

Infections of the Female Reproductive Tract in the Ihiala LGA

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Abstract

Infections in the female reproductive system were investigated in a study of women aged 15 to 44. Female residents of the Ihiala Local Government Area in Anambra State provided 100 blood and high vaginal swab samples. Forty-eight responders (about 8%) tested positive for either a high vaginal swab infection or HIV. There were 52 replies who have paraphrased the question. Human immunodeficiency virus, Staphylococcus aureus, Escherichia coli, Klebsiella spp, Trichomonas vaginalis, and Candida albicans are all organisms that have been linked to infections of the reproductive system. The results indicated that the most common kind of infection was caused by fungus (Candida albicans), followed by bacteria (Staphylococcus aureus, 18.6%), and finally by protozoa (2.3%). In conclusion, women should not have sexual relationships with more than one man at a time. It is recommended that more research be conducted and that the government's Women's Affairs Commission launch further public education campaigns on reproductive tract infections.

Infections in the female reproductive system, Ihiala, and the Women's Affairs Commission are all significant concepts.

INTRODUCTION

The reproductive tract, as described by Krishna; et al. (1998), is a network of organs inside an organism that collaborates for the goal of reproduction and relies on a number of inanimate substances, including fluids, hormones, and pheromones.

A medical infection is defined as the invasion of healthy tissues by microorganisms that cause illness, their proliferation, and the response of healthy tissues to the bacteria and the toxins they create. Viruses, prions, bacteria, and viroids are all examples of microorganisms that may cause infections, however macroparasites and fungi are also possible. Infections in or around the female reproductive system are characterized by infect. Chowdhury, et al; (2007) as

a woman's reproductive system. Infections of the reproductive system are becoming recognized as a major worldwide health issue that affects not only the individuals affected but also their families and communities (Cowen, et al., 2000). They may cause serious problems, such as infertility.

higher risk of HIV infection, ectopic pregnancies, persistent pelvic discomfort, and recurrent miscarriages. Infections in the female reproductive system may manifest in either the upper (Fallopian tubes, ovary, uterus) or the lower (vagina, cervix, vulva) tract. Reproductive tract infection may be categorized into three types: Endogenous infection, Intrinsic and Sexual Transmitted infections (STIs) (Cowen, et al; 2000) .

Common endogenous infections include those of the reproductive system (Tsui, et al., 1997). They develop when a vaginal microbe multiplies and spreads into the area. Bacterial vaginosis and vaginal candidiasis are included. These infections may be readily treated and healed. If they are not

treated, they may create difficulties ranging from regional discomfort to more significant

complications such as pelvic inflammatory disease.

Induced abortion and other medical procedures that disrupt the normally sterile environment of the upper reproductive tract may lead to iatrogenic infections.

shipping (Bang et al., 1989). Bacterial infections may arise from endogenous or sexually transmitted illnesses already existing in the lower reproductive tract, or through the inappropriate sterile inspection of medical devices (such as vaginal specula).

The term "sexually transmitted illness" refers to any infectious disease that may be spread from one person to another by sexual contact (Adler, et al., 1998). The symptoms of some are nonexistent, while others are readily remedied. Some have fatal long-term effects and are untreatable, such as the HIV virus that causes AIDS. The objective of this research was to investigate the prevalence of female reproductive tract infection in the area of Ihiala, a municipality in the state of Anambra. The infection's risk factors and its age-related prevalence among women will also be calculated.

METHODOLOGY

Research Facility

The research was conducted from May to September of 2012 in Anambra State's Ihiala Local Government Area. Ihiala Local Government can be found in Anambra State's southern region, namely between 50°14'N and 60°36'E in terms of longitude. The majority of the annual rainfall (1,800–2,200 mm) falls between March and October. It has a temperature of 20-38°C (Mean 29°C) and a relative humidity of 80%. Normal plant life predominates.

tropical rain forest. Paradise, and its, the phrased

peasant farmers and fishermen make up the bulk of the population. The primary focuses of education are agriculture and commerce. The local indigenous population has a dismal record when it comes to education.

Taking a Snippet

Advocacy visits were undertaken to the neighborhood beforehand to enlist the help of local health personnel and ensure a successful sample collection. The goals and intentions of the study were discussed in detail with the participants during interactive sessions. One hundred female respondents, ages 15 to 44, were selected at random for this research. High vaginal samples were collected using sterile swab sticks, and 2 ml of venous blood was collected in EDTA bottles from each patient.

The samples were bagged up and sent off to the lab for analysis. The blood test carried out are human immune deficiency virus (HIV) test and syphilis test. Samples from positive vaginal swab tests were examined using microscopy, Gram staining, and culture. The Chesbrough Method was used for identification after the cultured samples had been incubated for 24 hours.

Analysis of Data :

The hypothesis was determined by applying the chi-square test to the collected data. But charts were made to demonstrate how common each illness was.

RESULTS

The tables below summarize the data collected over the course of this investigation. In a study of 100 females, 48 tested positive for one or more of many identifying microorganisms. Respondents between the ages of 15 and 44 showed a statistically significant ($P>0.05$) range in infection prevalence (Table 1). Infections of the reproductive system were highest (37.5%) in those aged 20–24, and lowest (4.2%) in those aged 40–44 (Table1).

Table 1: Prevalence of RTIs in female in Ihiala Local Government Area of Anambra State in relation to their age ranges

Age ranges	No of samples	No infected	% infected
15-19	25	10	20.8
20-24	35	18	37.5
25-29	15	5	10.4
30-34	15	8	16.7
35-39	5	5	10.4
40-44	5	2	4.2
Total	100	48	100

Table 2 shows the frequency of infectious microorganisms found in a sample of women's high vaginal swabs. Five distinct microorganisms were found in the collected samples from the responders. *Candida albicans*, *Staphylococcus aureus*, *E. coli*, *Klebsiella pneumoniae*, and *Trichomonas vaginalis* are all examples of such microorganisms. *Candida albicans* was found in 31 (72.1%) of the samples, whereas *E. coli* and *Trichomonas vaginalis* each accounted for just 1 (2.3%) of the samples. However, the infection rates were significantly different ($P<0.05$).

Table 2: Common Bacterial Illnesses Found in Women With a High Vaginal Swab

Organisms Isolated	No of cases	% of Isolates
<i>Candida albicans</i> ,	31	72.1
<i>Staphylococcus aureus</i>	8	18.6
<i>Escherichia coli</i>	2	4.7
<i>Klebsiella pneumoniae</i>	1	2.3
<i>Trichomona vaginalis</i>	1	2.3
Total	43	100

$$X^2 (r-x)(r-1)(c-1)$$

$$X^2_{tab} = 9.49 \quad p=0.05$$

Pathogens that may affect the reproductive system were also shown according to age groups (Table 3). HVS and blood sample findings indicated that among all the pathogens identified, *Candida albicans* without HIV recorded maximum (28), and infection was greatest among those aged 20–24, while no one tested positive for syphilis.

Age ranges	<i>Candida albicans</i> without	<i>Candida albicans</i> with	<i>Staphylococcus aureus</i>	<i>Escherichia coli</i>	<i>Klebsiella pneumoniae</i>	<i>Trichomonas vaginalis</i>	Syphilis	HIV only	No of cases	% of incidence
15-19	6	-	4	-	-	-	-	-	10	20.8
20-24	13	3	-	1	-	1	-	-	18	37.5
25-29	3	-	-	-	-	-	-	2	5	10.4
35-39	2	-	-	1	1	-	-	1	5	10.4

40-44	2	-	-	-	-	-	-	-	2	4.5
Total	28	3	8	2	1	1	0	5	48	100

$$X^2 (r-x) (r-1) (c-1)$$

$$X^2 \text{ tab} = 49.8 \quad p=0.05$$

DISCUSSION

Research by Watch and Dixon (1996) demonstrates that infecting the female reproductive system is a global issue that threatens fertility and causes fatal diseases like cervical cancer. Our research indicated a greater overall frequency of reproductive tract infections than a previous one by Richard (2010) among women in Benin City, Nigeria. It's possible that differences in exposure and socioeconomic position are to blame for this seemingly increased occurrence. Historically, the people of Ihiala, a semi-urban community in southern Anambra State, have worked mostly in peasant agriculture and fishing. Indigenous people there have a low level of education.

The findings obtained were lower than the 54% prevalence reported by Nguyen(2009) from Vietnam. This might be due to the relaxed atmosphere there. This also demonstrates the extent to which a kid is exposed after they reach a certain age.

Anybody above the age of 18 may make their own decisions in regards to their daily lives without parental supervision.

This finding is consistent with those made in other locations of the United States (Terri, 2010). *Candida albicans* was the only one of the five isolated organisms found in almost all of the women tested. Previous research has linked low standards of personal cleanliness, a lack of education, and having several sexual partners to the high incidence and prevalence of these organisms worldwide. Even among early risers and late sleepers like the peasant farmers, women tend to choose the nighttime activities. Promiscuity and several sexual partners are common among the locals, contributing to the rapid transmission of the virus (Bradshaw;et al., 2006). It has been shown that *E. coli* and other enteric bacteria are common components of the gut flora (Bang;et al., 1989). Once the bacteria have invaded non-intestinal tissues, they become pathogenic. This means they help spread the illness to the genital area. Infections of the reproductive tract may sometimes be caused by *Klebsiella pneumoniae* (Lakshmi;et;2012). It's no secret that the universal lack of shoes and the very poor condition of environmental cleanliness are major factors in the global spread of diseases like cholera and diarrhoea.

samples showing the presence of enteric bacteria.

Isolates were discovered in all age groups, however the incidence varied greatly between them, exhibiting a rise at younger ages followed by a fall at older ages. The rate was greatest for those aged 20–24 and lowest for those aged 40–44. According to the results of a chi-square test, there was no significant variation in infection rates by age group ($P>0.05$). This finding agrees with the findings of (Tsui;et al;1997). Another possible explanation for the highest rate of infection among people in their 20s and early 30s is a dearth of educational initiatives including public service announcements, focus groups, seminars, and studies devoted to the topic of Reproductive Tract Infection. The absence of basic services and a lack of education in the region contribute to this age group's natural curiosity about the world (Terri; 2010). Multiple sex partners and subsequent infection rates are attributed to sexually active age, as stated by lakshmi,et al,(2012).

In conclusion, it is recommended that health education in this field focus on reproductive tract infections. Young women are urged to limit their sexual activity to a single partner. A girl should start

having sexual relations when she becomes 15.

Keep up with your gynecological checkups on a consistent basis. Prescription drug abuse is should be avoided. Young women are encouraged to abstain from sexual activity, but they are not punished if they engage in it.

they ought to start using condoms

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