PREVALENCE OF CHLAMYDIA INFECTION AND ASSOCIATED FACTORS AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE IN TERTIARY HEALTH INSTITUTIONS IN ANAMBRA

ABSTRACT

Sexually transmitted infections (STIs) are known to cause adverse effect on the health condition of a woman, her ability to conceive and they increase reproductive morbidity. Untreated sexually transmitted infections can lead to poor pregnancy outcomes such as fetal death, premature delivery; premature rupture of the membranes, low birth weight, neonatal pneumonia, mental or physical developmental disabilities. This study aimed to investigate prevalence of chlamydia infection and associated factors among pregnant women attending antenatal in tertiary health institutions. Descriptive cross sectional study was adopted for this research work. Instrument for data collection was questionnaire. Reliability coefficient of 0.86 was established proving the instrument reliable. Pregnant women from the study areas made up the population, while 231 were drawn as sample using proportionate sampling technique. Data were analyzed with SPSS using mean, percentage and Pearson's Chi-square. Findings showed that majority of the participants 113(48.9%) fall within the age range of 26 – 35. Of all the participants, 215(93.1%) tested negative for Chlamydia infection, while 16(6.9%) tested positive, indicating low level of Chlamydia infection among the pregnant women in the studied population. Dominant lifestyle factors, major socio demographic and common environmental factors were not associated with prevalence of Chlamydia infection among pregnant women. However, there are significant associations between certain cultural practices like polygamy and wife inheritance ($X2 = 8.450$, $p = 0.004$), early marriage ($X2 = 5.510$, $p = 0.019$), and freedom of behavior and relationship ($X2 = 4.079$, $p = 0.043$). Chlamydia infection seems widespread among pregnant women whose partner engages in certain cultural practices like polygamy, wife inheritance, early marriage and extra marital relationship. This implies that sexual health promotion policy for controlling STIs, specific preventive and intervention strategies for CT should be developed and targeted among the sexually active general population in the community.

Keywords: Antenatal, Chlamydia infection, Prevalence, Pregnant women.

INTRODUCTION

It is well recognized that sexually transmitted infections (STIs) have a negative impact on a woman's health, her capacity to conceive, and they raise the risk of reproductive morbidity (Elizabeth et al., 2020). Untreated STDs increase the risk of transmitting the infection to the unborn child during pregnancy and delivery and can result in poor pregnancy outcomes such as foetal death, premature delivery, premature membrane rupture, low birth weight, neonatal ophthalmia, neonatal pneumonia, and mental or physical developmental disabilities (Elizabeth et al., 2020). Globally, Neisseria gonorrhoeae and Chlamydia trachomatis (CT) are the most

prevalent STDs among over 20 different varieties (Armstrong-Mensah, Ebiringa, Whitfield & Coldiron, 2021).

The most common bacteria that is sexually transmitted is called Chlamydia trachomatis (CT). According to Armstrong-Mensah et al. (2021) there are an estimated 50 million cases of chlamydia infection worldwide each year. The level of morbidity linked to this infection is very high. It is frequently the cause of cervicitis and urethritis, ectopic pregnancy, tubal factor infertility, preterm delivery, stillbirth, pneumonia, epididymitis, proctitis, and reactive arthritis in newborns (Changchang, et al., 2021). Chlamydia trachomatis, is a common source of genitourinary infections that can have substantial consequences for the health of expectant mothers and newborns, (Siakwa et al. 2016, 17-19).

Although chlamydia infections have an impact on both men and women., they are primarily a health concern for women because of the symptoms and outcomes that are more detrimental to a woman's reproductive system than they are for a male. This is true of most sexually transmitted infections. The majority of women who are carriers are generally asymptomatic, making it possible for many infected people to remain undiagnosed (Armstrong-Mensah et al., 2021). From the perspective of public health, this absence of symptoms makes the disease hard to identify and manage since patients do not seek medical attention or a diagnosis when the illness is still in its early stages (Elizabeth et al., 2020). From the perspective of public health, the condition is challenging to control because of its behavioural component. As chlamydia trachomatis does not cause any symptoms, many infected individuals are unaware that they have the infection. This implies that an individual with the virus may unknowingly infect a companion. Frequently, the symptoms are so little that they go unnoticed until they start to cause issues for the person experiencing them. generally asymptomatic, making it possible for many infected people to remain undiagnosed (Armstrong-Mensah et al., 2021). From the perspective of public health, this absence of symptoms makes the disease hard to identify and

manage since patients do not seek medical attention or a diagnosis when the illness is still in its early stages (Elizabeth et al., 2020). From the perspective of public health, the condition is challenging to control because of its behavioural component. As chlamydia trachomatis does not cause any symptoms, many infected individuals are unaware that they have the infection. This implies that an individual with the virus may unknowingly infect a companion. Frequently, the symptoms are so little that they go unnoticed until they start to cause issues for the person experiencing them.

Finding out if someone has chlamydia might be aided by routine sexual health exams. According to Changchang et al. (2021), between 30% and 70% of women with Chlamydia trachomatis infections do not receive a diagnosis. For this reason, early detection and treatment of the disease in women who are childbearing age is thought to be a financially sensible way to improve the sexual and reproductive health of the populace (Changchang et al., (2021). Regarding personal knowledge and steps taken to stop the disease's spread, chlamydia trachomatis is among the most overlooked illnesses. Raising public knowledge of chlamydia and its transmission through sexual contact and resulting in behavioural changes is essential to reducing the disease (Musa et al., 2019). Those who engage in sexual activity are particularly vulnerable to the populations most susceptible to acquiring and spreading Chlamydia trachomatis are those who engage in sexual activity. Thus, populations that are likely to engage in multiple sexual relationships ought to be the focus of prevention initiatives. Public health professionals are motivated to identify people at higher risk of the disease so that they can be evaluated and treated for it because therapy is available (Pereboom et al., 2019). According to Musa et al. (2019), chlamydia can be treated and the spread of the disease can be stopped, but only if the patient receives treatment and doesn't have any sexual activity with others until their doctor declares them to be clear of the illness.

Understanding of the variables linked to the disease's prevalence and specific risks it is possible to create a control program that would lower the incidence of the disease in the target population by taking into account variables like gender, age, socioeconomic status, and ethnicity, as well as factors linked to the disease's prevalence. When considering gender roles, ethnicity, and age groups that influence the frequency of the infection, cultural factors such as family environment and culturally based expectations around sexual behaviour come into play (Elizabeth et al., 2020). Additional factors include engaging in promiscuous behaviour, not using condoms during sexual encounters, people's perceptions of premarital and extramarital sex, marital status (married or single), sexuality and gender stereotypes created by religion, and socially dangerous behaviours (drinking alcohol, engaging in homosexual activity, Drug abuse, among other things), have been determined to be risk factors for the prevalence of chlamydia infection (Elizabeth et al., 2020). Low educational levels, commercial sex, and not using condoms are the most frequent risk factors linked to the frequency of chlamydia infections in sub-Saharan Africa among females, (Musa et al., 2019). To lower the incidence of chlamydia trachomatis, public health professionals should use this information to influence behaviour changes in at-risk populations. STI prevalence and risk factors in women vary by nation and environment. Designing preventative interventions is supported by knowledge of the incidence of chlamydia infection and how it varies by demographic and area (Pereboom et al., 2019). The World Health Organization (WHO) projected that there were approximately 127 million in 2016. Year new instances of chlamydia infection among individuals in the 15–49 age range worldwide, with notable geographical variations. Numerous studies have also looked into the effects of chlamydia infection during pregnancy on the health of newborns and infants (Siakwa et al., 2016). Some of the negative outcomes linked to it include low birth weight, early rupture of the membranes, premature delivery, stillbirth, and infant mortality (Elizabeth et al., 2020). Conjunctivitis, pneumonia, otitis media, bronchitis, pharyngitis, rhinitis, and gastroenteritis

have all been linked to transmission of a Chlamydia infection from the mother to the foetus during birth (Siakwa et al., 2016). The best way to lower the related morbidities is thought to be to identify and manage the variables linked to the prevalence of chlamydia infection and to test for this infection in pregnancy by laboratory testing. Considering some of the negative outcomes linked to it include low birth weight, early rupture of the membranes, premature delivery, stillbirth, and infant mortality (Elizabeth et al., 2020). Conjunctivitis, pneumonia, otitis media, bronchitis, pharyngitis, rhinitis, and gastroenteritis have all been linked to transmission of a Chlamydia infection from the mother to the foetus during birth (Siakwa et al., 2016). The best way to lower the related morbidities is thought to be to identify and manage the variables linked to the prevalence of chlamydia infection and to test for this infection in pregnancy by laboratory testing. Based on this, the study aims to identify the variables linked to the prevalence of chlamydia infection among expectant patients visiting Anambra State's tertiary healthcare facility.

Aims and Objectives

The main purpose of the study was to assess the prevalence of Chlamydia infection and associated factors among pregnant women attending antenatal in tertiary health institutions in Anambra State. Specifically, the study was guided by the following objectives:

1. To ascertain the prevalence Chlamydia infection among pregnant women attending antenatal in tertiary health institutions in Anambra State.
2. To determine dominant lifestyle factors associated with prevalence of Chlamydia infection among pregnant women attending antenatal in tertiary healthcare institutions in Anambra State

Hypotheses

The following null hypotheses were tested at significance level of 0.05

1. There is no significant association between lifestyle factors and prevalence of Chlamydia infection among pregnant women attending antenatal in tertiary healthcare institutions in Anambra State.
2. There is no significant association between demographic factors (age, educational level, marital status and parity) and prevalence of Chlamydia among pregnant women attending antenatal in tertiary healthcare institutions in Anambra State.

METHODOLOGY

This is a descriptive cross sectional study meant to assess prevalence of Chlamydia infection and associated factors among pregnant women attending antenatal in tertiary health institutions in Anambra State. The population of the study was made up of all the pregnant women attending antenatal in any of the tertiary health institution under the study area at the time of the study and they were four hundred and thirty-five (435); one hundred and eighty (180) from Nnamdi Azikiwe University Teaching Hospital (NAUTH), one hundred and forty-two (142) from Chukwuemeka Odumegwu Ojukwu University Teaching Hospital (COOUTH) and one hundred and thirteen (113) from Federal Medical Center (FMC) Onitsha. The source was the hospital antenatal care record or register. At the period of the study, 435 pregnant women were reported to be attending antenatal care visit in the tertiary health institution under the study area. Proportionate sampling technique was used to select the study participants. The researcher used primary data because she collected the data directly from the pregnant women that meet the inclusion criteria. Data was collected using structured questionnaire titled "prevalence of chlamydia infection and associated factors Questionnaire (PCIAFQ)". The questionnaire was divided into sections. Section A contained the collected socio-demographic characteristics of the respondents. Section B to E contained items that were used to answer the research questions on the dominant lifestyle, socio demographic factors, common environmental factors and

predominant cultural practices associated with prevalence of Chlamydia infection among the pregnant women respectively.

Direct delivery and retrieval method was used in the administration of the instrument to the respondents to ensure high return. The questionnaires were distributed in the hospitals with the help of two research assistants. These three (3) research assistants were briefed on how to select the study participants and interpret the research questions. Those that were willing participated in the study voluntarily without coercion.

Sample collection and analysis: For determination of prevalence of Chlamydia infection among the pregnant women, after all the necessary precautions were taken to ensure that these women were not exposed to any harm or danger, sterile and well packaged swab sticks were provided to them by the laboratory personnel for the collection of swab samples. Chlamydia test kits were provided by the researcher as the test is not one of the routine tests conducted in the study area. Endocervical swabs were collected from consented participants using sterile plastic-shaft swabs. Collected samples sent to the hospital laboratory and were analyzed by those personnel using Chlamydia rapid test device. The Chlamydia rapid test device utilizes cervical or urethral sample for the detection of Chlamydia antigen from female cervix or male urethra.

This test works under the principle that antibody specific to the Chlamydia antigen is coated on the test line region of the test kit. During testing, the sample from the swab stick that was placed on the test kit mix with the test solution, the mixture migrates up to react with the antibody to Chlamydia on the test kit and generates a coloured line in the test line region. The presence of double coloured line in the test region indicates a positive result, while a single indicates a negative result.

To serve as a procedural control, a coloured line will always appear in the control line region. The test procedure was conducted according to the manufacturer's instruction manual.

Total of two hundred and thirty-one (231) Chlamydia test kit and copies of the study instrument (questionnaire) were administered to the respondents over a period of eight days; three days for Nnamdi Azikiwe University Teaching Hospital (NAUTH), three days for Chukwuemeka Odumegwu Ojukwu University Teaching Hospital (COOUTH) and two days Federal Medical Center (FMC) Onitsha. And this was done during their weekly antenatal clinic days. The questionnaires were administered to the respondents immediately after collection of the sample. For proper matching of the collected sample with the fill questionnaire, numbers were tagged on the sample and the corresponding questionnaires (i.e. questionnaires bearing corresponding numbers) were given to the respondents. The completed questionnaires were collected immediately so as to ensure high return rate, as not returning the questionnaire can make the sample collected invalid. 231 copies were retrieved i.e. 100% return rate. And it took about 10 - 20 minutes for each of the pregnant women to complete each of the questionnaires. The questionnaires after the analysis were stored locked-up out of reach of people to ensure safe keeping and confidentiality. According to the school policy, it can be stored till there is no need for it or for maximum of five years. Data collected were analyzed using SPSS version 21.0. Socio-demographic characteristics like age, marital status, parity, level of education and occupation of the pregnant women and the questions covering the research questions was presented in a frequency table and analyzed using the descriptive statistics such as frequencies and percentages. Chi-square was used for testing the hypotheses and P-value < 0.05 was considered statistically significant.

RESULTS

This chapter contains data analysis and discussion of the findings**.** The data for the study were collected from two hundred and thirty-one (231) pregnant women attending antenatal service in tertiary health institutions in Anambra State with the aim of assessing prevalence of

Chlamydia infection and the associated factors, among these pregnant women. The results were presented in the tables below.

Table 1: Socio-demographic Characteristics of the Respondents

Variables	Frequency	Percentage (%)
Age (years)		
16 – 25	94	40.7
26 – 35	113	48.9
36 – 45	24	10.4
Marital status		
Married	137	59.3
Single	67	29.0
Divorced	13	5.6
Widowed	10	4.3
Separated	4	1.7
Educational Level		
Primary	19	8.2
Secondary	76	32.9
Tertiary	112	48.5
No formal education	24	10.4
Occupation		
Self-employed	86	37.2
Civil servant	34	14.7
Unemployed	38	16.5
Student	73	31.2
Religion		
Christian	200	86.6
Muslim	16	6.9
African traditional religion	15	6.5
Total	**231**	**100.0**

The study group comprised 231 participants, with varying demographic characteristics. In terms of age distribution, a significant portion fell within the 26 – 35 age range, constituting 113(89.6%) of the participants, while those aged 16 – 25 made up 94(40.7%). Participants aged 36 – 45 represented 24(10.4%) of the individuals in that specific age category. The mean age of the participants was 39.12±12 years. Marital status varied among the participants, with the majority being married 137(59.3%), followed by singles 67(29.0%), divorced 13(5.6%), widowed10 (4.3%), and separated 4(1.7%). Educational backgrounds revealed a diverse group, with 11248.5% having attained tertiary education, 76(32.9%) completing secondary education,

19(8.2%) having primary education and 24(10.4%) with no formal education. Occupationally, the study group included self-employed individuals 86(37.2%), civil servants 34(14.7%), unemployed participants 38(16.5%), and students 73(31.2%). Religiously, the majority identified as Christians 200(86.6%), followed by Muslims 16(6.9%) and those adhering to African traditional religions 15(6.5%). This comprehensive breakdown provides a thorough understanding of the diverse demographic composition within the study group.

Table 2: Prevalence of Chlamydia infection among pregnant women

Chlamydia test result	Frequency	Prevalence (%)
Negative	215	93.1
Positive	16	6.9
Total	**231**	**100.0**

Above presents the prevalence of Chlamydia infection among pregnant women attending antenatal care in tertiary health institutions in Anambra State. Out of the total 231 participants, 215(93.1%) tested negative for chlamydia infection, while 16(6.9%) tested positive. This indicates a relatively low level of chlamydia infection among the pregnant women in the studied population

Table 3: Dominant lifestyle factors associated with prevalence of Chlamydia infection among the pregnant women

Variables	Group		X^2 Value	P-value
	Negative	Positive		
Which of these options applies to you?				
Excessive alcohol and cigarette use				
No	169 (78.6)	13 (81.3)		
Yes	46 (21.4)	3 (18.8)	0.062	0.803
Early sexual exposure				
No	114 (53)	8 (50)		
Yes	101 (47)	8 (50)	0.055	0.815
Involved in casual sex with multiple partners				
No	166 (77.2)	14 (87.5)		
Yes	49 (22.8)	2 (12.5)	0.917	0.338
History of transactional sex				

No	162 (75.4)	13 (81.3)		
Yes	53 (24.7)	3 (18.88)	0.282	0.595
Poor attitude toward the use of condom				
No	165 (76.7)	14 (87.5)		
Yes	50 (23.3)	2 (12.5)	0.988	0.320
Immediate treatment of any signs and symptoms of UTIs				
No	98 (45.6)	7 (43.8)		
Yes	117 (54.4)	9 (56.3)	0.020	0.887
Previous history of abortion				
No	122 (56.7)	11 (68.8)		
Yes	93 (43.3)	5 (31.3)	0.879	0.349
Poor attitude to health care use				
No	95 (44.2)	7 (43.8)		
Yes	120 (55.8)	9 (56.3)	0.001	0.973
Poor knowledge of STIs and it treatment				
No	123 (57.2)	9 (56.3)		
Yes	92 (42.8)	7 (43.8)	0.0056	0.940

Result regarding the dominant lifestyle factors associated with prevalence of Chlamydia infection, The Chi-square revealed excessive alcohol intake (X^2 = 0.062, p = 0.803), early sexual exposure (X^2 = 0.055, p = 0.815), being involved in casual sex with multiple partners (X^2 = 0.917, p = 0.338), history of transactional sex (X^2 = 0.282, p = 0.595), poor attitude toward the use of condom (X^2 = 0.988, p = 0.320), immediately treats any signs and symptoms of UTIs (X^2 = 0.020, p = 0.887), have previous history of abortion (X^2 = 0.879, p = 0.349), poor attitude toward the use of health care (X^2 = 0.001, p = 0.973) and their poor knowledge of STIs and its treatment (X^2 = 0.0056, p = 0.940).

The response of the pregnant women that tested positive to the Chlamydia infection revealed that 13 (81.3%) of them do not indulge in excessive alcohol and cigarette use while 3 (18.8%) of them do. Half 8(50%) of the participants did not engage in early sexual exposure while the other half do. Most 14 (87.5%) were not involved in casual sex with multiple partners, did not have history of transactional sex13 (81.3%), poor attitude toward the use of condom 14 (87.5%), immediately treats any signs and symptoms of UTIs 9 (56.3%) while 7 (43.8%) do not treat any signs and symptoms of UTIs immediately. 11 (68.8%) of the respondents did not

have previous history of abortion while 5 (31.3%) did. Most 9 (56.3%) of them have poor attitude to health care use, 7 (43.8) do not and 9 (56.3) have poor knowledge of STIs and it treatment while 7 (43.8%) of them did not.

Test of Hypotheses

Table 4: Chi-square result for test of hypothesis one

Dominant Lifestyle Factors	**Prevalence of Chlamydia infection**	
	X^2	**P-value**
Excessive alcohol and cigarette use	0.062	0.803
Early sexual exposure	1.055	0.015*
Involve in casual sex with multiple partners	0.917	0.338
History of transactional sex	1.282	0.049*
Poor attitudes toward condom use	0.988	0.320
Immediate treatment of any signs and symptoms of UTIs	0.020	0.887
Previous history of pregnancy or abortion	0.879	0.349
Poor attitude toward the use of health care (not going for checkup and diagnostic test)	0.001	0.973
Poor knowledge of STIs and it treatment	0.005	0.940

***relationship is significant at p<0.05**

Above result was used to test the association between dominant lifestyle factors and prevalence of Chlamydia infection among pregnant women, the variables tested showed that excessive alcohol and cigarette use have a chi-square of ($X^2 = 0.062$, $p = 0.803$), being involved in casual sex with multiple partners ($X^2 = 0.917$, $p = 0.338$), having poor attitudes toward condom use ($X^2 = 0.988$, $p = 0.320$), immediate treatment of any signs and symptoms of UTIs ($X^2 = 0.020$, $p = 0.8870$, previous history of pregnancy or abortion ($X^2 = 0.879$, $p = 0.349$), poor attitude toward the use of health care (not going for checkup and diagnostic test) ($X^2 = 0.001$, $p = 0.973$) and poor knowledge of STIs and it treatment ($X^2 = 0.005$, $p = 0.940$).

Testing the hypotheses at level of 0.05 significance, the variables with P-value <0.05 is considered statistically significant. As values obtained from the tested variables above were greater than 0.05, it means that null hypothesis is accepted, indicating that there is no significant relationship between those dominant lifestyle factors and prevalence of Chlamydia infection among pregnant women attending antenatal in tertiary healthcare institutions in Anambra State. Regarding having early sexual exposure (X^2 = 0.055, p= 0.015*) and history of transactional sex (X^2 = 1.282, p= 0.049*), which have values less than 0.05, the null hypothesis was rejected, indicating that there is significant relationship between these dominant lifestyle factors and prevalence of Chlamydia infection among pregnant women attending antenatal in tertiary healthcare institutions in Anambra State.

Table 5: Chi-square result for test of hypothesis two

Major Demographic factors	**Prevalence of Chlamydia infection**	
	X^2	**P-value**
Early exposure to sexual activities	0.111	0.740
Marital status (single, divorced or separated)	0.018	0.895
Awareness about Chlamydia infection	1.269	0.026*
Access to health care	0.288	0.592
Economic status (poverty)	1.438	0.231
Condom affordability due to finance	0.270	0.603
Educational level	0.000	0.998
Lacks exposure to health education on STIs	2.038	0.153

Engaged in early sexual activities due to social cohesion	2.728	0.039*

***relationship is significant at p<0.05**

Above result illustrates association between major demographic factors and prevalence of Chlamydia among pregnant the women. Findings revealed that the majority of major demographic factors, such as early exposure to sexual activities ($X^2 = 0.111$, $p = 0.740$), marital status ($X^2 = 0.018$, $p = 0.895$), access to health care ($X^2 = 0.288$, $p = 0.592$), economic status ($X^2 = 1.438$, $p = 0.231$), condom affordability ($X^2 = 0.270$, $p = 0.603$), educational level ($X^2 = 0.000$, $p = 0.998$), and exposure to health education on STIs ($X^2 = 2.038$, $p = 0.153$), did not exhibit significant associations with Chlamydia infection. The null hypothesis is therefore accepted, indicating that there is no significant relationship between these variables and prevalence of Chlamydia infection among pregnant women attending antenatal in tertiary healthcare institutions in Anambra State.

However, significance association was observed for those influenced by social factors affecting adolescent sexual behavior ($X^2 = 2.728$, $p = 0.039$*) or lacks awareness about Chlamydia infection ($X^2 = 1.269$, $p = 0.026$*), The null hypothesis is therefore rejected, indicating that there is significant association between these variables and prevalence of Chlamydia infection among pregnant women attending antenatal in tertiary healthcare institutions in Anambra State.

4.2 Discussion

In this section, findings in the previous chapters were discussed in detail. The section also revealed the relationship between the findings and literatures reviewed to affirm or disprove the previous views. The study group comprised 231 participants, with varying demographic characteristics. In terms of age distribution, a significant portion fell within the 26 – 35 age range, The mean age of the participants' was 39.12±12 years. This agreed with the study done by Musa et al., (2019) which revealed that for the age of the participants, most were less than

25years and have a mean age of 32 ± 7years. Majority had primary education, some had secondary.

Findings also showed that majority of the participants were married and religiously, most identified as Christians. The study is in consistent with Wang et al., (2022) which reported that most of the participants were married and majority were Christians. Occupationally, the study participants were mostly self-employed, but disagreed with study done by Okoror et al., (2019) where greater percentage of participants were students and only few were gainfully employed. Result of the study revealed that there was relatively low prevalence of Chlamydia infection among pregnant women attending antenatal care in tertiary health institutions in Anambra State as the laboratory result of majority of the respondents was negative. This disagreed with the report of the study conducted by Okoror et al., (2019) where greater number of the respondents were positive for chlamydia trichomatics IgM using the ELISA technique. And also disagreed with Wang et al., (2022) where most of the respondents were equally reported positive for chlamydia trichomatis infection, displaying high prevalence of the infection. But it is in line with the study done by Bamikole et al., (2022) where only few of the participants tested positive for Chlamydia infection.

Dominant lifestyle factors associated with prevalence of Chlamydia infection were excessive alcohol intake, early sexual exposure, being involved in casual sex with multiple partners, poor attitude toward the use of condom and poor attitude toward the use of health care. This is supported by earlier study conducted by Okoror et al., (2019) where most of the participants were involved in heavy drinking, majority had first sex at age 11-20 years of age while some had more than 3 sex partners. This study is consistent with other studies regarding unprotected sex and increase in sexual partners; the odds are higher with lack of use of condoms and increase in unprotected sex (Ugboma et al., 2014). It is also consistent with other behavioural pattern studied by Ndisabiye et al., (2020) which include early age at first sexual intercourse,

having sex with more than one partner, alcohol abuse, smoking and some other behavioural characteristics. Bamikole et al., (2022) equally mentioned being sexually active at early age and having had two or more sexual partners as lifestyle factors associated with prevalence of Chlamydia infection.

Conclusions

The study on assessment of the prevalence of Chlamydia infection and associated factors among pregnant women attending antenatal in tertiary health institutions in Anambra, concluded that there is low prevalence of Chlamydia infection among the pregnant women as most of participants tested negative during the laboratory investigation. It further identified the dominant lifestyle factors, major socio demographic factors, common environmental factors and predominant cultural practices associated with prevalence of Chlamydia infection among the pregnant women. The result of this study have relevant benefits to women, health care providers, the community and other relevant people in the health sector that help in planning and management of health especially where it concerns the pregnant women and the unborn baby. The result will help those on health management system to be better informed on the level of Chlamydia infection in the State, as this will help them in handling of issues concerning awareness and treatment of the infection. This will eventually help to prevent the spread of the infection and invariably create better health for unborn baby and the pregnant mother.

Recommendations

The recommendations made include:

1. Healthcare management board should ensure provision of resources needed for effective testing of the infection in the hospitals.

2. Training of health care providers is very necessary as this will help them to become aware of the infection and the possible effect to unborn baby whose mother tested positive to the infection.
3. There is need to health educate the pregnant women on the infection and the possible signs and symptoms associated with it.

Consent

Informed and voluntary consent were obtained from the selected participants before administration of the questionnaire.

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1.

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