



Surgeons and HIV: South African attitudes

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Objectives. The HIV status of surgeons, in the context of the informed consent obtained from their patients, is a contentious matter. We surveyed the views of practising surgeons in South Africa regarding aspects of HIV and its impact on surgeons.

Design. A cross-sectional survey of surgeons who were members of the Association of Surgeons of South Africa, regarding their attitudes to the preceding issues.

Results. The salient findings included the view that a patient-centred approach requiring HIV status disclosure to patients

would be discriminatory to surgeons and provide no clear benefit to patients, and that HIV-positive surgeons should determine their own scope of practice.

Conclusion. Patient-centred approaches and restrictive policies, related to this issue, do not accord with clinician sentiment. In the absence of comparable local or international data, this study provides clinicians' views with implications for the development of locally relevant policies and guidelines.

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The human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) have had a considerable impact on society.¹ South Africa has an estimated 5.7 million adults and children living with HIV, and an estimated 350 000 AIDS-related deaths in 2007.²

The initial focus of risk in the medical setting was on health care workers (HCWs) (and surgeons in particular),³ but the emergence of HIV-positive HCWs resulted in concerns that also included patient safety. The perceived risk to patients appeared to have been overstated, especially in view of the advent of antiretrovirals that reduce viral load and infectivity.⁴

Following initial reports of HCW-to-patient HIV transmission, the Centers for Disease Control and Prevention (CDC) issued guidelines in 1991 for HIV-positive HCWs. These guidelines, specific to the prevention of transmission of HIV and hepatitis B virus,⁵ were criticised for numerous reasons, not least of which was that they seemed to discriminate against practitioners while not necessarily conferring benefit on patients.⁴

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](http://www.hpcsa.co.za/hpcsa/userfiles/file/Professional%20Guidelines.doc)) make specific recommendations for infected practitioners relating to both practice (continuation thereof) and disclosure (no obligation) as well as the need to seek counselling. Along similar lines, South African Medical Association publications suggest that practitioners who are HIV-positive could be regarded as impaired on the basis that they should consider modifying their practice so as not to place patients at risk. However, there is no obligation for disclosure to either employers or co-workers, and any restrictions imposed on such practitioners should only be those that are 'scientifically justifiable', which accords with the HPCSA guidelines.^{6,7}

Local policies and those from developed countries may not address the clinical realities or sentiments in South Africa and may not accord with clinicians' views. We surveyed the views of practising South African surgeons regarding aspects of HIV and its impact on surgeons.

Materials and methods

The study employed a cross-sectional postal survey of practising surgeons in South Africa, using a questionnaire. There are approximately 500 registered general surgeons in South Africa, including plastic and vascular surgeons. The questionnaires were sent to surgeons on the database of the Association of Surgeons of South Africa, with a letter detailing the purpose of the research and inviting participation. The questionnaire comprised two components; the first addressed age, gender, surgical discipline and years of surgical practice, and 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.

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Data analysis

As the study was primarily descriptive, frequency distributions based on responses to the questionnaire were used. Means and standard deviations were calculated for continuous variables, e.g. age and years in practice.

Results

From the database of 574 surgeons, 529 questionnaires were sent in November 2006. Responses ceased to come in by the end of March 2007. There were 266 (53%) responses, including those who felt unable to contribute and a respondent who refused to participate, from a total of 506 possible responders (23 questionnaires were not delivered (returned to sender)).

Age/gender

The mean age of the respondents ($N=257$) was 53.05 years (SD 12.30; range 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).

(The variable N in the preceding paragraph is inconsistent with the total in the paragraph before as these are the actual number of responses for the specific data, and may therefore differ from the total number of respondents and between specific items of data – both here and elsewhere in the text.)

Years in surgical practice

The mean number of years in surgical practice for all respondents ($N=241$) was 20.73 (SD 11.65) – range 1 - 52 years. For male respondents ($N=228$), the mean number of years in surgical practice was 20.52 (SD 11.59; range 1 - 52 years); for females ($N=13$), the mean was 15.38 (SD 9.8; range 2 - 33 years).

Surgical discipline

Respondents described themselves as general surgeons (78.1%; $N=200$), paediatric surgeons (4.3%; $N=11$), trauma surgeons (3.9%; $N=10$), vascular surgeons (5.5%; $N=14$), gastroenterologists (2%; $N=5$), and as working in other areas of surgical practice, e.g. transplantation, ENT.

Disclosure of status

- Colleagues: 78.4% ($N=182$) did not believe that HIV-positive surgeons should disclose their status to colleagues; 21.6% ($N=50$) believed they should.
- Patients: 76% ($N=174$) did not believe that HIV-positive colleagues should disclose their status to patients; 24% ($N=55$) believed they should.
- Hospital advisory board: 51.1% ($N=120$) did not believe that HIV-positive colleagues should disclose their status to a hospital advisory board, bound by confidentiality; 49% ($N=115$) believed they should.

- Unsure: 8.5% ($N=22$) were unsure about disclosure to anyone.

Exposure-prone procedures

Forty-three per cent ($N=112$) believed that HIV-positive surgeons should refrain from undertaking exposure-prone procedures, 47% ($N=122$) believed that they should not refrain, and 10% ($N=25$) were unsure.

Scope of practice

Seventy-four per cent ($N=192$) believed that HIV-positive surgeons should determine their own scope of practice; 20% ($N=53$) believed that they should not; 5% ($N=14$) were unsure.

Exposure to blood products

Only 17% ($N=42$) of patients had been exposed to their surgeons' blood products; 83% of patients ($N=207$) had no exposure to their surgeons' blood products. However, 92% ($N=254$) of surgeons had been exposed to patients' blood products, with only 8% ($N=21$) reporting no exposure.

Mandatory testing

Sixty-one per cent ($N=159$) disagreed with mandatory HIV testing for surgeons, while 34% ($N=88$) felt that there should be mandatory testing, and 5% ($N=12$) were unsure.

HIV status

Ninety-one per cent ($N=235$) were aware of their HIV status, while 9% ($N=24$) were not.

HIV testing

Nine per cent ($N=24$) had never been tested for HIV, 12% ($N=31$) had been tested once, and 79% ($N=203$) had been tested more than once.

Frequency of HIV testing

Sixty per cent ($N=141$) were tested less frequently than annually, 35% ($N=82$) annually, 3.8% ($N=9$) quarterly, with 1.3% ($N=3$) more than quarterly.

Awareness of policy

Ninety-five per cent ($N=244$) were not aware of any policy giving clear guidelines regarding the practice of HIV-positive surgeons, whereas 5% ($N=13$) were aware of such a policy.

Discussion

Respondents were predominantly male, older and with decades of surgical experience, largely as general surgeons but with several surgical sub-specialties represented. Most were against informing patients or colleagues of HIV status but were more divided concerning hospital advisory boards bound by confidentiality. Few were unsure. Such attitudes appear to be contrary to a patient-centred approach whereby such



information could be deemed in the best interests of the patient for informed consent. Within the context of s 6.1(c) of the National Health Act 61 of 2003, such information (surgeon HIV status) could represent a *risk, cost or consequence* associated with a *treatment option*, i.e. a surgical procedure, requiring disclosure. However, if there is no risk, then surely there is no cost or consequence. Hence, bearing in mind the HPCSA guidelines on informed consent and in relation to general ethical duties ([http://www.hpcs.co.za/hpcs/userfiles/file/Professional Guidelines.doc](http://www.hpcs.co.za/hpcs/userfiles/file/Professional%20Guidelines.doc)), would such *information* be in the best interests of the patient to know?

Patient knowledge of surgeon status may serve no purpose, but it could deter the patient from undergoing a procedure by a surgeon who could be uniquely skilled. Any policy requiring disclosure could result in a loss of professionals to the discipline. Moreover, since patients are not bound by confidentiality rulings and ethical codes of conduct as are health practitioners, such information could be disseminated, with further negative consequences for the surgeon. Therefore, it seems that such information should not be shared, and to do so would probably do more harm than good.

There is an incongruity between full, informed consent on the patient's part, and antidiscrimination regarding the HCW.⁸ Based on the risk of surgeon-to-patient transmission of HIV, knowledge of the surgeon's HIV status does not appear to be required for informed consent, which accords with the American College of Surgeons' (ACS) standpoint that a surgeon's HIV status is 'personal health information and does not need to be disclosed to anyone'.⁹

While most respondents in this study were against HIV-positive surgeons having a limited scope of practice, opinion was more divided as to whether HIV-positive surgeons should perform exposure-prone procedures. A Nigerian study of specialist surgeon trainees established that 91% did not think that HIV-positive surgeons should be barred from practice, but 53% thought they should be barred from performing invasive procedures.¹⁰

A substantial majority were against mandatory HIV testing, compared with those in favour. The reasons for advocating mandatory HIV testing encompassed general and specific aspects and motivating their position based on everyone needing to know their status for the purpose of destigmatising and promoting safer practices, within the context of responsible behaviour. Those against mandatory testing were motivated primarily by surgeon-related concerns, specifically as it was perceived as discriminatory and undermining surgeon autonomy.

Despite the fact that most surgeons were against mandatory testing, attitudes appear to be shifting towards HIV testing generally, with calls and arguments for compulsory¹¹ and routine testing (on an opt-out basis).¹² Regarding surgeons and HIV screening, a study assessing the impact of such screening

determined that it would be costly, with costs extending beyond testing and counselling, which would potentially reduce the risk of HIV transmission from surgeons to patients but would not eliminate it.¹³ In our study, 91% were aware of their HIV status, suggesting that mandatory testing is not needed as it is done as a matter of course. To impose such testing upon surgeons would unquestionably constitute discrimination. The ACS statement on surgeons and HIV infection specifically recommends that surgeons should know their HIV status, with no mention of such knowledge arising from mandatory testing.⁹

While most 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). Therefore it was not surprising that over 90% of respondents knew their HIV status. The majority had been tested more than once, but most respondents had been tested less than annually. The relative risk of seroconversion for surgeons working in tropical Africa is estimated as 15 times higher than in Western countries.¹⁴ While our study did not survey 'universal precautions', several respondents cited this as a standard practice that would preclude a requirement for mandatory testing or limiting the scope of practice of HIV-positive surgeons. This consideration echoes earlier pronouncements about HIV-positive HCWs supporting adherence to universal precautions rather than mandatory HIV testing or disclosure of HIV status as the best protection for patients.¹⁵ A similar sentiment was expressed as to whether surgeons testing positive for hepatitis C should be barred from undertaking exposure-prone procedures, i.e. efforts should be directed at ensuring simple preventive measures are employed rather than limiting the practice of infected surgeons.¹⁶

Over 95% of respondents were unaware of any policy that specifically gave guidance as to how HIV-positive surgeons should practise, in spite of the existence of various policies that have provided best-practice approaches under such circumstances. This finding raises a critical issue – the role of practising clinicians in formulating policy that governs their practice. In this study, the major concerns were discrimination against doctors and that doctors were increasingly susceptible to escalating outside regulations, apparently based on a growing perception that the medical profession can no longer be trusted to regulate itself regarding the best interests of patients.¹⁷ Consequently, attempts have been made from within the discipline to explore, redefine and address medical professionalism.¹⁸

Almost a decade ago, the ramifications of HIV in relation to surgeons were understood to be a controversial issue, and required an approach based on 'objective information'.¹⁹ Such an approach is desirable and critical because policy development must take cognisance of evidence generally, but more specifically as there are calls for policies that affect patient care to be transparent, i.e. available to patients; this promotes



patient autonomy and informed consent²⁰ and access to new knowledge that should be available not only for medical professionals.²¹ Based on a legitimate call for transparency and availability of policies, the provisions of those related to controversial issues such as the HIV-positive surgeon behave careful consideration.

Conclusion

Regarding HIV-positive surgeons, an understandable yet apparently unjustified concern is surgeon-to-patient transmission of HIV. Science should inform policy and guide ethics in this dilemma whereby 'the fear of harm ought to be proportional not merely to the gravity of harm, but also the probability of harm'.²²

A clear, unequivocal policy that safeguards the rights of doctors and the wellbeing of patients is required – and is certainly possible. It should articulate the problem and the risk, and state best practice, while outlining the responsibilities and obligations of all parties, taking into account current knowledge, prevailing concerns related to trust in medicine, and awareness of the attitudes and concerns of those whose practice will be influenced by such a policy. South African surgeons should create – or endorse – practice guidelines akin to those of the ACS,⁹ incorporating all that is known on the subject, and rationally advance the position.

References

- Lieberman JD, Derse AR. HIV-positive health care workers and the obligation to disclose. Do patients have a right to know? *J Leg Med* 1992; 13: 333-356.
- UNAIDS. HIV and AIDS Estimates and Data, 2007 and 2001. 2008 Report on the Global AIDS Epidemic. Geneva: UNAIDS, 2008.
- Wright JG, McGeer A. Human immunodeficiency virus transmission between surgeons and patients in orthopaedic surgery. *Clin Orthop Relat Res* 1993; 297: 272-281.
- Szabo CP, Dhai A, Veller M. HIV-positive status amongst surgeons – an ethical dilemma. *S Afr Med J* 2006; 96(10): 1072-1075.
- Centers for Disease Control. Recommendations for preventing transmission of human immunodeficiency virus and hepatitis B virus to patients during exposure-prone invasive procedures. *Mor Mortal Wkly Rep* 1991; 40 (RR08):1-9.
- South African Medical Association. Basic rights and ethical duties. In: *Human Rights and Ethical Guidelines on HIV and AIDS. A Manual for Medical Practitioners*. Pretoria: SAMA, 2006: 5.
- South African Medical Association. HIV / AIDS and employment. In: *Human Rights and Ethical Guidelines on HIV and AIDS. A Manual for Medical Practitioners*. Pretoria: SAMA, 2006: 21.
- Bayer R. Discrimination, informed consent, and the HIV infected clinician. *BMJ* 1997; 314: 915.
- 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 (accessed 30 December 2008).
- 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/1471-2482/2/7> (accessed 30 December 2008).
- Falk-Kessler J, Barnowski C, Salvant S. Mandatory HIV testing and occupational therapists. *Am J Occup Ther* 1994; 48(1): 27-37.
- McQuoid-Mason D. Routine testing for HIV – ethical and legal implications. *S Afr Med J* 2007; 97(6): 416-420.
- 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.
- 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.
- 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.
- 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.
- Clark CC. Trust in Medicine. *J Med Philos* 2002; 27(1): 11-29.
- Medical Professionalism Project. ABIM Foundation. Medical Professionalism in the New Millennium: A Physician Charter. *Ann Intern Med* 2002; 136(3): 243-246.
- Flum DR, Wallack MK. The surgeon's database for AIDS: a collective review. *J Am Coll Surg* 1997; 184(4): 403-412.
- Williamson C. Withholding policies from patients restricts their autonomy. *BMJ* 2005; 331: 1078-1080.
- Richter M. SAMA's inward-looking approach to AIDS and ethics. *S Afr Med J* 2007; 97(7): 474.
- Gupta M. Occupational risk: the outrageous reaction to HIV positive public safety and health care employees in the workplace. *J Law Health* 2004-2005; 19(1): 39-73.

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