



The Blame Game: Stigma and HIV/AIDS in an African Metropolis

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Abstract

Background: The purpose of the present study was to explore further the cross-cultural validity, consistency, and replicability of FAIDSS among students when assessing HIV/AIDS-related stigma and fear of people living with HIV/AIDS (PLWHA) in Lagos metropolis.

Methods: Using a purposive method, participants in Lagos Metropolis were surveyed using a questionnaire and conceptualization derived from the work of Ross and Hunter (1992) to measure a variety of HIV-related attitudinal and behavioural items. Quantitative data analyzed employing factor analysis using maximum-likelihood extraction followed by oblique rotation (direct oblimin, delta= 0).

Results: On the factor scale measuring having fear of sex with a particular person, younger respondents especially females significantly more likely to report greater fear than for any other groups. Our findings further suggest that levels of fear of outsiders are high among males and need urgent action and intervention at both individual and societal levels.

Conclusion: It is argued that messages and interventions must be targeted to promote a positive social environment for those living with or affected by HIV/AIDS, and to be useful in understanding stigma, fear and prejudice more fully and in reducing them. A crosscurrent behavioral change that can transform AIDS from an inevitably fatal pandemic to a chronic and manageable disease is the answer.

Keywords: Stigma/Fear. Perception. PLWHA. Behavioural change. Africa

Introduction

Within one generation HIV/AIDS has been the most far-reaching and devastating epidemic the world has ever seen (1, 2). 'Fear of stigma' fuels the HIV/AIDS pandemic by creating a culture of secrecy, silence, ignorance, blame, victimization and shame (3). Available evidence suggests that sub-Saharan Africa (SSA) has the worst scenario of AIDS epidemic and the devastation of its impact is increasing (4).

Nigeria, is a nation with less concentrated HIV/AIDS, but characterized by one of the most rapidly increasing rates of new HIV/AIDS cases. In fact in 2008, around 3.1% of adults between ages 15-49 are living with HIV/AIDS (5).

The word 'stigma' dates back to the 1300s and it is derived from the same Greek roots as the verb

"to stick" (6, 7). In Africa, mental illness is believed to have genetic or biological cause, hence people with mental disease are dangerous and the disease is pervasive and serious. Likewise, AIDS is perceived as a disease of shame and people living with HIV/AIDS (PLWHA) were seen to be solely responsible for their "misfortune" and as such the societal people are more likely to keep their distance from them (8). Tables 1 and 2 showed the problem is inextricably linked to issues of human rights, health and law. As well as other problems such as homophobia, misogyny and racism/xenophobia and can be associated with behaviours often considered socially unacceptable such as drug use and prostitution. A growing body of researches (9-33) has suggested that attitudes (especially stigmatizing attitudes) are

influenced by societal, cultural and psychological factors. In addition, inaccurate understanding about HIV transmission, misinformation, misperception and folk conceptualization about an illness can distort educating the public about the illness (e.g., HIV/AIDS) and thus leading to stigmatizing attitudes and behaviors

The Fear of AIDS Scale (FAIDSS) was developed and tested in three western societies (The Netherlands, the United States, and Australia) (10, 13, 26).

Ross and Hunter examined the structure of FAIDSS in a sample of 134 health care workers in Melbourne, Australia. Factor analysis yielded five discrete dimension of fear of AIDS, with low to moderate intercorrelations (26).

The purpose of the present study was to explore further the cross-cultural validity, consistency, and replicability of FAIDSS among students when assessing HIV/AIDS-related stigma and fear of people living with HIV/AIDS (PLWHA) in Lagos metropolis.

Table 1: Issue in relation to human sex

Why humans have sex

Psyche: Feel good in human brain/sexual pleasure- swirl of hormones and Neurotransmitters (dopamine, norepinephrines, serotonin, oxytocin) - Gain pleasure
 Feel alert, awake, and perhaps somehow jumpy.
 Physical reasons: stress reduction, physical desirability, experience seeking.
 Goal attainment: Resources, social status, class, revenge and utilitarian.
 Emotional reasons: Love, Romance, Commitment and Expression.
 Insecurity: Self-esteem boost, ego trip, Mate guarding, Mundane pleasure.
 Individual differences: personality traits, sexual exploit, sexual motivation, trying to
 Improving or boasting of sexual prowess, reward to a nice partner or in exchange for a favour.punishing or retaliatory to partner's infidelity,
 Procreate to have children
 Spiritual
 Spirit of lust
 Nurture a relationship/express affection, intensify an ongoing affair,
 Escalating the level of commitment to a new or old lover,
 Spin-offs- Emotional closeness, bonding, ultra-commitment, love, affection, acceptance, tolerance, closeness etc
 Sperm competition
 Satisfy a need for intimacy or physical contact
 Channel excess energy or get some exercise
 Overcome boredom, duty/pressure.
 Get to sleep
 Get rid of an erection
 Comply with a partner's demands
 Provide or receive reward or preferred job or employment,
 Comply with social roles or expectations
 Affirm gender or sexuality
 Ego trip/Vanity
 Inferiority complex or insecurity
 Out of nothingness, fantasy
 Bottom power politics
 Promiscuity/Sexual habit
 Affirm one's desirability Gain social currency
 Demonstrate power (e.g., rape or revenge)
 Entrap the other person
 Satisfy curiosity, racial complex
 Satisfy a compulsive behavioural disorder
 Make money, land lucrative tender/contract work etc.

'Why do people have so much hate against people living with HIV/AIDS (PLWHA).'

Societal disdain
 Myths and Misinformation
 Concomitant Ignorance
 Societal values
 Fear of getting the disease and not knowing the pain it will cause
 People are not sure of the ways they can become HIV+

Table 1: Continued...

People see HIV to be additional yoke and terrible drama when peoples; bank accounts were already three times zeroed.
Fears and stigma of being labeled
Hatred and intolerance
Fears of illness, contagion and death
Risk situation construct
Mistrust and distrust
Xenophobic trends and prejudice
Cultural beliefs that HIV is an awful punishment from gods and ancestors
Stigma associated with never-do-wells (e.g., homosexuals, prostitutes, injection drug users)
Disgust in relation to sex outside of marriage
HIV seen as a shameful, disgraceful, unworthy condition
Inflammatory and ill-informed media coverage or commentary/rhetorics by high-profile figures such as prosecutors, government officials, or legislators.
Serious criminal charges have been laid against HIV-positive people for activities such as biting, spitting, or scratching, despite the evidence that the risk of HIV transmission in this fashion is extraordinarily small at most (and in some cases, completely non-existent).
Criminalization of HIV
Lack of belief that cocktail medication can give PLWHA excellent chance of having 20+ yr of a healthy & productive life,
Women who get infected are too scared to tell their husbands because he might blame them; blame for infertility falls on women more than men

Table 2: Misinformation and wrong conceptualization about HIV/AIDS

DOOne can get infected with HIV/AIDS

- By having sex with condom
- By wearing clothes used by an infected individual
- By being bitten by anophelis mosquito that already fed on an HIV patient
- By shaking hands with a person who has the HIV virus
- By hugging someone a person infected
- By having injections
- By receiving a blood transfusion
- By using the same clippers, cutlery, and toilet with someone who is infected

You can get AIDS from:

- Toilets
- Hugging
- Kissing on the lips
- Cups, spoons, knives, plates, glasses, etc
- Holding hands
- Telephones, door handles
- Towels
- Sharing food
- Dancing
- Talking to someone with AIDS
- Crowded rooms
- Insects or mosquito nets

AIDS is a genocidal conspiracy by the West and entrenched by the governments.
AIDS was produced in a government laboratory.
AIDS is a man-made virus that was made to kill and wipe out the black people.
AIDS is armagedon and it is the 'last punishment of man' according to the BOOKS!
HIV/AIDS is an agent of genocide entrenched by the former apartheid regime.
AIDS is a highly contagious disease, and PLWA are scums, paschal lambs and evil.
AIDS can be contracted when someone infected sneezes or coughs on others
There is a cure or vaccine for HIV/AIDS
AIDS/HIV is a product of South Africa's apartheid government plot against blacks.
AIDS can be transmitted when people eat or drink after one another in at a ceremony
AIDS can only be caught by adults through sexual intercourse or through sharing needles.
The AIDS virus can be caught through ordinary close social contract, such as sitting next to an infected person or through face-to-face conversation or sharing tools or equipment with AIDS victims or toilet seats.
Although all blood is tested, there is still a danger of getting AIDS from blood transfusion.
AIDS is transmitted by foreigners (especially African immigrants in South Africa, colloquially known as *Ma-kwere-kwere*), rodents, droppings, arena mystery virus and prostitutes
AIDS is like a mental disease and mental people are dangerous, pervasive and serious.
AIDS is a disease of shame and people living with HIV are responsible for their 'misfortune'. PLWA are wailing corpse expected to die hence no need for good things of life.

Material and Methods

Study design

The participants were all students in three major tertiary institutions in Lagos metropolis in Nigeria. Over 1450 students completed the questionnaire but only 1118 met the criteria for selection and only their data were analyzed. Only full-time students who had completed a minimum of one semester were enrolled. The participants were composed of 601 males and 508 females (data on gender were missing for the remainder). Mean age was 24.2, SD= 6.1, median 23 yr, and the mean education level was 13.86 yr, SD= 3.3. This study did receive approval by the relevant Institutional Review Boards.

Study Site

Lagos, with about 8.2 million inhabitants at the 2006 census, was formerly the capital of the nation. Lagos is a huge metropolis protected from the Atlantic Ocean by long sand spits such as Bar Beach (part of supposed 'Alex Merit Systems') which stretch up to 100 km east and west of the mouth. The city is the economic and financial capital of Nigeria.

Data Analysis

Factor analysis was carried out using maximum-likelihood extraction followed by oblique rotation (direct oblimin, delta= 0) (see Akande & Ross (10), for a full review).

Results

Results of the factor analysis are presented in Table 3. The first factor extracted was described as a Loss of control factor; the second as a fear of having sex with a particular person factor; the third as a contact with outsiders or stigmatized groups factor. The fourth factor described fear of infection and contact with those infected or perceived to be infected, and the final factor was a fear of death and dying factor. Factor intercorrelations are presented in Table 4, and illustrate that the factor solution was moderately correlated.

Factor scores on the five scales are presented in Table 5. There were significant differences on the factor scale measuring fear of having sex with a particular person, with females and younger respondents having significantly greater fear, and on the scale measuring fear of outsiders males scored significantly higher than females, ($P \leq 0.001$). Reliabilities of the five scales were Factor 1, 0.92; Factor 2, 0.83; Factor 3, 0.71; Factor 4, 0.82 and Factor 5, 0.71.

Results of comparison of the rotated matrix of the Lagos sample with the three sample matrices of Ross and Hunter (26) are presented in Table 6. There are accurate and significant matches for factors with the first Australian sample of health workers and, with the exception of one split match for each of the respective samples, also accurate and significant matches. The fact that with these two exceptions out of a possible 15 accurate matches, if the criterion of only one factor of the sample is being compared with, illustrates the high level of comparability between the factor structures between the Lagos and the three Australian Melbourne samples.

Discussion

First, the factor comparison analysis indicates that there is a significant and very accurate match between the factor solutions obtained with three previously reported Australian samples on the FAIDSS (26) and the Nigerian factor solution. Second, the close association between fear of loss of control and fear of AIDS suggests that concern about the discriminating; stigmatizing, socially dislocating, and disabling aspects of HIV disease are a major concern. Of more immediate interest, however, is the association of the item measuring fear of infection with AIDS and venereal diseases with fear of blood transfusions and contact with homo- or bisexual people. These data suggest that heterosexual contact is not seen as such a risk and associated with a similar level of fear, which may increase the risk of heterosexual HIV transmission particularly given the reported prevalence of HIV-2 in Lagos.

Table 3: Factor structure in Lagos metropolis

Item	Loading
Factor 1: Loss of control	
Helplessness	0.86
Hopelessness	0.88
Loss of self-respect	0.84
Becoming dependent on others (not financially)	0.76
Infecting others with one's illness	0.73
Becoming mentally ill	0.68
Display of physical suffering of others	0.66
Becoming physically unattractive	0.67
Inadequate (abnormal) behaviour	0.57
Infection through blood	0.43
Infection through someone's illness	0.44
Infection through sexual contact	0.47
Having contact with blood of other human beings	0.39
Drugs or chemicals	0.33
	(33.1% of variance)
Factor 2: Fear of having sex with a particular person	
Sexual contact with different partners	0.86
Frequent anonymous sexual contacts	0.77
Having extra-marital sexual contacts	0.77
Sexual intercourse	0.59
Having sexual contact with a prostitute	0.54
Having sexual contact with bisexual men or women	0.31
	(5.4% of variance)
Factor 3: Context with outsiders	
Having non-intimate contact (e.g., talking to a prostitute)	0.61
Having non-intimate contact (e.g., talking with homosexual men or women)	0.52
Intimate contact (e.g., kissing on the cheek) with Acquaintances, family members or friends	0.57
Having non-intimate contact (e.g., talking to) with bisexual Men or women	0.54
Having physical contact with sick patients (medically ill people)	0.54
Foreigners	-0.64
Taking medical tests	0.51
Having physical contact with people who you know are Addicted to drugs	0.46
Getting an injection	0.39
	(5.7% of variance)
Factor 4: Infection and contact with infected people	
Contracting AIDS	-0.78
Contracting venereal disease	-0.76
Having physical contact with a person with AIDS	-0.68
Viruses	-0.58
Undergoing blood transfusions	-0.44
Having sexual contact with homosexual men or women	-0.43
	(2.7% of variance)
Factor 5: Death	
Death	-0.72
Dying	-0.73
Growing ill	-0.42
	(1.3% of variance)

Table 4: Intercorrelations between scale factors

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 2	0.45			
Factor 3	0.43	0.34		
Factor 4	0.62	0.41	0.43	
Factor 5	0.47	0.24	0.39	0.44

(All $P < 0.001$)

Table 5: Factor scores by sex (gender) and age groups

	Male	Female	< 23	≥ 23
Factor 1. Loss of control	28.9±8.4	28.6±9.2	29.6±9.4	28.5±8.6
Factor 2. Fear of sex	10.7±4.1	12.8±4.7 **	12.5±4.5	11.2±4.4**
Factor 3: Contact with outsiders	10.3±3.8	9.9±3.8*	10.4±4.1	10.3±3.8
Factor 4: Infection and contact with infected people	11.3±4.2	11.2±4.2	11.4±4.3	11.2 ±4.3
Factor 5: Death	5.2±2.5	5.2±2.5	5.3±2.6	5.2 ±2.5

* $P \leq 0.01$ ** ≤ 0.001

Table 6: S indices between Lagos metropolis factors and Melbourne factors

Australian sample factors	Lagos metropolis factors				
	1	2	3	4	5
Health workers (1) (n=134)					
Factor 1	0.73*	0.00	0.00	0.00	-0.18
Factor 2	0.18	0.56*	0.00	0.00	0.00
Factor 3	0.33	0.00	0.36	-0.57*	0.00
Factor 4	0.34	0.00	0.14	0.00	-0.51*
Factor 5	0.12	0.17	0.56*	0.00	0.00
Social work students (n=220)					
Factor 1	0.35	0.44*	0.00	-0.34	0.00
Factor 2	0.74*	0.00	0.00	0.00	- 0.17
Factor 3	0.16	0.16	0.67*	0.00	0.00
Factor 4	0.34	0.00	0.14	0.67*	-0.41*
Factor 5	0.00	0.00	0.46	-0.51*	0.00
Health workers (2) (n = 66)					
Factor 1	0.53*	0.20	0.24	0.25	-0.18
Factor 2	0.58*	0.26	0.29	0.00	0.00
Factor 3	-0.03	0.00	0.26	0.00	-0.17
Factor 4	0.00	0.00	0.48*	-0.22	0.00
Factor 5	0.19	0.00	0.00	0.20	0.51*

* $P < 0.01$

The fear of HIV/AIDS or HIV-infection stigma in this sample should be interpreted in the context of attitudes toward deformity and disability in Nigeria, and with the implication that the level of fear and stigma may be higher given the lower level of support and acceptance in Nigerian society to the disabled. The results of the current study, which largely are supportive of previous studies (10, 26) Ross and Hunter's (26) findings indicate that the FAIDSS is a reliable index of fear of AIDS and stigma in this population and is readily scaleable, and the obtained factor structure was very close to that obtained in the Australian samples. This conclusion is buttressed by evidence that AIDS is conceptualized as being associated with homosexual persons and blood transfusions, and that preventive education will need to emphasize the risk of heterosexual HIV transmission and deemphasize the perception that only particular classes of person are at risk.

Study Limitations

First, the investigation on stigma and fears of AIDS was limited to relative small participants, with small effect size. Secondly, the investigation was conducted on students only, and not on other populations, to check if there might be a link between emotions and cognitive complexity or emotions and increased knowledge. Perhaps additional studies can consider locus attributions for specific, individual intention, belief and emotions instead of for fear/stigma as a set with two different typology scales. Thirdly, the present study was cross-sectional, rather than longitudinal, whilst the latter could have substantiated the findings of the study along certain structural changes. Future studies may contribute finer grained understanding of other forms of analyses and exploring ways of grouping countries and geopolitical locations in terms of intention, affect and cultures. Despite the limitations of the present study, the FAIDSS model has potential as an explanatory tool for studying the effect of AIDS Stigma. Additional cross-cultural studies using FAIDSS combined with other instruments on beliefs, attitudes, and intentions would therefore appear important. Such in-depth studies should allow exploration of indigenous notions.

In conclusion, responding to HIV/AIDS on a scale commensurate with the pandemic is more than a local imperative. As the end of the beginning appear in sight, the imperative must change gear to include religio-compassionate attitudes towards PLWHA, didactic social-clinical education and recognition of basic human rights to combat the impact of the climate of fear and stigma on the spread of this dreadful illness. Fighting a fatal illness will need more than medications and doctors, but requires self-renewal with "oneself" and understanding the extent to which morality, sexuality, religion and health intersect in day-to-day life activities of people (18). The burden of care for people living with AIDS should be shared between men and women, young and old amid social, medical and economic support (1). AIDS prevention, care and treatment should continue to be the leitmotiv of international AIDS campaigns and work, to slow the spread of AIDS and to improve the quality of life of those living with HIV/AIDS (34). The Lagos experience suggests an effective humane response to this disease should be based on a concern for equality, human rights and the tenets of social justice. A behavioral change that can transform AIDS from an inevitably fatal pandemic to a chronic and manageable disease will go a long way in understanding and decreasing stigma or prejudice and fear dramatically in Nigeria or Africa. A tall order? Maybe.

Ethical Considerations

Ethical issues including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been completely observed by the authors.

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References

1. Turmen T (2003). Gender and HIV/AIDS. *Inter J Gyn and Obste*, 82 (3): 411-18.
2. Wagner AC, Hart TA, Mohommad S, Ivanova E., Wong J, Lauty M (2010). Correlates of HIV stigma in HIV positive women. *Arch Wom Ment Health*, 13(1): 207-214.
3. Rankin WW, Brennan S, Schell E, Laviwa J, Rankin SH (2005). The stigma of being HIV-positive in Africa. *PLoS Med*, 2(1): 0702-04.
4. Piot P, Bartos M, Ghys PD, Walker N, Schwartzlander B (2002). The global impact of HIV/AIDS. *Nature*, 410(1): 14 April.
5. UNAIDS (2008) Sub-Saharan Africa-AIDS epidemic update- Regional Summary. Available from www.google.com.
6. Goffman E (1963). *Stigma: Notes on the Management of Spoiled Identity*. 1st ed. Simon and Schuster Inc. New York, pp.: 34-56.
7. Markowitz FE (2005). Sociological models of mental illness stigma: progress and prospects. Ed, P. Corrigan *On the Stigma of Mental Illness*, 1st ed, American Psychological Association, Washington, DC, pp. 4-5.
8. Rao D, Angell B, Lam C, Corrigan P (2008). Stigma in the workplace: employer attitudes about people with HIV in Beijing, Hong Kong, and Chicago. *Soc Sci & Med*, Available from www.scholargoogle.com.
9. Akande A, Ollendick TH. Dimensions of Fears in African children. Unpublished paper, Virginia State University and Polytechnic, Blackburg, USA: 1997.
10. Akande A, Ross MW (1994). Fears of AIDS/HIV in Nigerian students. *Soc Sci & Med*, 38 (40): 330-42.
11. Allport G (1954). *The Nature of Prejudice*. Addison Wesley, New York, pp 4-19.
12. Andrewin A, Chien L (2008). Stigmatization of patients with HIV/AIDS among doctors and nurses in Belize. *AIDS Pat Care and STDs*, 22 (2): 897-906.
13. Arrindell WA, Ross MW, Bridges KR, van Hout W, Hofmann A, Sanderman R (1989). Fears of AIDS: are they replicable, invariant questionnaire dimensions? *Adv Behav Res Therapy*, 11(3): 69-115.
14. Bandura A (1998). Health promotion from the perspective of social cognitive theory, *Psychol and Health*, 13(2): 1-23.
15. Bastian B, Haslam N (2006). Psychological essentialism and stereotype endorsement. *J Exp Soc Psychol*, 42 (2): 228-35.
16. Bolding G, Davis M, Hart G, Sherr, L, Elford J (2007). Where young MSM meet their first sexual partner: the role of the internet. *AIDS Behav*, 11(3): 522-26.
17. Decety J, Echols S, Correll, J (2009). The blame game: The effect of responsibility and social stigma on empathy on pain. *J Cog Neuroscience*, 22(3): 985-97.
18. Downing, MJ (2008). The role of home in HIV/AIDS: a visual approach to understanding human-environment interactions in the context of long-term illness. *Health & Place*, 14(2): 313-22.
19. Harris A, Bolus NE (2008). HIV/AIDS: An update. *Radiologic_Tech*, 79(3): 243-52.
20. Herek GM (2002). Thinking about AIDS and stigma: a psychologist's perspective. *J Law, Med, & Ethics*, 30(1): 594-607.
21. Ingman KA, Ollendick TH, Akande A (1999). Cross-cultural aspects of fears in African children and adolescents. *Beh Res and Therapy*, 37(2): 337-45.
22. Jing J (2006). The social origin of AIDS panics in China. Eds. Kaufman, & Saich 1st ed, *AIDS and Soc Policy in China*. Harvard University Press, Cambridge, pp.: 22-45.
23. Li L, Wu Z, Wu S, Zhaoc Y, Jia M, Yan Z (2007). HIV-related stigma in health care settings: a survey of service providers in China. *AIDS Pat Care & STDS*, 21(2): 753-62.
24. Luginaah I (2008). Local gin (akpeteshie) and HIV/AIDS in the Upper West region of Ghana: the need for preventive health policy. *Health & Place*, 14(3): 806-16.
25. Ollendick TH, Yang B, King NJ, Dong Q, Akande A (1996). Fears in American, Aus-

- tralian, Chinese and African children. *J Child Psychol & Psych*, 37(2): 213-20.
26. Ross MW, Hunter CE (1992). Replication of the factor structure of the Fear of AIDS schedule (FAIDSS) across samples. *Psychol and Health*, 6 (2): 39-44.
27. Merson M (2006). The HIV-AIDS pandemic at 25- the global response. *New Eng J Med*, 354 (1): 23.
28. Parkhurst JO (2002). The Uganda success story? Evidence and claims of HIV-1 prevention. *Lancet*, 360 (2): 78-80.
29. Rao D, Angell B, Lam C, Corrigan P (2008). Stigma in the workplace: employer attitudes about people with HIV in Beijing, Hong Kong, and Chicago. *Soc Sci & Med*, 67(10): 1541-49.
30. Stockemer D, Lamontagne B (2007). HIV/AIDS in Africa: explaining the differences in HIV prevalence rates. *Cont Pol*, 13(3): 365-78.
31. Wu Z, Sullivan S, Wang Y, Rotheram-Borus M, Detels R (2007). Evolution of China's response to HIV/AIDS. *Lancet*, 369(2): 670-90.
32. Yang L, Kleinman A (2008). Face and the embodiment of stigma: schizpphrenia and AIDS in China. *Soc Sci and Med*, 67(2): 398-408.
33. Merson CM, Buss DM (2007). Why humans have sex. *Arch Sex Behav*, 36(2):477-507.
34. Ki-moon B (2008). United Nations Secretary-General's Speech on a visit to UNAIDS Secretariat, Geneva. Available from www.google.com.

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