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Understanding client satisfaction with HIV testing and counseling services: a mixed-methods study in four African countries

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ABSTRACT

This paper uses mixed methods to provide comparative evidence across four African countries and identify those aspects of the testing experience that are the most important components of clients' satisfaction with services. We analyze data from three sources: a survey of clients at health facilities that included closed-ended questions about specific services and interactions around testing; responses to open-ended questions about testing experiences that were part of the same survey; and semi-structured interviews with a subsample of respondents who described their experience of testing and being diagnosed with HIV. High levels of reported satisfaction are found in both the survey and interview. The critical factors contributing to client satisfaction included: the three C's of testing-counseling, consent, and confidentiality, client-provider interactions, convenience of location, "good services", and reliable test results.

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Satisfaction; HIV testing; counseling; Africa; mixed methods

Introduction

HIV testing and counseling (HTC) has expanded rapidly, as have discussions regarding adequate testing services and clients' rights. Client satisfaction with HIV testing is associated with favorable outcomes such as adherence (Beach, Keruly, & Moore, 2006; Campbell, Scott, Madanhire, Nyamukapa, & Gregson, 2011; Dang, Westbrook, Black, Rodriguez-Barradas, & Giordano, 2013; Roberts, 2002; Schneider, Kaplan, Greenfield, Li, & Wilson, 2004), and high levels of client satisfaction with HTC services are documented across Africa (Kabbash, Hassan, Al-Nawawy, Attalla, & Mekheimer 2010; Miller et al., 2014; Muhondwa, Leshabari, Mwangi, Mbembati, & Ezekiel 2008; Orner et al., 2008). However, some have argued that satisfaction studies do not provide a true picture of client experiences; social desirability bias, cultural factors, or the circumstances of data collection may result in an incomplete evaluation of care (Hays & Ware, 1986; Sitzia & Wood, 1997). Weakness of services around HIV testing, such as lack of privacy, pressure to test, or insufficient information (Angotti, Dionne, & Gaydos, 2011; Angotti, 2012; Hardon et al., 2012; Njeru, Blystad, Shayo, Nyamongo, & Fylkesnes, 2011) have been documented, but so have high levels of satisfaction, despite reports of disrespectful treatment by staff, long waiting times and an inability to opt-out of testing

(Asefa & Mitike, 2014; Chimbindi, Barnighausen, & Newell, 2014).

In view of these contradictory assessments, a combination of quantitative and qualitative methods has been recommended (Jürgensen et al., 2013; Sitzia & Wood, 1997; Williams, Coyle, & Healy, 1998) as representing clients' views more thoroughly than pre-coded questions or checklists. Our mixed-methods study draws on three types of data: responses to closed-ended survey questions about services and interactions around testing; responses to open-ended questions about testing experiences; and texts from semi-structured interviews.

Indicators of quality were summarized under the heading of the 3-Cs: counseling, consent, and confidentiality (UNAIDS, 2000, 2004). Special attention was paid to clients' interactions with providers, (Sullivan, Stein, Savetsky, & Samet, 2000; Vo et al., 2012), and perceived quality of counseling services as key components of satisfaction (Biadglegne et al., 2011; Kabbash et al., 2010; Lyatuu, Msamanga, & Kalinga, 2008; Orner et al., 2008; Papanna et al., 2013). The strength of this study lies in this mixed-methods approach, which uses quantifiable items from surveys to calculate levels of satisfaction, and textual data describing experience and capturing clients' reasons for their opinions regarding health services (Avis, Bond, & Arthur, 1997; Chow, Quine, & Li, 2010).

Data and methods

Data come from the 2008 to 2009 Multi-country African Testing and Counseling for HIV (MATCH) study, conducted in Burkina Faso, Kenya, Malawi, and Uganda. Health facilities representing prevalent modes of testing and major providers of testing services were selected, and all consenting clients present at the selected facilities on the days of the survey (2187 respondents) were interviewed¹ about services provided during pre- and post-test counseling, socio-demographic characteristics, HIV testing experiences, provider interactions, and facility choice. The study's samples were considered to be reasonably representative (Obermeyer et al., 2012). Semi-structured interviews were also conducted with 101 people living with HIV/AIDS (PLWHA) who are potentially vulnerable to adverse consequences of poor care; this was a subsample of convenience meant to illustrate different experiences with testing.²

Responses to close-ended questions were analyzed for the extent to which services were consistent with guidelines on quality and rights, as described previously (Obermeyer et al., 2012). Quantitative results were compared with clients' responses to open-ended survey questions.³ Qualitative data from semi-structured interviews and open-ended survey responses were coded and analyzed within NVivo 10. Transcripts of the 101 client interviews were first coded to retrieve general themes related to satisfaction, and then recoded regarding overall satisfaction with testing and counseling services. Categories were: "satisfied" or "dissatisfied" (explicitly and unequivocally positive or negative); "mixed", (both negative and positive experiences were reported); and "unclear" (could not be categorized).⁴

Results

The 3-Cs – counseling, consent, and confidentiality – and beyond

Results about survey respondents' reports regarding pre- and post-test counseling measures are presented in Table 1. Most clients (89%) met with a counselor and received comprehensive pre-test counseling (76%); less than 3% of respondents ($n = 57$) received no pre-test counseling; the majority reported some form of post-test counseling, with 52% receiving all items on the index, and only 2% ($n = 47$) not receiving any. Most respondents (86%) consented. In another textual analysis of MATCH data, most clients actively consented (60%), a quarter expressed no objection to testing, and only 7% were tested without consent (Obermeyer, Verhulst, & Asmar, 2014). The majority of those tested (79%) believed their results to have been confidential.⁵ Negative

experiences were reported infrequently; clients who felt pressure to test or said their results were involuntarily disclosed expressed distress and dissatisfaction with HTC services.

The majority of survey respondents were satisfied (81%), saying that testing had not been difficult (78%), due largely to the helpfulness of counseling; most felt they received sufficient information (81%), were well treated (91%), and found the meeting useful (96%). There were no significant differences in overall satisfaction between HIV+ (82%) and HIV- (80%) clients (not shown).

Recodes of the transcripts of PLWHAs into satisfaction levels (Table 1) indicate the largest group (40%) had a positive experience and were satisfied; 15% were dissatisfied; 23% expressed positive and negative accounts and were labeled mixed; another 23% were categorized as "unclear".

Table 2 provides quotes that illustrate how clients assessed services and the bases for their satisfaction, based on the textual analysis. Clients who tested multiple times (56%) often had mixed experiences which reflect different settings and improvements over time; for example, a Kenya woman felt pressure to test the first time, struggled to accept her HIV-positive status, but a counselor at her third test, "told me that being positive does not mean the end of the world, [...] and not to stress myself... because that was not going to help". Other respondents who tested before and after the availability of treatment described major improvements.

PLWHA narratives provide powerful descriptions of positive and negative assessments of interactions with providers. Helpful providers give psychosocial support and emotional encouragement, show empathy, and alleviate despair following a positive diagnosis. Conversely, PLWHAs described negative encounters with unfriendly staff who were discourteous, abrupt, and/or indiscreet.

Clients selected testing facilities that were conveniently located and where they expected to be well treated and receive good services. Perceived quality of services referred to caring staff, knowledgeable providers, adequate equipment, cleanliness, and consistent access to medication. Another prominent theme is confidence in the accuracy of test results. Lack of trust led clients to re-test. Thus, beyond the 3-Cs, satisfaction depends on convenience, good services and trust.

Discussion

Our analysis triangulates quantitative and qualitative methods to better understand how clients assess satisfaction. Whereas satisfaction was twice as high in the survey

Table 1. Percent respondents reporting on outcome measures of HIV testing.

All countries ^a	Outcome measure ^b	Total (% Yes)
Analyses of survey data N = 2187	Pre-test: meet with counselor	88.7
	Pre-test index: all items	75.6
	Explained how HIV is transmitted	
	Explained the meaning of positive and negative results	
	Gave time to ask questions	
	Post-test index: all items	52.2
	Explained the meaning of the results	
	Gave advice on prevention	
	Advised discussing test results with significant other	
	Advised partner referral	
	Gave time to ask questions	
	Confidentiality index: all items	79.1
	Whether provider explained that results would not be shared	
	Whether respondent believed results had been protected	
	Consent index: all items	86.2
	Asked if respondent agreed to test	
	Explained that respondent had a choice to accept or refuse	
Referral index: all items (HIV+ clients only)	70.3	
Was referred for care during post-test counseling		
Was ever prescribed medications		
Satisfaction index: all items	80.7	
Survey data: Summary measures of satisfaction	Thought s/he received sufficient information	86.6
	Thought s/he was well treated	90.5
	Thought the meeting was useful	95.8
	Thought testing was not difficult ^c	78.3
	Satisfaction index: all items by country	
	Burkina Faso	73.5
Kenya	84.4	
Malawi	94.8	
Uganda	72.9	
Interviews with PLWHA N = 101	Overall satisfaction: transcripts with HIV+ clients	
	Satisfied	39.6
	Dissatisfied	14.9
	Mixed	22.9
	Unclear	22.8

^aAll differences across countries in the indices (pre and post-test, consent, confidentiality, referral and satisfaction) were significant with $p = .000$. Differences across countries are discussed in other analyses (Obermeyer et al., 2012; Obermeyer et al., 2013).

^bThe rationale for these measures and details about the indices have been described elsewhere (Obermeyer et al., 2012).

^cThis item was not part of the satisfaction index.

Table 2. Illustrative quotes from textual responses.

Satisfied with interactions with providers

"The doctor was talking to me in a kind and gentle way", Kenya, F, 40, HIV+.

"I went home a happy person with the encouragement he gave me", Malawi, F, 32, HIV+.

"Their conversation gave me joy", Burkina Faso, F, age unknown, HIV+.

"The matrons here deal with us well [...] they speak softly to us", Burkina Faso, F, 22, HIV-.

"It's clean and staff are cooperative", Kenya, M, 32, HIV-.

"We [...] don't queue on the line for a long time. Counselors are helpful and flexible", Malawi, M, 22, HIV-.

"The counselor gave me hope that I had a future," Kenya, M, 34, HIV+.

Negative encounters, poor treatment

"That nurse handled me very badly. She told me [...] 'You have tested negative for many ailments, but it seems that you have been sleeping around', [...] she did not give me any counseling", Kenya, F, mid 20s, HIV+.

"They shout at patients", Uganda, M, age unknown, HIV+.

Mixed assessments of encounters

"I don't like [counseling] because it took a lot of time talking nonsense ... I found it boring and I didn't like it ... I trust my counselor ... and I can happily say my counselor helped me in how to select food for my body", Malawi, F, 28, HIV+.

"In the first visit the counselor didn't take time during pre and post test counseling, [...], while the 2nd and 3rd visit she took time during counseling, especially post test counseling", Malawi, Female, 26, HIV+.

"They used to treat us like animals ... But God helped us and [they] got training workshops [at the hospital] and they improved. They started treating us really well", Uganda, M, 48, HIV+.

How providers protect confidentiality

"[Although the room was crowded] the other people could not hear what we were talking about", Kenya, F, 28, HIV+.

"[When the counselor came to conduct a follow-up visit at my home] he missed my house and ... for people not to know that he was a counselor, he asked other women about our whereabouts as if we were his relatives", Malawi, F, 38, HIV+.

How Clients Select Facilities

"[I] wanted to change facility to where I am not known", Uganda, F, 34, HIV-.

"This center is far from home, I don't know anyone who can reveal the results", Burkina Faso, F, 22, HIV-.

"I have trust in these people and their machines", Uganda, M, 24, indeterminate status.

as in the in-depth interviews with PLWHA (81% and 40%, respectively) the percentages of dissatisfied clients were similar in the interviews and the surveys (15% of PLWHA and 19% in the survey). Individuals who tested more than once describe diverse experiences, evaluate care comparatively (Avis et al., 1997; Jackson, Chamberlin, & Kroenke, 2001) and their assessments evolve with personal history and shifts in HIV treatment and related practices. Satisfaction varies across countries reflecting differences in history and policies around testing (Obermeyer et al., 2012; Obermeyer, Bott, Bayer, Desclaux, & Baggaley, 2013), but in all four countries, three-fourth or more of clients are satisfied.

Our analysis reveals that positive interactions with providers and counselors were key determinants of client satisfaction, consistent with other studies (Birhanu, Assefa, Woldie, & Morankar 2010; Dang, Westbrook, Rodriguez-Barradas, & Giordano, 2012), and conversely, dissatisfaction came from experiences with abrupt, rude, and/or disrespectful providers. The majority of clients reported they voluntarily consented and thought their results remained confidential. A small number commented on breaches in confidentiality, and pressure to consent, as reported elsewhere (Hardon et al., 2012; Njeru et al., 2011); in other analyses we have shown that pressure was not incompatible with true consent (Obermeyer et al., 2014) and many providers were keenly aware of dilemmas around consent and disclosure (Bott et al., 2015).

Many clients chose facilities because they expected “good services”, which explains in part why many survey clients were satisfied (Avis, Bond, & Arthur, 1995). They appreciated the convenience and accessibility of testing sites (Anderson, Camacho, & Balkrishnan, 2007; Church, Wringe, Fakudze, Kikuvu, & Simelane, 2012; Miller et al., 2014; Nabbuye-Sekandi et al., 2011; Weston, Dabis, & Ross, 2009); “good services”, positive interactions with providers, respectful staff, efficient services (Bogart et al., 2013), trust and credible results (Angotti et al., 2009; Dahl, Mellhammar, Bajunirwe, & Björkman, 2008; Musheke et al., 2013).

As in all facility-based studies high satisfaction may have been influenced by desirability bias (Leon, Lundgren, Huapaya, Sinai, & Jennings, 2007), but additional information from in-depth interviews and clients’ reports about multiple tests mitigate this limitation. Other limitations include a sample of convenience and the fact that data from 2008/2009 may not be fully reflective of the current testing situation. Although careful recodes of transcripts to quantify overall satisfaction do not represent an evaluation of services per se (Williams et al., 1998),⁶ the consistency in clients’ experiences across qualitative analyses and quantitative survey findings lends credence to our results.

Overall, our analysis shows that combining qualitative and quantifiable data provides a richer view of client satisfaction than either alone, and can explain clients’ assessments. Our results confirm previously documented factors such as convenience and courtesy, but also show how clients seek facilities where they expect good care, change their opinions over time, re-test when they do not trust results, and value interactions with providers. While client-provider interactions, care, respect, speed, and efficiency have all improved, there is still need for additional support to staff and for efforts to reduce the barriers and burdens providers face in treating patients.

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Disclosure statement

No potential conflict of interest was reported by the authors.

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Notes

1. The study was cleared by the Institutional Review Board of each country, and by the Ethics Review Committee of the World Health Organization (WHO). Details about the testing milieu in each of the four countries, the selection of facilities and respondents, response rates, ethical clearance, and data collection have been previously described (Obermeyer et al., 2012; al., 2013).
2. Interviews were conducted in local languages as well as in French and English, they were recorded, transcribed, and analyzed using NVivo 10. Further details about qualitative data methodology and analyses have been described elsewhere (Hardon et al., 2012; Obermeyer et al., 2014).
3. Open-ended survey questions, which were analyzed for textual analysis included: “Was it hard for you to be tested, why or why not?” (asked about most recent test, and, for those tested more than once, about first test); “Why did you choose to test at this particular facility?”; “How did you find the waiting period for your results?”; “Did clinic staff members help you and if so how?”; “What did the health worker advise you to do?”; “Why have you not received referred care?”
4. The coding was discussed between the lead (Michelle Osborn) and corresponding (Carla Makhlof Obermeyer) authors and quotes are illustrative of clients’ perspectives.

5. Responses about client consent have been analyzed in detail elsewhere (Hardon et al., 2012; Obermeyer et al., 2014), as well as involuntary disclosure and the ethical dilemmas this poses for health care workers (Bott et al., 2015).
6. This represents a critique levelled at satisfaction studies in general (Brookes & Fenton, 2014; Fenton, Jerant, Bertakis, & Franks, 2012).

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