Provider-initiated HIV testing in health care settings: Should it include client-centered counselling?

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Abstract

To increase access to HIV testing, the WHO and CDC have recommended implementing provider-initiated HIV testing (PITC). To address the resource limitations of the PITC setting, WHO and CDC suggest that patient-provider interactions during PITC may need to focus on providing information and referrals, instead of engaging patients in client-centered counselling, as is recommended during client-initiated HIV testing. Providing HIV prevention information has been shown to be less effective than client-centered counselling in reducing HIV-risk behaviour and STI incidence. Therefore, concerns exist about the efficacy of PITC as an HIV prevention approach. However, reductions in HIV incidence may be greater if more people know their HIV status through expanded availability of PITC, even if PITC is a less effective prevention intervention than is client-initiated HIV testing for individual patients. In the absence of an answer to this public health question, adaptation of effective brief client-centered counselling approaches to PITC should be explored along with research assessing the efficacy of PITC.

Keywords: *Provider-initiated HIV testing, client-centered counselling, HIV prevention, developing countries.*

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Résumé

Pour augmenter l'accès au dépistage du VIH, l'OMS et le CDC ont recommandé la mise en œuvre d'un dépistage du VIH initié par les fournisseurs (DVIF). Pour répondre aux limites du cadre du DVIF en matière de ressources, l'OMS et le CDC ont suggéré que les interactions patient-fournisseur au cours du DVIF se concentrent sur la fourniture d'informations et de références au lieu d'entraîner les patients vers une assistance psychosociale centrée sur le client comme cela est recommandé au cours d'un dépistage du VIH initié par le client. Il est apparu que les informations sur la prévention du VIH étaient moins efficaces que l'assistance psychosociale centrée sur le client pour réduire les comportements à risque quant au VIH et l'incidence de MST. Par conséquent, des préoccupations existent quant à l'efficacité du DVIF en tant qu'approche de prévention du VIH. Il est cependant apparu que les réductions de l'incidence du VIH pourraient être supérieures si davantage de personnes connaissaient leur statut sérologique par la plus grande disponibilité du DVID, même si le DVID reste une mesure de prévention moins efficace que ne l'est le dépistage du VIH initié par le client pour les patients individuels. En l'absence de réponse à cette question de santé publique, l'adaptation des approches efficaces d'assitance psychosociale centrée sur le client au DVID devrait être étudiée pendant que des études visant à évaluer l'efficacité du DVID sont réalisées.

Mots clés: *Dépistage du VIH initié par les fournisseurs, asisstance psychosociale centrée sur le client, prévention du VIH, pays en développement.*

Evolution of HIV counselling and testing

Historically most HIV testing has been client-initiated, or opt-in, in which individuals actively seek HIV testing at a facility offering HIV testing. Client-initiated HIV testing, which is generally known as voluntary counselling and testing (VCT), has been the primary model for providing HIV testing (WHO, 2007). In VCT, clients receive pre-test counselling before testing, and then post-test counselling when they receive their results. Until rapid HIV-tests became available, clients had to return to the testing site one or two weeks later to receive their results and post-test counselling. With the advent of rapid HIV testing, clients are able to receive their results the same day. Unfortunately, even with rapid testing, client-initiated testing has been unable to reach many people who need HIV testing (WHO, 2007).

More recently a new model for HIV testing and counselling, known as provider-initiated, or opt-out HIV testing, has been developed and is being scaled-up throughout the world (Bassett *et al.*, 2007; Chandisarewa *et al.*, 2007; Creek *et al.*, 2007; Gammino et al., 2008; Nakanjako *et al.*, 2007; Steen *et al.*, 2007; Wanyenze *et al.*, 2008). In contrast to client-initiated testing, during provider-initiated HIV testing and counselling (PITC), a health care provider offers HIV testing to a patient as a standard part of medical care. With opt-out PITC, like other medical procedures such as undergoing diagnostic X-ray examinations, patients must decline to be tested after receiving information about the test. PITC was first implemented as HIV screening, for example, when a patient had symptoms suggestive of an HIV-related illness. PITC is now routinely offered in outpatient, inpatient, antenatal, sexually transmitted infection, tuberculosis and emergency clinical settings. All patients presenting in the clinic are offered an HIV test if they have not tested recently.

The newest provider-initiated HIV testing approaches are door-to-door and household member HIV testing and counselling (Bateganya *et al.*, 2007; Were *et al.*, 2006). With door-to-door HIV testing community health workers go to all households in a selected area, and offer HIV testing in the home to adults and children. Household member testing is also being offered in the home to family members of clients identified as HIV-positive.

Scale-up of provider-initiated HIV testing

In an effort to increase the number of individuals who know their HIV status, decrease the prevalence of undiagnosed HIV infection, and to promote early diagnosis of and treatment for HIV infection, the WHO and CDC have recommended implementing and scaling-up opt-out provider-initiated HIV testing services in both in- and outpatient health care settings (Branson *et al.*, 2006; WHO, 2007). It is also hoped that as more people become aware of their HIV status, HIV transmission risk behaviours will decline, resulting in decreased HIV incidence.

WHO recommends that PITC be offered to patients in all health care facilities in countries with generalised HIV epidemics (WHO, 2007), and the CDC recommends that PITC should be offered to patients aged 13 - 64 in health care settings in the U.S. (Branson *et al.*, 2006). PITC programmes are not meant to replace client-initiated HIV testing, in fact, scale-up of such services is also recommended (Branson *et al.*, 2006; WHO,

2007). However, PITC may be an efficient and effective way to provide HIV prevention services to larger numbers of people.

With the rapid scale-up of PITC in several developing countries, including Uganda and Botswana, PITC may soon overtake client-initiated HIV testing in terms of the number of individuals tested. As such, PITC services hold great promise as a component of HIV prevention programmes because of their ability to reach large numbers of people and, most notably, to reach individuals who have never before had access to HIV testing and prevention services. However, the scale up of PITC programmes necessitates that PITC fit within the existing resource and time limitations of health care settings. These resource limitations, especially in developing countries, require that the patient-provider interaction during HIV testing be abbreviated and its contents modified, compared with counselling that is offered during client-initiated HIV testing.

Counselling during HIV testing

The recommended scale-up of PITC programmes will likely be successful in increasing the number of people who know their HIV status (Creek *et al.*, 2007) and providing important linkages to care and treatment for those who test HIV-positive. However, changes in the counselling approach recommended during PITC compared with client-initiated HIV testing raises concerns about the effectiveness of PITC as an HIV prevention approach for those who test HIV-negative as well as those who test HIV-positive.

Guidelines for counselling during PITC differ from those for counselling during client-initiated HIV counselling and testing. According to CDC and UNAIDS recommendations, counselling during client-initiated HIV testing should be client-centered, meaning that it is a dialogue between the counsellor and the client to identify the client's current HIV-risk behaviours, barriers to risk reduction, and to negotiate achievable goals to reduce HIV risk behaviours (CDC, 1993; UNAIDS, 2000). In order to address the inherent resource limitations in implementing PITC in health care settings, WHO and CDC guidelines suggest that the patient-provider interaction during PITC may need to be different than during client-initiated HIV testing. Specifically, WHO and CDC recommend that the patient-provider interaction may need to focus on providing basic HIV prevention information, along with referrals for prevention, support and care services. This is in contrast to the recommendations for client-initiated HIV testing which encourage providers to engage patients in client-centered discussions, including individualised HIV-risk assessment and risk reduction goal setting (Branson *et al.*, 2006; WHO, 2007). However, it is unknown if changes in the counselling during client-initiated HIV testing compared with PITC will reduce the efficacy of PITC in reducing HIV transmission risk behaviour compared with client-initiated HIV testing.

Unfortunately, current protocols for client-centered counselling during client-initiated HIV counselling and testing are too lengthy to be implemented in the PITC setting. In Uganda, for example, providing HIV prevention information and referrals during PITC lasts approximately 5 - 25 minutes. This is much abbreviated compared with the duration of counselling during client-initiated HIV counselling and testing. The WHO and CDC guidelines correctly acknowledge that in order to be viable in a variety of heath care settings, the patient-provider interaction during PITC must be brief. However, they also inherently assume that in most settings a client-centered counselling protocol cannot be designed to be brief enough to be feasible as part of PITC.

Brief client-centered counselling

In the absence of data to support the efficacy of current protocols for PITC in reducing HIV-risk behaviour, it is also worth considering that it may be possible to create a brief client-centered HIV-risk reduction counselling approach that stays within the limited time and resources available for PITC in health care settings. Brief client-centered counselling has been shown to be effective in several contexts. Most notably, client-centered counselling lasting less than 30 minutes during PITC among STD clinic patients who tested HIV-negative in the US was effective in reducing STI incidence and HIV-risk behaviour through 12-month follow-up (Kamb *et al.*, 1998). Similarly, two brief (5 - 15 minute) client-centered counselling sessions demonstrated effectiveness in reducing unprotected sexual behaviour among HIV-positive patients in clinical care in the US (Fisher *et al.*, 2006) and South Africa (Cornman *et al.*, 2008). A single session of client-centered counselling has also been shown to be effective in changing other health-related behaviours even when the counselling duration is 15 minutes or less (Rubak *et al.*, 2005).

Is knowledge of HIV-status enough to change behaviour?

For individuals who test HIV-positive, knowledge of their status, when accompanied by an individualised HIV transmission risk assessment and HIV risk reduction goal setting, has been shown to be effective in reducing HIV transmission risk behaviour (Marks *et al.*, 2005). However, it is unknown if knowledge of HIV-positive status in the absence of such client-centered counselling is equally effective in reducing HIV transmission risk behaviour.

HIV prevention counselling as part of follow-up care

The current recommendations for the structure of the patient-provider interaction during PITC include providing referrals for follow-up risk reduction counselling, partner and family member HIV testing, and support, care and treatment services as applicable (Branson *et al.*, 2006; WHO, 2007). The expectation is that individualised risk reduction counselling will be provided during follow-up at the referral site. However, this may not be the case due to the same resource limitations and a focus on HIV treatment for those who are HIV-positive. Furthermore, while opportunities may exist to provide individualised HIV transmission risk assessment and HIV risk reduction goal setting to those who test HIV-positive during follow-up clinical care, it is unknown what percentage of those who test HIV-positive during PITC seek follow-up services. Reports from the US indicate that one-third to nearly half of individuals diagnosed with HIV during client-initiated HIV testing delay entry into care for more than one year (Glynn, 2005; Samet *et al.*, 1998). Similar rates of delayed access to care have been observed in developing countries with universal access to HIV care and treatment (Kumar *et al.*, 2008; Louis *et al.*, 2007).

Furthermore, opportunities for follow-up individualised HIV risk reduction counselling may not exist for those who test HIV-negative, creating a missed opportunity to provide effective counselling to help these patients adopt behaviours to reduce their risk of HIV acquisition. Providing HIV prevention information during HIV testing has been shown to be less effective than client-centered counselling in reducing HIV risk behaviour and STI incidence in the US (Kamb *et al.*, 1998). For individuals who test HIV-negative, the absence of an individualised HIV risk assessment and risk reduction goal setting may enable them to assume incorrectly that their current behaviour poses little to no risk for HIV infection, even when their behaviour may pose significant risk (Glick, 2005). Such a conclusion may lead individuals who test HIV-negative to maintain or increase their current level of HIV risk behaviour. Therefore, abandoning the potential HIV preventive value of client-centered risk reduction counselling during the 'teachable moment' of HIV testing may create a missed opportunity to provide effective HIV prevention services to individuals who may not otherwise have access to these services.

Achieving optimal HIV prevention outcomes from PITC programmes may depend upon receipt of supplementary referrals for HIV risk reduction counselling as part of clinical care services following HIV-positive test results. As PITC programmes proliferate, research is needed to determine what percentage of patients seek follow-up counselling, support and care services, and to identify the enabling and impeding factors associated with accessing follow-up services. Such knowledge, in combination with data regarding the efficacy of PITC in reducing HIV risk behaviour among those testing HIV-negative and HIV-positive, would provide empirical support for the WHO and CDC recommendations of moving away from client-centered counselling for PITC, or the designing of interventions to address gaps in the current procedures.

Likelihood of HIV transmission

A final question concerning the public health impact of PITC versus client-initiated HIV testing is: At a population level, what is the likelihood of HIV-transmission among patients who receive PITC compared with those who seek client-initiated HIV testing? First, it is unknown if greater HIV prevalence is observed in widespread PITC compared with client-initiated HIV testing services. To date most PITC has mainly been done in high prevalence wards or clinics, resulting in data suggesting greater prevalence in PITC compared with client-initiated HIV testing (e.g. Menzies *et al.*, 2009; Wanyenze *et al.*, 2006). Therefore, the result of larger scale PITC in entire facilities may be a reduced prevalence. Second, are patients identified as HIV-positive during PITC more or less infectious than patients identified as HIV-positive during client-initiated testing? One recent paper from Uganda compared HIV prevalence and CD4+ counts among clients who were tested in different HIV testing approaches (Menzies *et al.*, 2009). Among hospital patients who received PITC, 27.2% tested HIV-positive and 71.4% had a CD4+ counts less than 200 cells/mm. In comparison, among clients who sought client-initiated HIV testing in a health facility, 19.1% tested HIV-positive and 67.7% had CD4+ counts less than 200 cells/mm. Having a CD4+ count less than 200 cells/mm meets WHO criteria for initiating antiretroviral therapy (WHO, 2006). It is likely that clients who have lower CD4+ counts also have higher viral loads and are thus more infectious (Mahajan *et al.*, 2004). However, at present there is not enough evidence to determine if the likelihood of HIV transmission is different between clients who receive provider-initiated versus client-initiated HIV testing and counselling.

Impact of HIV testing on HIV incidence: Unanswered questions

Given that client-initiated HIV counselling and testing programmes have reached such a small percentage of people who need access to HIV testing, one wonders whether reductions in HIV incidence may be greater if more people know their HIV status through expanded availability of PITC, even if PITC is a

less effective prevention intervention than is client-initiated HIV counselling and testing for individual patients. An answer to this question requires determination of: (1) if knowledge of HIV-positive status alone is sufficient to reduce HIV transmission risk behaviour; (2) how effective PITC is in reducing HIV transmission risk behaviour compared with client-initiated HIV testing; (3) how effective PITC is in linking patients to follow-up care; (4) how effective prevention counselling during follow-up care is in reducing HIV transmission risk behaviour; and (5) the HIV transmission likelihood among patients receiving PITC compared with those receiving client-initiated HIV testing.

In the absence of a definitive answer to these public health questions, adaptation of what is known about brief client-centered counselling from other contexts to the PITC setting should be explored. If an effective client-centered counselling approach, including an individualised HIV-risk assessment and HIV risk reduction goal setting, can be tailored to the time and resource constraints of the public health sector in resource limited settings, then the scale up of PITC programmes could achieve even greater reductions in HIV incidence than they might otherwise.

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