

# Prevalence of HIV among Women of Child Bearing Age in General Hospital Okigwe, Imo State

<sup>1</sup>Azubuike Amarachi Salome, <sup>2</sup>Ugwulor, Louis Oguchukwu, <sup>3</sup>Ajoku Bright Chibunna and <sup>4</sup>Ugwulor, Lilian Nkechinyere

<sup>1</sup>Department of Physical and Health Education, Gregory University Uтуру, Abia State.

<sup>2</sup>Department of Public Health, Gregory University Uтуру, Abia State

<sup>3</sup>Department of Public Health, Gregory University Uтуру, Abia State

<sup>4</sup>Department of Microbiology, Gregory University Uтуру, Abia State

Corresponding Author's Email: azubuikeamarachi@gmail.com.

**Abstract:** The study sought to determine the prevalence of HIV among women of childbearing age in General Hospital Okigwe. In particular, the study sought to determine the socio-demographic, prevalence, opportunistic infections, and behaviors contributing to the prevalence of HIV among women of childbearing age in Okigwe. The study adopted a cross-sectional descriptive study and a retrospective research design. The study's population included all Okigwe women of childbearing age (15–49 years) diagnosed with HIV. We used the convenience sampling technique to sample 275 respondents. The instrument for data collection was a structured questionnaire. We analysed the collected data using descriptive statistics. Findings from this study revealed that 63% of respondents lived in urban areas, and 61.8% of respondents were single. This study also revealed that women of childbearing age within the age range of 21–30 had the highest HIV prevalence, at 19.9%. Similarly, the study identified persistent weight loss, persistent diarrhoea, tuberculosis, skin cancer, and yeast infection as opportunistic infections. In the population study, the majority of respondents indicated that multiple sexual partners, drug abuse, and having sex in exchange for money are behaviors contributing to the prevalence of HIV. The study further revealed that the rate of respondents who tested positive for HIV infection moved from 156 in 2018 to 1412 in 2022, which shows that HIV is on the rise among women of childbearing age. The study suggests conducting seminars and workshop programs to educate women on HIV.

**Keywords:** prevalence, HIV/AIDS, childbearing age, opportunistic infection

Published by GRJPHE

Published 15/8/2024

## INTRODUCTION

### Background to the Study

The HIV/AIDS epidemic continues to be a major global health concern, particularly in developing countries like Nigeria. The virus has reached unprecedented levels since its official report in 1986, with a current national sero-prevalence rate of 4.4% (Abasiatai, Umoiyoho, Udoma, Abasiubong, & Ukafia, 2019). Despite accounting for just 10% of the world's population, Sub-Saharan Africa bears the brunt of the epidemic, with a staggering majority of HIV cases. The stark reality is that 40 million individuals around the world are living with HIV, with developing countries, particularly in Sub-Saharan Africa, bearing the brunt of the epidemic (Aniekwu, 2012). Despite being home to just 10% of the world's population, Sub-Saharan Africa accounts for an alarming 63% of the global HIV-positive

population, as well as 65% of new infections and 72% of HIV-related deaths in 2006 (National Guidelines, 2022).

HIV is a virus that weakens the immune system, leaving the body vulnerable to infections. The immune system consists of white blood cells, including CD4+ cells, which act as helper cells and play a crucial role in fighting off infections. When HIV infects a person, it replicates itself in CD4+ cells, eventually destroying them and leaving the immune system compromised. HIV infections can wreak havoc on the body's immune system, making it difficult for the body to fight off other infections. Without proper treatment, HIV can eventually lead to AIDS, a terminal illness. HIV damages CD4+ cells, reducing their numbers and weakening the immune system. While there is no cure for HIV, there are

medications known as antiretroviral therapy (ART) that can suppress the virus and help people with HIV live long, healthy lives (Coffin, Kapila, Chaudhary, Sharma, Vashist, Sisodia, & Gupta, 2021).

HIV leads to the development of AIDS, a condition characterised by a weakened immune system that makes it challenging for the body to combat infections. Typically occurring in the later stages of HIV, AIDS marks its onset with a range of symptoms and opportunistic infections that exploit the compromised immune system, making it a distinct illness. Opportunistic infections, which can occur in anyone but are particularly problematic in people with weakened immune systems, can cause significant illness in people with AIDS and are often difficult to treat.

It is critical to understand that AIDS is not an illness, but rather a set of infections that emerge when the immune system becomes severely weakened and is no longer able to ward off infections. The body becomes susceptible to various illnesses due to this compromised immunity, which we collectively refer to as AIDS. It is essential to remember that this condition is a consequence of a weakened immune system rather than a standalone disease.

Individuals classified as People Living with HIV/AIDS (PLWHA) are those who receive a positive test result for HIV. HIV-negative individuals are those who receive a negative test result for HIV (Coffin et al., 2021). It is essential to remember that these terms are just labels, and they don't define who someone is as a person (Coffin, in Kapila, Chaudhary, Sharma, Vashist, Sisodia, & Gupta, 2021). HIV can be transmitted through a variety of means, including contact with an infected individual's semen or vaginal fluids, contact with infected blood, sexual contact (including oral, vaginal, or anal intercourse) with an HIV-positive partner, from an HIV-positive mother to her baby during pregnancy, birth, or breastfeeding, sharing drug needles or syringes, and receiving blood products or organs from an HIV-positive donor.

HIV can spread primarily through unprotected sexual activity, contaminated blood transfusions, mother-to-child transmission during pregnancy, delivery, or breastfeeding, and sharing contaminated needles or syringes. While sexual contact between men remains a significant mode of HIV transmission, heterosexual contact is now the primary means of spreading the virus on a global scale (Kapila, Chaudhary, Sharma, Vashist, Sisodia, & Gupta, 2021). In many developing nations, HIV transmission through blood transfusions and the use of contaminated needles is a major public health concern. Moreover, a significant proportion of pregnant women with HIV can pass the virus on to their babies during pregnancy or delivery, underscoring the importance of maternal health services and prevention strategies (Olowokere, Adelakun, & Komolafe, 2018).

Mothers with HIV can transmit the virus to their babies through breastfeeding, as breast milk can contain significant amounts of the virus. However, common

activities such as sharing household items, hugging, kissing, or coming into contact with faeces or insects do not spread HIV. Healthcare workers' infection risk is primarily due to direct contact with the virus through needle sticks. Saliva may contain small amounts of HIV, but kissing cannot spread the virus (Olowokere, Adelakun, & Komolafe, 2018). Shortly after HIV infection, some people experience flu-like symptoms like fever, sore throat, and fatigue. However, the virus typically remains asymptomatic for a while before progressing to AIDS. Common symptoms of AIDS include weight loss, fever or night sweats, fatigue, and recurrent infections. While there is no cure for AIDS, strict adherence to antiretroviral medications can significantly slow the progression of the disease and prevent secondary infections and complications.

Many people living with HIV experience no symptoms whatsoever. Interestingly, recent research indicates that around 70–90% of HIV-infected individuals experience flu-like symptoms within a few weeks of infection. The most common symptoms are fever, rash, and a severe sore throat, all occurring simultaneously. In an otherwise healthy person, these symptoms may indicate a recent HIV infection. People living with HIV may also experience frequent or persistent yeast infections (oral or vaginal), which can be a sign of a compromised immune system. People living with HIV may also experience frequent or severe herpes infections, leading to oral, genital, or anal sores. Herpes zoster, also known as shingles, is more common in HIV-positive people. Pelvic inflammatory disease may occur in women who are resistant to treatment. The virus can also attack the nervous system, causing symptoms ranging from tingling in the feet and difficulty walking to memory issues. It's a serious business (Abasiattai, Umoyoho, Udoma, Abasiubong, & Ukafia, 2019). HIV infections can cause a range of symptoms, including: enlarged lymph nodes or "swollen glands" that persist for over three months; frequent fevers and night sweats; skin rashes or flaky skin that doesn't improve; short-term memory loss; slow growth or frequent illness in children; cough and shortness of breath; seizures and lack of coordination; difficulty or painful swallowing; confusion and forgetfulness (Abiodun, Sotunsa, Ani, & Jaiyesimi, 2019).

The impact of HIV on women of childbearing age in Africa is profound. A recent study at the Ebonyi State University Teaching Hospital in Nigeria revealed a high HIV infection rate among pregnant women in Africa, underscoring the need for ongoing research in this field (Ojukwu & Ibekwe, 2020). One cannot overstate the adverse effects of HIV on both the mother and her unborn child. The implications are far-reaching, impacting not only the mother's health but also the health and well-being of her child. Studies have shown that HIV-affected pregnancies are at a higher risk for preterm birth, low birth weight, intrauterine growth restriction, spontaneous abortions, foetal abnormalities, and neonatal sepsis (Segurado & Paiva, 2022).

Moreover, there is a significant increase in the likelihood of vertical transmission of HIV from mother to child, estimated to be 20–45% in sub-Saharan Africa (Asindi & Archibong, 2011). The gravity of these findings underscores the urgent need for improved prevention and treatment strategies.

Heartbreakingly, the majority of paediatric HIV infections—over 95%—occur through mother-to-child transmission. Even more devastating is the fact that a significant proportion of African children with HIV—35–59%—do not live to see their second birthday (Onakwehor & Airede, 2021). With this in mind, the study aimed to assess the prevalence of HIV among women of childbearing age at the General Hospital Okigwe in Imo State, Nigeria.

### Statement of the Problem

Since its initial discovery, HIV has continued to spread and claim lives at an alarming rate, with developing countries bearing the brunt of the pandemic. In Nigeria, for example, HIV continues to spread at an unprecedented rate, with the country ranking third among nations with the highest HIV burden. According to the Nigerian Ministry of Health, approximately 2.8% of adults aged 15 to 49 are living with HIV, highlighting the urgent need for action to combat the disease."

These findings align with statistics from the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the National Agency for the Control of AIDS, which estimate that approximately 1.9 million people in Nigeria are living with HIV. Alarmingly, this number includes a disproportionate number of women—specifically, women between 15 and 49 years old are more than twice as likely as men in the same age group to be living with HIV. In other words, women of childbearing age are particularly vulnerable to HIV infection, which has far-reaching consequences. Infected women not only put themselves at risk, but they also put their partners and children in danger of contracting the virus. Therefore, determining the prevalence of HIV among childbearing women is crucial for identifying and treating infected individuals, thereby curbing the virus's spread.

Okigwe L.G.A., according to the researcher's knowledge, lacks adequate information about HIV transmission and prevalence, which has posed a significant challenge. HIV is a deadly virus, and if left unchecked, it can spread to many people who come into contact with the infected individual. More research is necessary to understand the extent of the problem, as the available data on the prevalence of HIV among women of childbearing age in Okigwe L.G.A. is scarce.

### Objective of the Study

The main purpose of the study was to determine the prevalence of HIV among women of child bearing age in General Hospital Okigwe, Imo State. Specifically, the study sought to;

1. To access the socio-demographic characteristics among women of child bearing age in General Hospital Okigwe, Imo State.
2. To determine the prevalence of HIV among women of child bearing age in General Hospital Okigwe, Imo State
3. To identify the opportunistic infections in HIV among women of child bearing age in General Hospital Okigwe, Imo State
4. To evaluate the behaviours contributing to the prevalence of HIV among women of child bearing age in General Hospital Okigwe, Imo State

### Research Questions

1. What is the socio-demographic characteristics among women of child bearing age in General Hospital Okigwe, Imo State.
2. What is the prevalence of HIV among women of child bearing age in General Hospital Okigwe, Imo State
3. What are the opportunistic infections in HIV among women of child bearing age in General Hospital Okigwe, Imo State
4. What are the behaviours contributing to the prevalence of HIV among women of child bearing age in General Hospital Okigwe, Imo State

### METHODOLOGY

The study adopted a mixed-methods design involving a cross-sectional descriptive study and a retrospective research design. All patients diagnosed with HIV from 2018 to 2022 underwent an extensive review of their records. The area of this study was Okigwe General Hospital, owned by the government of Imo State and located in the Okigwe Local Government Area of Imo State. Okigwe is one of the local governments in Imo State with a large land mass, located in the northern part of the state. We limited the study to hospitals, clinics, and maternities within the Okigwe local government of Imo State.

The study's population consisted of all women of childbearing (15–49 years) age diagnosed with HIV in Okigwe General Hospital, Okigwe Local Government Area of Imo State. The study is limited to all women of childbearing (15–49 years) age diagnosed with HIV in Okigwe General Hospital, Okigwe Local Government Area of Imo State. The study used a researcher-structured questionnaire with closed-ended questions for data collection. We divided the questionnaire into four sections: **Section A** contains the respondents' sociodemographic information. **Section B** will include questions about the prevalence of HIV/AIDS among women of childbearing age. **Section C** consists of questions on opportunistic infections among women of childbearing age in Okigwe General Hospital. **Section D** consists of questions on behaviors that contribute to the prevalence of HIV among women of childbearing age in the General Hospital in Okigwe. The medical record

department conducted a thorough review of the patients' records to collect data. The review concentrated on records of patients diagnosed with HIV among women of childbearing age from 2018–2022. The researcher administered a pretested questionnaire to collect the data. The researcher cleaned, coded, and entered the data into the computer for analysis using the Statistical Package for Social Science (SPSS) program version 25.0. We reviewed all the conducted data analyses,

coded the gathered information, and double-entered the data. We used a frequency table and a percentage to analyse the research question.

## ANALYSIS OF DATA

**Research Question One:** What is the socio-demographic characteristics among women of child bearing age in General Hospital Okigwe, Imo State?

**Table 1:** Socio-demographic characteristics of respondents

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age Range</b>	<b>Frequency</b>	<b>Percentage</b>
Below 20years	11	4.0
21 - 30	181	65.8
31 – 40	68	24.8
41 - 50	15	5.5
50years above	0	0
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Educational level</b>	<b>Frequency</b>	<b>Percentage</b>
FSLC	10	3.6
O Level	71	25.8
Degree	187	68.0
No education	7	2.5
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Place of Residence</b>	<b>Frequency</b>	<b>Percentage</b>
Urban	175	63.6
Rural	100	36.4
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Marital Status</b>	<b>Frequency</b>	<b>Percentage</b>
Single	170	61.8
Married	97	35.3
Divorced	8	2.9
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Number of sexual partners</b>	<b>Frequency</b>	<b>Percentage</b>
None	40	14.5
Two Partners and above	119	43.3
One Partner	116	42.2
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Respondents' Knowledge of HIV</b>	<b>Frequency</b>	<b>Percentage</b>
Adequate	98	35.6
Inadequate	144	52.4
No knowledge	33	12.0
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Pregnancy Status</b>	<b>Frequency</b>	<b>Percentage</b>
Positive	108	39.3
Negative	169	60.7
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Birth in the Past 3 Years</b>	<b>Frequency</b>	<b>Percentage</b>
None	39	14.2
Birth and Antenatal Care (ANC)	170	61.8
Birth and No ANC	66	24.0
<b>Total</b>	<b>275</b>	<b>100</b>

Table 1 presents the socio-demographic characteristics of the study respondents based on the above table. All 275 respondents (100%) were female. Those between the ages of 21 and 30 constituted the majority, with 181 (65.8%), whereas 68 (24.7%) were within the age range of 31 to 40. 11 (4.0%) were below the age of 20 years, while 15 (5.5%) were above the age of 50. In terms of educational level attained, 187 (68.0%) had obtained their degree. 71 (25.8%) had their O-level certificates, while 10 (3.6%) respondents had a First School Leaving Certificate (FLSC), and 7 (2.5%) of the respondents had no formal education. The location analysis revealed that 175 (63.6%) of the respondents are leaving in the urban area, while 100 (36.4%) of the respondents are residents in the rural area of Okigwe L.G.A.

Furthermore, data on the marital status of the respondents revealed that 170 (61.8%) are single, while 97 (35.3%) and 8 (2.9%) are respectively married and divorced. More so, the data in Table 1 revealed that 116 (42.2%) of the respondents had one sexual partner, while 119 (43.3%) had more than one sexual partner.

However, 40 (14.5%) respondents had no sexual partners. Regarding the respondents' knowledge of HIV/AIDS, including its implications, symptoms, risk behaviors, and opportunistic infections, their responses indicated that 98 (35.6%) had adequate knowledge, while 144 (52.4%) had inadequate knowledge. However, 33 (12.0%) had no knowledge of HIV/AIDS.

Additionally, 108 (39.3%) of the respondents are currently pregnant, while 167 (60.7%) of the respondents are currently not pregnant. Data on the occurrence or frequencies of birth in the last 3 years by the respondents revealed that 39 (14.2%) of the respondents had not given birth in the last 3 years. However, 170 (61.8%) respondents had given birth and/or are undergoing antenatal care (ANC), while 66 (24.0%) respondents had given birth but are not undergoing antenatal care (ANC). According to data on respondents' use of condoms, 126 (45.8%) use condoms.

**Research Question Two:** What is the prevalence of HIV among women of child bearing age

**Table 2:** Prevalence of HIV among women of child bearing age in General Hospital Okigwe, Imo State

Year	Age Range	Number of persons with HIV positive	Total Number of persons tested	Percentage
2018	15 – 20	18	9500	0.19
	21 – 30	73	9500	0.76
	31 – 40	32	9500	0.34
	41 – 49	33	9500	0.35
	<b>Total</b>	<b>156</b>	<b>9500</b>	<b>1.64</b>
2019	15 – 20	27	9500	0.28
	21 – 30	185	9500	1.94
	31 – 40	80	9500	0.84
	41 – 49	71	9500	0.74
	<b>Total</b>	<b>363</b>	<b>9500</b>	<b>3.8</b>
2020	15 – 20	33	9500	0.34
	21 – 30	160	9500	1.68
	31 – 40	134	9500	1.41
	41 – 49	41	9500	0.43
	<b>Total</b>	<b>368</b>	<b>9500</b>	<b>3.86</b>
2021	15 – 20	175	9500	1.84
	21 – 30	600	9500	6.32
	31 – 40	270	9500	2.84
	41 – 49	89	9500	0.94
	<b>Total</b>	<b>1134</b>	<b>9500</b>	<b>11.94</b>
2022	15 – 20	242	9500	2.54
	21 – 30	894	9500	9.2
	31 – 40	203	9500	2.14
	41 – 49	73	9500	0.76
	<b>Total</b>	<b>1,412</b>	<b>9500</b>	<b>14.64</b>

Table 2 sought to ascertain the prevalence of HIV among women of childbearing age in General Hospital Okigwe, Imo State. Between 2018 and 2022, 9500 women of childbearing age underwent HIV testing. From January to December 2018, 156 women within the child-bearing age range tested positive for HIV, out of which

73 (0.19%) were between 21 and 30 years old, 33 (0.35%) were between 41 and 49, 32 (0.34%) were between 31 and 40, and 18 (0.19%) were between 15 and 20 years old. Similarly, in 2019, 363 women of childbearing age tested positive. Out of the 363 women, 185 (1.91%) were in the age range of 21–30 years, 80 (0.84%) were in the

age range of 31–40 years, 71 (0.74%) were in the age range of 41–50 years, and 27 (0.28%) were in the age range of 15–20 years. In 2020, 368 women of childbearing age tested positive in Okigwe General Hospital. Out of the 368 women, 160 are in the age range of 21–30, 134 are in the age range of 31–40, 41 women are in the age range of 41–49, and 33 women are in the age range of 15–20. In 2021, 1,134 women of childbearing age tested positive in Okigwe General Hospital. Out of the 1,134 women, 600 are in the age range of 21–30, 270 are in the age range of 31–40, 175

women are in the age range of 15–20, and 89 women are in the age range of 41–49. Finally, in 2022, 1,412 women of childbearing age tested positive in Okigwe General Hospital. Out of the 1,412 women, 894 are in the age range of 21–30, 207 are in the age range of 31–40, 203 are in the age range of 15–20, and 73 are in the age range of 41–49.

**Research Question Three:** What are the opportunistic infections in HIV among women of child bearing age in General Hospital Okigwe, Imo State

**Table 3: Opportunistic infections in HIV**

<b>Persistent Weight loss,</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	50	18.2
No	225	81.8
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Persistent diarrhoea,</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	58	21.1
No	217	78.9
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Tuberculosis,</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	25	9.1
No	250	90.9
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Pneumonia,</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	57	20.7
No	218	79.3
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Skin cancer,</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	25	9.1
No	250	90.9
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Rashes on the skin</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	75	27.3
No	200	72.7
<b>Total</b>	<b>275</b>	<b>100</b>
<b>skin infection</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	50	18.2
No	225	81.8
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Yeast infection</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	68	24.7
No	207	75.3
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Recurrent cold sores or genital herpes infection</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	10	3.6
No	265	96.4
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Persistent fever</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	100	36.4
No	175	63.6
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Night sweats</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	96	34.9
No	179	65.1
<b>Total</b>	<b>275</b>	<b>100</b>

Table 3 seeks information on the prevalence of opportunistic HIV infections among women of childbearing age at General Hospital Okigwe, Imo State. According to the table, 50 respondents, or 18.2%, had persistent weight loss, whereas 225 respondents, or 81.8%, did not have persistent weight loss. Similarly, 58 (21.1) respondents had persistent diarrhoea, while 217 (78.9) did not experience persistent diarrhoea. On tuberculosis, 9.1% (25) had tuberculosis, while 90.9% (250) respondents did not have tuberculosis. In addition, 20.7% (57) respondents had pneumonia, while 79.3% (250) respondents did not have pneumonia.

Data on skin-related infections revealed that 9.1% (25) had skin cancer, while 90.9% (250) respondents did not have skin cancer. Similarly, 27.3% (75) respondents indicated that they had rashes on the skin, while 72.7% (200) respondents indicated that they had no rashes on the skin. Furthermore, the data in Table 3.4 revealed that 18.2% (50) respondents had a skin infection,

whereas 81.8% (225) respondents indicated that they had no skin infection.

Furthermore, 24.7% (68) respondents revealed that they had a yeast infection, while 75.3% (207) respondents revealed that they had no yeast infection. Furthermore, 3.6% (10) of respondents revealed that they had recurrent cold sores or genital herpes infection, whereas 96.4% (265) of respondents indicated that they had no recurrent cold sores or genital herpes infection. Similarly, 36.4% (100) respondents indicated that they had a persistent fever, whereas 63.6% (265) respondents had no persistent fever. Finally, 34.9% (96) of the respondents reported having night sweats, while 65.1% (179) reported not having any.

**Research Question Four:** What are the behaviours contributing to the prevalence of HIV among women of child bearing age in General Hospital Okigwe, Imo State

**Table 4:** Behaviours contributing to the prevalence of HIV

<b>Multiple sexual partners</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	266	96.7
No	9	3.3
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Drug Abuse</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	254	92.4
No	21	7.6
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Having sex in exchange for drugs or money</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	263	95.6
No	4.4	12
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Untreated opportunistic infections</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	238	86.5
No	37	13.5
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Using unsterilized sharp materials like razor blade and needle</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	233	84.7
No	42	15.3
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Premarital sex</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	264	96.0
No	11	4.0
<b>Total</b>	<b>275</b>	<b>100</b>
<b>Engaging unprotected anal, vaginal or oral sex</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	270	98.2
No	5	1.8
<b>Total</b>	<b>275</b>	<b>100</b>

Table 4 aimed to identify the behaviors that contribute to the prevalence of HIV among women of childbearing age in General Hospital Okigwe, Imo State. The respondents' responses indicated that 96.7% (266), 92.4% (254), 95.6% (263), 86.5% (238), 84.7% (233),

96.0 (264), and 98.2% (270) agreed that multiple sexual partners, drug abuse, having sex in exchange for drugs or money, untreated opportunistic infections, using unsterilised sharp materials like razor blades and needles, premarital sex, and engaging in unprotected

anal and vaginal or oral sex are among the behaviors contributing to the prevalence of HIV among women of childbearing age in General Hospital Okigwe, Imo State. Conversely, 3.3% (9), 7.6% (21), 4.4% (12), 13.5% (37), 15.3% (42), 4.0% (11) and 1.8% (5) respondents, respectively, disagreed that multiple sexual partners, drug abuse, having sex in exchange for drugs or money, untreated opportunistic infections, using unsterilised sharp materials like razor blades and needles, premarital sex, and engaging in unprotected anal and vaginal or oral sex are behaviors contributing to the prevalence of HIV among women of childbearing age in General Hospital Okigwe, Imo State.

## DISCUSSION OF FINDINGS

Table 1 presents the socio-demographic characteristics of the respondents based on the findings. The majority of respondents, 181 (65.8%), were between the ages of 21 and 30. In terms of educational attainment, the majority of respondents, 187 (68.0%), had earned their degree. This implies that the majority of the study participants were well-educated, enabling them to exercise good judgement and understanding regarding the items on the questionnaire. This further implies that the participants' responses to the study's questions were founded on a solid understanding. Therefore, we can rely on the findings derived from the analysis of their responses. An analysis of the respondents' locations revealed that 175 (63.6%) and 100 (36.4%) reside in the urban and rural areas of Okigwe L.G.A. The data on the respondents' marital status showed that 170 (61.8%) of them are single, while 97 (35.3%) and 8 (2.9%) are married and divorced. Furthermore, Table 1's data showed that 116 (42.2%) of the respondents had a single sexual partner, while 119 (43.3%) had multiple partners. Regarding the respondents' knowledge of HIV/AIDS, including its implications, symptoms, risk behaviors, and opportunistic infections, their responses indicated that 98 (35.6%) had adequate knowledge, while 144 (52.4%) had inadequate knowledge. Additionally, 108 (39.3%) of the respondents are currently pregnant, while 167 (60.7%) of the respondents are not currently pregnant. Additionally, 108 (39.3%) of the respondents are currently pregnant, while 167 (60.7%) of the respondents are currently not pregnant. However, 170 (61.8%) respondents had given birth and/or were undergoing antenatal care (ANC), while 66 (24.0%) respondents had given birth but were not undergoing ANC. Data on the respondents' condom use revealed that 126 (45.8%) of the respondents use condoms.

ANC), while 66 (24.0%) respondents had given birth but are not undergoing antenatal care (ANC). Data on the respondents use of condoms revealed that 126 (45.8%) of the study by Sombi, Cartoux, Meda, Tiendrébéogo, Ouangré, Yaro, Ky-Zerbo, Dao Blami, Fao, Nébié, Nacro, Kpezohouen, Van de Perre, and Philippe (2019) on the socio-demographic profile of HIV-infected pregnant women in Bobo-Dioulasso, Burkina Faso, supports this finding. Ky-Zerbo, Dao Blami, Fao, Nébié, Nacro, Kpezohouen, Van de Perre, and Philippe (2019) on the socio-demographic profile of HIV-infected pregnant women in Bobo-Dioulasso, Burkina Faso. The study revealed that predictors of HIV infection included age between 20 and 29 years, single marital status, literacy, primiparity, syphilis infection, and the history of infant death.

The study found that between 2018 and 2022, 9500 women of childbearing age underwent HIV testing. In 2018, 156 of these women tested positive for HIV from January to December, with 73 (0.19%) being between 21 and 30 years old. Similarly, in 2019, 363 women of childbearing age tested positive. Out of the 363 women, 185 (1.94%) were in the age range of 21–30 years. In 2020, 368 women of childbearing age tested positive in Okigwe General Hospital. Out of the 368 women, the majority (160) are in the age range of 21–30. In 2021, 1,134 women of childbearing age tested positive in Okigwe General Hospital. Out of the 1,134 women, the majority of the respondents (600) are in the age range of 21–30. Finally, in 2022, 1,412 women of childbearing age tested positive in Okigwe General Hospital. Out of the 1,412 women, the majority (894 women) are in the age range of 21–30. This is in agreement with the findings of Isaiah and Ola's (2021) studies on the prevalence and predictors of HIV-risky health behaviours among secondary school students in South-West Nigeria. The study revealed that the rate of respondents who tested HIV positive moved from 156 in 2018 to 1,412 in 2022, which shows that HIV infection is on the rise among women of childbearing age.

Findings on opportunistic infections in HIV revealed that 50 respondents, representing 18.2%, had persistent weight loss, whereas 225 respondents, representing 81.8%, did not. Similarly, 58 (21.1) respondents had persistent diarrhoea, while 217 (78.9) did not experience persistent diarrhoea. On tuberculosis, 9.1% (25) had tuberculosis, while 90.9% (250) respondents did not have tuberculosis. In addition, 20.7% (57) respondents had pneumonia, while 79.3% (250) respondents did not have pneumonia. Data on skin-related infections revealed that 9.1% (25) had skin cancer, while 90.9% (250) respondents did not have skin cancer. Similarly, 27.3% (75) respondents indicated that they had rashes on the skin, while 72.7% (200) respondents indicated that they had no rashes on the skin. Furthermore, the data in Table 3.4 revealed that 18.2% (50) respondents had a skin infection, whereas 81.8% (225) respondents indicated that they had no skin infection. Furthermore, 24.7% (68) respondents revealed that they had a yeast



infection, while 75.3% (207) respondents revealed that they had no yeast infection. Furthermore, 3.6% (10) of respondents revealed that they had recurrent cold sores or genital herpes infection, whereas 96.4% (265) of respondents indicated that they had no recurrent cold sores or genital herpes infection. Similarly, 36.4% (100) respondents indicated that they had a persistent fever, whereas 63.6% (265) respondents had no persistent fever. Finally, 34.9% (96) of the respondents revealed that they had night sweat, while 65.1% (179) of the of the respondents revealed that they had no night sweat. This study validates the findings of Shanka (2019) on perception and knowledge about HIV/AIDS and opportunistic infections among students in West Nepal. The findings, among others, revealed that students diagnosed with opportunistic infections such as syphilis, persistent weight loss, persistent diarrhoea, tuberculosis, pneumonia, skin cancer, yeast infection, cold sores or genital herpes infection, persistent fever, night sweat, and so on should always screen for HIV and also try as much as possible to take their treatments seriously.

Findings on behaviors that expose one to HIV showed that having multiple sexual partners was 96.7% (266), drug abuse was 92.4% (254), having sex in exchange for drugs or money was 95.6% (263), untreated opportunistic infections was 86.5% (238), using unsterilized sharp materials like razor blades and needles was 84.7% (233), having premarital sex was 96.0 (264), and engaging in unprotected anal, vaginal, or oral sex In General Hospital Okigwe, Imo State, 98.2% (270) of behaviors contribute to the prevalence of HIV among women of childbearing age. This validates the findings of Danjin and Onajole (2019). They conducted a study on HIV/AIDS among in-school youths in Gombe metropolis, Nigeria. A variety of factors, including multiple sexual partners, a history of STDs, exchanging sex for money or favors, and an early sexual debut, were associated with a higher prevalence of HIV among women of childbearing age, according to the study. Furthermore, the study found that condom use was low, which may contribute to the prevalence of HIV in the population. The findings of this study are consistent with those of Nwaneri, Ezike, Anarado, Ndubuisi, and Onyia (2018), who conducted a study on HIV/AIDS knowledge and risk-taking behaviours among university students in Enugu, Nigeria. They discovered that premarital sex, multiple sexual partners, sharing razors or blades, using public clippers, and tribal marking were common risky behaviors among students.

## CONCLUSION

The findings have established that the socio-demographic characteristics of the respondents, which include gender, age, education, place of residence, marital status, number of sexual partners, knowledge of HIV, pregnancy status, birth in the past 3 years, and use of condoms, can influence the prevalence of HIV among women.

From 2018 to 2022, a total of 3,433 women of childbearing age tested positive for HIV, including 165 in 2018, 363 in 2019, 368 in 2020, 1134 in 2021, and 1,412 in 2022. Furthermore, persistent weight loss, persistent diarrhoea, tuberculosis, pneumonia, skin cancer, rashes on the skin, skin infection, yeast infection, recurrent cold sores or genital herpes infection, persistent fever, and night sweats are some of the opportunistic infections in HIV among women of childbearing age in Okigwe L.G.A.

Finally, findings show that multiple sexual partners, drug abuse, having sex in exchange for drugs or money, untreated opportunistic infections, using unsterilised sharp materials like razor blades and needles, premarital sex, and engaging in unprotected anal, vaginal, or oral sex are behaviors contributing to the prevalence of HIV among women of childbearing age in General Hospital Okigwe, Imo State. From 2018 to 2022, the study tested a total of 9500 women of childbearing age. 6067 women tested negative for HIV infection, while 3433 women tested positive. Therefore, from 2018 to 2022, the prevalence of HIV among women of childbearing age is 36.1%. Women of childbearing age within the age range of 21–30 have the highest prevalence (1912) (19.9%).

## RECOMMENDATIONS

We made the following recommendations in light of the findings and conclusions:

1. It is important for parents to provide a supportive and loving home environment that encourages self-improvement and socialisation for their children. This includes giving children a sense of autonomy and independence, which will in turn help them develop positive health behaviours as they mature into adults.
2. Parents should maintain a warm and open relationship with their children, which will help them feel comfortable discussing important issues, such as health and sex education. This will prevent children from seeking advice from their peers, who may provide inaccurate information.
3. The government, NGOs, and other public health stakeholders should organise regular seminars and workshops to educate the public, correct misconceptions about HIV, and promote positive health behaviours that can prevent its spread. We should tailor these interventions to the specific needs of different communities.
4. It is important to employ health personnel in rural and urban communities to provide education on the dangers of HIV, including related health issues and opportunistic infections. These professionals should teach practical and ethical strategies that communities can use to prevent the spread of HIV.
5. There should be a national campaign and advertisement series that raises awareness of the dangers of early sexual activity among adolescents. Additionally, we should avoid films and other media that promote or encourage the sale and exhibition of

pornographic material, as they can lead to sexual activity without appropriate knowledge of control.

6. Furthermore, the primary and secondary school curricula should incorporate moral education to underscore the traditional and religious norms surrounding sexual behavior. This will help reinforce positive health behaviours in young people.

## REFERENCES

- Abasiattai, A.M., Umoiyoho, A.J., Udoma, E.J., Abasiubong, F.S., & Ukafia, S. (2019). Prevalence of HIV infection among antenatal attendees at Uyo Teaching Hospital, Akwa Ibom State, South-South Nigeria, *International Journal of Research*, 6(4), 230-243.
- Abiodun, O., Sotunsa, J., Ani, F., & Jaiyesimi, E. (2019). Knowledge of HIV/AIDS and predictors of uptake of HIV counseling and testing among undergraduate students of a privately owned university in Nigeria. *BioMed Central Research Notes*, 7(1), 639-648.
- Aniekwu, N. I. (2012) Gender and Human rights dimensions of HIV/AIDS in Nigeria. *African Journal of Reproductive Health* 6 (3), 30-37.
- Asindi, A. A. & Archibong, A. E. (2011). Prevention of Perinatal HIV infection in developing countries: Obstacles and possibilities. *Postgrad Doc Afr*; 23(3): 50-53.
- Coffin, J. M. (2021). Molecular biology of HIV. In K. A. Crandall ed., *The Evolution of HIV*, 3-40.
- Dembe, J. B., Erickson, R. G., Delbos, S. M. & Banks, A. E. (2020). The impact of overtime and long work hours on occupational injuries and illnesses: new evidence from the United States. *Occupational and Environmental Medicine*, 62 (9): 588–597.
- Israel, B.A., Schulz, A.J., Parker, E.A., Becker, A.B., Allen, A.J., & Guzman, J.R. (2003). *Critical issues in developing and following community based participatory research principles*In: Minkler M, Wallerstein N (editors) *Community-based participatory research for health* (pp53-76) San Francisco: Jossey-Bass
- Kapila A., Chaudhary S., Sharma R.B., Vashist H., Sisodia S.S., & Gupta A., (2021). *A review on: HIV AIDs. Indian Journal of Pharmaceutical and Biological Research (JPBR)*. 4(3):69-73  
2007. Federal Ministry of Health.
- Ojukwu, J. U., & Ibekwe, P. C., (2020). Maternal HIV seropositivity and perinatal/neonatal outcome at Ebonyi State University Teaching Hospital, Abakaliki, Nigeria. *Trop Journal Obstet Gynaecol*; 22(1): 33-37.
- Olowokere, A.E., Adalakin, O.A., & Komolafe, A.O. (2018). Knowledge, perception, access and utilisation of HIV counselling and testing among pregnant women in rural communities of Osogbo town, Nigeria. *Australian journal of Rural Health*;26(1): 33-41.
- Onakewhor, J. U. E. & Airede, K. I., (2021). Integrating VCT for HIV/AIDS into the National programme on immunisation: A vehicle for providing accelerated access to mothers and babies with unmet needs for prevention of Mother- to –Child transmission of HIV/AIDS. *Sahel Medical Journal*; 9 (2): 29-32.