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Provider-Initiated HIV Testing in  
Antenatal Clinics in Rural Malawi**

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# **An Offer You Can't Refuse: Provider-Initiated HIV Testing in Antenatal Clinics in Rural Malawi<sup>1</sup>**

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## **ABSTRACT**

Provider-initiated, 'routine' HIV testing of pregnant women seeking antenatal care-- wherein women are tested unless they explicitly refuse-- is promoted by international organizations as an effort to curb mother-to-child transmission. Utilizing qualitative data from Malawi, we offer an account of the perceptions that surround-- and surely impact-- a pregnant woman's decision to take an HIV test. We argue that idealized social relations, characterized by equality, rationality, and non-coercion between clients and providers, are presumed to be disseminated with routine testing programs. We find, however, that these stylized relations do not fit neatly in Malawi, and consequently, may lead to paradoxical outcomes for public health. We show that rural Malawians do not perceive HIV testing as a choice, but rather as compulsory and the only way by which to receive antenatal care. This study illustrates considerable dissonance between global expectations and local realities of the delivery of routine testing programs.

## **Introduction**

HIV counseling and testing ("HIV testing") has been advocated by international organizations and Western donors as an important intervention for HIV prevention and treatment (UNAIDS 2004; WHO 2007), particularly in sub-Saharan African countries where HIV prevalence is disproportionately high (see UNAIDS 1998; World Bank 1999; WHO 2002, 2003). Nonetheless, HIV testing is controversial within the global AIDS community (see DeCock et al. 2002; Dixon-Mueller 2007; Yeatman 2007). We situate our study within the debates surrounding the global endorsement of provider-initiated 'routine' HIV testing of pregnant women seeking antenatal care, an approach advocated to avert mother-to-child transmission.<sup>5</sup> We use original data from Malawi, a poor, largely rural country in southern Africa where HIV prevalence is eighth highest in the world. Our study offers an account of the perceptions that surround-- and surely impact-- a pregnant woman's "decision" to take an HIV test: the perceptions women have of health personnel in the clinic setting, and, to a lesser extent, husbands' opinions about HIV testing.

Since 2004, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) have promoted routine, provider-initiated HIV testing (UNAIDS 2004; UNAIDS 2005; WHO 2007) as an addition to client-initiated HIV testing policies. Routine testing, on paper at least, allows governments to pursue more aggressively the public health goal of promoting widespread testing, while keeping the choice to be tested with the individual (Rennie and Behets 2006). The protocol is simple: all patients in a clinical setting are informed that they will be tested for HIV *unless they explicitly refuse* (Rennie and Behets 2006: 53). The current WHO/UNAIDS guidelines for provider-initiated HIV testing elaborate: “Patients must receive adequate information on which to base a personal and voluntary decision whether or not to consent to the test, and be given an explicit opportunity to decline a recommendation of HIV testing and counselling without coercion” (WHO 2007: 36).

Since the XV International AIDS Conference in Bangkok in July 2004-- and at every AIDS Conference thereafter (2006 in Toronto; 2008 in Mexico City)-- the desirability of routine testing has been widely discussed. By the XVII International AIDS Conference in Mexico City in 2008, the tenor of the discussion was both celebratory and cautionary. Public health representatives pointed to the success of this “opt-out” approach: there has been a marked increase in the number of those tested and, as a result, the number who have been able to access anti-retroviral treatment. We still do not know, however, whether the concerns raised by international human rights advocates-- that in practice, power imbalances between providers and clients would result in testing individuals against their will-- are justified. These concerns are particularly salient with respect to gender: since women and girls are more likely than men to attend a health facility, they are most likely to become the targets of a routine testing policy (Rennie and Behets 2006).

An equally important concern, we argue, is that the implementation of HIV testing protocols-- ones formulated in the headquarters of the WHO and UNAIDS in Geneva and then incorporated in rural African settings-- may have unexpected consequences for public health. While international organizations play a seminal role in creating testing standards, it is nation-states that make national policy and establish guidelines for implementation (Bayer and Edington 2008; Paxton 2007).<sup>6</sup> Moreover, the policies are then implemented by the providers who communicate directly with their clients (Pritchett and Woolcock 2003). There is substantial literature showing that as technologies travel from one location to another, they are transformed: for example, in the Gambia, rural women employed oral contraceptives to achieve goals unforeseen by family planning promoters (Bledsoe et al. 1998; also see Johnson-Hanks 2002 for Cameroon). Adaptations are particularly likely in the case of health interventions in developing countries, since these are assumed to travel from their birthplace at the WHO in Geneva or the Centers for Disease Control and Prevention (CDC) in Atlanta accompanied by a specific set of social relations. Although the relations between health professionals and clients in clinic settings are meant to be those of equality, rationality and non-coercion, the work of others suggests that there are good reasons for skepticism (Booth 2004; Datye et al. 2006; Rutenberg and Watkins 1997).

In the study described in this paper, we began by asking how pregnant women at clinics in rural Malawi perceive HIV testing. We were particularly interested in how well the ideal formulation of social relations maps onto preexisting sets of social relations as they exist within the clinic setting. We find considerable dissonance between global expectations and local realities of the delivery of routine testing programs. The consequences of this disjuncture are worth the attention of policy makers and program implementers, as they may well lead to

unexpected, even paradoxical outcomes for public health (see Portes 2006; Swidler 2004 for related observations).

### **Research Setting: Malawi**

Malawi is a poor, largely rural country in southern Africa with an HIV prevalence estimated at 12% (National AIDS Commission [Malawi] 2007), placing it eighth highest in world rankings. Testing for HIV first became available in Malawi in the mid-1990s but was only accessible in private health clinics and research hospitals. Since 2003 it has expanded: first to government hospitals in major cities, and since 2004, to district hospitals and even some rural clinics. Malawi significantly expanded its provision of Prevention of Mother-to-Child Transmission (PMTCT) services in recent years; these services include both HIV testing of the mother and, to a far lesser extent, the provision of prophylaxis to the mother, the child, or both.<sup>7</sup> In 2002, only seven facilities provided PMTCT services, testing 5,059 pregnant women attending antenatal clinics; in 2004, 31 facilities offered PMTCT services and 43,345 women were tested during antenatal visits. In 2003, the government mandated routine HIV testing of pregnant women (Office of the President and Cabinet and National AIDS Commission 2003),<sup>8</sup> which may account for the rapid increase in the number of women tested. A new report points to a rise in the number women tested alongside the implementation of opt-out testing:

Rapid HIV testing and 'opt-out' testing were instituted in July 2003 and April 2005, respectively. The program reached 20,000 pregnant women in the first 12 months. Acceptance of HIV testing increased from 45% to 73% ( $P < 0.001$ ) when rapid, same day testing was instituted. When opt-out testing was instituted, 99% of the mothers agreed to testing (Weir et al. 2008: 96).

The adoption of routine and opt-out testing was accompanied by guidelines for local clinic personnel. There was no evaluation, however, of the extent to which these guidelines were fully understood or followed, nor, crucially for the consequences of the new policy, of the reactions of

pregnant women whom mandated testing was meant to benefit.

## **Data & Methods**

Because our primary interest is in the perceptions of pregnant women, and to a lesser extent their husbands, we use qualitative methods that permit respondents to talk at greater length than possible in a structured survey. We use two types of qualitative data: 1) perceptions and experiences of HIV testing at antenatal clinics as expressed in semi-structured interviews with two categories of rural Malawians: the first of women tested for HIV in rural clinics, the second a group of their “near-neighbors”, a term clarified in the following sampling description; and 2) observational field journals that capture local, informal conversations about AIDS.

*Semi-structured interviews:* We conducted the interviews alongside a quantitative survey-based study on HIV testing and treatment surveillance, led by colleagues at the University of Pennsylvania in conjunction with the District Office of the Ministry of Health in Mchinji District. We drew respondents from the population of attendees undergoing HIV testing at the two hospitals in the district and one government clinic, to which we refer hereafter as the Testing Attendee Sample. One hospital is the government-run Mchinji District Hospital, where services and drugs, including anti-retroviral treatment, are free of charge-- at least when they are available and accessible. At the second hospital, Kapiri Mission Hospital, testing is free, although other services, such as CD4 count, require a fee. The local clinic, Tembwe Clinic, is a very basic government health center that provides HIV testing and limited drugs and services.

Using clinic registers, we randomly drew our sample from all clients who were tested in the months of November and December, 2006. We restricted the sample to these two months because they were the only months for which we also had clinic surveys and consent for follow-up.<sup>9</sup> We also restricted the sample to include only those over 18 years of age, and those with

complete identifying information from the clinic survey. Finally, we randomly selected 16 respondents from each facility.

The research team selected and attempted to interview a total of 44 respondents sampled from the clinic registers. At the time of our study, however, 14 of the 44 sampled respondents could not be interviewed, because they had died, moved, were out of town or hospitalized. The remaining 30 respondents were successfully interviewed, 10 from each facility.

We also included in the sample some “near-neighbors”. These were neighbors of our Testing Attendee Sample<sup>10</sup> and were included so that our sample would contain individuals who were similar to our respondents but who we expected would not have been tested for HIV, and would thus know about testing from talking with others. Near-neighbors were selected during the visit to the HIV-tested respondent; one interviewer located the house of the respondent, then the other interviewer went to the nearest home in the village that was not part of the same compound. The interviewer then spoke with either the man or woman of the house, and asked if they would be willing to chat about health services in Malawi. In the event that there was more than one adult at home, the interviewer asked to speak with the head of the household.<sup>11</sup> Forty-nine interviews were conducted in all. Of the 40 respondents who were tested, 21 were tested during an antenatal clinic visit, 18 from the HIV Testing Attendee Sample and 3 from the Near-Neighbors Sample.<sup>12</sup>

**-- Table 1 about here --**

Both interviewers were Malawians, fluent in Chichewa, the local language, and English. All interviews were conducted in Chichewa and translated and transcribed into English by the respective interviewers. Interviews were then typed in the field by the research director, providing an opportunity to ask the interviewer about any exchanges or English words that were

not clear. Interviewers were equipped with a digital voice recorder, consent forms, the interview protocol, a question guideline, a notebook, and a pen. Interview recordings are all archived in digital format. Although our interviewers had considerable experience, prior to initiating our fieldwork, they took part in a one-day training for this particular project.<sup>13</sup> We provided follow-up training as needed throughout the course of data collection; a review of the initial transcripts, for example, showed that we needed to reword some interview questions.<sup>14</sup>

Interviews took place in respondents' homes or, very occasionally, in a location of the respondent's choosing and were conducted in private. Following a brief introduction, interviewers asked about personal and family health, experience with HIV testing,<sup>15</sup> knowledge about antiretroviral treatment, and local health services. Interviews were semi-structured such that interviewers were equipped with a question guideline but were instructed not to ask questions in a highly structured format. Rather, we explained that we intended for the session to resemble a conversation, though one that addressed all of the issues in the guideline. Interviewers were instructed to probe or revisit questions when respondents gave short answers, conflicting statements, and/or used social marketing language (e.g., "It's important to know your status"; "I wanted to plan for the future"). Interviews lasted 25 minutes to just over an hour, with typed transcripts averaging 11 single-spaced pages.

Interviews were coded and analyzed for content. The original purpose of the study was to understand local perceptions of HIV testing in general. However, given the great proportion of the Testing Attendee sample was tested as part of antenatal care, the interview transcripts provided substantial data on the perceptions of HIV testing in antenatal clinics. The analysis for this paper is drawn from the interview transcripts specifically discussing HIV testing and



antenatal care: 21 of the 49 interview respondents reported having been tested in the course of receiving antenatal care.

*Observational field journals:* Based on our previous experience conducting surveys in Malawi as well as analyses of the quality of survey data in Malawi and elsewhere in the region, we expected that respondents might report a more flattering picture of interactions at a clinic than they had actually experienced (Miller et al. 2001). We thus take advantage of a rich set of observational field journals collected over the past decade by a related project in Balaka district. This project's aim is to learn what people say about AIDS when they are talking with each other in informal conversations in natural and public settings, rather than what they report in a formal interview. Several village residents were asked simply to listen to the conversations they overheard or participated in during the course of their daily lives and then to later write their recollections in a field journal. The conversations they capture are varied, ranging from graveside condolences following a funeral, talk between neighbors at a borehole, or men's conversations at a bar or on the bus. All field assistants previously worked as enumerators for a longitudinal health survey and have the equivalent of a U.S. high school education, but no college; all rely on subsistence agriculture, supplemented by casual labor, small-scale retail, or intermittent research projects. They write the journals in English, though the conversations they capture are in local languages in which the field assistants themselves are fluent. The collection of these journals has been ongoing in Malawi since 1999 and to date, there are nearly 700 journals. We recognize that this method is unusual, but its analytic utility (as well as its drawbacks) has been well documented elsewhere (see Kaler 2004; Watkins 2004; Watkins et al. forthcoming).<sup>16</sup>

We examined these journals for everyday conversations about HIV testing at antenatal clinics. In the observational accounts in this paper, we retain the words of the field assistants

despite grammatical errors, but bracket explanations of segments that may be unclear. Names of people and places have been changed to protect the identities of the participants.

In addition to providing variation in the type of data analyzed, the two sources also vary with respect to the region from which the data are drawn: interviews were conducted in Mchinji, a district in the central region, whereas the observational field journals were written in Balaka, a district in the southern region of Malawi. Although the journals were collected in another district and over a decade, a much longer period than our interview study, the information that they provide adds substantially to the semi-structured interviews. In particular, the journals not only provide insight into what people say to each other in natural settings, they also address an important methodological limitation of our study, namely that we could not identify, and thus could not interview, women who *refused* to be tested for HIV during their antenatal visits, perhaps biasing our study in favor of those who perceive HIV testing as compulsory.<sup>17</sup> Like the Near-Neighbors Sample, the integration of the relevant journals compensate for this limitation, insofar as they provide the perspective of both men and women who may not have been tested as part of antenatal care, thereby offering insight into the perspectives of the wider community.

This study was approved by the Institutional Review Board of the University of Pennsylvania and the National Health Sciences Research Committee (NHSRC) of Malawi.

## **Findings**

We present data showing that rural Malawians do not perceive HIV testing in antenatal clinics as a choice; to the contrary, it is perceived as compulsory and the only way to receive antenatal care. Next, we consider the consequences of the perception of ‘compulsory’ antenatal testing, specifically as it affects pregnant women, the intended beneficiaries of routine testing policies.

### ***Routine HIV Testing: “Opt-out” or No Option?***

The majority of our respondents told us that they were not given the option to refuse the HIV test during an antenatal visit, thus indicating that international and national guidelines are lost at the final stage of the implementation process. One woman said that there was “a rule that anyone who has gone for antenatal should be tested,” and an exchange later in the interview demonstrates her belief that there was no option to refuse:

Interviewer: Alright. You said you were told to be HIV tested.

Respondent: Mmhm. [Affirmative response.]

Interviewer: Were you given the option in the VCT [HIV testing]<sup>18</sup> room to refuse the test or go on with it?

Respondent: Mmhm, no, there wasn't that option.<sup>19</sup>

Another woman elaborated this practice as a law, explaining her fear that without compliance she would forfeit access to care, “[When I went for antenatal] that’s when I heard that everyone should have an HIV test.”<sup>20</sup> Another respondent similarly described the lack of choice in having an HIV test during her antenatal clinic visit; when asked if she felt pressured to take the test, she responded, “You know at antenatal it’s compulsory, whether you like it or not you have to go for an HIV test.”<sup>21</sup> A fourth interview had a longer exchange:

Interviewer: Were you given the option by the counselor to refuse VCT [HIV testing]?

Respondent: No, he told us to be tested.

Interviewer: Did he give a chance to you that anyone who wants to be tested can do so and anyone who doesn't want cannot be tested?

Respondent: No he did not give us that chance.

Interviewer: Okay. Why do you think that you were not given that chance?

Respondent: Because it was important for women to be tested.

Interviewer: Alright, did all women who went for VCT [HIV testing] that day get tested?

Respondent: Yes.<sup>22</sup>

Four women of the 21 tested during an antenatal visit stated that refusals were allowed and reported that women who refused an HIV test were still able to receive the other antenatal

services offered. The majority of women, however, perceived that there was no option to refuse testing.

We find similar perceptions of testing at antenatal clinics as compulsory in our second source of data, the informal conversational journals. One field assistant, who was pregnant and visited an antenatal clinic herself, wrote that "...the nurse told us that the government of Malawi has decided to force all the women who are pregnant to be tested for HIV so that if they are found with that problem [HIV], they should be helped...".<sup>23</sup> Another field assistant heard his female relatives debating antenatal testing; the excerpt below suggests that even women who are not themselves going for antenatal care perceive testing as compulsory from the stories shared with them by their friends and neighbors. He recalled:

She [the field assistant's relative] found that those women who went to this clinic for antenatal services, they were being told by the nurses that before they were assisted with antenatal services, they had to undergo blood tests [HIV tests] first and that this is a must in these days and that some of the women were not happy with this demand.<sup>24</sup>

From both of our data sources, then, women perceive that the government has given them no choice but to be tested.

Some women went further, saying that testing is not only compulsory for them, but also for their husbands. One respondent who attended antenatal services explained:

It's a new law that every pregnant woman who comes for antenatal should be accompanied by her husband for HIV testing. I told the doctor that I came alone...I went home and told my husband that next week we should go together for antenatal and HIV testing.<sup>25</sup>

We suspect that this respondent's perception that her husband must accompany her to be tested is based on what she experienced of the implementation of routine testing at her antenatal clinics.

The WHO guidelines for provider-initiated testing stipulate that

Women diagnosed HIV-positive should be encouraged to propose HIV testing and counseling to their male partners. Such testing can be done either in the health facility, for example, following counselling of the couple, or through referral of the partner to client-initiated HIV testing and counselling services (WHO 2007: 24).

Additionally, the most recent training document for healthcare workers in antenatal clinics in Malawi suggests that the HIV counselor encourage women to bring their partners to also be HIV-tested, a suggestion meant to occur only after the HIV test, in post-test counseling (PMTCT Handbook for Health Workers 2003:14-15). Health personnel in antenatal clinics, however, may have transformed the instructions from “encouraging” to “insisting.”

### ***The Consequences of ‘Compulsory’ Antenatal HIV Testing***

Do women object to compulsory testing? We find mixed reactions. Some consider antenatal testing (or perhaps just compliance with what they understand to be the government’s rules) more important than choice; others respond to the perception of antenatal HIV testing as mandatory with skepticism and, arguably, fear. The consequences of the latter are significant, and may well lead to outcomes largely unexpected by the champions of routine testing policies.

Many respondents said that pregnant women should be tested for HIV. One woman explained that compulsory antenatal testing is acceptable because “it is important for women to be tested”.<sup>26</sup> Other women echoed this sentiment in language that reflects back what they have heard in the clinic or on the radio: that testing is “good for the baby”, or “When we know our status we will know how to care for the baby.”<sup>27</sup> In short, for many of our respondents, testing is *understandably* ‘compulsory’.

These favorable comments should not surprise. Social marketing campaigns in many high-prevalence countries like Malawi emphasize the importance of learning one’s HIV status as a way to “plan for the future.”<sup>28</sup> The recent availability of anti-retroviral treatment has also

altered the context of testing such that many now see taking an HIV test as potentially life-saving, rather than a death sentence. Indeed the very conditions that gave rise to the testing norm of ‘individual choice’ in many Western democracies-- that is, to protect already stigmatized groups from being further stigmatized by a positive diagnosis (Kirp and Bayer 1992)-- are quite different in sub-Saharan Africa, where the disease has reached the general population. There is some evidence that HIV testing is quite acceptable. In the other interviews we conducted, some respondents expressed frustration that they were not offered an HIV test when they sought care at a health facility for an illness. And when HIV tests have been offered at people’s homes or in mobile clinics-- thus obviating the costs in money and time of traveling to a health facility-- acceptance has been high (Angotti et al. 2008; Byamukama et al. 2008; Obare 2007; Thornton et al. 2005; Thornton forthcoming).

Even if HIV testing is generally acceptable, the perception that it is compulsory and sanctioned by the government is quite significant, particularly in a country deeply suspicious of measures, such as fertility control, often understood as malicious efforts of Westerners.<sup>29</sup> The AIDS epidemic began in Malawi at a time when the government was launching its neo-Malthusian population policy, timing that perhaps fed rumors that AIDS was a form of population control; the international community, the government, and even local health care personnel, therefore, were viewed with great skepticism (Kaler 2004). Many, we find, conflate the actions of health personnel with that of higher government authority, seeing them as proxies for the government, which is distrusted by some. One journalist, capturing a conversation among a group of neighbors, notes the concerns among the group that the government-- in pushing ‘compulsory’ antenatal HIV testing-- would try to intervene in long-established practices of childbirth:

The other woman added saying that the badness is that the government...is working hand in hand with the traditional birth attendants who are telling them that they should refer all pregnant women who had delivered three or four children to the hospital.<sup>30</sup>

A final, and perhaps most important consideration, is how people deal with the consequences of having to confront testing that they perceive as compulsory, when it is something they do not want, and significantly, something unwanted by their partners. Consider this example from an informal conversation in which men are said to be telling their wives to make excuses for their husbands' failure to appear for testing:<sup>31</sup>

Then brother Lawrence who is also a health volunteer at Luka Health Centre told us that at the clinic...they had a seminar recently and that during that seminar, they have been told that there should be a programme there at the clinic where he said that....women are supposed to go there together with their husbands so that they are both tested their HIV status and that programme has been started and that some of the husbands of those wives who were told to do this, some of them were telling their wives that when they go there at the clinic and they are told to bring their husbands for HIV tests, they should be cheating [lie to] the clinical officers that they (husbands) are in South Africa for labour and that they are not currently at home and that such husbands are doing all of this because of not willing to have HIV/AIDS tests themselves.<sup>32</sup>

Whereas subversion in this case may be innocuous, other consequences are not. One woman who was tested at antenatal and found to be HIV positive encountered conflict at home when sharing her results with her husband, who admonished her to no longer seek antenatal care at the clinic:

Her husband shouted that the doctors has lied to her... She said that her husband spoke many things that encouraged her to disobey the advice [from the antenatal clinic] that she even stopped going to Antenatal clinic and she thought that she will deliver at home.<sup>33</sup>

Another journal reports a similar conversation that suggests that with 'compulsory' testing, husbands may forbid their wives from going for antenatal services:

Then brother Lawrence laughed and said, "I can also see that most of the men will not be sending their wives to the clinic for antenatal services fearing the same programme ['compulsory' HIV testing]."<sup>34</sup>

A particularly vivid example of the lengths that men might go to in order to escape testing was observed by a field assistant who happened to see a man passing by, carrying his pregnant wife on his bicycle. After they are out of earshot, the man's neighbors talk about him. One said:

...the husband who was cycling his wife is afraid to be tested blood for AIDS status. She went on saying that the woman (his pregnant wife) went to Mwendu Hospital to start antenatal clinic because of her pregnancy and she was told that she should first of all be tested for AIDS status before everything and she was told to go and bring her husband to undergo the process while together and when she was told that she came out of the hospital and meet with her husband who was waiting [for] her outside the hospital (with the bike – I hope [believe]) and when she told her husband about that the husband was against that move and said 'let's go home' and they run away from there and now they are going to Vingula dispensary [clinic] thinking that they are not going to be tested.<sup>35</sup>

One important consequence is that people may increasingly avoid government hospitals for antenatal services to escape what they perceive to be a mandatory testing requirement. The peril is that if a woman is HIV positive, she will not be able to access antiretroviral treatment or nevirapine, medicines designed to avert the transmission of HIV from mother to child. Those avoiding testing may seek other clinics where the testing requirement is more flexible, or they may avoid public antenatal clinics all together. The field assistant's comment, however, that the man on the bicycle and his wife were "thinking that they are not going to be tested," suggests that it is impossible to evade testing because all antenatal clinics have the same requirement.

## **Discussion**

This paper examines empirically what is often overlooked: the ways that health interventions may be transformed as they travel from their international origins to implementation in specific settings. Here we have examined the practice of routine HIV testing in antenatal clinics in a sub-Saharan African country. By collecting and analyzing data on how this practice is perceived by the women who are expected to benefit, this study, to our knowledge, is one of the first that



offers empirical evidence to those who debate the potential advantages and disadvantages of routine testing in developing countries. As proponents would expect, we find that the numbers of rural Malawians who were tested for HIV increased dramatically after routine testing was mandated by the government. We also, however, find that the concerns of some about violations of international conceptions of human rights are justified; in addition, we find that social relations in the clinic setting may negatively impact antenatal care.

There are several important substantive, methodological, and policy-relevant implications of our study. Provider-initiated or ‘routine’ HIV testing, as stipulated by the WHO and UNAIDS in Geneva and as national policy in Malawi, is intended to take place only with informed consent, which is presumed to be given if the individual does not explicitly opt-out. In our study, however, the perception among our respondents is that there is no right to refuse the test; rather, their interactions with health personnel-- and the stories that rural Malawian men and women share with one another-- lead them to conclude that testing in antenatal clinics is not only compulsory, but also the only way in which to receive antenatal care. Thus some women may opt out of antenatal care altogether.

What might explain the disjunction between global expectations and local realities that we find? It may be that health personnel have a different understanding of what it means to have the option to refuse, perhaps because it has been specified to them incompletely or imperfectly in their training or training manuals (Pritchett and Woolcock 2003). Alternatively, health personnel themselves may see testing as an important health intervention, with goals that override concerns about the voluntariness of testing (Angotti 2008). Based on other work we have done in Malawi as well as our reading of the literature on health in developing countries, we think constraining choice may be especially likely when clients are women, rural and relatively uneducated

compared to health personnel (see Booth 2004; Datye et al. 2006; Rutenberg and Watkins 1997). We also note that the clients themselves may be accustomed to procedures in health facilities that are not voluntary, though presented to them as such. Indeed, the very establishment of a health policy that offers a test of a certain kind sends a powerful normative message that taking it is the best thing to do (Rennie and Behets 2006: 54; also see Dixon-Mueller 2007).

In addition to their interactions with providers in the clinics, some women then have to contend with their husbands when they return home, who may not want them to be tested for HIV. If men also perceive HIV testing in antenatal clinics as mandatory-- either for themselves or for their wives-- they may discourage, perhaps even forbid, their wives from seeking antenatal care. It is with good reason that men may fear their wives being tested: many men believe that if their wives return with a positive result, this means that they too are HIV positive-- that is, if your wife has HIV, you also are certainly HIV positive. This interpretation is consistent with other work which suggests that people tend to greatly overestimate the transmissibility of HIV and assume that everyone who has unprotected sex, even once, with someone who is HIV positive will themselves get AIDS (Anglewicz and Kohler 2006; Santow et al. 2008). Even men who would themselves choose voluntary counseling and testing (VCT) may not want to be informed of their diagnosis by their wife.

Our paper also raises important methodological considerations for the evaluation of any innovation in HIV prevention or, more broadly, of interventions meant to improve public health. Typically, evaluations of responses to an intervention are based on data collected in structured settings, such as individual interviews (either survey or qualitative) or focus groups. These data, however, cannot be taken at face value, for they may well reflect the respondent's hope that the respondents may benefit materially if they provide what they understand to be the correct answer

(Miller et al. 2001; Angotti et al. 2008; Thornton et al. 2005). With this in mind, we integrated two different forms of qualitative data strategically: although we cannot make a numerical comparison, we perceive that there is more sympathy for compulsory testing when respondents are talking with an interviewer than when people are talking with each other in natural settings.

This study also raises important policy considerations. If increasing the proportion of those tested is the ultimate goal of routine HIV testing, then it should be lauded as an important first step as a public health intervention. But if this is to be accomplished while upholding ‘individual rights’ at the same time, then routine testing-- in Malawi, at least-- is imperfect at best and counterproductive at worst. As we have shown, not only is routine testing perceived as compulsory by its intended beneficiaries, it is also seen as the only way to receive antenatal care. For some, this may very well mean that they forfeit all access to care, either because providers fail to give them another option, or because their husband objects to them being tested. Our study thus suggests that greater attention be given to how health policy is implemented in practice, in the setting in which health professionals and their clients interact. The social relations in which HIV testing actually occurs may not be as they are assumed in either global or national policies: from the perspective of rural Malawian women attending antenatal clinics, these relations are not equal and non-coercive, but unequal and coercive. We also believe that it is important that the correct information be disseminated about the transmission probability of HIV. Many Malawians believe that sexual partners inevitably share the same HIV status. If proper information about HIV transmission were disseminated, then it is possible that men would be less concerned with learning their partner’s test result, and perhaps even see it as beneficial for themselves as well as for their wife and expected child.

Our study thus demonstrates that policies and programs designed to increase the numbers of those who know their HIV status, with implications for prevention and for treatment, are so thoroughly affected by the context in which they are pursued that there may be unexpected-- and perverse-- consequences.

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<b>TABLE 1: INTERVIEW RESPONDENTS</b>	<b>COUNT</b>	<b>PERCENT</b>
<b>Sample</b>		
HIV Testing Attendees	30	61.2%
Near Neighbors	19	38.8%
<b>Sex</b>		
Male	10	20.4%
Female	39	79.6%
<b>Marital Status</b>		
Married	40	81.6%
Divorced/Separated	4	8.2%
Single	4	8.2%
Widowed	1	2.0%
<b>HIV Status</b>		
Ever Tested <sup>36</sup>	40	81.6%
HIV +	16	32.7%
HIV –	23	46.9%
Unknown	10	20.4%

N=49. Average age of respondent was 29 years old, with a median of 26, ranging from 18 to 62.



## Notes

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<sup>5</sup> There are two main types of HIV counseling and testing programs: *client-initiated* approaches, whereby a client self-presents at a health facility for testing; and *provider-initiated* approaches, referred to as either “routine”, “diagnostic”, or “opt-out”, whereby clients are offered an HIV test in a clinical setting with the option to refuse. In this paper, we use the terms “routine testing”, “provider-initiated testing” and “opt-out testing” interchangeably.

<sup>6</sup> Lieberman (forthcoming) would argue that the boundaries between international advocacy and domestic policymaking are more fluid.

<sup>7</sup> There is currently lack of capacity and resources to administer prophylaxis to all women who test HIV positive in Malawi.

<sup>8</sup> Though the policy for opt-out testing of pregnant women was established in 2003, as the following quote shows, it was not fully implemented until 2005.

<sup>9</sup> The greater study’s ethical approval required previous consent before any follow-up interviews. Additionally, the clinical surveys provided only residential information for respondents such that they could be located and interviewed.

<sup>10</sup> Though near-neighbors were not drawn from the HIV testing sample, some had been tested, and three of our near-neighbor respondents were tested during an antenatal visit.

<sup>11</sup> If this house did not have anyone at home, and that resident could not be located, the interviewer moved on to the next nearest home.

<sup>12</sup> One additional respondent said she was tested after being encouraged by the clinician she saw while at the antenatal clinic, but we do not include her in the count here because the interview transcript leads us to believe she sought out testing after her antenatal visit at a place other than the antenatal clinic (Interview #27).

<sup>13</sup> Interviewers had previous experience working with a longitudinal health survey in 2006 as well as smaller-scale qualitative projects.

<sup>14</sup> A major change made in the field after review of the initial transcripts was to ask respondents what they “heard” about HIV testing instead of what they “knew.” We found that to “know” something would require a greater deal of certainty than we thought was necessary to understand villagers’ perceptions about the HIV testing experience.

<sup>15</sup> Interviewers did not ask questions that assumed an HIV testing visit. Questions were worded such that respondents would be asked what they knew about testing. Biomarker data was available only to the research director in the field, not the interviewers. It was rare, however, for a respondent to not share his/her own experience with testing; the interviews show that those who have been tested tell some friends about it, not just the interviewer. In fact, a study from rural Malawi on HIV status disclosure finds that only approximately 3% of women and 1% of men report having told no one their HIV status (Anglewicz 2008).

<sup>16</sup> Examples of the journals are available publicly at [www.malawi.pop.upenn.edu](http://www.malawi.pop.upenn.edu).

<sup>17</sup> However, because our interview study does not include women who refused being tested, we cannot rule out the possibility that those women who refused being tested were also denied antenatal care.

<sup>18</sup> The interviewers would refer to HIV testing as VCT and vice versa. Though we make a distinction in this paper that VCT is but one model of HIV testing, that distinction was not made by our interviewers or the respondents during the course of fieldwork.

<sup>19</sup> Interview #5.

<sup>20</sup> Interview #10NN.

<sup>21</sup> Interview #9NN.

<sup>22</sup> Interview #10. In this context, the interviewer refers to “all women” getting tested because the respondent was tested during an antenatal visit.

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<sup>23</sup> Journal from Alice, 27 July 2006.

<sup>24</sup> Journal from Diston, 11 January 2007.

<sup>25</sup> Interview #10NN.

<sup>26</sup> Interview #10.

<sup>27</sup> Interview #25

<sup>28</sup> “Plan your future, go for a HIV test today” was the slogan of Malawi’s 2007 National Testing Week campaign.

<sup>29</sup> A journal predating the institution of routine HIV testing at antenatal clinics captures this suspicion: “[The government] would like to kill all women because they have tried hard to tell the women to stop bearing through family planning method, but they failed. Many women are still bearing children. We shall just stop going to the antenatal clinics fearing that we shall be injected with that injection that they have just soon [recently] decided to give us.” Journal from Alice 03 October 2002.

<sup>30</sup> Journal from Simon, 14 August 2007.

<sup>31</sup> We also do not discount the possibility that women themselves make excuses as a way to evade taking an HIV test during their antenatal visits, such as telling health personnel that they need to obtain their husbands’ permission first.

<sup>32</sup> Journal from Diston, 8 March 2007.

<sup>33</sup> Journal from Patuma, 15 October 2006.

<sup>34</sup> Journal from Diston, 08 March 2007.

<sup>35</sup> Journal from Simon, 14 August 2007.

<sup>36</sup> 10 of these are self-reported, 30 from clinic records. Of the respondents who self-reported having an HIV test, only one did not disclose her HIV status in the interview.