



Facilitating HIV Disclosure

Facilitating HIV Disclosure Across Diverse Settings: A Review

Carla Makhoul Obermeyer, DSc, Parijat Bajjal, MA, and Elisabetta Pegurri, MSc

HIV status disclosure is central to debates about HIV because of its potential for HIV prevention and its links to privacy and confidentiality as human-rights issues.

Our review of the HIV-disclosure literature found that few people keep their status completely secret; disclosure tends to be iterative and to be higher in high-income countries; gender shapes disclosure motivations and reactions; involuntary disclosure and low levels of partner disclosure highlight the difficulties faced by health workers; the meaning and process of disclosure differ across settings; stigmatization increases fears of disclosure; and the ethical dilemmas resulting from competing values concerning confidentiality influence the extent to which disclosure can be facilitated.

Our results suggest that structural changes, including making more services available, could facilitate HIV disclosure as much as individual approaches and counseling do. (*Am J Public Health*. 2011; 101:1011–1023. doi:10.2105/AJPH.2010.300102)

THE TOPIC OF HIV STATUS

disclosure is central to debates

about HIV, because of its links to confidentiality and privacy as human-rights issues and its potential role in prevention.¹ Disclosure is also considered a way to “open up” the HIV epidemic² and hence is a crucial step toward ending stigma and discrimination against people living with HIV and AIDS (PLWHA). Recognizing its importance, a number of researchers have reviewed the literature on disclosure by women,³ by men,⁴ or by parents to children.⁵ Others have reviewed what is known about the factors associated with disclosure, including the connections among stigma, disclosure, and social support for PLWHA⁶; the links among disclosure, personal identity, and relationships⁷; and client and provider experiences with HIV partner counseling and referral.⁸ We sought to complement existing reviews by including available information on low- and middle-income countries, which are poorly represented in all but 1 of the extant literature reviews, and by focusing on the role of health services and health care providers in HIV disclosure.

Recently, increased attention to transmission within serodiscordant couples has highlighted the potential role of disclosure as a way to encourage prevention.⁹ Moreover, as countries scale up HIV

testing, counseling, and treatment, better evidence is needed to inform laws and policies, particularly regarding how best to facilitate disclosure while protecting medical confidentiality. Ongoing debates about mandatory disclosure to partners, health workers’ role in disclosing without patients’ consent, and the criminalization of HIV transmission raise important questions about the place of disclosure in the fight against HIV and about the human-rights dimension of disclosure policies. These debates also underscore the need for a careful review of the evidence on disclosure, an examination of individual motivations and experiences around disclosure, an assessment of the role of health workers, and a better understanding of the societal determinants and consequences of disclosure in diverse settings.

METHODS

We conducted an electronic search of databases for journal articles and abstracts, focusing on HIV disclosure by adults living with HIV. Disclosure is defined here as the process of revealing a person’s HIV status, whether positive or negative. HIV status is usually disclosed voluntarily by the index person, but it can also be

revealed by others with or without the index person’s consent. We conducted the search in PubMed, PsychINFO, Social Sciences Citation Index, and the regional databases of the World Health Organization, including African Index Medicus, Eastern Mediterranean, Latin America, and Index Medicus for South-East Asia Region. The search used the keywords “disclosure,” “notification,” and “HIV or AIDS.” The search retrieved a total of 3463 titles published between January 1997 and October 2008. After a scan of titles and abstracts, we retained 231 sources, including 15 abstracts from the 2008 International AIDS Conference and 11 reviews or commentaries.

We included sources in this review if they were original studies or literature reviews that had appeared in peer-reviewed publications and if they reported on the levels or process of disclosure (to whom, when, and how), the determinants of and reasons for disclosure, and the consequences of and incidents associated with disclosure, such as life events, risk behavior, stigma, and discrimination. Articles that focused exclusively on children’s HIV status were excluded, but we refer to children if their parents disclosed to them. We consulted the



regional databases of the World Health Organization to find articles about resource-limited settings. This review also drew on related reviews of the literature on HIV testing, stigma, treatment, and prevention by Obermeyer et al.^{10,11} Studies published after October 2008 were not included in the tabulations, although they may be cited in the discussion.

Table 1 presents the characteristics of the studies included in this review. Of the 231 articles included, more than two thirds (157 studies) came from high-income countries, mainly the United States. Most studies in low- and middle-income countries (49 out of 76) were from sub-Saharan Africa. A total of 98 studies were conducted among heterosexual adults of both sexes, 49 specifically among women, and 35

among men who have sex with men, of which 31 were conducted in the United States.

Most of these studies (134 of 231) were based on quantitative surveys, and they provide frequencies on different aspects of disclosure. However, a considerable number (74 studies) used qualitative methods, including in-depth interviews and focus-group discussions, and some (11 studies) combined questionnaires with qualitative methods, often to explore the relational context of disclosure and how individuals coped with their HIV status.

LEVELS AND PATTERNS OF DISCLOSURE

Table 2 summarizes the results of studies on levels and patterns of

disclosure in general as well as disclosure to specific categories of people, such as sexual partners, family members, and friends. Overall, a striking finding of this review was that the majority of people disclosed their HIV status to someone. The levels of reported disclosure to anyone, as shown in Table 2, ranged mostly from about two thirds to about three fourths of respondents, with a few lower rates in sub-Saharan Africa. Three studies explicitly referred to involuntary disclosure, but the rest were concerned with voluntary disclosure exist, suggesting that most people willingly disclosed their HIV status.

The frequencies summarized in Table 2 indicate that gender differences in levels and patterns of disclosure exist. Women (as mothers and sisters) were more

frequently mentioned than were men as recipients of disclosure. Only a few studies have investigated gender differences in HIV-positive disclosure rates to partners, and the findings have been mixed. Some found no gender differences, as in Ethiopia^{103,104} and Mali,¹⁰⁵ or higher disclosure rates by HIV-positive men (84%) than HIV-positive women (78%).⁷¹ Several found higher rates by women, as in Burkina Faso and Mali,¹⁰⁵ South Africa,⁷³ and the United States.¹⁷ Regardless of whether there were significant gender differences in disclosure rates, most studies documented substantial gender differences in the contexts of, barriers to, and outcomes of disclosure.

Other differences in disclosure frequency had to do with HIV status and to whom status was

TABLE 1—Characteristics of Studies on Disclosure of HIV Status, January 1997–October 2008

Countries	Populations Sampled						Total
	Adults, Both Genders	Heterosexual Men Only	Men Who Have Sex With Men	Women Only, Including PMTCT	Injection Drug Users	Parents' Disclosure to Children	
High income							
United States	41	6 ^a	31 ^a	22	10	23	133
United Kingdom	4	...	2	1	...	...	7
Western Europe ^b	7	...	...	...	1	2	10
Australia	4	...	...	...	...	...	4
Canada	1	...	...	1	...	...	2
Saudi Arabia	1	...	...	...	...	...	1
Low and middle income							
Sub-Saharan Africa	25	...	1	20	...	3	49
Asia	12	1	...	5	2	...	20
Eastern Europe	1	...	...	...	...	...	1
Latin America, Caribbean	2	1	1	...	...	...	4
Total	98	8	35	49	13	28	231^c

Note. PMTCT = prevention of mother-to-child transmission. Ellipses indicate that no studies were reviewed from that country or region.

^aMarks and Crepaz¹² includes both homosexual and heterosexual men.

^bWestern Europe does not include the United Kingdom.

^cMedley et al.³ covers both Africa and Asia; Grinstead et al.¹³ covers both Africa and Latin America.



TABLE 2—Studies (n = 96) on Levels and Patterns of HIV Status Disclosure, January 1997–October 2008

Population (Location)	No. of Studies	Disclosure to Anybody, %	Disclosure to Sexual Partners, %	Disclosure to Family, %	Disclosure to Friends, %
United States (n = 46)					
Adults ¹⁴⁻²³	10	82	56-81 (casual partners 25; main partners 74)	70-87 (77-79 to mothers; 47-65 to fathers)	26-88
Parent to children ^{24-34,a,b}	11			30-75 to parents; 32-62 to children	
Men ³⁵⁻³⁶	2		53-60		
Women ³⁷⁻⁴⁵	9	96-100	68-92	60-84 (66-81 to mothers; 25-51 to fathers)	28-83
MSM ^{12,17,46-55,c}	12	80-97	54-80 (38-42 casual partners)	50 (37-67 to mothers; 23-47 to fathers)	85
Injection drug users ^{56,57}	2		61-86		
Europe (n = 10)					
Adults (France, ⁵⁸⁻⁶⁰ Russian Federation, ⁶¹ Sweden, ⁶² United Kingdom ⁶³⁻⁶⁵)	8	85-97	88-97	53-77	57-79
Parent to children (Belgium ⁶⁶)	1			10 to children	
Women (United Kingdom ⁶⁷)	1		81		
Sub-Saharan Africa (n = 26)					
Adults (Burkina Faso, ⁶⁸ Ethiopia, ⁶⁹ Kenya ^{13,d} , Nigeria, ⁷⁰ South Africa, ⁷¹⁻⁷⁴ Uganda, ⁷⁵ Tanzania, ^{76,77} Zambia ⁷⁸)	12	22-96	28-91 (65 by men; 73 by women)	60-75	6-43
Parent to children (South Africa, ⁷⁹ Uganda ⁸⁰)	2			44-50 ^e	
Women (Burkina Faso, ^{81,82} Côte d'Ivoire, ⁸³ Kenya, ^{84,85} Malawi, ⁸⁶ South Africa, ⁸⁷⁻⁸⁹ Tanzania ⁹⁰⁻⁹²)	12	22-94 (46 HIV +; 97 HIV-)	17-90 (64 HIV +; 80 HIV-)	20-22	15
Asia (n = 8)					
Adults (China, ⁹³ India ^{94-96,f})	4	(35 involuntary; 65 voluntary)	70 (100 by women; 65 by men)	78	7
Men (Taiwan ⁹⁷)	1	72			
Women (India, ⁹⁸ Thailand ⁹⁹)	2		37-84	34 family or friends	34 family or friends
Injection drug users (Vietnam ¹⁰⁰)	1		0 (no respondents disclosed) ^e		
Caribbean (n = 1)					
Adults (French Antilles/Guyana ¹⁰¹)	1	70	85	56	
Reviews (n = 5)					
Adults ^{7,8,102}	3	68-97	22-86 (70-92 LIC; 44-67 HIC)	61-86	
Men ⁴	1		67-88		
Women ³	1		17-86		

Note. HIC = high-income countries; LIC = low-income countries; MSM = men who have sex with men. For multiple studies on a country or population, the table presents the range of disclosure rates (minimum and maximum) reported in the studies.

^aEmlet also reported that adults aged 50 years or older disclosed their HIV status to those in their social networks less frequently than younger adults did.³⁴

^bTwo statistics are included: the percentage of parents who reported disclosing to children and the percentage of children who were told by their parents.

^cThe study by Marks and Crepez of HIV-positive men (homosexual, bisexual, and heterosexual) is counted under MSM, who represent the majority of the study sample.¹² Similarly, the Weinhardt et al. study of MSM, women, and heterosexual men is counted under MSM, who represent the majority of the study sample.¹⁷

^dGrinstead et al. covers Kenya, Tanzania, and Trinidad, but it is listed under Africa and counted once under Kenya.¹³

^eIncludes data from studies with fewer than 25 participants.

^fIn Mulye et al., patients' spouses (23%) and relatives (2%–12%) knew patients' HIV status after it was disclosed to patients in their presence.⁹⁴



disclosed. Studies that included information on HIV status almost always reported that disclosure was lower when HIV status was positive. Disclosure to relatives was higher than was disclosure to friends. Partner disclosure varied greatly, but it was generally lower with casual partners than it was with steady partners.

Some studies explored sociodemographic factors that influence disclosure, principally residence and ethnicity. For example, research in South Africa found higher disclosure rates in urban settings than in rural settings.¹⁰⁶ In the United Kingdom, studies found that African men were less likely than were White men to tell their partners about their HIV infection (66% vs 86%, respectively⁶³) and were less likely than were White men to disclose to relatives, partners, or work colleagues.⁶⁴ Similarly, a study in French Antilles and French Guyana found that non-French citizens were less likely to disclose to a steady partner than were French citizens,¹⁰¹ and studies in the United States found that African Americans disclosed less often than did European Americans.^{34,107}

Such results suggest that individuals from racial/ethnic minority groups have greater concerns about stigmatization if they disclose their status. Socioeconomic factors and access to resources also appear to play an important role. In the South African study mentioned earlier,¹⁰⁶ urban communities with higher disclosure rates had more institutional sources of support, including nongovernmental organizations and hospitals. Research from Nigeria and among migrants from Africa in Sweden

revealed that more educated respondents disclosed more often than did their less educated counterparts.^{62,70} Similarly, a study from India found a higher rate of disclosure to partners by literate respondents compared with illiterate respondents (86% vs 44%, respectively⁹⁶). Conversely, low-wage employment and economic vulnerability reduced disclosure by Tanzanian women,⁹¹ Dominican male sex workers,¹⁰⁸ and Canadian female sex workers.¹⁰⁹ Such results suggest that economic and social disadvantage make disclosure more difficult. This finding is consistent with the frequencies in Table 2, which tended to be higher in higher-income countries (the United States and Europe), whereas levels in developing countries of Africa, Asia, and the Caribbean showed much greater variation.

VARIATIONS IN THE CONCEPT AND PROCESS OF DISCLOSURE

We found that different processes have been subsumed under the concept of disclosure, underscoring the need for researchers to clarify more consistently how disclosure is measured. Quantitative studies have shown large differences in disclosure frequencies depending on what information was given and by whom, whether HIV status was positive or negative, and whether that status was disclosed to 1 or more persons, to anyone, to sexual partners, to friends, or to family. Qualitative studies, on the other hand, have raised questions about the multiple dimensions and meanings of disclosure.

Disclosure is not always voluntary, an issue raised primarily (though not exclusively) in studies conducted outside Europe and the United States. Varga et al.⁸⁸ reported that in South Africa, 32% of disclosure to family members was involuntary. Similarly, in India, 35% of male and female respondents reported that their HIV status had been disclosed without consent,⁹⁵ and relatives sometimes found out a person's HIV status when it was disclosed in their presence by someone else.⁹⁴

Research has found large variations in the amount of information that people reveal. For example, only about half of respondents in a study from India disclosed the exact nature of their illness to those around them; others preferred partial disclosure or referred to a less stigmatizing illness, such as fever, heart problems, or general illness.⁹⁵ A US study found that 54% of respondents reported having received full disclosure.¹⁵ Parents tended to disclose partially to their young children and more fully to their adolescent children.¹¹⁰

Rather than being a one-time event, as it is sometimes assumed to be, disclosure is often a gradual process of disclosing to an increasing number of others in one's networks over time. For example, a study among homosexual and bisexual men in the United Kingdom found that immediately after diagnosis, respondents were more likely to opt for nondisclosure, but later they used disclosure as a mechanism for coping with the disease.¹¹¹ In a study in South Africa, many HIV-positive men and women waited substantial periods of time before disclosing to their

partners, including 15% who waited more than a year.⁷¹ Among a sample of gay Latino men in the United States, half disclosed to someone on the day they found out, and another 15% disclosed within a few days, but about 20% did not tell anyone for 1 year or more.⁵⁴ Among a sample of HIV-positive pregnant women in Tanzania, disclosure to a partner increased from 22% within 2 months of diagnosis to 40% after nearly 4 years.⁹¹ Other studies among heterosexual men and women, young people, and attendees of an outpatient HIV clinic found that disclosure had a positive association with the length of time since diagnosis^{15,20,34,65,112} and with disease progression.^{19,74,113}

Some qualitative studies explored differences among those who disclose and those who do not, such as the criteria motivating decisions, the process of communication, and coping styles. The results of these studies tended to converge around certain key points: selective disclosure is the most frequent strategy, a minority of people fall in the "never disclose" or "always disclose" categories, disclosure decisions have to be made repeatedly, and disclosure decisions change over time.^{7,41,114-117} Other qualitative studies have provided insight into the process whereby individuals weigh the risks (fear of abandonment and discrimination) and benefits (need for support) of disclosure before making a decision.¹¹⁸ These studies underscore the importance of relationships, trust, emotions, perceptions of self, and perceptions of HIV status. Most of these studies were conducted in the United



States, tended to emphasize the psychological aspects of disclosure, and focused on individual factors and processes, but some considered the social context of disclosure in Africa,^{77,106} and others analyzed the connections between the choices made by individuals and the ethical debates and social policies around HIV disclosure.¹¹⁹

ATTITUDES, REACTIONS, AND BEHAVIORS AFTER DISCLOSURE

Much has been written about the stigma associated with disclosure of HIV-positive status. Fear of stigma is thought to discourage disclosure, and disclosure has often been considered a proxy measure for stigma, because people living with HIV are more likely to disclose in low-stigma contexts, where they expect fewer negative consequences.¹²⁰ Conversely, there is a vast literature on discrimination (sometimes defined as enacted stigma) faced by those whose HIV status is disclosed by others, often without their consent. Women are thought to face special barriers related to fears of stigma, as documented in numerous sources.^{3,41,42,76,84,90,92,99,115,121-123} Research has drawn attention to negative consequences of disclosure, such as disrupted relationships with families and communities^{124,125}; isolation, criticism, and ostracism by family members^{68,126}; abuse, violence, divorce, or separation from partners; and rejection by friends.^{43,84,89,127}

However, it has been difficult to document the causal link between HIV disclosure and adverse events, in part because baseline

rates of negative experiences such as violence are often unknown, and because HIV-positive individuals who eventually face negative reactions often come from disadvantaged groups that are already at high risk for violence.¹²⁸ For example, although some evidence suggests that women with risk factors such as a history of drug use are more likely to experience negative social and physical consequences when their infection becomes known,^{43,129} violence was not significantly higher among a sample of HIV-positive women compared with demographically and behaviorally similar HIV-negative women in the United States.¹³⁰ Nevertheless, evidence indicates that fear of stigma, discrimination, and violence decreases willingness to disclose HIV status in many settings.^{3,115,121,125,131-138}

Reviews of the literature have shown that reactions to disclosure ranged from negative to neutral to supportive, and that negative reactions from family, friends, employers, and the community were relatively low—about 3% to 15% of cases.^{3,8,43,96,129} Studies in diverse contexts have documented high levels of supportive reactions to HIV-positive persons.^{68,119,139,140} For example, nearly half of the HIV-positive women in the often-cited study from Tanzania⁹⁰ reported that their partners were supportive, as did 73% of women in a Kenyan study.⁸⁴ Studies in South Africa found that reactions to disclosure included trust, support, and understanding,⁷⁴ and that 19% of disclosures resulted in kindness and 70% in no change of attitude.⁸⁹ A positive correlation between disclosure and social support has been

documented in a meta-analysis⁶ as well as in studies from contexts as varied as Greece, Kenya, South Africa, Tanzania, Trinidad, and the United States.^{13,18,44,71,90,139,141} However, these results must be interpreted in light of differences in types of populations and levels of disclosure. Reactions of support are more likely where HIV-positive individuals are not seen as responsible for getting HIV, whereas those seen as having been infected because of their own behavior may face negative reactions. In addition, low disclosure and high support may indicate that individuals are careful not to disclose their HIV status if they expect negative reactions.⁹²

Studies have also examined the behavioral outcomes of disclosure, including its possible effect on safer sex. Disclosure of HIV-positive status to partners has been associated with safer sexual practices in the United States,^{17,21,142,143} France,⁶⁰ and Cameroon.¹⁴⁴ Similarly, a study in South Africa found that condom use was higher (57%) among women who disclosed their status than it was among those who did not (38%).⁷³ Unprotected sex was also more frequent among groups of men who have sex with men, heterosexual men, and women who did not disclose than it was among those in each category who did.¹⁴⁵ Other risk behaviors, such as having multiple sexual partners, have also been associated with nondisclosure, as documented in a review.⁴ Studies among injection drug users and men who have sex with men in the United States revealed that sexual risk behaviors were highest among inconsistent disclosers, followed by

nondisclosers; consistent disclosers reported fewer sexual risk behaviors, although the evidence was not always unequivocal.^{51,56}

Indeed, not all studies have found an association between disclosure and safer behaviors.^{12,22,50,55,146,147} The difficulties of documenting effects and establishing the direction of causality are common to studies of prevention in general, and we found a literature review on disclosure that reported contradictory results, with positive effects sometimes limited to a subgroup of participants, such as HIV-negative partners or nonprimary partners.¹⁴⁸ These inconsistent results may be partly attributable to confounding factors such as alcohol or drug consumption, which increase risk-taking regardless of disclosure. In addition, because safer sex requires explicit discussions beyond simply disclosing HIV status,³⁵ the effect of disclosure needs to be considered in relation to other behaviors and attitudes.

DISCLOSURE, HEALTH SERVICES, AND HEALTH PROVIDERS

The influence of health services on disclosure has not been systematically examined, but we can piece together information on 3 interrelated questions: first, whether staff at health facilities contribute to reducing stigma and discrimination, thus normalizing HIV; second, whether they encourage disclosure by HIV-positive persons and promote testing and referral of partners and family members; and third, whether they are prepared to counsel and support those who are tested, to



facilitate voluntary disclosure and support.

The extent to which health facilities promote disclosure depends in part on whether they provide a supportive context for the difficult experience of being HIV positive. Evidence suggests that health facilities sometimes fall short in this regard. Discrimination against HIV-positive individuals was reported to occur when health workers treat them differently, use excessive precautions, or withhold appropriate care.¹⁴⁹⁻¹⁵¹ Fears of being treated poorly were reported more frequently by women than men. In Australian health facilities, more women than men reported fearing discrimination in the form of avoidance of treatment, extra precautions, and confidentiality problems, and in Kenyan maternity wards, health workers expressed anxiety when caring for women who may have been HIV positive and admitted that they used “extra care” in handling them; such situations contributed to delays and suboptimal care, such as reluctance to take HIV tests or to give birth at health facilities.¹⁵²⁻¹⁵⁴ These studies also reported that stigma and discrimination are declining.

Another indication of how disclosure is linked to health services comes from studies that examined its connection with adherence to antiretroviral therapy. Initiatives to provide antiretroviral therapy sometimes require that patients disclose to a supportive individual in their network, on the basis of a large body of evidence indicating that disclosure facilitates initiation of and adherence to antiretroviral therapy, whereas worries

about disclosure contribute to secrecy and missed medications.^{88,155-160} Most studies on the subject focus on adherence, and more information is needed about the process of disclosure when it is a condition for antiretroviral therapy.

Health facilities are often ill equipped to reassure PLWHA that they will be treated well, and health workers may not have the training to counsel patients or the competence to judge how to disclose patients’ HIV status or to whom it should be disclosed.^{161,162} For example, a study from Vietnam found that health workers felt so uncomfortable discussing HIV with patients that they avoided giving women their HIV test results directly; instead, they relied on the official notification system, which informs local district officials about the HIV status of people living in their catchment area without patients’ consent.¹⁶³ This nonconfidential process sometimes has serious social, economic, and health consequences for HIV-positive women and their children.

In addition, health workers sometimes communicate test results to individuals other than HIV-positive patients, as documented in numerous settings. For example, in a comparative study in India, Indonesia, the Philippines, and Thailand, 34% of HIV-positive respondents reported that health care workers had revealed their HIV status to someone else without their consent.¹⁵¹ One Indian study found that 61% of women reported that family members were given test results without the patient being consulted¹⁶⁴; another found that 35% of

respondents (male and female) reported that their HIV status was disclosed to friends or relatives without their consent (in 75% of cases the disclosure was made by health workers).⁹⁵ Similarly, a study in China found that health providers often informed family members of an HIV diagnosis before informing the patient.¹⁶⁵ One study suggested that privacy breaches by health workers in India were more frequent for female clients and in the private sector.¹⁶¹

Involuntary disclosure by health workers has been attributed in part to circumstances at health facilities, which often lack private spaces and where it is difficult to manage patient files without compromising confidentiality. More importantly, however, the issue of involuntary disclosure by health workers highlights the difficulty of balancing medical confidentiality with the need to facilitate disclosure to those around an HIV-positive person. Health workers are supposed to encourage testing of partners and family members and to promote disclosure to mobilize support for treatment and prevention, but these objectives are often incompatible with guaranteeing absolute patient confidentiality.

The difficulty of promoting partner disclosure is manifested in the low rates of partner referral.^{21,82,90,166} A review of 15 studies from sub-Saharan Africa and Asia found that partner disclosure by HIV-positive women ranged from 17% to 80%, with lower rates generally reported by women tested during antenatal care, compared with women undergoing voluntary HIV testing and

counseling.³ This finding suggests that the mode of testing makes a difference to HIV disclosure, but also that women’s vulnerability during pregnancy increases their reluctance to disclose.¹¹ For example, only 23% of partners of HIV-positive women attending a program on prevention of mother-to-child transmission in Côte d’Ivoire were subsequently tested for HIV.⁸³ Only 17% of HIV-positive pregnant women in a study in Tanzania reported their test results to their partners.⁹² The fact that 69% of partners who agreed to test were seropositive underscores the missed opportunity for prevention.

Some studies suggest that HIV-positive health workers find disclosure difficult because they worry that they may be stigmatized or that a positive diagnosis will mean they have failed as a role model. These fears may hamper their own ability to be tested, to disclose, and to promote testing, as documented among health workers in Kenya¹⁶² and Malawi.¹⁶⁷

Despite these difficulties, some studies have shown that health workers can help people cope with disclosure and its aftermath. In Sweden, contact with counselors increased the probability of disclosure by immigrant African families, filling a gap in their disrupted social network.⁶² In a study in China, good relations between patients and providers led to positive health outcomes after disclosure, particularly when families were unsupportive because of HIV-related stigma.¹⁶⁵ More evidence is needed to demonstrate how health workers can support HIV disclosure.



SOCIAL CONTEXT OF DISCLOSURE

Although frequencies and statistical associations provide useful information about levels of disclosure and their possible determinants, they also raise questions about differences in the meaning of disclosure, the consequences of disclosure, and the roles of health providers in different sociocultural settings. The evidence suggests that social context influences key dimensions of disclosure, in particular the notion of support, the role of the family, and the values surrounding disclosure.

Qualitative studies that examine individual experiences have shown that disclosure is closely related to expectations of support. These studies have also shown that disclosure is higher when individuals hope to receive help from those around them, and it is lower when they expect blame and discrimination. As a lengthy, potentially fatal illness, HIV infection represents a possible rupture of the rules of reciprocity that are the basis of social interactions, and a potential drain on resources for those around the ill person.¹⁶⁸ That is why, in diverse contexts—such as the Dominican Republic, Malawi, and Tanzania—individuals thinking about disclosure try to predict how others will react, based on the disclosers' perceived responsibility for the infection and on the quality of their relationships with those around them.^{76,77,86,133}

Emotional support is important everywhere, but in low-resource settings where services are deficient and individuals need material support from their families and

communities, there are stronger incentives to disclose. At the same time, however, there are also more risks in disclosing in these settings, precisely because PLWHA are explicitly or implicitly making immediate or future demands on those around them. Hence, a subtle difference can be discerned when comparing both qualitative and quantitative studies in resource-rich settings to those in resource-poor settings. Respondents in resource-rich settings, such as the United States and France, tended to describe disclosure as a way to obtain psychological support and relief from the stress of harboring a secret,^{18,58,102} whereas those in resource-poor settings, such as China, India, Kenya, Nigeria, and South Africa, mentioned expectations of financial and social support,^{70,72,169} emotional and material support,⁹⁵ and help with medical care and counseling.⁹³

Social context also shapes the extent to which disclosure decisions are made by others beyond the individual, as documented in both quantitative and qualitative research. In settings where adequate health services and social services are lacking and kinship bonds continue to be strong, families and communities may be seen as having responsibilities toward ill individuals and therefore as having a right to be informed about an HIV-positive result.^{93,125,147} If, as in India, close involvement of the family is thought to be in the best interest of the patient, then a health worker's breach of confidence can be seen as choosing to conform to local social norms rather than to national standards.¹⁶¹ In many settings,

physicians are thought to have the authority to decide on disclosure, as documented in a comparative study in Asia and the Middle East, where 80% of Saudi physicians reported that they would disclose a patient's HIV status to their family without his or her consent.¹⁷⁰ Practitioners often think they know better than poor or uneducated clients, particularly women, and they involve families as a way of recognizing hierarchies within families that lead some members to make health decisions on behalf of others.^{95,171} A qualitative study from Lesotho found that when health workers kept patients' HIV status strictly confidential, family caregivers sometimes lacked crucial information needed to secure appropriate medical care.¹⁷²

Thus, the social context of disclosure may define 2 competing sets of values: those designed to respect patients' privacy and confidentiality, and those meant to assist and protect those around the patient. Health workers may be caught between these conflicting values and may feel that they should provide information to family members, either to rally support for an HIV-positive person or because they feel some responsibility to those around that person if patients themselves refuse to disclose.¹⁷³

The legal context also influences the extent of disclosure and its consequences. A number of countries have enacted laws or formulated policies to encourage disclosure or to mandate disclosure to partners. This has happened in the United States,^{174,175} Canada,¹⁷⁶ Singapore,¹⁷⁷ and countries of west and central

Africa.^{178,179} In addition, mandatory premarital HIV testing and so-called "beneficial disclosure," which allows health workers to disclose patients' status without their consent, are being discussed in African countries.^{180,181} Elsewhere, as in some countries of the Middle East and north Africa, the majority of HIV testing appears to be mandatory, with no guidance on disclosure.¹⁸² These situations raise a number of ethical and legal issues that are beyond the scope of this article and about which much has been written. Here, it is important to note that the legal context has an impact on institutional support for disclosure at health facilities in the form of guidelines, protocols, programs, and other resources that enable health workers to help around disclosure. The legal context also affects individuals' perceived incentives and motivations for disclosure.

As a process of sharing information about a sensitive topic, HIV status disclosure takes on different meanings in different contexts. The absence of exact equivalents for the term "disclosure" in languages other than English testifies to the different connotations it can have (e.g., revealing a secret, admitting guilt, or simply stating a medical fact). These complex meanings are linked to moral and ethical valuations. The ethical and moral dimensions of deeply personal choices around sex and disclosure have been highlighted in a thoughtful US study,¹¹⁹ and comparable analyses are sorely needed to better understand the reality of moral challenges and how they are addressed in other settings. It has



been claimed that a policy focused on individual rights, confidentiality, and professional counseling distances the family and community from their role in providing HIV support¹⁷³ and may be incompatible with traditional notions of collective family responsibility.¹⁶⁵

The tension between the ethics of individualism and communalism is beyond the scope of this article, but it is clear that the difficulties of disclosure reflect the potential conflict between competing ethical values. Some authors argue that the right of sexual partners to be informed and protected is as important as the privacy of PLWHA¹⁸³ and that when respect for confidentiality increases the risks to third parties, then routine third-party disclosure may be the lesser of the evils.¹⁸⁴ Managing the value conflict underlying recommendations about disclosure represents an important challenge for all the actors involved—individual partners, health workers, and policymakers.⁴¹

CONCLUSIONS

The studies on disclosure that we have reviewed here show that, first, although disclosure is difficult, few people keep their HIV status completely secret. Levels of disclosure are generally high, but lower levels are documented among certain populations, particularly women tested during prenatal care. This finding suggests that attention should be directed to these groups to better understand circumstances that favor or hinder disclosure. Second, not all studies on disclosure disaggregate results by respondents' HIV status;

but this information is essential, because HIV-positive status is consistently linked to lower disclosure rates, a point that underscores the prevention implications of lower disclosure among those more likely to transmit the infection. Third, disclosure is more uniformly high in the high-income countries of Europe and the United States, and frequency variations are wider in low- and middle-income countries. These differences likely reflect differential availability of and access to resources to deal with HIV and its consequences. Fourth, women appear to disclose, and to receive disclosure, more frequently than do men, but married and pregnant women encounter special difficulties with partner disclosure. Further research should seek to identify those specific gender-related factors that may facilitate disclosure and mitigate its negative consequences.

Analyses of disclosure as a process show that decisions regarding what information to disclose, to whom, and when are iterative and selective, such that partial and gradual disclosure to a growing number of people is more common than is one-time full disclosure to all; also, disclosure to sexual partners is often more difficult than to others. The implications of these results are clear: partner disclosure deserves special attention, given its consequences for transmission; initiatives to support disclosure need to be ongoing, rather than focusing on a single point in time; and counseling cannot be the same at all stages but should consider evolving motivations and consequences.

A main goal of this review was to assess the extent to which health facilities and health workers facilitated disclosure. We found that health worker facilitation of disclosure was limited by the potential for discrimination at health facilities, the limited counseling abilities of many health workers, and health workers' own fears and concerns regarding HIV. The relatively high frequencies of health workers disclosing people's HIV status without their consent and the low levels of partner disclosure, particularly in less developed countries, testify to the difficult balance between encouraging disclosure and keeping HIV status confidential. Health workers on the front lines need support as they negotiate these complicated situations.

At the same time, however, a number of reports indicate that health workers can help with disclosure, provided that they are supported in multiple ways. There have been calls to give nurses a role in assisting women with their disclosure decisions,¹¹⁵ to support community- or home-based HIV care programs,¹⁸⁵ to facilitate couple counseling, and to promote disclosure while reducing the risk of discrimination and violence against women. The successes reported by some programs suggest promising possibilities, such as strengthening health workers' communication skills and increasing their perceived self-efficacy, providing ongoing support for women working through disclosure decisions, and mediating disclosure through counselors in the clinic or through friends or family members outside the clinic.¹⁸⁶ In

Rwanda, a package of strategies—including systematic couple counseling and community-based campaigns—seems to have overcome some barriers to disclosure and has increased the uptake of HIV testing by male partners of pregnant women from 7% in 1999 to 84% in 2009.¹⁸⁷ Further evidence is needed to identify the optimal combination of interventions that would support health workers' efforts to facilitate disclosure while ensuring that disclosure is used as the basis for mobilizing support for those who need it.

We also found differences in the meaning of disclosure across settings. Although emotional factors related to relationships and trust influenced motivations to disclose everywhere, respondents from resource-rich settings put a somewhat greater emphasis on psychological relief, whereas those in resource-poor settings more often referred to needs for material support and caregiving as a reason for disclosing. These motivations may change with increased access to free treatment, however, as individuals have less need to disclose to their families to obtain material support and have greater access to support groups. Thus, the meaning of disclosure may shift from divulging a secret to sharing a new identity built on serostatus.

The ethical dilemmas resulting from competing values—the confidentiality of patient information versus the need to inform and protect others around the PLWHA—are especially marked in contexts in which family and community remain important structures and in which relatives



and community members are expected to play a major role in medical decision-making, care giving, and material support for PLWHA. Cross-cultural comparisons of what constitutes communities and of the values attached to consent and confidentiality show a great deal of variation.¹⁸⁸⁻¹⁹⁰ A better understanding of how confidentiality is perceived in different cultural contexts can help identify areas of flexibility that can be used to facilitate disclosure where appropriate. Support for disclosure cannot wait for a resolution of the ethical dilemmas around confidentiality, but the debates around disclosure and the policies that are formulated to promote it should, at a minimum, be informed by evidence on how individuals in the field address these situations.

Research also confirms the reciprocal connections among stigma, social support, and disclosure. Expectations of support are a crucial factor in the decisions of PLWHA to disclose, and reactions to these disclosures are, in part, influenced by the sacrifices that may be required from those around them. Stigmatization increases these potential sacrifices, and support services reduce them. Thus, fears around disclosure reflect available levels of resources and social support. Taken together, these results suggest that structural changes—including making more services available to support PLWHA, their families, and communities—could be as important as individual approaches or the provision of counseling. ■

About the Authors

Carla Makhoul Obermeyer is with the Department of HIV/AIDS, World Health Organization, Geneva, Switzerland. Parijat Baijal is with the Global Fund to Fight AIDS, Tuberculosis and Malaria, Geneva, Switzerland. Elisabetta Pegurri is with UNAIDS, Geneva, Switzerland.

Correspondence should be sent to Carla Makhoul Obermeyer, Department of HIV/AIDS, World Health Organization, 20 Ave Appia, 1211 Geneva, Switzerland (e-mail: obermeyer@who.int). Reprints can be ordered at <http://www.ajph.org> by clicking the "Reprints/Eprints" button.

This article was accepted December 9, 2010.

Note. The views expressed here are those of the authors and do not represent those of the World Health Organization; the Global Fund to Fight AIDS, Tuberculosis and Malaria; or UNAIDS.

Contributors

C. M. Obermeyer conceptualized the study, coordinated the analyses, and led the writing of the article. P. Baijal and E. Pegurri conducted the searches, summarized the results, and participated in writing the article.

Human Participant Protection

No protocol approval was necessary because the study did not involve any human research participants.

References

1. Pinkerton SD, Galletly CL. Reducing HIV transmission risk by increasing serostatus disclosure: a mathematical modeling analysis. *AIDS Behav*. 2007; 11(5):698–705.
2. UNAIDS. *Opening up the HIV/AIDS Epidemic: Guidance on Encouraging Beneficial Disclosure, Ethical Partner Counselling & Appropriate Use of HIV Case-Reporting*. Geneva, Switzerland: UNAIDS; 2000.
3. Medley A, Garcia-Moreno C, McGill S, Maman S. Rates, barriers and outcomes of HIV serostatus disclosure among women in developing countries: implications for prevention of mother-to-child transmission programmes. *Bull World Health Organ*. 2004;82(4):299–307.
4. Sullivan KM. Male self-disclosure of HIV-positive serostatus to sex partners: a review of the literature. *J Assoc Nurses AIDS Care*. 2005;16(6):33–47.
5. Murphy DA. HIV-positive mothers' disclosure of their serostatus to their

young children: a review. *Clin Child Psychol Psychiatry*. 2008;13(1):105–122.

6. Smith R, Rossetto K, Peterson BL. A meta-analysis of disclosure of one's HIV-positive status, stigma and social support. *AIDS Care*. 2008;20(10):1266–1275.

7. Mayfield Arnold E, Rice E, Flannery D, Rotheram-Borus MJ. HIV disclosure among adults living with HIV. *AIDS Care*. 2008;20(1):80–92.

8. Passin WF, Kim AS, Hutchinson AB, Crepez N, Herbst JH, Lyles CM. A systematic review of HIV partner counseling and referral services: client and provider attitudes, preferences, practices, and experiences. *Sex Transm Dis*. 2006;33(5): 320–328.

9. Dunkle KL, Stephenson R, Karita E, et al. New heterosexually transmitted HIV infections in married or cohabiting couples in urban Zambia and Rwanda: an analysis of survey and clinical data. *Lancet*. 2008;371(9631):2183–2191.

10. Obermeyer CM, Bott S, Carrieri P, et al. *HIV Testing, Treatment and Prevention: Generic Tools for Operational Research*. Geneva, Switzerland: World Health Organization; 2009.

11. Obermeyer CM, Osborn M. The utilization of testing and counseling for HIV: a review of the social and behavioral evidence. *Am J Public Health*. 2007; 97(10):1762–1774.

12. Marks G, Crepez N. HIV-positive men's sexual practices in the context of self-disclosure of HIV status. *J Acquir Immune Defic Syndr*. 2001;27(1):79–85.

13. Grinstead OA, Gregorich SE, Choi KH, Coates T. Positive and negative life events after counseling and testing: the Voluntary HIV-1 Counselling and Testing Efficacy Study. *AIDS*. 2001;15(8):1045–1052.

14. Mohammed H, Kissinger P. Disclosure of HIV serostatus to sex partners in rural Louisiana. *AIDS Care*. 2006;18(suppl 1): S62–S69.

15. Nicolai LM, King E, D'Entremont D, Pritchett EN. Disclosure of HIV serostatus to sex partners: a new approach to measurement. *Sex Transm Dis*. 2006;33(2): 102–105.

16. Wiener LS, Battles HB. Untangling the web: a close look at diagnosis disclosure among HIV-infected adolescents. *J Adolesc Health*. 2006;38(3):307–309.

17. Weinhardt LS, Kelly JA, Brondino MJ, et al. HIV transmission risk behavior among men and women living with HIV

in 4 cities in the United States. *J Acquir Immune Defic Syndr*. 2004;36(5):1057–1066.

18. Kalichman SC, DiMarco M, Austin J, Luke W, DiFonzo K. Stress, social support, and HIV-status disclosure to family and friends among HIV-positive men and women. *J Behav Med*. 2003;26(4):315–332.

19. O'Brien ME, Richardson-Alston G, Ayoub M, Magnus M, Peterman TA, Kissinger P. Prevalence and correlates of HIV serostatus disclosure. *J Adolesc Dis*. 2003;30(9):731–735.

20. D'Angelo LJ, Abdalian SE, Sarr M, Hoffman N, Belzer M. Disclosure of serostatus by HIV infected youth: the experience of the REACH study. *J Adolesc Health*. 2001;29(3, suppl. 1):72–79.

21. Kalichman SC, Nachimson D. Self-efficacy and disclosure of HIV-positive serostatus to sex partners. *Health Psychol*. 1999;18(3):281–287.

22. Lee M, Rotheram-Borus MJ, O'Hara P. Disclosure of serostatus among youth living with HIV. *AIDS Behav*. 1999;3(1): 33–40.

23. Nicolai LM, Dorst D, Myers L, Kissinger PJ. Disclosure of HIV status to sexual partners: predictors and temporal patterns. *Sex Transm Dis*. 1999;26(5): 281–285.

24. Delaney RO, Serovich JM, Lim JY. Reasons for and against maternal HIV disclosure to children and perceived child reaction. *AIDS Care*. 2008;20(7):876–880.

25. Corona R, Beckett MK, Cowgill BO, et al. Do children know their parent's HIV status? Parental reports of child awareness in a nationally representative sample. *Ambul Pediatr*. 2006;6(3):138–144.

26. Kirshenbaum SB, Nevid JS. The specificity of maternal disclosure of HIV/AIDS in relation to children's adjustment. *AIDS Educ Prev*. 2002;14(1):1–16.

27. Lee MB, Rotheram-Borus MJ. Parents' disclosure of HIV to their children. *AIDS*. 2002;16(16):2201–2207.

28. Schrimshaw EW, Siegel K. HIV-infected mothers' disclosure to their uninfected children: rates, reasons, and reactions. *J Soc Pers Relat*. 2002;19(1): 19–43.

29. Armistead L, Tannenbaum L, Forehand R, Morse E, Morse P. Disclosing HIV status: are mothers telling their children? *J Pediatr Psychol*. 2001;26(1): 11–20.



30. Murphy DA, Steers WN, Dello Stritto ME. Maternal disclosure of mothers' HIV serostatus to their young children. *J Fam Psychol*. 2001;15(3):441-450.
31. Shaffer A, Jones DJ, Kotchick BA, Forehand R. Telling the children: disclosure of maternal HIV infection and its effects on child psychosocial adjustment. *J Child Fam Stud*. 2001;10(3):301-313.
32. Simoni JM, Davis ML, Drossman JA, Weinberg BA. Mothers with HIV/AIDS and their children: disclosure and guardianship issues. *Women Health*. 2000;31(1):39-54.
33. Rotheram-Borus MJ, Drainin BH, Reid HM, Murphy DA. The impact of illness disclosure and custody plans on adolescents whose parents live with AIDS. *AIDS*. 1997;11(9):1159-1164.
34. Emler CA. A comparison of HIV stigma and disclosure patterns between older and younger adults living with HIV/AIDS. *AIDS Patient Care STDS*. 2006;20(5):350-358.
35. Crepaz N, Marks G. Serostatus disclosure, sexual communication and safer sex in HIV-positive men. *AIDS Care*. 2003;15(3):379-387.
36. Stein MD, Freedberg KA, Sullivan LM, et al. Sexual ethics. Disclosure of HIV-positive status to partners. *Arch Intern Med*. 1998;158(3):253-257.
37. Armistead L, Morse E, Forehand R, Morse P, Clark L. African-American women and self-disclosure of HIV infection: rates, predictors, and relationship to depressive symptomatology. *AIDS Behav*. 1999;3(3):195-204.
38. Comer LK, Henker B, Kemeny M, Wyatt G. Illness disclosure and mental health among women with HIV/AIDS. *J Community Appl Soc Psychol*. 2000;10(6):449-464.
39. Serovich JM, Craft SM, Yoon HJ. Women's HIV disclosure to immediate family. *AIDS Patient Care STDS*. 2007;21(12):970-980.
40. Ateka GK. HIV status disclosure and partner discordance: a public health dilemma. *Public Health*. 2006;120(6):493-496.
41. Sowell RL, Seals BF, Phillips KD, Julious CH. Disclosure of HIV infection: how do women decide to tell? *Health Educ Res*. 2003;18(1):32-44.
42. Gielen AC, O'Campo P, Faden RR, Eke A. Women's disclosure of HIV status: experiences of mistreatment and violence in an urban setting. *Women Health*. 1997;25(3):19-31.
43. Gielen AC, Fogarty L, O'Campo P, Anderson J, Keller J, Faden R. Women living with HIV: disclosure, violence, and social support. *J Urban Health*. 2000;77(3):480-491.
44. Simoni JM, Demas P, Mason HRC, Drossman JA, Davis ML. HIV disclosure among women of African descent: associations with coping, social support, and psychological adaptation. *AIDS Behav*. 2000;4(2):147-158.
45. Sowell RL, Lowenstein A, Moneyham L, Demi A, Mizuno Y, Seals BF. Resources, stigma, and patterns of disclosure in rural women with HIV infection. *Public Health Nurs*. 1997;14(5):302-312.
46. Simon Rosser BR, Horvath KJ, Hatfield LA, Peterson JL, Jacoby S, Stately A. Predictors of HIV disclosure to secondary partners and sexual risk behavior among a high-risk sample of HIV-positive MSM: results from six epicenters in the US. *AIDS Care*. 2008;20(8):925-930.
47. Klitzman R, Exner T, Correale J, et al. It's not just what you say: relationships of HIV disclosure and risk reduction among MSM in the post-HAART era. *AIDS Care*. 2007;19(6):749-756.
48. Carballo-Dieguez A, Miner M, Dolezal C, Rosser BR, Jacoby S. Sexual negotiation, HIV-status disclosure, and sexual risk behavior among Latino men who use the Internet to seek sex with other men. *Arch Sex Behav*. 2006;35(4):473-481.
49. Patel P, Taylor MM, Montoya JA, Hamburger ME, Kerndt PR, Holmberg SD. Circuit parties: sexual behaviors and HIV disclosure practices among men who have sex with men at the White Party, Palm Springs, California, 2003. *AIDS Care*. 2006;18(8):1046-1049.
50. Hart TA, Wolitski RJ, Purcell DW, Parsons JT, Gomez CA. Partner awareness of the serostatus of HIV-seropositive men who have sex with men: impact on unprotected sexual behavior. *AIDS Behav*. 2005;9(2):155-166.
51. Parsons JT, Schrimshaw EW, Bimbi DS, Wolitski RJ, Gomez CA, Halkitis PN. Consistent, inconsistent, and non-disclosure to casual sexual partners among HIV-seropositive gay and bisexual men. *AIDS*. 2005;19(suppl 1):S87-S97.
52. Serovich JM, Esbensen AJ, Mason TL. HIV disclosure by men who have sex with men to immediate family over time. *AIDS Patient Care STDS*. 2005;19(8):506-517.
53. Zea MC, Reisen CA, Poppen PJ, Bianchi FT, Echeverry JJ. Disclosure of HIV status and psychological well-being among Latino gay and bisexual men. *AIDS Behav*. 2005;9(1):15-26.
54. Zea MC, Reisen CA, Poppen PJ, Echeverry JJ, Bianchi FT. Disclosure of HIV-positive status to Latino gay men's social networks. *Am J Community Psychol*. 2004;33(1-2):107-116.
55. Wolitski RJ, Rietmeijer CA, Goldbaum GM, Wilson RM. HIV serostatus disclosure among gay and bisexual men in four American cities: general patterns and relation to sexual practices. *AIDS Care*. 1998;10(5):599-610.
56. Parsons JT, Missildine W, Van Ora J, Purcell DW, Gomez CA. HIV serostatus disclosure to sexual partners among HIV-positive injection drug users. *AIDS Patient Care STDS*. 2004;18(8):457-469.
57. Latkin CA, Knowlton AR, Forman VL, et al. Injection drug users' disclosure of HIV seropositive status to network members. *AIDS Behav*. 2001;5(4):297-305.
58. Levy A, Laska F, Abelhauser A, et al. Disclosure of HIV seropositivity. *J Clin Psychol*. 1999;55(9):1041-1049.
59. Preau M, Bouhnik AD, Roussiau N, Lert F, Spire B. Disclosure and religion among people living with HIV/AIDS in France. *AIDS Care*. 2008;20(5):521-526.
60. Spire B, Bouhnik AD, Obadia Y, Lert F. Concealment of HIV and unsafe sex with steady partner is extremely infrequent. *AIDS*. 2005;19(13):1431-1433.
61. Amirhanian YA, Kelly JA, McAuliffe TL. Psychosocial needs, mental health, and HIV transmission risk behavior among people living with HIV/AIDS in St Petersburg, Russia. *AIDS*. 2003;17(16):2367-2374.
62. Åsander A-S, Belfrage E, Pehrson P-O, Lindstein T, Björkman A. HIV-infected African families living in Stockholm/Sweden: their social network, level of disclosure and knowledge about HIV. *Int J Soc Welf*. 2004;13(1):77-88.
63. Elford J, Ibrahim F, Bukutu C, Anderson J. Disclosure of HIV status: the role of ethnicity among people living with HIV in London. *J Acquir Immune Defic Syndr*. 2008;47(4):514-521.
64. Erwin J, Morgan M, Britten N, Gray K, Peters B. Pathways to HIV testing and care by Black African and White patients in London. *Sex Transm Infect*. 2002;78(1):37-39.
65. Petrak JA, Doyle AM, Smith A, Skinner C, Hedge B. Factors associated with self-disclosure of HIV serostatus to significant others. *Br J Health Psychol*. 2001;6(pt 1):69-79.
66. Nostlinger C, Jonckheer T, de Belder E, et al. Families affected by HIV: parents' and children's characteristics and disclosure to the children. *AIDS Care*. 2004;16(5):641-648.
67. Forbes KM, Lomax N, Cunningham L, et al. Partner notification in pregnant women with HIV: findings from three inner-city clinics. *HIV Med*. 2008;9(6):433-435.
68. Ouedraogo T, Ouedraogo A, Ouedraogo V, Kyelem N, Soubéiga A. HIV infection and modification of social relationships: study of 188 HIV-infected persons in Ouagadougou (Burkina Faso) [in French]. *Cahiers d'Études et de Recherches Francophones*. 2005;15(4):256-257.
69. Deribe K, Woldemichael K, Wondafrash M, Haile A, Amberbir A. Disclosure experience and associated factors among HIV positive men and women clinical service users in Southwest Ethiopia. *BMC Public Health*. 2008;8:81.
70. Akani CI, Erhabor O. Rate, pattern and barriers of HIV serostatus disclosure in a resource-limited setting in the Niger delta of Nigeria. *Trop Doct*. 2006;36(2):87-89.
71. Skogmar S, Shakely D, Lans M, et al. Effect of antiretroviral treatment and counselling on disclosure of HIV-serostatus in Johannesburg, South Africa. *AIDS Care*. 2006;18(7):725-730.
72. Sethosa E, Peltzer K. Evaluation of HIV counselling and testing, self-disclosure, social support and sexual behaviour change among a rural sample of HIV reactive patients in South Africa. *Curatoinis*. 2005;28(1):29-41.
73. Olley BO, Seedat S, Stein DJ. Self-disclosure of HIV serostatus in recently diagnosed patients with HIV in South Africa. *Afr J Reprod Health*. 2004;8(2):71-76.
74. Sigxashe TA, Baggaley R, Mathews C. Attitudes to disclosure of HIV status to sexual partners. *S Afr Med J*. 2001;91(11):908-909.
75. King R, Katuntu D, Lifshay J, et al. Processes and outcomes of HIV serostatus disclosure to sexual partners among people living with HIV in Uganda. *AIDS Behav*. 2008;12(2):232-243.



76. Maman S, Mbwapo J, Hogan NM, Kilonzo GP, Sweat M. Women's barriers to HIV-1 testing and disclosure: challenges for HIV-1 voluntary counseling and testing. *AIDS Care*. 2001;13(5):595-603.
77. Lugalla JLP, Madihi CM, Sigalla HL, Mrutu NE, Yoder PS. *Social Context of Disclosing HIV Test Results: HIV Testing in Tanzania*. Dar es Salaam, Tanzania: Centre for Strategic Research and Development and Macro International; 2008. DHS Qualitative Research Studies 15.
78. Denison JA, McCauley AP, Dunnett-Dagg WA, Lungu N, Sweat MD. The HIV testing experiences of adolescents in Ndola, Zambia: do families and friends matter? *AIDS Care*. 2008;20(1):101-105.
79. Palin FL, Armistead L, Clayton A, et al. Disclosure of maternal HIV-infection in South Africa: description and relationship to child functioning. *AIDS Behav*. 2009;13(6):1241-1252.
80. Rwemisi J, Wolff B, Coutinho A, Grosskurth H, Whitworth J. 'What if they ask how I got it?' Dilemmas of disclosing parental HIV status and testing children for HIV in Uganda. *Health Policy Plan*. 2008;23(1):36-42.
81. Issiaka S, Cartoux M, Ky-Zerbo O, et al. Living with HIV: women's experience in Burkina Faso, West Africa. *AIDS Care*. 2001;13(1):123-128.
82. Nebie Y, Meda N, Leroy V, et al. Sexual and reproductive life of women informed of their HIV seropositivity: a prospective cohort study in Burkina Faso. *J Acquir Immune Defic Syndr*. 2001;28(4):367-372.
83. Brou H, Djohan G, Becquet R, et al. When do HIV-infected women disclose their HIV status to their male partner and why? A study in a PMTCT programme, Abidjan. *PLoS Med*. 2007;4(12):e342.
84. Gaillard P, Melis R, Mwanyumba F, et al. Vulnerability of women in an African setting: lessons for mother-to-child HIV transmission prevention programmes. *AIDS*. 2002;16(6):937-939.
85. Farquhar C, Mbori-Ngacha DA, Bosire RK, Nduati RW, Kreiss JK, John GC. Partner notification by HIV-1 seropositive pregnant women: association with infant feeding decisions. *AIDS*. 2001;15(6):815-817.
86. Bobrow EA, Chasela C, Kamanga E, et al. Factors associated with HIV disclosure patterns by pregnant HIV-positive women in Lilongwe, Malawi. Poster presented at: 17th International AIDS Conference; August 3-8, 2008; Mexico City, Mexico. Abstract THPE0703.
87. Visser MJ, Neufeld S, de Villiers A, Makin JD, Forsyth BW. To tell or not to tell: South African women's disclosure of HIV status during pregnancy. *AIDS Care*. 2008;20(9):1138-1145.
88. Varga CA, Sherman GG, Jones SA. HIV-disclosure in the context of vertical transmission: HIV-positive mothers in Johannesburg, South Africa. *AIDS Care*. 2006;18(8):952-960.
89. Kuhn L, Mathews C, Fransman D, Dikweni L, Hussey G. Child feeding practices of HIV-positive mothers in Cape Town, South Africa. *AIDS*. 1999;13(1):144-146.
90. Maman S, Mbwapo JK, Hogan NM, Weiss E, Kilonzo GP, Sweat MD. High rates and positive outcomes of HIV-serostatus disclosure to sexual partners: reasons for cautious optimism from a voluntary counseling and testing clinic in Dar es Salaam, Tanzania. *AIDS Behav*. 2003;7(4):373-382.
91. Antelman G, Smith Fawzi MC, Kaaya S, et al. Predictors of HIV-1 serostatus disclosure: a prospective study among HIV-infected pregnant women in Dar es Salaam, Tanzania. *AIDS*. 2001;15(14):1865-1874.
92. Kilewo C, Massawe A, Lyamuya E, et al. HIV counseling and testing of pregnant women in sub-Saharan Africa: experiences from a study on prevention of mother-to-child HIV-1 transmission in Dar es Salaam, Tanzania. *J Acquir Immune Defic Syndr*. 2001;28(5):458-462.
93. Li L, Sun S, Wu Z, Wu S, Lin C, Yan Z. Disclosure of HIV status is a family matter: field notes from China. *J Fam Psychol*. 2007;21(2):307-314.
94. Mulye R, Raja T, Menon M, Pereira J, Barnes BL. Confidentiality, stigma, discrimination and voluntary disclosures: experiences of people living with HIV/AIDS. *Indian J Soc Work*. 2005;66(3):310-322.
95. Chandra PS, Deepthivarma S, Manjula V. Disclosure of HIV infection in south India: patterns, reasons and reactions. *AIDS Care*. 2003;15(2):207-215.
96. Taraphdar P, Dasgupta A, Saha B. Disclosure among people living with HIV/AIDS. *Indian J Community Med*. 2007;32(4):280-282.
97. Ko NY, Lee HC, Hsu ST, Wang WL, Huang MC, Ko WC. Differences in HIV disclosure by modes of transmission in Taiwanese families. *AIDS Care*. 2007;19(6):791-798.
98. Sugadev M, Swaminathan S, Devaraj S. Disclosure patterns of HIV-infected men in South India. Paper presented at: 17th International AIDS Conference; August 3-8, 2008; Mexico City, Mexico. Abstract WEAD0303.
99. Manopaiboon C, Shaffer N, Clark L, et al. Impact of HIV on families of HIV-infected women who have recently given birth, Bangkok, Thailand. *J Acquir Immune Defic Syndr Hum Retrovirol*. 1998;18(1):54-63.
100. Go VF, Quan VM, Voytek C, Celentano D, Nam le V. Intra-couple communication dynamics of HIV risk behavior among injecting drug users and their sexual partners in Northern Vietnam. *Drug Alcohol Depend*. 2006;84(1):69-76.
101. Bouillon K, Lert F, Sitta R, Schmaus A, Spire B, Dray-Spira R. Factors correlated with disclosure of HIV infection in the French Antilles and French Guiana: results from the ANRS-EN13-VESPA-DFA study. *AIDS*. 2007;21(suppl 1):S89-S94.
102. Krumbach U, Sarker M, Neuhaun F. To disclose or not to disclose: the interaction between disclosure of HIV status, adherence and treatment outcome: a literature review. Paper presented at: 17th International AIDS Conference; August 3-8, 2008; Mexico City, Mexico. Abstract WEAD0302.
103. Deribe K, Woldemichael K, Bernard N, Yakob B. Gender difference in HIV status disclosure among HIV positive service users. *East Afr J Public Health*. 2009;6(3):248-255.
104. Lemma F, Habte D. The status of HIV positive serostatus disclosure to regular partners in Central Ethiopia, 2007. Paper presented at: 17th International AIDS Conference; August 3-8, 2008; Mexico City, Mexico. Abstract THPE0437.
105. Ndiaye C, Boileau C, Koala S, et al. Gender and partner notification in community and hospital based cohorts receiving ART in Burkina Faso and Mali. Paper presented at: 16th International AIDS Conference; August 13-18, 2006; Toronto, Canada. Abstract THPE0625.
106. Norman A, Chopra M, Kadiyala S. Factors related to HIV disclosure in 2 South African communities. *Am J Public Health*. 2007;97(10):1775-1781.
107. Vance D. The relationship between HIV disclosure and adjustment. *Psychol Rep*. 2006;99(3):659-663.
108. Padilla M, Castellanos D, Guilam-Ramos V, Reyes AM, Sanchez Marte LE, Soriano MA. Stigma, social inequality, and HIV risk disclosure among Dominican male sex workers. *Soc Sci Med*. 2008;67(3):380-388.
109. Montaner M, Pacey K, Pelltier L, Tyndall M, Shannon K. HIV disclosure laws within a criminalized sex industry: the failure of prevention strategies and policy to protect the basic human rights of sex workers. Paper presented at: 17th International AIDS Conference; August 3-8, 2008; Mexico City, Mexico. Abstract THAE0305.
110. De Baets AJ, Sifovo S, Parsons R, Pazvakavambwa IE. HIV disclosure and discussions about grief with Shona children: a comparison between health care workers and community members in Eastern Zimbabwe. *Soc Sci Med*. 2008;66(2):479-491.
111. Holt R, Court P, Vedhara K, Nott KH, Holmes J, Snow MH. The role of disclosure in coping with HIV infection. *AIDS Care*. 1998;10(1):49-60.
112. Batterham P, Rice E, Rotherham-Borus MJ. Predictors of serostatus disclosure to partners among young people living with HIV in the pre- and post-HAART eras. *AIDS Behav*. 2005;9(3):281-287.
113. Shehan CL, Uphold CR, Bradshaw P, Bender J, Arce N, Bender B. To tell or not to tell: men's disclosure of their HIV-positive status to their mothers. *Fam Relat*. 2005;54(2):184-196.
114. Baumgartner LM. The incorporation of the HIV/AIDS identity into the self over time. *Qual Health Res*. 2007;17(7):919-931.
115. Black BP, Miles MS. Calculating the risks and benefits of disclosure in African American women who have HIV. *J Obstet Gynecol Neonatal Nurs*. 2002;31(6):688-697.
116. Cusick L. The process of disclosing positive HIV status: findings from qualitative research. *Cult Health Sex*. 1999;1(1):3-18.
117. Serovich JM. A test of two HIV disclosure theories. *AIDS Educ Prev*. 2001;13(4):355-364.
118. Derlega VJ, Winstead BA, Greene K, Serovich J, Elwood W. Reasons for HIV disclosure/nondisclosure in close relationships: testing a model of HIV-



- disclosure decision making. *J Soc Clin Psychol.* 2004;23(6):747-767.
119. Klitzman R, Bayer R. *Mortal Secrets: Truth and Lies in the Age of AIDS.* Baltimore, MD: Johns Hopkins University Press; 2003.
120. Nyblade L, MacQuarrie K. *Can We Measure HIV/AIDS Related Stigma and Discrimination? Current Knowledge About Quantifying Stigma in Developing Countries.* Washington, DC: USAID, ICRW, and the POLICY Project; 2006.
121. Clark HJ, Lindner G, Armistead L, Austin BJ. Stigma, disclosure, and psychological functioning among HIV-infected and non-infected African-American women. *Women Health.* 2003;38(4):57-71.
122. Pool R, Nyanzi S, Whitworth JA. Attitudes to voluntary counselling and testing for HIV among pregnant women in rural south-west Uganda. *AIDS Care.* 2001;13(5):605-615.
123. Chin D, Kroesen KW. Disclosure of HIV infection among Asian/Pacific Islander American women: cultural stigma and support. *Cultur Divers Ethnic Minor Psychol.* 1999;5(3):222-235.
124. Korner H. Negotiating cultures: disclosure of HIV-positive status among people from minority ethnic communities in Sydney. *Cult Health Sex.* 2007;9(2):137-152.
125. Yoshioka MR, Schustack A. Disclosure of HIV status: cultural issues of Asian patients. *AIDS Patient Care STDS.* 2001;15(2):77-82.
126. Obi SN, Ifebunandu NA. Consequences of HIV testing without consent. *Int J STD AIDS.* 2006;17(2):93-96.
127. Semrau K, Kuhn L, Vwalika C, et al. Women in couples antenatal HIV counseling and testing are not more likely to report adverse social events. *AIDS.* 2005;19(6):603-609.
128. Koenig LJ, Moore J. Women, violence, and HIV: a critical evaluation with implications for HIV services. *Matern Child Health J.* 2000;4(2):103-109.
129. Gielen AC, McDonnell KA, Burke JG, O'Campo P. Women's lives after an HIV-positive diagnosis: disclosure and violence. *Matern Child Health J.* 2000;4(2):111-120.
130. Koenig LJ, Whitaker DJ, Royce RA, Wilson TE, Callahan MR, Fernandez MI. Violence during pregnancy among women with or at risk for HIV infection. *Am J Public Health.* 2002;92(3):367-370.
131. Crosby R, Bonney EA, Odenat L. Correlates of perceived difficulty in potentially disclosing HIV-positive test results: a study of low-income women attending an urban clinic. *Sex Health.* 2005;2(2):103-107.
132. Green S, Rice E, Comulada S, Rotheram-Borus MJ. Serostatus disclosure within the social network ties of women living with HIV/AIDS. Poster presented at: 17th International AIDS Conference; August 3-8, 2008; Mexico City, Mexico. Abstract THPE0688.
133. Ortiz CE. Disclosing concerns of Latinas living with HIV/AIDS. *J Transcult Nurs.* 2005;16(3):210-217.
134. Pulerwitz J, Michaelis AP, Lippman SA, Chinaglia M, Diaz J. HIV-related stigma, service utilization, and status disclosure among truck drivers crossing the southern borders in Brazil. *AIDS Care.* 2008;20(7):764-770.
135. Ford K, Wirawan DN, Sumantera GM, Sawitri AA, Stahre M. Voluntary HIV testing, disclosure, and stigma among injection drug users in Bali, Indonesia. *AIDS Educ Prev.* 2004;16(6):487-498.
136. Dias SF, Matos MG, Goncalves AC. AIDS-related stigma and attitudes towards AIDS-infected people among adolescents. *AIDS Care.* 2006;18(3):208-214.
137. Liu H, Hu Z, Li X, Stanton B, Naar-King S, Yang H. Understanding interrelationships among HIV-related stigma, concern about HIV infection, and intent to disclose HIV serostatus: a pretest-post-test study in a rural area of eastern China. *AIDS Patient Care STDS.* 2006;20(2):133-142.
138. Simbayi LC, Kalichman SC, Strebel A, Cloete A, Henda N, Mqeketo A. Disclosure of HIV status to sex partners and sexual risk behaviours among HIV-positive men and women, Cape Town, South Africa. *Sex Transm Infect.* 2007;83(1):29-34.
139. Sachperoglou E, Bor R. Disclosure of HIV seropositivity and social support: general patterns in Greece. *Eur J Psychother Couns.* 2001;4(1):103-122.
140. Katz A. 'Mom, I have something to tell you'—disclosing HIV infection. *J Adv Nurs.* 1997;25(1):139-143.
141. Skhosana NL, Struthers H, Gray GE, McIntyre JA. HIV disclosure and other factors that impact on adherence to antiretroviral therapy: the case of Soweto, South Africa. *Afr J AIDS Res.* 2006;5(1):17-26.
142. De Rosa CJ, Marks G. Preventive counseling of HIV-positive men and self-disclosure of serostatus to sex partners: new opportunities for prevention. *Health Psychol.* 1998;17(3):224-231.
143. O'Brien M, Kissinger P. Study: HIV + people often don't disclose status to sex partners. *HIV Clin.* 2002;14(2):11.
144. Loubiere S, Peretti-Watel P, Boyer S, Blanche J, Abega SC, Spire B. HIV disclosure and unsafe sex among HIV-infected women in Cameroon: results from the ANRS-EVAL study. *Soc Sci Med.* 2009;69(6):885-891.
145. Ciccarone DH, Kanouse DE, Collins RL, et al. Sex without disclosure of positive HIV serostatus in a US probability sample of persons receiving medical care for HIV infection. *Am J Public Health.* 2003;93(6):949-954.
146. Kalichman SC, Rompa D, Luke W, Austin J. HIV transmission risk behaviours among HIV-positive persons in serodiscordant relationships. *Int J STD AIDS.* 2002;13(10):677-682.
147. Tangmunkongvorakul A, Celentano DD, Burke JG, de Boer MA, Wongpan P, Suriyanon V. Factors influencing marital stability among HIV discordant couples in northern Thailand. *AIDS Care.* 1999;11(5):511-524.
148. Simoni JM, Pantalone DW. Secrets and safety in the age of AIDS: does HIV disclosure lead to safer sex? *Top HIV Med.* 2004;12(4):109-118.
149. Bishop GD, Oh HM, Swee HY. Attitudes and beliefs of Singapore health care professionals concerning HIV/AIDS. *Singapore Med J.* 2000;41(2):55-63.
150. Foreman M, Lyra P, Breinbauer C. *Understanding and Responding to HIV/AIDS-Related Stigma and Stigma and Discrimination in the Health Sector.* Washington, DC: Pan American Health Organization; 2003.
151. Paxton S, Gonzales G, Uppakaew K, et al. AIDS-related discrimination in Asia. *AIDS Care.* 2005;17(4):413-424.
152. Thorpe R, Grierson J, Pitts M. Gender differences in patterns of HIV service use in a national sample of HIV-positive Australians. *AIDS Care.* 2008;20(5):547-552.
153. Turan JM, Miller S, Bukusi EA, Sande J, Cohen CR. HIV/AIDS and maternity care in Kenya: how fears of stigma and discrimination affect uptake and provision of labor and delivery services. *AIDS Care.* 2008;20(8):938-945.
154. Mill JE. Shrouded in secrecy: breaking the news of HIV infection to Ghanaian women. *J Transcult Nurs.* 2003;14(1):6-16.
155. Ammassari A, Trotta MP, Murri R, et al. Correlates and predictors of adherence to highly active antiretroviral therapy: overview of published literature. *J Acquir Immune Defic Syndr.* 2002;31(suppl 3):S123-S127.
156. Stirratt MJ, Remien RH, Smith A, Copeland OQ, Dolezal C, Krieger D. The role of HIV serostatus disclosure in antiretroviral medication adherence. *AIDS Behav.* 2006;10(5):483-493.
157. Klitzman RL, Kirshenbaum SB, Dodge B, et al. Intricacies and interrelationships between HIV disclosure and HAART: a qualitative study. *AIDS Care.* 2004;16(5):628-640.
158. Nam SL, Fielding K, Avalos A, Dickinson D, Gaolathe T, Geissler PW. The relationship of acceptance or denial of HIV-status to antiretroviral adherence among adult HIV patients in urban Botswana. *Soc Sci Med.* 2008;67(2):301-310.
159. Aggleton P, Wood K, Malcolm A, Parker R. *HIV-Related Stigma, Discrimination and Human Rights Violations: Case Studies of Successful Programmes.* Geneva, Switzerland: UNAIDS; 2005.
160. Mukherjee JS, Ivers L, Leandre F, Farmer P, Behforouz H. Antiretroviral therapy in resource-poor settings: decreasing barriers to access and promoting adherence. *J Acquir Immune Defic Syndr.* 2006;43(suppl 1):S123-S126.
161. Datye V, Kielmann K, Sheikh K, et al. Private practitioners' communications with patients around HIV testing in Pune, India. *Health Policy Plan.* 2006;21(5):343-352.
162. Turan JM, Bukusi EA, Cohen CR, Sande J, Miller S. Effects of HIV/AIDS on maternity care providers in Kenya. *J Obstet Gynecol Neonatal Nurs.* 2008;37(5):588-595.
163. Oosterhoff P, Hardon AP, Nguyen TA, Pham NY, Wright P. Dealing with a positive result: routine HIV testing of pregnant women in Vietnam. *AIDS Care.* 2008;20(6):654-659.
164. Apte S, Kulkarni S, Kulkarni V, Parchure R, Darak S, Jori V. Patterns of disclosure in HIV-infected women detected during pregnancy and their consequences on experiences of stigma. Paper presented at: 17th International AIDS Conference; August 3-8, 2008; Mexico City, Mexico. Abstract WEAD0306.



165. Chen WT, Starks H, Shiu CS, et al. Chinese HIV-positive patients and their healthcare providers: contrasting Confucian versus Western notions of secrecy and support. *ANS Adv Nurs Sci*. 2007; 30(4):329–342.
166. Heyward WL, Batter VL, Malulu M, et al. Impact of HIV counseling and testing among child-bearing women in Kinshasa, Zaire. *AIDS*. 1993;7(12):1633–1637.
167. Namakhoma I, Bongololo G, Nyirenda L, et al. Negotiating multiple barriers: health workers' access to counselling and testing in Malawi. *AIDS Care*. 2010;22(S1):68–76.
168. Sliip Y, Poggenpoel M, Gmeiner A. The experience of HIV reactive patients in rural Malawi—part I. *Curationis*. 2001; 24(3):56–65.
169. Miller AN, Rubin DL. Motivations and methods for self-disclosure of HIV seropositivity in Nairobi, Kenya. *AIDS Behav*. 2007;11(5):687–697.
170. Mobeireek AF, Al-Kassimi F, Al-Zahrani K, et al. Information disclosure and decision-making: the Middle East versus the Far East and the West. *J Med Ethics*. 2008;34(4):225–229.
171. Kielmann K, Shinde S, Datye V, Karvande SS. “We never say this in front of the patient directly”: passive testing and indirect disclosure of HIV test results in high-prevalence settings in India. Paper presented at: 17th International AIDS Conference; August 3–8, 2008; Mexico City, Mexico. Abstract THPE0912.
172. Makoae MG, Jubber K. Confidentiality or continuity? Family caregivers' experiences with care for HIV/AIDS patients in home-based care in Lesotho. *SAHARA J*. 2008;5(1):36–46.
173. Seidel G. Confidentiality and HIV status in Kwazulu-Natal, South Africa: implications, resistances and challenges. *Health Policy Plan*. 1996;11(4):418–427.
174. Galletly CL, Dickson-Gomez J. HIV seropositive status disclosure to prospective sex partners and criminal laws that require it: perspectives of persons living with HIV. *Int J STD AIDS*. 2009;20(9): 613–618.
175. Galletly CL, Pinkerton SD. Preventing HIV transmission via HIV exposure laws: applying logic and mathematical modeling to compare statutory approaches to penalizing undisclosed exposure to HIV. *J Law Med Ethics*. 2008; 36(3):577–584.
176. Symington A. Criminalization confusion and concerns: the decade since the Cuerrier decision. *HIV AIDS Policy Law Rev*. 2009;14(1):1, 5–10.
177. Singapore to inform spouses of HIV patients. *Reuters*. July 15, 2005.
178. Sanon P, Kabore S, Wilen J, Smith SJ, Galvao J. Advocating prevention over punishment: the risks of HIV criminalization in Burkina Faso. *Reprod Health Matters*. 2009;17(34):146–153.
179. Uganda: proposed bill would criminalize HIV transmission, force partners to reveal HIV-positive status. *HIV AIDS Policy Law Rev*. 2009;14(1):27–28.
180. Kenya Ministry of Health. *Guidelines for HIV Testing in Clinical Settings*. Nairobi, Kenya: National AIDS and STD Control Programme of Kenya, Kenya Ministry of Health; 2004.
181. Jack A. We need privacy, but not secrecy. *Financial Times*. August 8, 2005.
182. Hermez J, Petrak J, Karkouri M, Riedner G. A review of HIV testing and counseling policies and practices in the Eastern Mediterranean Region. *AIDS*. 2010;24(suppl 2):S25–S32.
183. Dixon-Mueller R. The sexual ethics of HIV testing and the rights and responsibilities of partners. *Stud Fam Plann*. 2007;38(4):284–296.
184. Masiye F, Ssekubugu R. Routine third party disclosure of HIV results to identifiable sexual partners in sub-Saharan Africa. *Theor Med Bioeth*. 2008;29(5):341–348.
185. Ncama BP. Acceptance and disclosure of HIV status through an integrated community/home-based care program in South Africa. *Int Nurs Rev*. 2007;54(4): 391–397.
186. Maman S, Medley A. *Gender Dimensions of HIV Status Disclosure to Sexual Partners: Rates, Barriers and Outcomes*. Geneva, Switzerland: World Health Organization; 2004.
187. Republic of Rwanda. UNGASS Country Progress Report, Rwanda, January 2008–December 2009. Kigali, Rwanda: Republic of Rwanda; 2010.
188. MacQueen KM, McLellan E, Metzger DS, et al. What is community? An evidence-based definition for participatory public health. *Am J Public Health*. 2001;91(12):1929–1938.
189. Marshall P. The relevance of culture for informed consent in US-funded international health research. In: Dickens BM, ed. *Ethical and Policy Issues in International Research: Clinical Trials in Developing Countries*. Vol. 2. Bethesda,
- MD: National Bioethics Advisory Commission; 2001:C1–C38.
190. Obermeyer CM. Ethical guidelines for HIV research: a contextual implementation process. *J Int Bioethique*. 2004;15(1):95–104, 134–135.