

***Gender Disparities In HIV/Aids Epidemiology:
A Study of Expectant Couples in Selected Rural Communities in Nigeria***

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Abstract

Gender disparities appear to be widening such that women make up a growing proportion of persons living with the Human Immune-deficiency Virus (HIV), globally. Statistics has shown that the highest population of people living with HIV are women in the child-bearing age of 15-49 years. However, beyond women's greater biological susceptibility and other explanations of why men and women are at disparate risk for HIV infection, it is believed that unequal exposure to routine HIV-testing could contribute to gender disparities in HIV epidemiology. In the public health institutions in Nigeria for instance, HIV counselling and testing is mandatory in Ante-Natal care (ANC) and routinely carried out on all expectant mothers, while their spouses are excluded from the routine screening.

A total of 110 respondents comprising 53 expectant couples (53 females and 53 males) and 7 health personnel participated in the study. The convenience sampling technique was used to include willing expectant couples at the selected Rural Public Health Facilities in Ogun State Nigeria. Multiple methods of data collection combining quantitative and qualitative research methods were employed to provide rich opportunities for cross-validation of data and triangulation. Descriptive survey methodology was adopted for the quantitative aspects, using a pre-tested questionnaire to collect socio-demographic information and quantitative data pertaining to determinants of gender disparities in HIV-epidemiology, couples' awareness of their HIV status. In-depth interviews and Focus Group Discussions (FGDs) were employed to collect qualitative data from health personnel regarding the current approaches to HIV screening while separate FGDs were held with the expectant mothers and fathers to elicit information about expectant mothers' perception of mandatory HIV screening.

Among other findings, the study revealed that, current approaches to HIV-screening focuses only women and excludes men. The study further reveals a gendered construction of the couples' perceptions of the woman's connection with the unborn child and thus her involvement and responsibilities for child-care. Findings regarding couples' awareness of HIV status and willingness to volunteer for HIV-screening corroborate the fact that exclusion of men from routine HIV-screening especially during ANC is contributory to gender disparities in HIV-epidemiology. The major reasons why expectant fathers will not volunteer for HIV-screening include lack of confidentiality and trust in Health personnel; fear of testing; misconceptions that healthy looks and fidelity in marriage suggests negative HIV status and the fact that healthcare policies do not focus on men requiring routine or mandatory HIV screening. The thesis of this study and as revealed by the findings, is that male-exclusion from routine HIV-screening during ANC in a major contributor to gender disparities in HIV-epidemiology especially in the study area.

Introduction and Background

That Human Immune Deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) is more prevalent in females than in males, has been the general trend in HIV-epidemiology. Gender disparities appear to be widening such that women make up a growing proportion of persons living with HIV (UNAIDS, 2007), thus lending urgency to calls for new research that identifies and explains the factors

that work to place men and women at disparate risk for HIV infection. It has been documented that, in nearly all countries in sub-Saharan Africa, 76 per cent of the young people (aged 15-24 years) living with HIV are females. In sub-Saharan Africa, 60% of people living with HIV are women and girls (UNAIDS, 2011). According to UNAIDS (2010), prevalence data show that 13 women in sub-Saharan Africa become infected with HIV for every 10 men. According to NACA (2011), prevalence among young women aged 15 – 24 years in Nigeria, is estimated to be three times higher than among men of the same age; females constitute 58% (about 1.72 million) of persons living with HIV in Nigeria. Each year, 55% of AIDS deaths occur among women and girls. (NACA, 2011). Furthermore, the national median prevalence among pregnant women in Nigeria is 4.1%. (NACA, 2011).

While it has long been recognized that men and women face unequal risk for HIV infection, explanations for the sources of gender differences in risk remain relatively weak. Women's greater biological susceptibility has been variously attributed to the greater exposed surface area in the female genital tract compared to the male genital tract and greater potential for injury to the cell wall during intercourse for women compared to men. In addition, globally, and particularly in sub-Saharan Africa, the observed high rates of HIV infection in women have brought into sharp focus the problem of violence against women. There is also a growing recognition that women and girls' risk of, and vulnerability to, HIV infection is shaped by deep-rooted and pervasive gender inequalities - violence against them in particular.

Despite the fact that gender inequalities have been largely documented as a major index of gender disparities in HIV epidemiology, attention does not appear to be focussing the real issues, globally. Over the past ten years there has been increasing movement away from opt-in HIV testing, towards service provider initiated, routine HIV tests, where the emphasis is on the service user to opt-out. This move follows joint UNAIDS and World Health Organization guideline in 2004. While knowing one's status can sometimes enable women and men to better protect their health and that of their partners, the move towards opt-out testing is highly problematic in contexts where inequality and HIV-related stigma make disclosure a life threatening prospect (ICW, 2006)..

The 2011 UN Political declaration on HIV and AIDS specifies ten targets and elimination commitments aimed at intensifying efforts to eliminate HIV and AIDS (UNAIDS/GARPR, 2014). The first target is to reduce sexual transmission of HIV by 50% by 2015 and one of the key indicators is the percentage of women and men aged 15-49 who received an HIV test in the past 12 months and know their results. The question then is – how could this target be met, if men and women do not have equal opportunities of knowing their HIV status? That is, with the existing gender inequalities in access to routine HIV screening, especially during Ante-Natal care. In the same vein, the seventh target of the political declaration – ‘Elimination of Gender inequalities’. However, the indicator for measuring the achievement of this target – ‘proportion of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male intimate partner in the past 12 months’ is limiting, gender-biased and further strengthens male-exclusion (UN, 2011).

UNAIDS report in July 2014 shows that 19 million of the 35 million people living with HIV globally do not know their HIV-positive status (UNAIDS, 2014). Women

and men do not have equal opportunities of accessing HIV Counselling and Test (HCT) services, and as discovered in this study and this is a fundamental and globally ignored reason why there are gender disparities in HIV epidemiology. Most women living with HIV discovered their status during mandatory HIV screening at antenatal care and this has made so many researchers to conclude that the highest populations of women living with HIV are those at the child bearing age (15 - 49 years). Most men on the other hand, will not volunteer for HIV screening if there is no medical need that warrants it.

Studies have shown that when male partners are involved in HIV testing and Ante-Natal care (ANC), women are more likely to accept Anti-RetroViral (ARV) prophylaxis (Kiarie, et. al., 2003; Farquhar, et al. 2013); give birth in a health facility (Albrecht, et. al, 2006), and adhere to recommended HIV-related care (Kalembo, et. al. 2013). Msuya, et.al. (2008) and Farquhar, et al. (2004) also discovered that involvement of male partners in their partner's PMTCT programme, in Tanzania and Kenya, led to more HIV infected women receiving Nevirapine during their antenatal follow up visits, avoidance of breastfeeding in their babies, adherence to infant feeding method chosen and a reported higher condom use than those whose partners were not involved. Prevention of Mother to Child Transmission services have also been criticized for only focusing on females and side-lining males who are the primary support unit to the woman (Reece, Hollub, Nangami, and Lane, 2010). A review of Demographic Health surveillance data from 8 countries in Africa, recommended the recognition of an association between uptake of HIV tests by men and the communities they live in thereby underscoring the importance of community factors such as educating communities in HIV programmes to increase male uptake of the programme (Stephenson, Miriam, and Winter, 2013).

The current study was motivated by the concern that, gender-stereotyping regarding the socio-cultural and gendered constructions of women's biological roles has crept into HIV epidemiology and it is contributory to gender disparities in HIV statistics. Apart from the anatomical and physiological make-up of the female reproductive organs which makes her more vulnerable to HIV infection, her biological and socially constructed gender roles in reproduction places more burden on her during the antenatal and post-natal periods in her child-bearing ages. According to UNAIDS/WHO (2006, 2010, 2011), women and girls are especially vulnerable to HIV infection due to a host of biological, social, cultural and economic reasons, including women's entrenched social and economic inequality within sexual relationships and marriage. Women and girls, including those who are themselves HIV positive, also bear the physical and psychological burden of HIV and AIDS care. Women thus carry a 'triple jeopardy' of AIDS: as people infected with HIV, as mothers of children infected, and as carers of partners, parents or orphans with AIDS (Paxton and Welbourn 2004).

Gender, as a key determinant of health, has specific relevance to HIV infection and related health equity issues in terms of how gender influences the activities of everyday life for both men and women. Unlike biological sex, gender refers to the socially constructed notion of what are considered appropriate roles and behaviours for men and women in society (PHA, Canada, 2003) Distinct gender roles and behaviours for men and women can lead to inequities in both health status and access to health care (WHO, 2009). In terms of HIV testing, women and men face different gender-related inequities to testing as well as different challenges in accessing HIV

care, treatment and support programs and services when testing HIV-positive (Remien et al., 2009).

The current drive to test as many people as possible for HIV often ignores the lived complexities of women's – and men's – lives, in which knowing one's status does not necessarily equate with being able to act on that knowledge to improve one's well-being and that of one's family. In addition, the current emphasis by the World Health Organization on testing in ANC settings is problematic because it reinforces the view that women bring HIV into the family. The focus on testing in ANC or childbirth settings further entrenches the perception among women that the primary objective in testing is to protect the health of the infant, rather than also being for the benefit of the women themselves.

Whereas it is believed that heterosexual sex remains the dominant mode of HIV transmission and that the vast majority of people in sub-Saharan Africa continue to be infected with HIV through unprotected heterosexual intercourse, routine ante-natal HIV-screening is restricted to only women to the exclusion of the men. Moreover, if testing is available primarily through ante-natal services there is a real risk that women who are not pregnant will not be reached. Targeting ANC settings also shifts the responsibility away from men to get tested. When combined with the prevalent belief in many cultures that 'real men' do not get sick, this means that men tend not to get tested for HIV (Esplen 2006).

Although the international shifts in HIV testing policy and programming present an opportunity to re-examine current approaches, the issue of gender and related determinants of health equity remain largely absent from the debate. Hence, the current study is adopting inclusive strategies to investigate the determinants of gender disparities in HIV-epidemiology, with a view to discovering strategies to address gender equity issues in access to routine HIV-screening. The study focuses expectant families and includes the expectant mothers accessing antenatal-care in selected rural health facilities and their spouses (expectant fathers) in the study.

Objectives

The study aimed at:

1. Exploring current approaches in HIV- screening
2. Investigating the determinants of gender-disparities in HIV epidemiology
3. Investigating the expectant couples awareness of their HIV status and willingness (of expectant fathers in particular) to undergo HIV screening.
4. Discovering a rationale for the development of gender-equity strategies in HIV- screening and gender-inclusive policies in HIV prevention.

Methodology

The study adopted descriptive and qualitative research methods.

Sample

As part of an on-going study covering other parts of Nigeria, a total of 110 respondents comprising 53 expectant couples (53 women and 53 men). The convenience sampling technique was used to include willing expectant couples from 7

selected Rural Public Health Facilities in Ogun State Nigeria, as indicated in table 1. The expectant mothers were accessed during routine ANC and those that were willing to participate in the study were included. The criterion for inclusion was that their spouses are required to participate in the study. Willing mothers who agreed to intimate their spouses about their required involvement in the study were then enlisted as study participants. Using the convenience sampling method, 1 health personnel (a Nurse/Midwife or Community Health Extension Worker [CHEW]) was selected from each of the health centres, making a total of 7 health personnel. The expectant fathers were thereafter contacted through the assistance of the selected health personnel in the respective health facilities.

Table 1: Selected Rural Public Health Facilities and Expectant Couples

S/N	Selected Health Centres	Number of Couples
1.	Adedero Health Centre	5
2.	Owode General Hospital	15
3.	Ofada Health Centre	5
4.	Orile-imo Health Centre	5
5.	Obafe Health Centre	10
6.	Mowe Health Centre	7
7.	Mokoloki Health Centre	6
	Total	53

Data Collection Methods

Multiple methods of data collection combining quantitative and qualitative research methods were employed to provide rich opportunities for cross-validating and cross-fertilizing research procedures and findings (Brewer and Hunter, 1989). The adopted multi-method approach also provided a means of triangulation for crosschecking and confirming the information elicited from qualitative data sources. Descriptive survey methodology was adopted for the quantitative aspects, using a pre-tested questionnaire to collect socio-demographic information and quantitative data pertaining to determinants of gender disparities in HIV epidemiology, couple awareness of their HIV status, their willingness to undergo screening, and why expectant fathers will not volunteer for HIV screening. Qualitative data were collected through in-depth face-to-face interviews and Focus Group Discussions (FGDs). The broad questions used to elicit qualitative data emerged from preliminary analyses of the quantitative data (simple percentages), and provided basis for further probing. The participating Nurse-Midwives were interviewed on the current approaches to HIV-screening while in-depth interviews and FGDs were held with the expectant couples to elicit responses regarding their perceptions on mandatory HIV screening for expectant mothers and why expectant fathers will not volunteer for HIV screening.

Descriptive statistics (percentages) were used to analyze socio-demographic and other quantitative data from questionnaires. All in-depth interviews and focus group discussions were audio-recorded, transcribed verbatim and checked for accuracy. All qualitative data were then translated into English and analyzed according to the major themes and patterns emerging from the study, using coding procedures suggested by Strauss (1987).

Major Findings

Socio-demographic Characteristics

The majority of the couples (70.8%) were in monogamous marriages, majority (59.4%) were Christians and 60% are Yorubas (the predominant tribe in south-western Nigeria). Participants are majorly literate. About half of the expectant couples (50.9%) had secondary school education, while 15.1% had tertiary education. The majority of the couples (94.3%) are in the child-bearing ages of 18-47years. All the health personnel in the study were females.

Current approaches in HIV- screening

Findings of the study revealed that HIV-screening is mandatory for expectant mothers and is part of routine investigation during ANC in Nigerian Public Health Facilities. The current approach focuses only the females and excludes males. In-depth interviews of the participating health personnel further revealed that husbands of the expectant mothers rarely show up in the Ante-Natal clinics, since there is no policy or guideline requiring their clinic attendance. One of the health personnel in the study noted that men are not comfortable in the ANC environment because the content of messages disseminated and sung at the ANCs targets women and excludes men.

The ante-natal clinic is a woman's domain. Spouses of the pregnant women are usually not comfortable here, because our messages focus the women. The clinic is for them. Hence, the men stay away. They come here only on invitation as you can see. NM Respondent

Male-exclusion in the current approaches to HIV screening therefore strengthens feminization of HIV. However, cooperation of expectant fathers in this study suggest that Male-Involvement (MI) in ANC is achievable, suggest that MI in ANC is achievable, if policies are put in place to make it a requirement for accessing ANC. Msellati (2009), proposed a change in the term ‘Prevention of Mother To Child Transmission’ (PMTCT) to ‘Prevention of Parents To Child Transmission’ (PPTCT) to promote “Male Involvement” into the programme.

Falnes, et. al (2011) suggest that streamlining of services for men or for pregnant couples promotes MI. Researchers further suggest that MI can be achieved through couple counselling (Katz, et.al, 2009, Mbuyi et. al., 2004, Sasaki, 2010) and sexual reproductive health services to boys and men (Yamey, 1999).

On a further probing of how MI in ANC and male-inclusiveness in HIV screening could be achieved, the interviewed health personnel highlighted the roles of community sensitization through traditional rulers, opinion leaders and religious groups. They also stressed the need to integrate routine HIV-screening into the health-care of men attending the general out-patient clinics. According to a Nurse-Midwife respondent,

A shift in the current approaches to HIV screening is desirable and could be achieved through the encouragement of male involvement in ante-natal care. Community mobilisation and sensitization could also be achieved through advocacy meetings with traditional rulers, chiefs and religious groups and campaigns. NM Respondent 2

This finding corroborates that of Nyodo et. al (2014), that the position and influence of chiefs as custodians of culture and enforcers of customs in communities and their involvement in the programme would promote male involvement in PMTCT services. Nyodo et. al (2014) further observed that health education on MI should not be limited to the ANC because most men patronize the General Medical Outpatient departments.

Determinants of gender-disparities in HIV epidemiology

Two issues emerged in relation to determinants of gender disparities in HIV epidemiology. The first is the gender role socialisation and gendered constructions of women's roles in reproduction and childcare; while the second relates to why a higher HIV prevalence is discovered in women. Table 2 reveals three major reasons emerged as being responsible for discovery of a higher HIV prevalence in women. These reasons include: Mandatory HIV-screening for expectant mothers only, attendance of ANCs by women only and frequency of women's visits to health facilities for gynaecological and child-care issues.

Table 2: Determinants of gender-disparities in HIV Epidemiology: Couples' Perceptions

S/N	Determinants	Females (n=53)	Males (n=53)
1.	Mandatory HIV-Screening for Expectant Mothers not a requirement for fathers	49 (82.4%)	45 (84.9%)
2.	"Women's only" attendance at Ante-Natal Clinics	50 (94.4%)	50 (94.4%)
3.	Frequency of Visit of women to Hospitals and Health facilities for:		
(a)	Gynaecological Problems (Infertility, Fibroids, Dysmenorrhea)	46 (86.8%)	47 (88.7%)
(b)	Childcare Issues (treatment of Illnesses, Immunisation, child welfare)	50 (94.4%)	46 (86.8%)

The study reveals a gendered construction of the couples' perceptions of the woman's connection to the unborn child and thus their involvement and responsibilities for childcare. Couples in the study opined that women are more biologically more connected with the unborn child and should therefore be the ones to be screened for HIV. Even though the biological connection of women with the unborn child is obvious, that men should be excluded from HIV-Screening is a clear indication of gender-role stereotyping. This finding corroborates an earlier discovery by Nyodo (2014), that culture and gender considerations constitute barrier to MI in PMTCT; due to gender roles and assumptions that pregnancy and child-bearing are women's responsibilities.

Awareness of HIV Status and Willingness to undergo HIV-screening

Findings of the study revealed that none of the expectant mothers knew their HIV status prior to their first attendance at the ANC and that only 35 (66%) were willing to undergo HIV Counselling and Testing (HCT). However, because the screening was mandatory, they were left with no choice after counselling, than to undergo screening. Only 9 of the 53 (17%) expectant mothers tested positive. The study further revealed that 13 (24.5%) of the expectant fathers claimed to be aware of their HIV status, prior to participation in the study, out of which 2 (3.8%) were positive and 11 (20.7%)

negative. Out of the 40 (75.5%) the expectant fathers that do not know their HIV status, only 29 (54.8%) agreed to undergo voluntary HCT while the remaining 11 (20.7%) opted-out. While the expectant mothers had no choice but to undergo mandatory HIV-screening, it was not the case for their spouses. However, for ethical reasons, the unwilling expectant fathers were not mandated to undergo HIV-screening, since it was not part of the ANC policy guidelines.

Furthermore, out of the 29 expectant fathers that opted-in for HCT, 10 tested positive, while 19 were negative. This brought the number of positive cases among the 53 expectant fathers to 12 out of 42 (i.e. 28.6%); whereas, only 9 of the 53 expectant mothers tested positive. The gender disparity here is alarming, tilting the table towards a higher prevalence in men! This discovery suggests that HIV is more prevalent among the men (28.6%) than the women (17%) in the study. There is also a high probability that the figures could have been higher for men if all the expectant fathers in the study had opted-in for HCT, even though a host of other factors could be responsible.

Three questions then emerged, regarding (a) the circumstances that led to the HIV screening of the 13 expectant fathers that knew their HIV-status prior to inclusion in the current study, (b) whether HIV prevalence among the 13 is actually limited to 2 that disclosed their positive status and (c) why 11 fathers finally opted-out of HCT. One of the 2 men confided in one of the researchers that he could not disclose his status to his wife for fear of stigmatization and divorce. According to a 36-year old expectant father:

I cannot tell my wife about my status because she will believe that I have infected her and this will lead to distrust, fights and separation. Hence I have kept it to myself. I know that she will discover her status during antenatal care routine HIV screening. I just pray that our unborn child will be free of HIV.

This finding corroborates an earlier discovery that barriers to HIV status disclosure among couples included fears of abuse, disharmony in the relationship, and stigma (Walcott et. al. 2013).

Why Expectant Fathers ‘opt-out’ of HIV-Screening

Findings of the study revealed 8 major reasons why the expectant fathers in the study opted out of HIV-screening. Table 3 shows the reasons in order of importance.

Table 3: Why Expectant Fathers will not volunteer for HIV-Screening

S/N	Reasons	n=53
1.	Lack of confidentiality and trust in Health personnel.	50 (94.4%)
2.	Fear of spousal separation or divorce if positive	49 (90.6%)
3.	Fear of being discovered as positive, due to unprotected sex with multiple sex partners	48 (90.5%)
4.	Misconception that healthy looks suggests Negative HIV status	48 (90.5%)
5.	Misconception that fidelity in marriage suggests HIV-negativity	48 (90.5%)
6.	Fear of being discovered as positive, due to Infidelity	47 (88.7%)
7.	Medical attention not focusing men and HIV	46 (86%)
8.	Fear of Stigmatization if positive	45 (84.9%)

The highlighted 8 reasons could further be compressed into 4 major ones as follows:

1. Lack of confidentiality and trust in Health personnel.
2. Fear (due to Infidelity and unprotected sex with multiple sex partners; of spousal separation or divorce) if found positive.
3. Misconceptions that ‘healthy looks’ and fidelity in marriage suggests Negative HIV status.
4. Medical attention not focusing men and HIV..

Previous studies have similarly revealed that the fear of learning one’s HIV status following attendance of PMTCT services prevents men from attending the service (Aarnio et. al, 2009; Theuring et. al., 2009, Nkuoh et. al., 2010)

Conclusion and Implications of Findings

Findings of this study confirm that exclusion of men from routine HIV screening especially during ANC of their spouses is contributory to gender disparities in HIV epidemiology.

Ample evidence in this study lends credence for an argument that – regardless of the greater vulnerability of women to HIV and AIDS, it would not be justifiable to assume that greater vulnerability automatically translates to greater prevalence. Socio-cultural gendered constructions, gender inequality in access to HCT services and male exclusion from ANC are evidently contributory to gender disparities in HIV Epidemiology as discovered in this study. A major discovery in this study is that the statistics of the expectant fathers that had positive HIV status and the additional that could have been discovered amongst them if HIV-screening were to be mandatory are missing in the reported epidemiology of HIV in the study area due to male exclusion from mandatory ANC HIV-screening. In view of the above, there is temptation to re-title the study as “*GREATERR HIV PREVALENCE IN WOMEN: AN ERRONEOUS ASSUMPTION?*”. But not yet! Further studies need to be carried out using larger samples.

Implications of Findings

The revealed greater HIV prevalence in the men in this study calls for further research into more ‘fundamental’ causes of gender disparities in HIV epidemiology as currently being portrayed in Global HIV statistics.

Findings of the study have implications for:

- Development of gender-sensitive, gender-inclusive and gender-equity strategies to mitigate male-exclusion in family reproductive health matters, with particular attention to HIV- screening and HIV prevention.

Such strategies could include:

- Development of Policies to involve expectant fathers in ANC and thus routine HIV screening.
- Providing Couple Counselling Services in reproductive health clinics (family Planning, ANC and PNC)
- Maintaining a male friendly in the reproductive health clinics
- Community involvement in Mobilisation and sensitisation
- Clinic flow management to give priority attention to men that accompany their wives reproductive health clinics to encourage male involvement.

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