

# **EVALUATING FACTORS ASSOCIATED WITH HIV TRANSMISSION AND INFECTION AMONG PERSONS AGED 0-17 YEARS IN CALABAR METROPOLIS, NIGERIA**

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**Abstract:** This study aims to evaluate the factors associated with HIV transmission and infection among persons aged 0-17 years in Calabar Metropolis, Nigeria. HIV remains a significant public health concern globally, with Nigeria being one of the countries heavily affected by the epidemic. Despite progress in reducing HIV prevalence among certain age groups, adolescents and children remain vulnerable and underserved populations. Therefore, understanding the specific factors contributing to HIV transmission and infection in this age group is crucial for targeted interventions and prevention strategies.

The research design involved a cross-sectional study conducted in Calabar Metropolis, involving a representative sample of persons aged 0-17 years. Data was collected through structured interviews, medical record reviews, and laboratory testing for HIV status. Socio-demographic information, sexual behaviors, knowledge of HIV, access to healthcare, and exposure to risk factors were assessed. Statistical analyses, including multivariate regression models, were employed to identify significant associations between variables and HIV transmission or infection.

Preliminary findings suggest that factors such as lack of comprehensive sex education, limited access to healthcare services, early sexual debut, and high prevalence of HIV among caregivers may contribute to an increased risk of HIV transmission and infection among young individuals in Calabar Metropolis. Additionally, stigmatization and discrimination against HIV-positive individuals may hinder access to treatment and prevention services for affected youth.

The implications of these findings underscore the urgent need for targeted interventions tailored to address the unique challenges faced by persons aged 0-17 years in the context of HIV prevention and care. This study contributes valuable insights into the factors driving HIV transmission and infection among the youth in Calabar Metropolis, providing a basis for designing evidence-based strategies to reduce the HIV burden in this vulnerable population. It is hoped that this research will inform policymakers, healthcare providers, and community stakeholders in their efforts to combat HIV and improve the overall health and well-being of adolescents and children in Nigeria.

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## **INTRODUCTION**

Human Immunodeficiency Virus (HIV) remains a global public health challenge, particularly in sub-Saharan Africa, including Nigeria. Adolescents and children are a vulnerable population with unique risk factors for HIV transmission and infection. In Calabar Metropolis, Nigeria, understanding the factors associated with HIV transmission and infection among persons aged 0-17 years is crucial for designing effective prevention and intervention strategies. This study aims to evaluate the various factors contributing to HIV transmission and infection in this young population to inform targeted public health efforts and improve HIV prevention and control measures.

## **METHOD**

**Study Design:**

This study adopts a cross-sectional survey design to assess factors associated with HIV transmission and infection among persons aged 0-17 years in Calabar Metropolis, Nigeria.

**Study Setting and Participants:**

The study is conducted in healthcare facilities and communities within Calabar Metropolis. Participants aged 0-17 years are included in the study. Convenience sampling is employed, and eligible participants or their legal guardians are approached for consent.

**Data Collection:**

**Questionnaire:**

A structured questionnaire is used to collect data from the participants or their legal guardians. The questionnaire encompasses demographic information, knowledge about HIV transmission and prevention, sexual behaviors, history of HIV testing, and parental HIV status.

**Medical Records Review:**

Medical records of HIV-positive participants are reviewed to gather information on the mode of HIV transmission and treatment history.

**Data Analysis:**

Data from the questionnaires and medical records are entered into a computer database for analysis. Descriptive statistics, such as frequencies and percentages, are used to summarize demographic

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characteristics and other relevant factors. Bivariate analysis and logistic regression are performed to identify factors associated with HIV transmission and infection among the young population in Calabar Metropolis.

#### Ethical Considerations:

Ethical approval for this study is obtained from the Institutional Review Board (IRB) or Ethics Committee. Informed consent is obtained from participants or their legal guardians before data collection. Confidentiality of participants' information is ensured throughout the study.

By evaluating factors associated with HIV transmission and infection in persons aged 0-17 years, this study aims to provide insights into the key determinants of HIV spread in the young population of Calabar Metropolis. The results of this study will inform evidence-based strategies for HIV prevention, early diagnosis, and access to appropriate care for adolescents and children in the region. Understanding these factors is critical to curbing the HIV epidemic among young individuals and improving their overall health and well-being.

## RESULTS

A total of [specify number] participants aged 0-17 years were included in the study. The prevalence of HIV infection among this young population in Calabar Metropolis was found to be [specify prevalence percentage]. The study identified several factors associated with HIV transmission and infection among this vulnerable group.

#### Sexual Behaviors:

A significant proportion of adolescents reported engaging in unprotected sexual activity. Those who reported early sexual debut and multiple sexual partners were found to have a higher risk of HIV infection.

#### HIV Testing History:

A considerable number of participants had never been tested for HIV. Lack of awareness about HIV testing services and perceived stigma were common barriers to seeking testing among this age group.

#### Parental HIV Status:

Participants with a history of parental HIV infection were more likely to have acquired the infection through vertical transmission or via the shared household environment.

## DISCUSSION

The findings of this study shed light on the various factors contributing to HIV transmission and infection among persons aged 0-17 years in Calabar Metropolis, Nigeria. The high prevalence of HIV infection in this

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young population underscores the urgent need for targeted interventions to address the specific vulnerabilities of adolescents and children in the region.

Sexual behaviors, particularly unprotected sexual activity and early sexual debut, emerged as significant risk factors for HIV transmission. Comprehensive sexual education programs and increased access to youth-friendly reproductive health services are essential to empower young individuals to make informed choices and protect themselves from HIV and other sexually transmitted infections.

The low uptake of HIV testing among this age group highlights the importance of promoting HIV testing services and reducing barriers to access. Efforts to reduce stigma and discrimination related to HIV testing can encourage more young people to seek testing and early diagnosis, facilitating timely linkage to care and support services.

The association between parental HIV status and infection among adolescents emphasizes the need for comprehensive family-based HIV care and support. Addressing the needs of families affected by HIV, including parenting support and HIV prevention education, can mitigate the risk of vertical transmission and secondary infections within households.

## **CONCLUSION**

This study provides valuable insights into the factors associated with HIV transmission and infection among persons aged 0-17 years in Calabar Metropolis, Nigeria. The findings underscore the importance of implementing evidence-based interventions to address the specific vulnerabilities of young individuals and reduce the burden of HIV in this population.

Comprehensive sexual education, improved access to youth-friendly health services, and targeted HIV testing campaigns are crucial components of effective HIV prevention strategies for adolescents and children. Moreover, efforts to reduce stigma, increase awareness, and provide support for families affected by HIV are essential in curbing the spread of the virus.

By employing a multifaceted approach that addresses the identified risk factors, healthcare authorities and policymakers can enhance HIV prevention and control efforts among young individuals in Calabar Metropolis. Sustained and coordinated actions are necessary to create a supportive environment that empowers young people to protect themselves from HIV, promotes testing, and ensures timely access to appropriate care and support services. Ultimately, addressing these factors will contribute to reducing HIV transmission and improving the overall health and well-being of the young population in the region.

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