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ORIGINAL ARTICLE

Prevalence of Human Immunodeficiency Virus Infection in Pregnant Women Attending Traditional Birth Homes And Hospitals In Southern Nigeria

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Abstract

Introduction: Prevention of mother-to-child transmission is an important strategy for the control of human immunodeficiency virus (HIV) infection. While the structure for this intervention programme exists within conventional antenatal care, infected pregnant women who prefer the services of traditional birth attendants (TBAs) could be at risk of being undetected. This study aimed to evaluate the prevalence of HIV infection among pregnant women accessing antenatal care across conventional health facilities and traditional birth homes (TBHs) in Uyo, southern Nigeria.

Methods: The enrolled subjects were tested for HIV infection following the national algorithm. Three trained interviewers administered a structured questionnaire to obtain biodata, ascertain prior knowledge of status, and assess access to antiretroviral therapy. The data were analyzed using SPSS version 22.0.

Results: The socio-demographic characteristics of the enrolled pregnant women revealed a general late commencement of antenatal care (59% in TBHs and 47% in Hospitals commenced in the third trimester). Additionally, there were more of first-time pregnancy at TBHs (36.4%). The study observed a significantly higher prevalence of HIV infection (4.5%) among those attending traditional birth homes compared to those attending hospitals (2%) (p=0.002)

Conclusion: Undetected HIV infection among pregnant women attending traditional birth is significantly higher than the prevalence seen in conventional health facilities.

Keywords: Human immunodeficiency virus, mother-to-child transmission, traditional birth homes, traditional birth attendants, pregnant women.

INTRODUCTION

Human immunodeficiency virus (HIV) infection remains a public health challenge more than four decades after its discovery (1). This is particularly of concern in sub-Saharan Africa where Nigeria belongs. Efforts at addressing the scourge at the national level include the adoption of the 95-95-95 target aimed at realizing maximal detection and treatment (1,2). This commendable bold approach is to ensure effective control of HIV infection. Undoubtedly, the prevalence of HIV infection has witnessed considerable decline in Nigeria over the last decade, yet the war cannot be said to be worn (3). At the current prevalence of 1.4% for the Nigerian general population and 1.6% among women of reproductive age, there is yet need to sustain the fight against this public health scourge (4). One important angle to the spread of HIV infection lies in its impact on reproductive health. The study area has a higher proportion of women of child-bearing age among persons living with the infection and accessing care at conventional health facilities (5). Such insight into the distribution pattern of the infection supports the understanding of women's vulnerability and as such a target point for breaking both vertical and horizontal transmissions.

To curb the devastating impact of HIV spread within families, voluntary testing and timely commencement of therapy for infected persons were advocated alongside the campaign for sustaining preventive measures. Of particular interest in breaking family-related transmission was the advent of prevention of mother-to-child transmission (PMCT) otherwise referred to as vertical transmission (6,7). Though successful, this intervention suffers from the limitations of inadequate national health coverage and the fact that not all pregnant women opt for conventional antenatal care (United Nations Children's Fund (8,9). The degree and magnitude of antenatal care offered by TBAs remain largely undocumented. A situation that calls for concern when weighed against the level of training and knowledge of HIV transmission among such persons (10,11). A previous study in similar cultural setting had considered factors associated with HIV transmission among children. That study observed immense vertical route transmission occasioned by the preference for services of TBAs among pregnant people (8).

Traditional birth attendants have long been involved in gynaecology and obstetrics care. Patronage for TBAs is influenced by socio-cultural factors that are largely prevalent in resource-poor settings as we have in Nigeria. The recognition that TBAs are important in these societies has led to the advocacy for their integration into primary healthcare delivery (Center for Disease Control and prevention (12). While laudable milestones may have been realized through this approach, there remains a need for monitoring and evaluation. Some of the traditional birth homes are founded on faith-based principles with minimal accommodation for conventional healthcare practices. The advocacy to integrate TBHs in primary healthcare delivery assumes governmental support for the attendants particularly in the area of training. Laboratory aspects of HIV management such as diagnosis and routine monitoring are lacking at TBHs. Despite the awareness on testing, there is no follow up to ensure compliance, leaving a gap for possible mother-to-child transmission. This study was therefore undertaken to evaluate detection and prevalence of HIV infection among pregnant women accessing antenatal care across conventional health facilities and traditional birth homes in Uyo, southern Nigeria.

MATERIALS AND METHODS

This cross-sectional study was conducted among pregnant women aged 18 to 45 years who were accessing antenatal care across hospitals and traditional birth homes in Uyo, Akwa Ibom State of Nigeria.

The enrolled subjects were tested for HIV infection using the following testing kits; Alere Determine (Abbott Laboratories, Tokyo, Japan) Uni-Gold (Trinity Biotech, Ireland) and MP Diagnostic Multisure HIV Rapid test (MP Biomedicals, Singapore). A structured questionnaire was administered by three trained interviewers to obtain biodata and ascertain prior knowledge of status, and access to antiretroviral therapy.

Statistical analysis of data was carried out using SPSS version 22.0. Chi-square analysis was used to compare frequencies. A p-value less than or equal to 0.05 was considered significant in the study.

Ethical approval was duly sought and obtained from The Ministry of Health, Akwa Ibom State in Nigeria. Informed consent was obtained from each study participant.

RESULTS

The socio-demographic characteristics of the enrolled pregnant women revealed general late commencement of antenatal care (59% in TBHs and 47% in Hospitals commenced at third trimester). Additionally, there were more of first-time pregnancy at TBHs (36.4%) as shown in Table 1.

Table 1. Socio-demographic characteristics of study participants

VARIABLES	Hospitals n = 100	TBHs n = 88
Marital Status		
Married	95(95%)	85 (96.6%)
Single	5 (5.0%)	3 (3.4%)
Number of previous children		
0	27 (27%)	32 (36.4%)
1	28 (28%)	23 (26.1%)
2	23 (23%)	15 (17%)
3	14 (14%)	11 (12.5%)
4	5 (5%)	4 (4.5%)
5 >	3 (3%)	3 (3.4%)
Trimester at commencement of care		
First	14 (14%)	10 (11.4%)
Second	39 (39%)	26 (29.5%)
Third	47 (47%)	52 (59.1%)

The study observed a significantly (p= 0.002) higher prevalence of HIV infection among those attending traditional birth homes (4.5%) compared to attending hospitals (2%) (Figure 1).

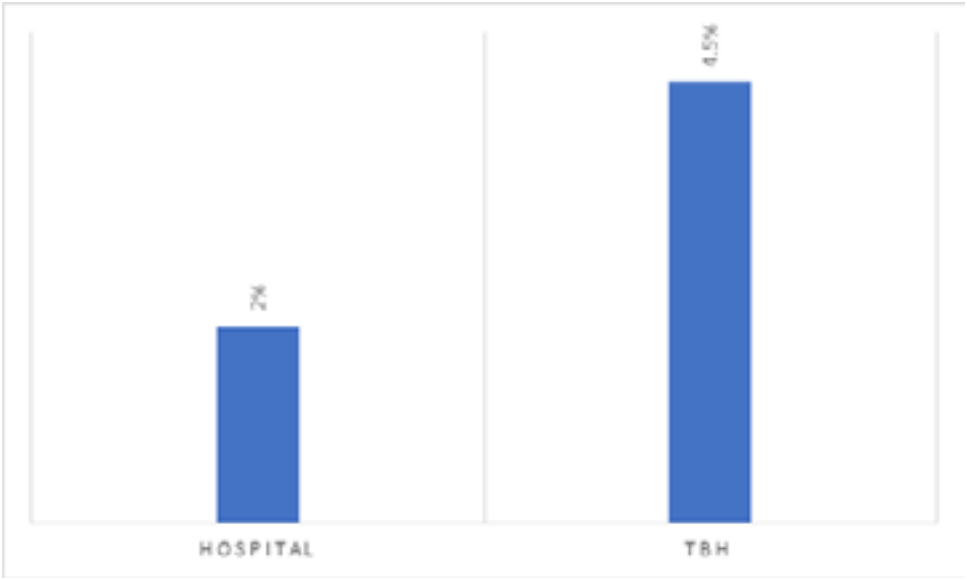

Figure 1. Prevalence of HIV infection among the studied pregnant women

Table 2 indicates that among the infected persons, those attending hospitals had been detected, knew their status and were already on antiretroviral therapy. Although some of the persons attending TBHs claimed to have been screened at private laboratory facilities, no evidence of laboratory report was documented on their behalf. None of the infected women at the TBHs knew their status and they were not accessing antiretroviral therapy at the time of this study.

Table 2. Testing and Knowledge of status for HIV infection among the pregnant women

VARIABLES	Hospitals	TBHs
All Subjects	**n = 100**	**n = 88**
Information about HIV infection	100 (100%)	48 (54.5%)
Tested since the commencement of ANC	100 (100%)	0
Infected Subjects	**n = 2**	**n = 4**
Tested since the commencement of ANC	2	0
Knowledge of HIV status	2	0
Currently accessing HAART	2	0

DISCUSSION

Healthcare coverage, though essential, is yet to be fully achieved in this part of the world. From lack of infrastructure to prevailing factors that influence antenatal care-seeking behaviours of pregnant women in our society, maternal healthcare in general is apparently inadequate (13-16). Late commencement of antenatal care remains a challenge to be addressed in our setting as observed by these previous studies. The present study observed same in addition to the finding that those visiting traditional birth homes were more of (36.4%) first-time pregnant women. This study recorded a significantly higher prevalence of HIV infection among those attending traditional birth homes compared to those attending

hospitals. This finding has implications for the actual prevalence of infection in the community as against hospital-generated data. Patronage of TBAs is quite significant in our society but level of healthcare offered by this category of caregivers occur largely undocumented. Interestingly, the previous study on factors associated with HIV transmission among children reported that a higher proportion of infected children were from infected mothers, and had been delivered outside conventional healthcare settings by TBAs (8).

There is appreciable undetected HIV infection among women attending TBHs. These subjects were unaware of their status and consequently were not receiving antiretroviral therapy as at the time of the study. Apart from the direct risk of rapid/ unchecked disease progression and worsening health condition, other consequences exist. These include possible ongoing transmission within such centers, transmissions within the family of the infected persons and more importantly, mother-to child transmission (6,7). Proper management of health conditions can only take place after accurate diagnosis. Undetected HIV infection remains a breach to the commitment towards eradication. Undetected infected mothers serve as transmitting lines to the next generation. Socio-cultural values and religious sentiments are among the factors that influence uptake of voluntary testing which in turn impacts on epidemiological data (17-20). These same factors also drive the preference for services of TBAs in our society. Thus, the persistence of these belief systems in our society may constitute serious challenges in maternal and infant healthcare delivery. Beyond the advocacy for recognition and training of TBAs as caregivers, there is need for a support system that ensures documented screening of pregnant women who opt for traditional healthcare. This approach in addition to already existing structures could fast-track the national goal for the control of HIV infection.

Conclusion

This study concludes that there are undetected cases of HIV infection among pregnant women who opt for antenatal care from TBAs. These undetected cases pose the risk of continued transmission.

Conflict of Interest

The authors declare no conflict of interest.

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