The Impact of Vulvovaginitis on Nigerian Students Residing in Dormitories

Rita Dooshima Dugeri *

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Article

The Impact of Vulvovaginitis on Nigerian Students Residing in Dormitories

Rita Dooshima Dugeri

Public Health Epidemiology at Sechenov Medical University Moscow; risticdugeri@gmail.com

Abstract: Vulvovaginitis is a common and potentially serious gynecological condition that can have a significant impact on the physical, emotional, and social well-being of young women and adolescents. The condition is caused by a variety of factors, including bacterial, viral, and fungal infections, as well as hormonal changes and other underlying conditions. The symptoms of vulvovaginitis can include itching, burning, pain, discharge, and bleeding, which can impact the quality of life of affected individuals. This article examines the effect of Vulvovaginitis on Nigerian students residing in dormitories, highlighting the causes, symptoms, complications, and treatment options. The study emphasizes the need for improved sanitation, education on personal hygiene, and easy access to effective treatment to mitigate the spread of this infection.

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***Introduction:**

Vulvovaginitis, also commonly referred to as Vaginitis, is a prevalent gynecological concern among adolescents and young women seeking specialized care. This condition, characterized by inflammation of the vaginal and vulvar tissues, gives rise to a spectrum of discomforting symptoms. This article endeavors to delve deep into the profound impact of Vulvovaginitis on Nigerian students residing in dormitories. By meticulously examining the causes, symptoms, complications, and treatment options, a comprehensive understanding of this affliction will be achieved. This knowledge is crucial for implementing targeted measures to both prevent and effectively manage this infection within educational institutions. Vulvovaginitis is the most common gynecologic condition of the prepubertal girl. The severity of the symptoms varies from child to child, but is usually distressing to both the child and the parents. It is estimated that up to 80% of gynecologic visits by premenarcheal girls result from vulvovaginitis. A physiologic discharge is often noted around the time of puberty. It is characterized as a mucus-like, often no odorous yellow discharge that represents ovarian hormone production. Appropriate management is reassurance. This differs from the discharge most commonly encountered in nonspecific vulvovaginitis, which typically has an odor. Nonspecific vulvovaginitis accounts for 75% of all vulvovaginitis in prepubertal girls; cultures usually reveal normal flora of the gastrointestinal tract. Nonspecific vulvovaginitis is best treated with instruction regarding vulvovaginal hygiene, wiping fecal material posteriorly away from the vaginal area, Sitz baths, and use of low-dose (1%) hydrocortisone. Additionally, Domeboro's solution can be used when acute sign and symptoms are present.

A number of bacterial organisms are responsible for "specific" vulvovaginitis in the pediatric patient. These include Escherichia coli, group A streptococcus, Staphylococcus epidermidis,

Haemophiles influenzae, Urea plasma urealyticum, and Streptococcus pyogenes. Appropriate antibiotics should only be administered if a particular pathogen is grown on vaginal culture. In addition, candida vulvate may occur in prepubertal girls but is rare in the absence of diabetes or immunosuppression; routine antifungal treatment should be avoided unless this organism is seen on wet preparation or culture.

Abnormal physical examination findings are in part associated with the underlying abnormality.

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***Methods:**

A meticulous and exhaustive literature review approach was adopted to acquire a nuanced understanding of Vulvovaginitis and its repercussions on Nigerian students in dormitory settings. This involved a systematic survey of diverse sources, encompassing peer-reviewed research articles, clinical guidelines, and expert perspectives. By employing this methodological rigor, a comprehensive and rigorously informed overview of the subject matter was attained, ensuring the veracity and reliability of the information presented herein

Causes and Symptom's

The etiology of Vulvovaginitis predominantly stems from inadequate sanitation practices, the usage of unhygienic vaginal products, and exposure to contaminated environments. Within the framework of dormitory living, factors such as overpopulation, substandard bathroom facilities, and communal personal items markedly amplify the risk of infection dissemination. Additional contributing factors encompass the use of unclean water and facilities for personal hygiene, extended use of sanitary products, and the application of harsh detergents.

- Bacterial infections, such as bacterial vaginosis (BV), are caused by an imbalance in the normal mix of bacteria in the vagina. This can be caused by a variety of factors, including douching, using scented products, and having a new sexual partner.
- Viral infections, such as HPV, are spread through sexual contact. HPV can cause health problems such as genital warts and certain cancers, including cervical cancer. There are vaccines available to prevent infection with some types of HPV. Currently they are two HPV vaccines available in the US that protect against HPV. The first is the HPV vaccine (also called Gardasil or Gardasil 9), which protects against nine different types of HPV, including two types that cause most cases of cervical cancer. The second is the Cervarix vaccine, which protects against two specific types of HPV that cause most cases of cervical cancer. Both vaccines are given in a series of shots over a period of several months.

In addition to these bacterial and viral infections, fungal infections such as candidiasis can also cause vulvovaginitis. Candida yeast is normally present in the vagina, but an overgrowth of this yeast can cause symptoms such as itching, burning, and discharge. Candidiasis can be caused by factors such as diabetes, pregnancy, and taking antibiotic.

Symptoms include intermittent genital itching or pain. Dysuria from skin contact with acidic urine may lead to hesitancy and retention. Erythema of the vulva and vaginal mucosa may come and go, and yellow–green discharge may be seen coming from the vagina or on the underwear. Fever is uncommon unless the vaginitis is accompanied by genitourinary infections from the same bacteria. If in an acute cycle, the physical examination should reveal inflamed mucosa. Excoriations are possible if the child is scratching excessively. A gentle collection of discharge may reveal basal epithelial cells and numerous white blood cells indicating prepubertal estrogen levels and inflammation, respectively. Yeast is almost never a cause of vaginitis before puberty. Immunocompromised states such as diabetes or leukemia should be ruled out if yeast is found on a wet prep.

A. Epidemiology: It is estimated that three of four women will have at least one candida vulvovaginitis in their childbearing years. The incidence of this condition is increasing. Candida vulvovaginitis is also more common during pregnancy because of multiple factors. Most infections are caused by Candida albicans. Non-albicans species such as Candida tropicalis and Candida glabrata are becoming increasingly common and can be a source of antifungal resistance.
B. Conditions associated with candida infections include:

a. Diabetes mellitus
b. Cushing's or Addison's disease
c. Hypothyroidism or hyperthyroidism
d. Malignancies
e. Human immunodeficiency virus (HIV)

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f. Pregnancy
g. Vaginal trauma

These symptoms not only inflict physical distress but also exert a profound impact on the day-to-day lives and academic pursuits of Nigerian students inhabiting dormitories.

***Complications:**

The most common complication of Vulvovaginitis is urinary tract infections (UTIs). A UTI is an infection of the urinary tract, which includes the bladder, urethra, and kidneys. Symptoms of a UTI include pain or burning when urinating, cloudy or bloody urine, and a strong urge to urinate. If left untreated, a UTI can lead to more serious complications, such as kidney infection or sepsis.

Potential complications are:

Pelvic inflammatory disease (PID), which is an infection of the reproductive organs. PID can cause scarring and damage to the reproductive organs, and can even lead to infertility.

Preterm birth. Preterm birth is when a baby is born before 37 weeks of pregnancy. One of the risk factors for preterm birth is having an infection, such as vulvovaginitis, during pregnancy. Preterm birth can lead to health problems for the baby, such as breathing problems, low birth weight, and developmental delays. Thus, not all cases of vulvovaginitis during pregnancy will lead to preterm birth. However, if the infection is left untreated, it can cause the cervix to become weak and dilate prematurely. This can cause the baby to be born before they are fully developed. There are also other complications that can occur if a woman has a preterm birth, such as **long-term developmental delays** for the baby and **increased risk of infant death.**

Ways to prevent preterm birth: Even if a woman has an infection such as vulvovaginitis, one way to prevent it is through the use of antibiotics to treat the infection. Another way is by regular prenatal care and monitoring of the cervix. This can help to detect any changes that may indicate an increased risk of preterm birth.

Neglecting timely intervention for Vulvovaginitis can precipitate profound health complications. Among young women, it can precipitate severe menstrual pain and alter the appearance of menstrual blood. Pregnant individuals with Vulvovaginitis confront heightened risks of miscarriage and infertility. Moreover, the infection escalates vulnerability to contracting HIV and can culminate in postpartum infections and premature delivery. The amalgamation of physical discomfort and emotional distress attendant to Vulvovaginitis exerts a toll on the mental well-being of affected students, potentially exacerbating academic challenges.

***Treatment Options:**

There are several treatment options available for vulvovaginitis, depending on the specific cause of the infection.

Bacterial infection

The most common treatment for bacterial infections is antibiotics.

- **Antifungal medications** are used to treat fungal infections. One of the most commonly used antibiotics, which is metronidazole. Metronidazole is a type of antibiotic that is used to treat many different types of bacterial infections. It is taken by mouth, either as a tablet or liquid. It's important to take the full course of antibiotics as prescribed, even if the symptoms go away. Stopping the antibiotics early can lead to the infection coming back.

Potential side effects of metronidazole: The most common side effects are nausea, vomiting, and diarrhea. These side effects are usually mild and go away on their own. However, some people may experience more serious side effects, such as a rash, fever, or difficulty breathing. If any of these symptoms occur, it's important to contact a doctor right away.

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- **Another antibiotic clindamycin:** Clindamycin is another type of antibiotic that is commonly used to treat bacterial infections, including those that cause vulvovaginitis. It can be taken by mouth or applied directly to the affected area.

Common side effects of clindamycin: The most come side effect of clindamycin are diarrhea and abdominal pain. However, as with metronidazole, there is a risk of more serious side effects, such as Stevens-Johnson syndrome. This is a rare but serious condition that can cause a rash, fever, and damage to internal organs.

Treatment of fungal infections

The most common treatment for fungal infections is a medication called fluconazole. Fluconazole is an antifungal medication that is available as a pill or liquid. It works by stopping the growth of fungi.

Common side effects of fluconazole: include nausea, diarrhea, and headache. There is also a small risk of more serious side effects, such as liver damage and a decrease in white blood cells.

***Prevention and Management Strategies:**

Mitigating the impact of Vulvovaginitis on Nigerian students necessitates a multi-dimensional approach. The augmentation of sanitation facilities within dormitories, encompassing the vigilant maintenance of pristine toilets and bathrooms, represents a pivotal measure in curtailing infection transmission. Encouraging personal hygiene practices, including regular handwashing, scrupulous genital care, and the utilization of clean, breathable undergarments, significantly diminishes the likelihood of Vulvovaginitis occurrence.

The implementation of comprehensive sexual education programs assumes paramount importance in educating students about the causes, symptoms, and preventive measures related to Vulvovaginitis. Establishing an environment conducive to open communication regarding sexual health, coupled with easy access to healthcare services within or in close proximity to dormitory premises, ensures the timely diagnosis and treatment of Vulvovaginitis cases.

***Conclusion:**

The impact of Vulvovaginitis on Nigerian students residing in dormitories is significant. Overcrowded living conditions, inadequate toilet and bathroom facilities, sharing of personal items, such as towels and razors and poor sanitation practices contribute to the rapid spread of this infection. The resulting symptoms and complications can adversely affect the physical and mental well-being of affected students, leading to academic and personal challenges. To address this issue, it is crucial to improve sanitation, educate individuals on personal hygiene, and ensure easy access to effective treatment. By implementing these measures, the prevalence of Vulvovaginitis can be reduced, leading to improved overall health and well-being among Nigerian students.

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