Attitudes of patients towards voluntary human immunodeficiency virus counselling and testing in two Nigerian tertiary hospitals

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Summary

Background: **Despite new scientific evidence establishing the benefits of counselling and testing as key elements in human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) prevention strategy, inappropriate HIV screening without consent and counselling is frequent in Africa. Presumed high rejection rate of HIV test has been adduced to this practice.**

Objective**: To determine the acceptability of HIV conselling and testing among Nigerians.**

Methods: **Consecutive sixty indigenous Nigerians aged 35.10 ± 11.31 years with male: female ratio of 2:1, and made of clients with clinically suspected AIDS (20), diseases unrelated to AIDS (15), dermatological problems (10), sexually transmitted diseases (9), and asymptomatic persons (6) were studied.**

Results: **Fifty-three (88.3%) subjects gave informed consent to HIV screening. Of the 53 consenters, 32 (60.4%) were seropositive while 21 (39.6%) were seronegative. Five clients (9.4%) (1seropositive + 4 seronegative consenters) did not turn up for their results, and 2 (3.8%) seronegative consenters did not want to know their serostatus. The reactions to disclosure of seropositive results included grief 9 (28.1%), indifference 8 (25%), surprise 5 (15.6%), family concern 5 (15.6%), denial 3 (9.4%) and suicidal ideation 2 (6.3%). Thirteen (40.6%) seropositive clients showed willingness to disclosure of their serostatus to family members including the father (58%), senior brother (23%), wife (11%) and others (8%).**

Direct cost of screening was N400.00 (U$3.10) per client. An average of 18 minutes per client was spent on counselling.

Conclusions**: This study demonstrates the feasibility of VCT in Nigerian hospitals.**

Keywords: *HIV, Informed consent, Counselling, Testing.*

Résumé

Introduction: En dépit des preuves nouvelles scientifiques qui ont permis d'établir les avantages d'activaté de conseil et d'expérimentation comme des facteurs clés de stratégie de prévention à l'égard du Virus Immunodeficitaire humain/syndrome immunodeficitaire acquis (VIH/SIDA), un test de dépistage de VIH peu approprié sans consentement et activité de conseil sont trés fréquent en Afrique. Un taux élevé présumé du test VIH a été apporté à cette pratique.

Objetif:- Déterminer l'acceptabilité d'activité de conseil et d'expérimentation en ce qui est de VIH chez les Nigerians.

Methodes:- Soixante patients consecutifs originaire du Nigeria âge de 35. 10 ±,11.31 ans avec la proportion masculine: féminine de 2: 1 et compose des clients cliniquement présumé du SIDA (20), des maladies sans rapport au SIDA (15), des problèmes dermatologiques (10), des maladies sexuellement transmissibles (9), et des patients asymptomatiques (6) ont été étudiés.

Résultats: Cinquate trio soit 88,3% sujets ont donnés leur consentement au test de dépistage du VIH. Parmi ces 53 sujets, 32 soit 60,4% étaient séropositifs, tandis que 21 soit 39,6% étaient séronégatifs. Cinq clients soit 9,4% (1 séropositif + 4 séronegatif patients) étaient perdu de vu pour leur résultats, et 2 soit 3,8% séronegatif des patients ne voulaient savoir leur sérostatut. Des réactions en matière de la révelation des résultat séropositifs sonts: douleur 9 soit 28,1%, indifférence 8 soit 25%, surprise 5 soit 15,6%, d'intérêt de famille 5 soit 15,6%, refus 3 soit 9,4% et idéation suicidaire 2 soit 6,3%. Trieze soit 40,6% clients séropositifs ont demontré le desire de reveller leur sérostatut au membre de la famille y compris le père (58%) frère ainé (23%) epouse (11%) et d'autres (8%). Le frais exact du test de dépistage était N400.00 (US $3.10) par client. Un moyen de 18 minutes par client était donné pour activaté de conseil.

Introduction

Increasing prevalence and public health significance of human immuno deficiency virus infection/acquired immune deficiency syndrome (HIV/AIDS) in geometric proportions in Nigeria has been established through anonymous sentinel screening.[1] Specific local and national policy on voluntary HIV counselling and testing (VCT) is now urgently required as key elements of HIV prevention strat-

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egy. Specifically, VCT reduces spread of HIV by reducing risk behaviours[2,3] and identifying seropositive pregnant women requiring interventions that may prevent vertical transmission of HIV.[4] Furthermore, VCT may improve clinical management of HIV/AIDS through early diagnosis and identification of patients requiring chemoprophylaxis against tuberculosis, *Pneumocystitis carini* and, perhaps, malaria.[5,6] It is also currently the position of substantial proportions of surgeons and preoperative patients alike (48% and 54% respectively) that preoperative HIV screening is required to reduce the occupational risk of HIV infection.[7]

Hospitals appear to be efficient and practical settings for VCT. It is estimated that routine hospital testing of hospital patients for HIV could identify more than 100,000 patients with previously unrecognized infection[8]. Counselled clients are more likely to comply with HIV care and prevention programmes. Unfortunately, inappropriate or anonymous HIV screening with no informed consent and/or counselling is still frequent in African settings. This might have arisen from scientific need to eliminate participation and selection bias in epidemiological studies, the need to protect health care workers and presumed high rejection rate of HIV testing among Africans. The ethical justification for anonymous sentinel screening in epidemiological studies is that the public good outweighs any harm to individuals. However, in the light of new scientific evidence of benefits of VCT,[2-6] legal and ethical principles mandating informed consent as an integral element of HIV/AIDS prevention,[9] it is unlikely that public good is best served by the continuation of anonymous screening.

Anonymous screening contravenes the basic principle of VCT, which is that knowledge of HIV status enables people to make logical informed decision about their sexual life. Though antiretroviral treatment that is necessary to optimize HIV/AIDS preventive efforts by providing individuals with the incentive for HIV test is rarely available or affordable in Africa, VCT must be an entry point for any type of HIV/AIDS care. It is therefore argued that it is no longer ethical for health professionals to request clients' consent for anonymised screening or refrain from telling them about the benefits of voluntary named testing.

Moreover, there are extremely scarce data on the acceptance rate of VCT among Nigerians. This study is therefore undertaken to determine the attitudes of Nigerian patients towards VCT in two tertiary hospitals.

Methods

The study population consisted of sixty subjects aged 35.10 ± 11.31 years (range: 17-60 years) with male to female ratio of 2:1 and made of patients with clinical suspicion of AIDS (20), diseases unrelated to AIDS (15), dermatological problems (10), sexually transmitted diseases (9), and asymptomatic persons (6). They were randomly recruited into the study at the Medical Department of Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria and the Dermatology and Venereology Department of Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria. Clinical and demographic data including age, gender, marital, educational and occupational status were obtained from each subject.

Informed consent for participation in the study, HIV screening and disclosure of serostatus were separately obtained. Each subject was pretest and posttest counselled. The duration of counselling of every subject was recorded. Human immunodeficiency virus screening was by enzyme linked immunosorbent assay (ELISA) and limited to subjects who consented to HIV screening. The reactions of the subjects to disclosure of serostatus were documented. Subjects who had previously been screened for HIV or were not well enough to comprehend counselling and implications of HIV screening were excluded from the study.

Results

The clinical and demographic characteristics of patients are shown in Table 1. Mean age was 35.10±11.31 years (range: 17-60 years). Male to female ratio was 2:1. Sixty percent (60) of the patients were married. Literacy rate was 40%. Trading (16.7%), civil service (15%), students (15%) and housewives (13.3%) were the dominant

Table 1 Clinical and demographic characteristics of patients

Characteritics	Frequency	N=60 N (%)
Gender	Male	40 (66.7)
	Female	20 (33.3)
Literacy status	Literate	24 (40.0)
	Illiterate	36 (60.0)
Marital status	Married	36 (60.0)
	Single	18 (30.0)
	Divorced	4 (6.7)
	Widowed	2 (3.3)
Occupation	Farming	7 (11.7)
	Civil servants	9 (15.0)
	Drivers	5 (8.3)
	Housewives	8 (13.3)
	Military and paramilitary	4 (6.7)
	Students	9 (15.0)
	Business/Trading	10 (16.7)
	Professionals	3 (5.0)
	Others	3 (5.0)
	Unemployed	2 (3.3)
Subject Category	Suspected AIDS	20 (33.3)
	AIDS-non-related diseases	15 (25.0)
	Sexually transmitted diseases	9 (15.0)
	Dermatological diseases	10 (16.7)
	Asymptomatic	6 (10.0)
		Mean
Age (years)		31.10±11.31

Table 2 Reactions to disclosure of HIV seropositive status

Reactions	Frequency N=32
Indifference	7 (21.9)
Shock	5 (15.6)
Family concern	5 (15.6)
Denial	3 (9.4)
Dejection	2 (6.3)
Suicidal ideation	1 (3.1)
Total	**32 (100)**

occupations among the subjects.

Of the 60 subjects studied, 53 (88.3%) gave informed consent to HIV screening. Of the 53 consenters, 32 (60.4%) were seropositive while 21 (39.6%) were seronegative. Five (9.4%) consenters (1seropositive and 4 seronegative) did not turn up for their serostatus results and 2 (3.8%) seronegative consenters did not want to know their serostatus. The 4 leading reactions to disclosure of seropositive results among the seropositive subjects as shown in Table 2 included grief 9 (28.1%), indifference 8 (21.9), "shock" 5 (15.6%) and family concern (15.6%). One (3.2%) seropositive subject showed suicidal tendency. Eighty six percent (86%) of seronegative subjects felt relieved while the remaining appeared indifferent. Thirteen (40.6%) seropositive clients showed willingness to disclosure of their serostatus to family members including the father (58%), senior brother (23%), wife (11%) and others (8%).

The direct cost of HIV screening was N400.00 (U$3.64) per client. An average of 18 minutes per client was spent on counselling.

Discussion

This study demonstrates a positive attitude towards HIV counselling and testing (VCT) and compare favourably well with acceptance rates ranging from 78-95% in previous reports from developing and developed countries.[10,11] Pregnant women[11,12] and preoperative patients[7] have similarly been shown to express willingness to accepting routine HIV screening. However, hospital based acceptance rate may not be a true reflection of what is obtainable in the general population as evidenced by a recent report showing that less than 40% of the general population consented to VCT[13]. Furthermore, willingness for VCT may not always translate into actual use. Only 3.6% of subjects who showed willingness for VCT in a population survey actually turned up for HIV testing[13] Factors that have been associated with favourable response to HIV screening include confidentiality, presentation of VCT as a routine rather than optional, and perceived high risk[13]

Informed consent for HIV screening among Africans may also be passive. Despite assurances that participation was voluntary in a VCT study involving Black South African population, 88% of women felt compelled to participate in the study[14] A substantial proportion of subjects (47%) in the general population who volunteered for HIV testing in a population survey did not turn up for their results[13] Passive consent is suggested in the current report by the consenters who did not turn up for their HIV results or did not want to know their serostatus. It has been recommended that the right of patients not to know their serostatus should be respected.[15] The current report also showed that non-consenters and consenters of VCT who did not desire knowledge of their serostatus were not necessarily clients with high risk of HIV infection.

In spite of the climate of fear, prejudice and discrimination surrounding HIV/AIDS in Africa, disclosure of HIV positive serostatus is required to reduce HIV transmission. Knowledge of HIV negative status, on the other hand, could be a strong motivator for avoiding high-risk behaviours[16]. The reactions to disclosure of seropositive HIV status among our patients do not differ from the Caucasians[17]. They underscore the need for counselling and multi-displinary approach in HIV/AIDS care.

Physicians appear deficient in the standard clinical use of VCT. Where policies on VCT exist, gaps between policy and practice have been demonstrated as in a hospital-based study where only 14% of HIV screening requests complied with all hospital policy requirements.[18] Health care providers on surgical services are less likely than others to comply with hospital policy guidelines.[19] A VCT study in a South African hospital showed that only 34% and 54% of Interns felt that pretest and posttests counselling respectively were always necessary.[20] Lack of formal counselling training in medical schools may be responsible for these deficiencies.

Human immuno deficiency virus counseling and testing has its human and material cost implications. The cost of HIV screening ranges from U$ 3.10 to U$57.00[21,22] Cost-effectiveness analysis weighed heavily in favour of routine VCT in hospitals where seroprevalence of HIV/AIDS exceeds 1%. If more than one person in 260 people change their behaviour to prevent additional HIV infection, the ratio of medical care saving to cost of counselling would be greater than 1.0, a cost saving preventive measure.[21,22]

The strong family tie in Nigeria may be responsible for the willingness of some of our clients to disclose their serostatus to a family member. A link between hospital and community based VCT in HIV care and prevention programme may therefore be proposed. Clients should be followed up at home. This provides opportunity for information on clients' socio-cultural environments, contact tracing and assessment of impact of education and counselling. Community based HIV/AIDS counselling programmes involving opinion, religious and political leaders, professionals and people living with AIDS could be utilized to promote traditional African values such as fidelity, pre-marital abstinence and psychosocial support.

In conclusion, this study demonstrates the feasibility of voluntary HIV counselling and testing in Nigerian hospitals. Protocol for VCT include information on self

perceived HIV risk behaviour, pretest counselling, informed consent, HIV testing, disclosure of results, posttest counselling irrespective of serostatus, and follow-up.

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