



Factors associated with HIV Transmission and Infection among Persons Aged 0-17 years in Calabar Metropolis of Nigeria

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ABSTRACT: As different vulnerable groups to HIV infection are identified, it becomes necessary to investigate the possible factors associated with such groups. This approach reveals sensitive areas for intervention as the fight against HIV and AIDS continues. This study was carried out among 70 male and female subjects aged 0-17 years who were living with HIV infection and accessing care at government hospitals within Calabar metropolis. The subjects and their mothers were interviewed using a pre-tested structured questionnaire administered by trained interviewers. Sixty percent of the subjects were delivered from mothers who were also HIV infected and only 44% of the infected children were delivered in the hospital while, traditional birth attendants (TBAs) took delivery of the rest (56%). Majority of the respondents (53%) lived in houses with 6-10 persons per household while, (77%) assisted their parents in petty-trading. More so, the prevalence of assault among the subjects stood at 34% with females affected approximately 4 times higher than males (27%: 7%). In conclusion, this study has revealed an immense vertical route transmission of HIV and a preference for the services of TBAs among pregnant women in our locality. There is also ongoing sexual coercion with the attendant risk of HIV infection among male and female under-aged persons.

KEYWORDS: HIV, vertical transmission, TBAs, sexual assault.

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I. INTRODUCTION

The need to tackle HIV infection necessitated adopting a family health approach in the intervention programmes, especially as regards the spread among under-aged persons. Among the early strategies, was the effort directed towards stemming the tide of mother-to-child transmission. Although remarkable progress has been made in preventing vertical transmission of HIV from infected mothers to their babies, fresh concerns have been raised for another vulnerable group; the adolescents for whom AIDS remains a leading cause of death. According to UNICEF^[1], new HIV infections among adolescents are projected to rise from 250,000 in 2015 to nearly 400,000 annually by 2030 if progress in reaching adolescents' stalls. One of the proposed strategies for prospective reversal of this projection is to strengthen data collection. Along this line of inquiry is the consideration for possible factors driving the spread HIV among these young people. While peer pressure may be influencing the age of sexual debut among male adolescents^[2], quite a number of HIV-associated sociodemographic factors that occasion vulnerability supports the finding of female predominance^[3].

Unfortunately, the scourge of sexual coercion and abuse of adolescents, particularly females, continues to ravage sub-Saharan Africa. In a Nigerian survey, as high as 25% of girls and 10% of boys experience sexual violence^[4]. Much of such incidents are generally not reported to appropriate authorities, leaving majority of victims both medically and psychologically unattended to. The need to explore rape-prevention strategies in the combat of HIV among adolescents has recently been highlighted^[5] and worth considering especially in the light of associated life-long impact. It is quite needful to study the prevailing predisposing factors to HIV infection among adolescents in local populations.

II. METHOD

This study was carried out among 70 HIV-infected subjects aged 0-17 years who were accessing care at government hospitals within Calabar metropolis. A pre-tested structured questionnaire was administered by two trained interviewers to obtain information on the bio-data and sociodemographic variables of the subjects. Some

of the key questions asked in the questionnaire focused on age, gender, knowledge of HIV status and history of sexual involvement.

Input from the mothers/ guardians was included in the interview particularly on issues pertaining to maternal HIV status and circumstances surrounding the birth of the children. For the subjects who couldn't express themselves, their mothers provided the needed information. Ethical clearance was duly sought and obtained (CRS/MH/HREC/016/Vol.V/045) from the Ministry of Health in Cross River State of Nigeria. Informed consent was also obtained from each participant but for the children who were too young to consent, their mother's consent was sought on their behalf.

III. RESULTS

The average age of the children who accessed care at secondary health facilities in Cross River State during the study period was seven years and more males (70%) than females (30%) were recorded. The children lived mainly in homes with 6-10 per household (53%), while 77% of their parents/ guardians were engaged in petty-trading (Table 1).

On the birth-related data of the infected children, 60% of the mothers were also infected and 56% of the children were delivered at home by traditional birth attendants (TBAs). More than half (54%) of the women who were delivered of their babies at home by TBAs were given episiotomy, while 60% of the entire mothers breast-fed their children at birth (Table 2). Most of the children (63%) were not yet sexually involved at the time of the study. However, 34% of them had been sexually assaulted and the victims were mainly females (Table 3).

Table 1. Demographics of children (0 – 17 Years) with HIV infection

Characteristics	No. (Percent)
Age (years)	7± 5
Gender	
Male	49 (70%)
Female	21 (30%)
Number of Persons per Household	
1-5	30 (43%)
6-11	37(53%)
12-15	3(4%)
Occupation of Parents	
Self-employed	54 (77%)
Civil Servant	16 (23%)

Table 2. Birth-related data of the infected children

Characteristics	No. (Percent)
HIV Status of Mothers	
HIV Negative	28 (40%)
HIV Positive	42 (60%)
Place of Birth of the Children	
Delivery at Home	39 (56%)
Hospital Delivery	31 (44%)
Mode of Delivery of the Children	
Normal delivery at home	39 (56%)
Normal delivery in the hospital	26 (37%)
Caesarean Section in the hospital	5 (7%)
Percentage of Mothers given Episiotomy during normal deliveries	
At Home	21 (54%)
At Hospital	10 (39%)
Mode of feeding at Birth	
Direct Breast Feeding	42 (60%)
Infant formula	28 (40%)

Table 3. Sexual involvement of the infected children

Characteristics	No. (Percent)
Never involved before	44 (63%)
Assaulted	
Male	5 (7%)
Female	19 (27%)
Consented	
Male	0 (0%)
Female	2 (3%)

IV. DISCUSSION

This study considered among other things the maternal HIV status, mode and place of delivery as well as sexual involvement of persons up to 17 years of age living with HIV infection in Calabar. Sixty percent of the subjects were delivered from mothers who were also infected, a finding suggestive of immense vertical route transmission of HIV in this locality. The strategy of prevention of mother-to-child transmission (PMCT) was one of the earliest to be adopted as the impact of HIV spread within families became more and more devastating^[6, 7]. The anticipated success of this approach was probably on the assumption that pregnant women would naturally access antenatal care and child delivery at conventional health institutions. So far, there is appreciable achievement in the PMCT programme as reported by UNICEF^[1], although, the success would have been undoubtedly much more, had conventional maternal care been a global reality. This study observed that less than half (44%) of the infected subjects were delivered in the hospital while, traditional birth attendants (TBAs) took delivery of 56% of the children indicating a high confidence and preference for the services of TBAs among women of reproductive age resident in Calabar.

The involvement of traditional birth attendants (TBAs) in maternal health care is an age-long practice that has persisted till date. In fact, more of the child deliveries are thought to take place outside conventional health settings aided by the TBAs than the deliveries taken in hospitals^[8]. Unfortunately, the participation of TBAs in child delivery has remained an important factor in the transmission of HIV from infected mothers to their children. Majority of the TBAs both within and outside Nigeria lack adequate knowledge of HIV infection and prevention as well as the various transmission routes especially as regards exposure to bodily fluids during delivery^[9, 10, 11]. The overwhelming confidence on the TBAs apparently stems from socio-cultural and religious sentiments, making the practice somewhat difficult to expunge from the child and maternal health care system. To this end, the option of integrating TBAs by government at local levels has been considered and embraced in different states of Nigeria including Cross River State^[12, 13]. Government appears to be focused on organizing regular trainings and issuing license to this category of care givers in order to bring them up to date on maternal care including the issues of HIV infection and prevention. These approaches by government in Nigeria seem to reflect attempts towards ensuring success of the PMCT programme at all levels nationwide. However, there would be need to constantly evaluate these new tactics.

Majority of the respondents lived in houses with 6-10 persons per household (53%) and assisted their parents in petty-trading (77%). The socio-economic status of such subjects and their families was generally low. A pattern of poor socio-economic level being associated with increased risk of HIV infection has lingered since the emergence of this public health menace and is yet to be addressed. The coping strategies of poor homes often place children in compromised situations such as child labour which in turn holds the risk of sexual assault and possible infection with HIV^[14]. More so, the prevalence of assault among the subjects stood at 34% with females affected approximately 4 times higher than males even though females constituted about half the number of males that participated in the study. While female children stand at a greater risk of violation, it can no longer be dismissed that the males are also at risk. It is important to note that both male and female under-aged persons are often easily targeted for sexual coercion with the attendant risk of HIV infection among myriads of medical and psychological consequences. The need to encourage victims to open up and also seek medical help is long overdue while efforts should be made towards reorientation of the public against stigmatizing affected persons and covering up perpetrators of child molestations even if they are family members. Proactive measures are quite necessary to check the spread of infection among these young ones. Thus, campaigns on knowledge and prevention of HIV infection as well as personal security consciousness should be sustained in schools, religious organizations and social platforms for effective sensitization of the populace.

V. CONCLUSION

This study has revealed an immense vertical route transmission of HIV and a preference for the services of TBAs among pregnant women in our locality. There is also ongoing sexual coercion with the attendant risk of HIV infection among male and female under-aged persons.

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