical Association. HIV/AIDS and employment. In: Human Rights and Ethical Guidelines on HIV and AIDS. A Manual for medical Practitioners. 2006. 21.

27. Beauchamp TL, Childress JF. Principles of Biomedical Ethics, 4th Edn. New York: Oxford University Press. 1994

28. Childress JF. A Principle-Based Approach. In: H Kushe, P Singer (eds). A Companion to Bioethics. Oxford: Blackwell. 1998, 61-71

29. Clouser KD, Gert B. A critique of principlism. Journal of Medicine and Philosophy 1990; 15: 219-236.

30. Frey RG. Act-Utaltarianism. In: H. LaFollette (ed.). The Blackwell Guide to Ethical Theory. Oxford: Blackwell. 2000, 165-182.

31. Hooker B. Rule-Consequentialism. In: H. LaFollette (ed.). The Blackwell Guide to Ethical Theory. Oxford: Blackwell. 2000, 183-204

32. Beauchamp TL. The philosophical basis of psychiatric ethics. In: Psychiatric Ethics Third Edition. Eds Bloch S, Chodoff P, Green SA. Oxford: oxford University Press. 1999, p26-48

33. Andanda P. Module Two: Informed Consent. Developing World Bioethics 2005;5(1): 14-29

34. Faden RR, Beauchamp TL. The Concepts of Informed Consent and Competence. In: A History and Theory of Informed Consent. New York/Oxford: Oxford University Press. 1986, 274-295.

35. Mazur DJ. Influence of the law on risk and informed consent. British Medical Journal 2003; 327:731-736.

36. Shisana O, Hall E, Maluleke KR, et al The impact of HIV/AIDS on the Health Sector : National Survey of Health Personnel, Ambulatory and Hospitalized Patients and Health Facilities 2002. Cape Town: Human Sciences Research Council, Medical University of Southern Africa and Medical Research Council, 2003. http://www.hsrcpress.ac.za/index.asp?areaid=4

37. Tawfik L, Kanoti KN. The impact of AIDS on Health Systems in Sub-Saharan Africa with Special Reference to the issue of Human Resources. Washington, DC: USAID Bureau for Africa, 2003.

38. Marais H. Buckling: The Impact of AIDS in South Africa. Pretoria: centre for the Study of AIDS, University of Pretoria, 2005.

39. Rogers As, Froggatt JW 3rd, Townsend T, Gordon T, Brown AJ, Holmes EC, et al. Investigation of potential HIV transmission to the patients of an HIV-infected surgeon. JAMA 1993; 269(14): 1795-1801.

40. Gostin LO. A proposed national policy on health care workers living with HIV/AIDS and other blood borne pathogens. JAMA 2000; 284(15): 1975-1976.

41. Gostin LO. Rights and duties of HIV infected health care professionals. Health Care Anal 2002; 10(1): 67-85.

42. Asch DA, Jedrziewski MK, Christakis NA. Response rates to mail surveys published in medical journals. J Clin Epidemiol 1997; 50 (11): 1129-1136.

43. Leece P, Bhandari M, Sprague S, Swiontkowski MF, Schemitsch EH, Tornetta P. Does flattery work ? A comparison of 2 different cover letters for an international survey of orthopaedic surgeons. Can J Surg 2006; 49 (2):90-95.

44. Templeton L, deehan A, Taylor C, Drummond C, Strang J. Surveying general practitioners: does a low response rate matter ? Br J Gen Pract 1997; 47(415): 91-94.

45. Dillman DA. Mail and Internet surveys: the tailored design method. New York: John Wiley and Sons; 1999.

46. Medical Professionalism Project: ABIM Foundation. Medical Professionalism in the New Millennium: A Physician Charter. Annals of Internal Medicine 2002; 136 (3): 243- 246.

47. Bayer R. Discrimination, informed consent, and the HIV infected clinician. British Medical Journal 1997; 314: 915.

48. American College of Surgeons. [ST 13] Statement on the surgeon and HIV infection. Revised May 2004.
http://www.facs.org/fellows_info/statements/st-13.html

49. Adebamowo CA, Ezeome ER, Ajuwon A, Ogundiran TO. Survey of the knowledge, attitudes and practice of Nigerian surgery trainees to HIV-infected persons and AIDS patients. BMC Surgery 2002, 2:7 http://www.biomedcentral.com/147 1-2482/2/7

50. Connelly D, Veriava Y, Roberts S, Tsotetsi J, Jordan A, DeSilva E, et al. Prevalence of HIV infection and median CD4 counts among health care workers in South Africa. South African Medical Journal 2007; 97(2): 115-120.

51. Venter F. Make HIV tests compulsory for South Africans. Sunday Times, June 3, 2007.

52. Mcquoid-Mason D. Routine testing for HIV- ethical and legal implications. South African Medical Journal 2007; 97(6): 416- 420.

53. Falk-Kessler J, Barnowski C, Salvant S. Mandatory HIV testing and occupational therapists. Am J Occup Ther 1994; 48(1): 27-37.

54. Schulman KA, McDonald RC, Lynn LA, Frank I, Christakis NA, Schwartz JS. Screening surgeons for HIV infection: assessment of a potential public health program. Infect Control Hosp Epidemiol 1994; 15(3): 147-155.

55. Clark CC. Trust in Medicine. Journal of Medicine and Philosophy 2002; 27 (1): 11-29.

56. Cutter J, Jordan S. Uptake of guidelines to avoid and report exposure to blood and body fluids. J Adv Nurs 2004; 46(4): 441-452

57. Manian FA. Blood and body fluid exposures among surgeons: a survey of attitudes and perceptions five years following Universal Precautions. Infect Control Hosp Epidemiol 1996; 17(3): 172-174.

58. Patterson JMM, Novak CB, Mackinnon SE, Patterson GA. Surgeon's Concern and Practices of Protection Against Bloodborne Pathogens. Annals of Surgery 1998; 228: 266-272.

59. Consten EC, van Lanscot JJ, Henny PC, Tinnemans JG, van der Meer JT. A prospective study on the risk of exposure to HIV during surgery in Zambia. AIDS 1995; 9(6): 585-588.

60. DiMaggio SL. State regulations and the HIV-positive health care professional: a response to a problem that does not exist. Am J Law Med 1993; 19(4): 497-522.

61. Cockcroft A. Surgeons who test positive for hepatitis C should not be transferred to low risk duties. Rev Med Virol 2000; 10(2): 79-82.

62. Flum DR, Wallack MK. The surgeon's database for AIDS: a collective review. J Am Coll Surg 1997; 184(4): 403-412.

63. Williamson C. Withholding policies from patients restricts their autonomy. BMJ 2005; 331: 1078-1080.

64. Richter M. SAMA's inward-looking approach to AIDS and ethics. South African Medical Journal 2007; 97(7): 474.

65. Halpern SD. Towards evidence based bioethics. BMJ 2005; 331: 901-903.

66. Gupta M. Occupational Risk: The Outrageous Reaction to HIV Positive Public Safety and Health care Employees in the Workplace. Paper 95. bepress Legal Series, 2003. http://law.bepress.com/expresso/eps/95