Ethical and human rights dimensions in prenatal HIV/AIDS testing: Botswana in global perspective

Rekha A Kumar, PhD, LLM Department of Law, University of Botswana

Corresponding author: kumar@mopipi.ub.bw

Objectives. To evaluate the conflicts between the rights of society and those of mothers-to-be and the unborn, which raise difficult ethical and legal questions regarding decision-making, respect for autonomy, confidentiality, public health and individual rights in an 'opt-out' approach to HIV testing in antenatal care, which Botswana introduced in 2004.

Methods. An empirical study with critical analysis of research studies since 2004, and documentary data/reports relating to opt-out HIV testing policy in prenatal cases in Botswana.

Conclusions. The Government of Botswana's capacity to deal effectively with HIV/AIDS is inherently connected with larger societal, legal, policy and contextual issues. These issues appear to be insufficiently appreciated in Botswana, even though their consideration is essential if the country is to align its practices with existing national laws, as well as international conventions to which it is a signatory.

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Prenatal testing for HIV is a major component in many national strategies to prevent vertical transmission of the disease and reduce the burden of HIV/AIDS. Among developing nations, the Government of Botswana has made particularly impressive strides in combating the disease, achieving rates similar to those of developed nations, where the incidence of neonatal HIV has been virtually eliminated. As a result of a pioneering programme introduced in 2004, which uses an 'opt-out' approach to testing in antenatal care, the rate of mother-to-child transmission (MTCT) of HIV in Botswana has been reduced from 20.7% in 2003 to 4.8% in 2007 (UNGASS Indicator Data, 2007). Despite the obvious individual and societal gains from such an approach, both in Botswana as well as in other countries where similar policies have been adopted, there remain unsettled issues surrounding prenatal HIV testing. Tensions surrounding the rights of society, mothers-to-be and the unborn raise difficult ethical and legal questions regarding decision making, respect for autonomy, confidentiality, public health and individual rights that cannot be ignored. This article is based on the assumption that the government's capacity to deal effectively with HIV/AIDS is inherently connected with larger societal, legal, policy and contextual issues. These issues appear to be insufficiently appreciated in Botswana, even though their consideration is essential if the country is to align its practices with existing national laws as well as international conventions to which it is a signatory.

The vulnerability of girls and young women to HIV/AIDS has been documented in many studies and discussed at various United Nations forums. Most states agree that young people have the right to develop their capacities, to access a range of services and

opportunities, to live, learn and earn within a safe and supportive environment, and to participate in decisions and actions that affect them.¹ Botswana has a high HIV prevalence among pregnant women (33.4% in 2007) and provides a free prevention of MTCT (PMTCT) service. Currently nearly all pregnant women (95%) have antenatal care (ANC).² Uptake of antenatal testing was low from 1999 through 2003. In 2004, Botswana's President declared that HIV testing should be routine but not compulsory in medical settings.³ A rights-based understanding of participation in theory and practice is crucial. The relationships between participation and decision making in prenatal testing and access to information, recourse to treatment and accountability, among others, are still uncertain issues in Botswana.

The situation in Botswana is controversial because few organisations have any understanding of how the rights of women living with HIV/AIDS are violated.⁴ The success of the PMTCT programme has made Botswana an example for other African nations. However, antiretroviral treatment (ART) alone cannot solve Botswana's devastating HIV and AIDS crisis. In his address at the 17th International AIDS Conference in Mexico in 2008, former President Mogae stressed that while the government must remain committed to Botswana's comprehensive treatment programme, hopes of ever overcoming AIDS in Botswana lie in controlling transmission: 'Prevention of new infections should be our priority number one, priority number two and priority number three.'

PMTCT is one of the key strategies for halting the spread of HIV. A national PMTCT programme is in place and is functioning well.

Its objective was to reduce MTCT of HIV to 20% by 2006 and to 10% by 2009.6 Routine testing, according to which all patients are tested unless they opt out, as recommended by UNAIDS and the World Health Organization (WHO), was introduced in Botswana in 2004. One key concern is prenatal testing. It has been rightly suggested by Staurt and Behets⁷ that in settings marked by poverty, weak healthcare and inadequate civil society infrastructure, gender inequalities, and persistent stigmatisation of people with HIV/AIDS, opt-out testing policies may become split from human rights ideals that first motivated calls for the universal access to AIDS treatment. Prenatal testing, a crucial element in this process, is a substantially neglected subject in empirical research, human rights monitoring and ethical scrutiny in underdeveloped countries, including Botswana. The country's testing policy poses potential threats to patient rights concerning consent, confidentiality and counselling.

HIV prenatal testing: an ethical and human rights perspective

According to the UNAIDS/WHO Policy Statement (the Policy), the cornerstones of an HIV testing scale-up must include protection from stigma and discrimination as well as assured access to integrated prevention, treatment and care services. The conditions of testing must be anchored in a human rights approach which protects rights and pays due respect to ethical principles.⁸ The Policy introduced the practice of routine, provider-initiated 'opt-out' testing as one of several preventive strategies in use, as shown in Table 1.

Informed consent under the Policy

According to the Policy, informed consent requires awareness of the following:

- · the clinical and the prevention benefits of testing
- · the right to refuse
- · the follow-up services offered
- in the event of a positive test result, the need to inform anyone
 with an ongoing risk who would otherwise not suspect that he/
 she was being exposed to HIV infection.

In settings with provider-initiated offers of testing, whether for purposes of establishing HIV status as part of an individual's clinical care and treatment offering prenatal ART to pregnant women found to be HIV positive, patients must retain the right to refuse testing, i.e. to 'opt out' of an offer of systematic testing. The Policy makes it clear that opt-out testing can only take place in a setting where mechanisms exist for counselling and referral for medical and psychosocial support after testing. The pre-test counselling may be cut short (compared with voluntary counselling and testing (VCT)), but should be sufficient to provide informed consent.

Ensuring a rights-based approach

Globally, HIV testing is a prerequisite to scaling up the response to AIDS and access to treatment. It must be grounded in sound public health practice and also respect, protect and fulfil human rights norms and standards. The voluntariness of testing must remain at the heart of all HIV policies and programmes, both to comply with human rights principles and to ensure sustained public health benefits. According to a UNAIDS report, 10 the following key factors, which are mutually reinforcing, need to be addressed simultaneously:

- ensure an ethical process for conducting the test, defining the purpose and benefits of testing; assurances of linkages between the sites where the test is conducted; confidentiality of all medical information
- address the implications of a positive test result, such as access to sustainable treatment and care
- erase HIV/AIDS-related stigma and discrimination at all levels, notably within healthcare settings
- ensure a supportive legal and policy framework within which the response is scaled up, safeguarding the human rights of those seeking services
- ensure adequate post-diagnostic infrastructure.

Botswana prenatal HIV testing policy in global perspective

Prior to the devastating effects of HIV/AIDS, Botswana was on track to significantly reduce child mortality in keeping with the Millennium Development Goals (MDGs) to which it is party. In the early 1990s, fewer babies died at birth or within 5 years of birth than at the end of the decade. From the mid-1990s, child mortality rates increased to levels experienced in the 1970s. HIV prevalence among pregnant women attending antenatal clinics

Voluntary counselling and testing (VCT)	Client-initiated testing to learn HIV status provided through VCT Is indicated whenever a person shows signs or symptoms that are consistent with HIV-related disease or AIDS to aid clinical diagnosis and management Should be seen in the context of pregnancy, to facilitate an offer of antiretroviral prevention of mother-to-child transmission in clinical and community-based health service settings where HIV is prevalent and ART is available (for those who are asymptomatic)				
Diagnostic HIV testing					
Routine provider-initiated offer of HIV testing of pregnant women					
Mandatory HIV screening	UNAIDS/WHO support mandatory screening for HIV and other blood-born viruses of all blood that is destined for transfusion or for manufacture of blood products				

Table 2. Prenatal testing									
Year	1992	2002*	2003	2004	2005	2006	2007	2008 [†] (Oct - Dec quarter)	
No./% of preg- nant women	13.8	35.4	52	75	92	83	94	A total of 11 875 new ANC clients were recorded	

^{*}The programme became available in every public antenatal clinic.

Sources: Botswana 2006 HIV Sentinel Surveillance data; Botswana FY Country Operational Plan (COP) 2008.

increased from 13.8% in 1992 to 35.4% in 2002. It is estimated that 40% of infants born to HIV-positive mothers who do not enrol for PMTCT are infected with HIV. Infant deaths closely follow the AIDS prevalence index. The under-5 mortality rate has also increased since 1996. 12 After routine testing began, the percentage of infected women (delivering in the regional hospital) who knew their HIV status increased from 47% to 78% and the percentage receiving PMTCT interventions increased from 29% to 56%. ANC attendance and the percentage who disclosed their HIV-positive status remained stable. Research indicates that ANC clients supported the policy. 2.13

Routine testing was more accepted than voluntary testing and led to substantial increases in test participation and PMTCT interventions without detectable adverse consequences. Botswana's stable and relatively well-resourced government has provided extensive funding to combat the HIV epidemic and started Africa's first national programme for PMTCT of HIV in 1999, providing short-course zidovudine (AZT) for mothers and infants and infant formula at no cost to clients. It has the potential to reduce vertical transmission from 35 - 40% to 5 - 10%.

Ethical and human rights issues in the opt-out approach: unmet challenges

Test results between November 2006 and February 2007 indicate that less than 4% of babies born to HIV-positive mothers were infected, a rate comparable to those in the USA and Western Europe. 15 However, ethical and human rights questions surrounding opt-out policies in prenatal cases, and the impact of such policies on individuals and communities, largely remain unanswered. The subject revolves around the conflict between human rights and the pursuit of public health goals, and the potential benefits and risks for unborn children and mothers-to-be. In a public meeting in Botswana, Bonela, a local NGO, discussed the ethical issues involved in HIV testing.16 Timely diagnosis, it was stated, can allow access to ART for opportunistic infections or longitudinal care. Horizontal HIV transmission can be prevented through knowledge of HIV status and behaviour change, and vertical transmission through screening and subsequent intervention for HIV-positive pregnant women. Furthermore, HIV/AIDS awareness and risk reduction may result in those who test HIV negative. Despite the potential benefits, the meeting reached the consensus that compulsory HIV testing, even in a high-prevalence country such as Botswana, is ethically unacceptable. While weighing up the risks and benefits, the discussion group concluded that routine testing for HIV/AIDS in the context of overwhelming public health hazards is ethically

defensible on condition that individual rights are protected and the negative consequences of being tested (and found HIV positive) are minimised by appropriate social and institutional support services.¹⁶

The subject, however, demands more empirical research, human rights monitoring and ethical scrutiny, not yet advanced in Botswana. For instance, testing has been available in Botswana's public health system since the mid-1990s, but there have been barriers leading to reluctance among patients and providers to discuss HIV. A shortage of trained counsellors, concerns about confidentiality in small communities, results taking several weeks to return, and a dearth of population mobility lead to many unclaimed results. HIV testing for PMTCT was initially offered by midwives at routine ANC, who received counselling training and were expected to weigh risks and benefits of testing with each client. However, many women were not offered, and most women refused, testing. In late 2002, lay counsellors (secondary school graduates with 4 weeks of training) were employed to provide dedicated counselling services for PMTCT in public clinics. Testing uptake improved somewhat, but many women remained untested and untreated.17

According to Staurt and Behets, Ike the Botswana policy, the UNAIDS/WHO policy clearly aims at producing a win-win situation in which governments can pursue public health goals more aggressively without compromising the rights of the individual. But the complexities associated with a genuine consideration of human rights, particularly in resource-poor countries, are often downplayed by advocates of the new routine testing policies. It is a well-documented fact that the epidemic has had a gender bias, more especially in African regions. Prejudicial cultural and traditional practices directly influence women's decision making in sexual and reproductive health issues as well. Increasing poverty among single female-headed households and the rising incidence of violence, including rape, are other contributing factors. Is

Informed consent, participation and decision-making power in prenatal testing

Ethical considerations are wider in prenatal testing. One of the main ethical obstacles is the stipulation that voluntariness must be central to all HIV policies. The condition is not fulfilled simply by offering the patient the right to refuse. Right of refusal or the optout approach balances autonomy with medical practice and meets ethical standards of informed consent.⁷

[†]Over 11 000 under PMTCT, 5 March 2009. Daily News, Gaborone, Botswana

Participation in prenatal HIV testing is key to the right to health, as are other human rights. However, participation can mean very different things to different role players. Testing is fundamental to both prevention and treatment of HIV. Efforts to increase testing have recently been extended to the provision of 'opt-out' or routine testing, where the healthcare provider rather than the client initiates the test. Testing kindles beneficial behavioural change¹⁹ and opens access to regulated resources and services, such as PMTCT.20 In this scenario, HIV testing is offered routinely to all patients attending a particular healthcare facility, such as an ANC, even though they are asymptomatic. The emphasis is shifted from client-initiated (as in VCT) to provider-initiated testing. The process is still voluntary, with the option to refuse (opt out). It may also decrease the stigma associated with choosing to have a test in as much as everyone is having it offered irrespective of perceived risk.^{20,21} It is still a matter of concern calling for further studies. What effect the HIV opt-out policy has on the popularity of the original non-related services (the proportions accepting/declining HIV testing; proportion receiving results of the test; proportion attending further HIV-related services if positive; and overall attendance rates at the health facility before and after the introduction of an opt-out policy) has not been adequately assessed.3 As routine testing policies are deemed potentially coercive, provider-initiated approaches are gaining popularity; counselling may no longer be practised, people may be dissuaded from visiting their doctors for fear of being tested, and this policy may also increase testingrelated partner violence.22 It is important to improve awareness of individual rights and mitigate obstacles associated with implementation of the policy in Botswana.23 According to Clark,24 one of a number of physicians at Princess Marina Hospital in Botswana, the main public hospital in the capital of Gaborone, even with mass education most women refuse to be tested. However, the situation seems to be different in the case of prenatal testing.^{2,13} According to Clark: 'Mandatory HIV testing, and when necessary, mandatory treatment of all pregnant women in Botswana is both a necessary and a vital part of a broader comprehensive strategy for preventing the spread of AIDS in sub-Saharan Africa."24

The decision-making process

The rates of HIV infection among pregnant women and the irregular uptake of PMTCT services suggest that not many couples are making responsible reproductive health choices. This is partially explained by the disproportionate responsibility for family health choices and child care that women carry.²⁵ The legal system in the country and cultural norms reinforce gender inequality by giving men control over productive resources such as land, through marriage laws that make women subject to their husbands, and inheritance customs that make males the principal beneficiaries of family property. This is still the trend despite the fact that country ratified in 1996 the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW). Such resolutions have far-reaching consequences for the rights of women, as well as their decision-making power at the time of prenatal testing.

Another crucial concern is the lack of involvement of male partners in every aspect of HIV management. In any society, men play

a significant role in women's sexual and reproductive decisions. According to UNICEF statistics, the involvement of men in programmes such as PMTCT in Botswana is only10%. Field research by Nair and Rakgoasi¹⁸ confirms that voluntary testing services do not attract men in significant numbers. The counselling services offered at the ANCs to motivate men and women to be tested and to pursue appropriate preventive measures or treatment are insufficient, particularly for men. The entire management of pregnancy and childbirth is considered the exclusive domain of women. Men generally do not accompany wives or partners to ANCs or other health facilities where HIV-related services are available. There are a number of barriers in the community that prevent men's participation and increased role in ANCs and related services. They range from a lack of motivation, men's bias against service providers and strong traditional stereotypes and misconceptions about the different roles of men and women in reproductive health, to class differences between the service providers and men.¹⁸ According to Charity Kgotlafela, Vision 2016 Council Publicity Manager, the negative impact of the HIV/AIDS epidemic runs across all Vision 2016 Pillars, especially the Vision Pillar 6 - Botswana to be 'A Moral and Tolerant Nation'; many women still feel that negative social attitudes towards the status and role of women have not been completely removed from society.26

Right to information and knowledge on ANC, PMTCT, VCT, etc.

According to research reports¹⁸ based on focus group discussions, women in Botswana are aware of the need for antenatal check-ups, including testing and treatment for PMTCT, from seeing other women attend health facilities and from health talks and posters at health centres, as well as television and print media. In their own words: 'We hear at kgotla meetings, public meetings, freedom squares for different political parties and from Parliament members when they visit our village. Even the President and Chiefs talk about it.'

Men not only tend to rely on their partners as sources of information on testing and prevention programmes, they also use their partner's HIV test results to infer their own HIV status. In any rural society, Africa in particular, traditional leaders and chiefs play a decisive role in influencing people's attitudes and perceptions. The level of knowledge among these leaders is therefore crucial for the success of the HIV management programme. As traditional leaders, chiefs have a lot of influence among the rural public. However, there is very little evidence to suggest that traditional leaders are any more knowledgeable than the rest of the population, or that they are able to stand up and challenge stereotypes and misconceptions about modern testing practices.

Attitudes and perceptions towards testing

Routine testing appears to be widely supported and may reduce barriers to testing in Botswana. Eleven months after introduction of the 'opt-out' policy in Botswana in 2005, a cross-sectional, population-based study²⁵ of 1 268 adults from five districts in Botswana to assess attitudes toward routine testing revealed that most participants (81%) reported being extremely in favour of routine test-

ing. The majority believed that this policy would decrease barriers to testing (89%), HIV-related stigma (60%), and violence toward women (55%), as well as increase access to ART (93%). At the same time, 43% of participants believed that routine testing would lead people to avoid going to the doctor for fear of testing. The prevalence of self-reported HIV testing was 48%. In the context of potential human rights infringements, few individuals reported violence (1%), discrimination (2%) or a breach of confidentiality by healthcare workers (5%) associated with VCT or routine testing. In addition, approximately two-thirds of participants who were tested by either routine testing or VCT felt that they could not refuse the test, suggesting that the voluntary nature of both routine testing and VCT is not fully understood.25 In 2009 a report by National Council for AIDS stated that a significant proportion of the new ANC clients refuse the test.²⁷ In addition, the number of women on highly active antiretroviral therapy (HAART) at delivery continues to be high (901 for the October - December guarter). 27,28 This is the highest since 2007, according to the Council, which may suggest an increasing number of pregnancies among women on HAART. These findings accentuate the importance of implementing HIV testing policies with measures in place to ensure informed consent, protection of confidentiality, and protection of women from gender-based violence related to testing. Nevertheless, the testing process is still being viewed as women's domain, with a very small role for men. A woman remarked: 'When it comes to ANC, most men do not know about [it]. It is a woman's secret and so she will handle it alone. I think if you take your partner when you go for ANC, he will understand what is going on.'26

Some women may be reluctant to be tested for HIV, to follow an ART regimen if found to be positive, or to adopt health behaviours. such as formula feeding for babies, which might expose their positive infection status to their partners. In a society where marriage as a social institution is not strong, it is not strange to find that married women do not want to risk their married state. According to the Mashi Study, for an African mother living with HIV, the decision not to breastfeed her child is problematic. The lack of access to clean water and formula, and the societal pressures to breastfeed only make the decision more difficult.28 According to another report by NACA, new infant infections are estimated from prevalence among pregnant women and the rate of MTCT, which is dependent on infant feeding practices and prophylactic cover with ARVs.29 According to the Ministry of Health, without intervention 35 - 45% of babies exposed to the HIV virus through vertical (mother-to-child) transmission will be infected. MTCT occurs 15 -20% through breastfeeding. Of HIV-positive women, 65% fed their infants formula from birth (as of 2005).30 Under PMTCT formula is provided for women who choose formula feeding. However, women may opt out if they desire. 29,31 Problems such as partner violence associated with HIV testing have also been identified, for women in particular.^{24,32} By marital status, the highest prevalence (42%) was among women living with partners while the lowest (30.2%) was among married women.30

Fears have been expressed with the change in emphasis to provider-initiated testing, that the autonomy (the individual human

right) of the patient to freely decline or accept testing could be undermined. The need to comply with the authority of health staff, a lack of time to consider a decision in favour of testing, and the strong normative message to 'get tested' may all contribute to undermining patient autonomy. If individuals perceive that they have lack the freedom to decline a test at a health facility, they may either avoid the facility altogether or decline those services normally attached to HIV testing.

Concern has also been raised that in practice a routine offer of testing may effectively become routine HIV testing, with erosion of pretest counselling. It is argued that this would undermine the principles advocated by both WHO and UNAIDS, namely consent, counselling, and confidentiality ('the 3 Cs'), and so violate human rights.^{20,33}

Addressing HIV-related stigma should be an integral part of HIV testing policies in Botswana, including measures to protect those affected by discrimination in healthcare, work, and other settings. Policies that target HIV-related stigma may also prevent fears of being tested. Botswana already has several innovative programmes in place aimed at addressing stigma directly, such as media campaigns. The public testing of Ex-President Festus Mogae and other national leaders, and the annual 'Miss HIV Stigma Free' competition, illustrate a moral boost the masses urgently needed.³⁴ However, a deeper understanding of the dimensions of disease-related stigma and the mechanisms by which it reinforces and generates social inequalities related to gender, ethnicity, and class, is still required.³⁵

Testing policy and right to personal autonomy/reproductive choices for women: upcoming debates

An accommodation between personal freedom and the exercise of state authority is always delicate. It is particularly challenging when a public health intervention such as Botswana's 'opt-out' testing policy may undermine a woman's right to reproductive choices and to autonomous decision-making. A small number of research reports have raised the issue of abortion as one choice a woman might make in light of her HIV status. Unwanted pregnancy among HIV-positive women is a reality that is hardly discussed. Policies that permit emergency contraception and voluntary, safe, legal abortion could, in settings where 'opt-out' programmes encourage pregnant women to be tested, offer a meaningful choice to those who do not wish to continue the pregnancy in light of their HIV status.4 Since the 2006 Toronto International AIDS Conference, an increasing number of organisations have spoken out about the need to respect the reproductive rights of women living with HIV/AIDS.³⁶ Strikingly, during the International Conference on AIDS in Mexico in 2008, abortion was presented as an obstacle for women living with HIV. While voluntary pregnancy termination was scarcely addressed at previous AIDS conferences as a policy issue, several speakers pointed out the need to include abortion care within the scope of reproductive rights.

It is being argued that a woman's indecision to undergo prenatal testing manifests violation of her civil rights because it indicates

her lack of autonomy on matters relating to her sexual and reproductive health. The right of women living with HIV to become mothers has definitely advanced in recent years – she has a right to bear children, to use assisted conception and to adopt children. Interestingly, the issues were not discussed at the recent International Conference on AIDS in Botswana. The right of HIV-positive women to avoid unwanted pregnancies has not been accepted as an issue so far. It is submitted, however, that debates over these issues have just begun in the global forum and the author therefore leaves this issue open, while reserving her personal view, and believing that the state has the right to intervene in the matter of the life of an unborn child regardless of the opinion of the parent and that the opt-out policy is the most benign form of intervention.

Why women do not register for PMTCT and related care

HIV-related stigma and denial was also a major barrier to women accessing services: 'People are still reluctant to come forward to be tested. They don't come forward because of the fear of discrimination and the stigma associated with HIV. And unless you're tested, you don't know whether or not you're positive and therefore might benefit from treatment.' ³⁷

HIV stigma was identified by government and press sources as one possible impediment to testing and to the success of the new ART programme. Individuals very often shun testing and treatment facilities to avoid potential stigma and discrimination. Some women reported that it is not easy to participate in PMTCT programmes because people will become aware of their HIV-positive status when they are seen collecting milk at the health facility and may scoff at or even isolate them. Many women therefore decide to breastfeed so that people will think that they are not affected. Some women fail to register with the programme because health workers do not follow up after testing to find out if they are mentally strong enough to reveal their status to their relatives (partners, mothers or next of kin) or to offer needed counselling. In such situations, women decide to remain silent and breastfeed their children even if they have registered and followed other procedures.

Rights of the unborn

The unborn, merely on account of their non-existence in the physical world, are not beyond the protection of human rights. Their status under law, although controversial, is unique as well, and in the context of prenatal testing may create ethical tensions between the rights of a pregnant woman to determine what is done to her body (autonomy) and obligations to the well-being of an unborn child (beneficence).

Botswana's public health system caters well to the needs of children. It provides prenatal care services that cover nutrition and health education for pregnant women. It also provides a fully funded nationwide PMTCT programme that includes infant formula as a substitute for breastmilk for HIV-positive mothers. But the limits of state protection for children may well be stretched further in the case of HIV/ AIDS. Why, for instance, should the state allow a woman who tests positive for HIV to remain ignorant of her HIV

status if she so desires, when ignorance may result in her not receiving prenatal ART and in the prolongation of risk of MTCT for her newborn through breastfeeding?⁴⁰

International guidelines regarding clinical care and medical research oblige health professionals to adhere to the principles of respect for persons (autonomy), beneficence, non-maleficence (do no harm), and justice.41 These may be considered what Ross42 would describe as prima facie or conditional duties that must be weighed against each other to arrive at a course of right conduct in any given situation. Depending on context, the obligations under one duty may 'trump' obligations under another. With regard to the principle of autonomy, courts have consistently agreed that a patient's right to self-determination is not absolute, permitting the informed consent requirement to be overruled in fewer than five generally recognised circumstances: a public health emergency, a medical emergency, the incompetent patient, the therapeutic privilege, and the patient waiver. 43 Botswana's national response to the HIV epidemic in general and to the need to reduce the incidence of MTCT of HIV in particular, has been in recognition of a public health emergency. In this context, the state has based its obligations on a moral principle of 'beneficence', the obligation to maximise the well-being of its citizens. In consideration of this, and given that abortion is illegal in Botswana (i.e. the 'rights' of an unborn child are protected by the state), it can be argued that every child, born or unborn, has a right to expect state protection from the risk of HIV infection. Is it not in the interest of the unborn child and, on a broader scale, in the interest of public health, that the state demand that pregnant women be informed about their HIV status and the options available to them to protect their children? Secondly, men influence their spouses' reproductive health choices. To facilitate informed choices on such critical issues as HIV testing, enrolment for PMTCT and breastfeeding, they should also participate in prenatal education with their spouses. Men's involvement is critical because many women do not have full control over decisions concerning their health and that of their babies. About 60% of Batswana mothers have their first child at 15 - 19 years of age, when they are still dependent on others and may be unable to make responsible reproductive health choices.44

Conclusion

Initially slower, the programme made rapid progress in 2004 and 2005 and continues to register a high record. This suggests that there may be widespread support for routine HIV testing in Botswana, a finding supported by recent increases in treatment uptake, but such support remains largely unexamined in the empirical literature. Routine testing holds significant promise for the prevention and treatment of HIV/AIDS in Botswana and elsewhere. While testing is central, its process demands a supportive environment that follows ethical considerations and respects individual rights. Given the ethical and human rights concerns that are raised by HIV testing policies, particularly an 'opt-out' policy such as that in force in Botswana, special safeguards must be put in place to ensure that patients have all the information necessary to make an informed and free decision about being tested, that women have adequate and readily available protection against violence related

to their HIV status, and that information relating to their positive status will be kept confidential to the fullest extent possible, in accordance with international codes and conventions.

It is suggested that in settings marked by poverty, weak health-care and civil society infrastructures, gender inequalities, and persistent stigmatisation of people with HIV/AIDS, opt-out policies may become disconnected from the human rights ideals that first motivated calls for universal access to AIDS treatment. We leave open the ethical question of whether opt-out policies should be implemented, and we recommend that whenever routine HIV testing policies are introduced in resource-poor countries, their effect on individuals and communities should be the subject of empirical research, human rights monitoring and ethical scrutiny.

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