

Knowledge, Attitude and Practices Regarding Genital Tract Infections Among Female Undergraduate Students, Ibadan, Nigeria

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Abstract

Various researchers have put in place interventions in different sectors and categories of communities to curb the spread of health related issues associated with genital tract infections. Interventions which include: voluntary testing and counseling, treatment, care and supports, among others to mitigate its impact, which ranges from less serious to fatal outcomes such as neurological and cardiovascular diseases, pelvic inflammatory disease, infertility, and ano-genital cancers specifically cervical cancer. This attracted the attention of this study to assess University of Ibadan female undergraduate's knowledge, attitude and practices regarding genital tract infections. Survey research design was adopted and Questionnaires were used to gather data from female undergraduate students of university of Ibadan, Nigeria. Purposive sampling technique was used to select two hundred female undergraduate students who participated in the study. Data collected was analyzed using version 20.0 of statistical package for social sciences. The result revealed inadequate knowledge of genital tract infection among female undergraduate students of university of Ibadan. It was also discovered that there is adequate and positive attitude toward genital tract infections/ vaginal infection among the female students. Further analysis revealed that prevalence rate of genital tract infections/ vaginal infection among selected female undergraduate students of university of Ibadan is high (90%). Also, the findings revealed that there was a significant relationship between student's knowledge and preventive measures against vaginal infections among female undergraduate students of university of Ibadan at ($r = .169^*$ $df = 200$, $P < .05$). The study concluded with discussion of findings and recommended that health professionals in the university health setting should or should be organizing educative programme on yearly bases to educate the female undergraduate students on practical ways and methods of living healthy without vaginal infection because the finding of the study revealed that female undergraduate students of the university of Ibadan had inadequate knowledge and the prevalence rate of the vaginal infection is high.

Keywords

Knowledge, Attitude, Practice, Vaginal, Infections

1. Introduction

Genital tract infections are of significance as they are intertwined with many health related issues. These consequences range from less serious to fatal outcomes for the materno-foetal health, such as, premature delivery, low birth weight, still births, congenital syphilis, neo-natal conjunctivitis, neurological and cardiovascular diseases, Pelvic Inflammatory Disease, infertility, and ano-genital

cancers, specifically cervical cancer [1]. It was observed that many crises have affected human health and threatened the nation's (especially developing countries) social and economic progress but none has not threatened and prevailed like the way infections threaten. Studies have shown that these are several cases of uncontrolled growth of harmful micro-organism which leads to several other complications in the human body. Out of various reports of infections, is the Genital Tract Infections (GTIs), which affects both the male and female genital organs. For the purpose of this study, the

concentration will be on the female gender. The most recognized form of Female Genital Tract Infections (FGTIs) is vaginal infection and therefore will be used interchangeably in this study. The female vaginal is a very sensitive and a multifunctional organ, which gives pleasure and it's a source of potential pain. It's an organ open to the outside and has a direct link into the female body, located very close to the anus, where there is large amount of pathogenic bacterial. Improper and inadequate health precaution around this organ of the body can leads to infections.

However, vaginal infections was observed to be one of the most common reasons women see their doctor, accounting for more than 10 million visits each year and approximately 340 million new cases of STIs (sexually transmitted infections) occur every year and majority of them are from developing countries [2]. Vaginal infections can cause vaginal discharge, discomfort, and vaginal odor. However, these symptoms do not necessarily indicate an infection. Instead, they may result from other conditions that affect the vagina. For example, use of chemicals or other materials (such as hygiene products, bubble bath, laundry detergents, contraceptive foams and jellies, and synthetic underwear) can irritate the vagina and cause a discharge and discomfort. The inflammation that could result from such irritation is called non-infectious vaginitis. This constitutes the knowledge of health care practices that is required by every female to understand in order to avoid genital tract infections.

Many bacteria normally grow in the vagina of a healthy woman. Some of them, especially lactobacilli, help to keep the vagina healthy, maintaining an acid pH (less than 4.5), and control overgrowth of potentially bad bacteria [3]. Vaginal infections are caused by microorganisms, but women can take precautions, such as wearing loose, absorbent underwear, to reduce their risk of getting infections. Infections usually cause a discharge with itching, redness, and sometimes burning and soreness [4]. Every woman secretes moisture and mucus from the membranes that line the vagina and cervix. This discharge is clear or slightly milky and may be somewhat slippery or clumpy. When dry, it may be yellowish. When a woman is sexually aroused, under stress, or at mid-cycle, this secretion increases. It normally causes no irritation or inflammation of the vagina or vulva. Moreover, vaginal discharge may be caused by a disorder that affects other reproductive organs, rather than the vagina. For example, a discharge can result from certain sexually transmitted diseases such as chlamydial infection or gonorrhoea. The bacteria that cause these diseases can spread from the vagina to the cervix (the lower, narrow part of the uterus that opens into the vagina) and the uterus, causing pelvic inflammatory disease. Genital herpes, which can cause blisters on the vulva (the area around the opening of the vagina), in the vagina, and on the cervix, can also cause a vaginal discharge [5]. The vagina creates its own environment and maintains a balance among the normal bacteria found there and the hormonal changes in a woman's body. Vaginitis occurs when the vaginal ecosystem has been

changed by certain medications such as antibiotics, hormones, contraceptive preparations (oral and topical), douches, vaginal medication, sexual intercourse, sexually transmitted diseases, stress, and change in sexual partners. Some vaginal infections are transmitted through sexual contact, but others such as yeast infections probably are not. Vaginitis means inflammation and is often caused by infections, but may be due to hormonal changes (especially when a woman is going through menopause) or due to trauma in young girls. Some infections are associated with more serious diseases.

Despite the increase in the level of knowledge on risky sexual behavior, there is no corresponding decrease in its practices, indicating that increasing level of knowledge does not necessarily reduce risky sexual behavior. Aside issues pertaining to hygiene, stress, among others, Sexually transmitted diseases (STD) has been recognized as the major cause of genital infections in most of the world. The study on the knowledge of genital infections cannot be erased completely because of its great importance to the next coming generations. The knowledge about the causes of these infections goes a long way in helping students to avoid and curb its manifestations. Students who have gathered information on issue concerning vaginal infection, either by parents, reading books, media, or medical personnel may have better attitudes towards preventing infections than those who has no knowledge at all. Vaginal infections or vaginitis creates discharge, odor, irritation, or itching. It can be difficult to diagnose because vaginitis has many causes and it was observed that some female undergraduate students visited university health center because of the vaginal infection and some of them use a variety of over-the-counter medications to treat the itching, discharge, and discomfort of these conditions, which may lead to further complications. This attracted the attention of this study to assess the level knowledge, attitude of university of Ibadan female undergraduate student toward vagina infection in order to proffer actionable recommendations.

More so, Genital hygiene knowledge is the major component of women's health and is very important for the protection of reproductive health [6]. The genital area should be kept clean but excessive cleaning procedures which could disturb the vaginal flora should be avoided. Women's care and treatment of their vagina and genital area might affect their vulnerability to sexually transmitted infections (STI, including HIV) and other sexual and reproductive morbidities [7]. Women who have urinary incontinence or are confined to bed may have difficulty keeping the genital area clean. Irritation from urine and stool can lead to infection and the three diseases most frequently associated with vaginal discharge are Bacterial Vaginosis (replacement of the normal vaginal flora by an overgrowth of anaerobic microorganisms, myco-plasmas, and *Gardnerella vaginalis*), Trichomoniasis (*T.vaginalis*) and Candidiasis (usually caused by *Candida albicans*) [8]. Bacterial vaginosis is characterized by the substitution of the vaginal flora, normally dominated by lactobacilli, by a complex and abundant flora of strictly or

optionally anaerobic bacteria that are normally found in the vagina (*Gardnerella vaginalis*, *Bacteroides* sp, *Peptostreptococcus*, *Mobiluncus* sp). Abundant foul smelling vaginal secretions are the typical symptom of infection by *Gardnerella vaginalis* [9]. Recent research suggests that bacterial vaginosis, a common genital tract infection which has been linked in pregnant women to premature labor and low birthweight, may also be associated with HIV risk [10]. However, *Trichomonas vaginalis* is a flagellate protozoan considered to be sexually transmissible and related to low socioeconomic levels. Typically, a patient with trichomoniasis presents intense frothy yellow-greenish vaginal discharge, irritation and pain in the vulva, perineum and thighs, and dyspareunia and dysuria [10].

The implications of vaginal infection is not only limited to the physiological problems, it extends to both social and emotional imbalances. The individual who is experiencing discomforts such as itches, pains, foul smells, bleeding and so on, will develop bad self-esteem; not having confidence to stay with or dress up in the presence of her peers. If such an individual is sexually active, she can find it difficult to inform her partner about the infection, especially here in Africa, so as not to be named promiscuous. Sexual activities becomes painful and uninteresting, she might later have issues with infertility, miscarriages or adverse pregnancies, issues with in-laws, which might later lead to broken relationships or divorce. Despite the implication and available information, many female students are observed to be complaining about symptoms of genital infection and some visit university health center on daily basis. Although, there are many ways or causes of genital infection among university students but the observable major causes among university students in Nigeria are through sex, vaginal hygiene and public toilet. Many female students have been observed not to have a right attitude towards the use of general toilets (especially hostel toilets) and some of them prefer to use underwear made with nylon or rubber because it makes their body shape looks more attractive than the cotton made ones. A lot of products has been made to be used on the vaginal, in order to prevent odor and therefore, makes rinsing with water almost unnecessary after using the toilet and this have implication on growth of bacteria. However, products such as vaginal spray, vaginal wash and wipers etc., has made female students lazy and they prefer to make use of these products rather than giving it a thorough rinsing after every toilet use. This attracted the attention of this study to assess university of Ibadan female undergraduate's knowledge, Attitude and Practices Regarding Genital Tract Infections for the purpose of recommendations and intervention programme. To this end, the objective of this research is to assess the prevalence of genital tract infection, level of knowledge of female students on the infections that affects the genital area, their attitudes towards its causes and the preventive measures among female undergraduate students of university of Ibadan, Ibadan. Also to examine significant relationship that exists between the knowledge of genital tract infection and preventive measure against genital

tract infection among female undergraduate students of university of Ibadan.

2. Methods

2.1. Design

This study utilized survey research design with the use of structured questionnaires. This is because these variables of interest had already happened or occurred in nature prior to the commencement of the study.

2.2. Research Setting

This study was conducted among female undergraduate students of university of Ibadan, Ibadan, Oyo state of Nigeria. University of Ibadan (UI) is the oldest Nigerian university, and is located five miles (8 kilometres) from the centre of the major city of Ibadan in Western Nigeria. It is popularly known as Unibadan or UI. Besides the College of Medicine, there are now 11 other faculties: Arts, Science, Agriculture and Forestry, Social Sciences, Education, Veterinary Medicine, Technology, Law, Public Health, and Dentistry. The university has residential and sports facilities for staff and students on campus, as well as separate botanical and zoological gardens. In September 2016, it became the first Nigerian university to make the top 1000 in Times Higher Education rankings. Prior to that, it had always made the top African 10 in Webometrics Rankings. Its management envisions UI becoming one of the top 100 universities in the world in the near future. The university houses both undergraduate and post graduate student, and also runs professional programs.

2.3. Population

The study population comprised of all female undergraduate students who reside in the three female halls of residence within the university premises. The halls of residence are; Queens hall, Queen Idia hall and Awo hall of residence.

2.4. Sample and Sampling Technique

The sampling techniques used in selecting the samples for the study was non-probability sampling technique. In this technique, normal distribution of the population is not assumed unlike the probabilistic sampling. In this present study, for the purpose of clarity, sampling which is one form of non-probabilistic techniques was used. It involves the use of participants that were available during the time or period of research investigation which is year 2018. Purposive sampling is widely accepted and used mainly in exploratory or field research survey (Babbie, 1998).

Purposive sampling techniques was used to select sixty five 65 female students each from Queens hall and Queen Idia hall while the remaining seventy (70) female students were selected from Awo hall of residence within university of Ibadan, Nigeria.

2.5. Research Instruments

Questionnaires were used to collect relevant information from the participants of the study. The questionnaire was divided into four segments with each of the segments tapping information based on the identified variables of interest. It comprised three sections; A, B C and D. The structure of the questionnaire is outlined below.

2.5.1. Section A: Demographic Variable

In this section of the questionnaire, demographic information of the participants was captured ranging from gender to their degree of visual impairment. This section consisted of variables such as age, level of study and hall of residence.

2.5.2. Section B: Knowledge of Vaginal Infection/Genital Infection Scale

This section measured the knowledge of female undergraduate students on vaginal infection/genital infection. This was developed by the researcher and the research supervisor through the thematic analysis of responses generated from focus group discussion and literature review carried out in the first phase of the study. The researcher generated items from the themes identified in the pilot study. Questions were teased out from the identified themes in form of direct and codified questions. These items were subjected to content and face validity by experts in the field of nursing for necessary face validation to ascertain whether the items meet face value measure for knowledge of vaginal infection.

With the pilot test sample, the resultant 14-item scale yielded alpha coefficient of. 82.

2.5.3. Section C: Female Student's Attitude Towards Vaginal Infection Scale

This section measured the female student's attitude towards vaginal infection. This was developed by the researcher and the research supervisor through the thematic analysis of responses generated from focus group discussion and literature review carried out in the first phase of the study. The researcher generated items from the themes identified in the pilot study. Questions were teased out from the identified themes in form of direct and codified questions. These items were subjected to content and face validity by experts in the field of psychology for necessary face validation to ascertain whether the items meet face value measure for female student's attitude towards vaginal infection.

With the pilot test sample, the resultant 6-item scale yielded alpha coefficient of. 65.

2.5.4. Section D: Preventive Measures Against Vaginal Infections Scale

This section measured the preventive measures against vaginal infections among the university of Ibadan female students. This was developed by the researcher and the research supervisor through the thematic analysis of responses generated from focus group discussion and literature review carried out in the first phase of the study.

The researcher generated items from the themes identified in the pilot study. Questions were teased out from the identified themes in form of direct and codified questions. These items were subjected to content and face validity by experts in the field of nursing for necessary face validation to ascertain whether the items meet face value measure for preventive measures against vaginal infections.

With the pilot test sample, the resultant 10-item scale yielded alpha coefficient of. 52.

2.6. Procedure for Data Collection

Permission was sought from the respondents by the researcher before the administration of the questionnaires. The purpose of the research work was explained, the researcher then gave copies of the questionnaire to the respondents after explaining the instruction on how to fill the questionnaire. Confidential treatment of information was assured. In all, two hundred and ten questionnaires will be distributed

2.7. Statistical Design

Descriptive statistics such as frequency and percentage was used to analyze the socio-demographic characteristics of the participants. Mean, standard deviation, frequency and percentage was used to analyse research question one to four while research question five was analysed using Pearson Product Moment Correlation.

3. Result

This chapter presents various findings drawn from the study. The following results presented are based on the research questions which the study has sought to answer.

Research question 1: What percentage level is the knowledge of female undergraduate students of university of Ibadan regarding genital infections?

Table 1. Level of Knowledge of Vaginal Infection among female undergraduate students.

Level of knowledge	Frequency	Percentage	Mean
Inadequate knowledge	100	50.0	35.24
adequate knowledge	100	50.0	
Total	200	100	

Source; Field survey 2017

Table 1 shows the analysis of the level of knowledge of vaginal tract infection among female undergraduate students of university of Ibadan. The norm to differentiate those with inadequate knowledge from those with adequate knowledge was set using their average score on the knowledge scale. Those that have score above the mean are classify as those with adequate knowledge and those that have score below are categorise as those with inadequate knowledge. The result shows that half 100 (50.0%) of the respondents have adequate knowledge of genital tract infection while half 99 (49.5%) of the respondents also has inadequate knowledge of genital tract infection among female undergraduate students

of university of Ibadan. This implies that there is still more to do in educating the female undergraduate students on vaginal infection as this will shape their attitude and preventive measure attitude against the infection.

Table 2. Attitude of Female Undergraduate Students of University of Ibadan toward Genital Tract Infections/ Vaginal Infection.

ITEMS	Strongly Agree	Agree	Disagree	Strongly Disagree
I make sure the toilet is clean before use to avoid vaginal infection	155 (77.5%)	2 (19.5%)	4 (2.0%)	2 (1.0%)
It is really important to me that I wash my buttocks after toilet from ‘front to back’ to avoid vaginal infection	98 (49.0%)	41 (20.5%)	32 (16.0%)	29 (14.5%)
I usually observe my genital area against any vaginal infection	95 (47.5%)	89 (44.5%)	14 (7.0%)	2 (1.0%)
I change my sanitary pads whether soaked or not to avoid vaginal infection	108 (54.0%)	76 (38.0%)	14 (7.0%)	2 (1.0%)
Vaginal infection is real and abnormal, therefore I make all effort to avoid it.	128 (64.0%)	61 (30.5%)	10 (5.0%)	1 (0.5%)
I make sure that my hands are clean before using it on my genital area when feeling itches	92 (46.0%)	85 (42.5%)	16 (8.0%)	6 (3.0%)

Source; Field survey 2017

Table 2 also revealed the analysis of the attitude of female undergraduate students of university of Ibadan toward genital tract infections/ vaginal infection. The result shows that the attitude of female undergraduate students of university of Ibadan toward genital tract infections/ vaginal infection is adequate and positive as the result indicated that majority of the female undergraduate students who participated in this study reported agree to the following items used to assess their attitude. Majority 194 (97.0%) of the selected female undergraduate students reported agree that they make sure the toilet is clean before use to avoid vaginal infection while the rest 6 (3.0%) reported disagree. The result also indicated that majority 139 (69.5%) of the selected female undergraduate students reported agree that it is really important to them that they wash their buttocks after toilet from ‘front to back’ to avoid vaginal infection while the rest 61 (30.5%) reported disagree. Majority of the selected female undergraduate students reported agree to the other following statement that was used to assess their attitude toward genital tract infections/ vaginal infection; I usually observe my genital area against any vaginal infection, I change my sanitary pads whether soaked or not to avoid vaginal infection, vaginal infection is real and abnormal, therefore I make all effort to avoid it, and I make sure that my hands are clean before using it on my genital area when feeling itches. From this result of finding, it can be deduce that female undergraduate student have adequate and positive attitude toward genital tract infections/ vaginal infection.

Research question 3: What is prevalence of genital tract infections/ vaginal infection among female undergraduate students of university of Ibadan?

Table 3. Prevalence of Vaginal Infection among female undergraduate students.

Prevalence	Frequency	Percentage
Not infected	20	10.0
Infected	180	90.0
Total	200	100

Source; Field survey 2017

Table 3 shows the analysis of prevalence rate of genital tract infections/ vaginal infection among female

Research question 2: What percentage level is the attitude of female undergraduate students of university of Ibadan toward genital tract infections/ vaginal infection?

undergraduate students of university of Ibadan. The result shows that majority 180 (90.0%) of the respondents reported a case of experiencing sign and symptoms of genital tract infection such as vaginal itching and discoloration while the rest 20 (10.0%) of the respondents has not been infected before. This implies that the prevalence rate of genital tract infections/ vaginal infection among selected female undergraduate students of university of Ibadan is 90%.

Research question 4: What is the level of female student’s preventive measures against vaginal infections among female undergraduate students of university of Ibadan?

Table 4. Level of female Student’s Preventive Measures against Vaginal Infections.

Level of Preventive	Frequency	Percentage	Mean
Inadequate preventive measure	104	52.0	28.82
adequate preventive measure	96	48.0	
Total	200	100	

Source; Field survey 2017

Table 4 shows the analysis of the level of student’s preventive measures against vaginal infections among female undergraduate students of university of Ibadan. The norm to differentiate those with inadequate preventive measure from those with adequate preventive measure was set using their average score on the preventive measure scale. Those that score above the mean are classify as those with adequate preventive measure and those that score below are categorise as those with inadequate preventive measure. The result shows that majority 104 (52.2%) of the respondents engaged in inadequate preventive measure against genital tract infection and the rest 96 (48.0%) of the respondents engaged in adequate preventive measure against genital tract infection among female undergraduate students of university of Ibadan. This implies that inadequate preventive measure against genital tract infection may be one of the causes of the high prevalence rate of the infection among the female undergraduate students.

Research question 5: What pattern of relationship exists between the knowledge of genital tract infection and preventive measure against genital tract infection among female undergraduate students of university of Ibadan?

Table 5. Pearson Product Moment Correlation analysis showing relationship between Student's Knowledge and Preventive Measures against Vaginal Infections.

		knowledge of vaginal infection	preventive measure
knowledge of vaginal infection	Pearson Correlation	1	.169*
	Sig. (2-tailed)		.017
	N	200	200
preventive measure	Pearson Correlation	.169*	1
	Sig. (2-tailed)	.017	
	N	200	200

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5 shows the analysis of Pearson product moment correlation analysis showing relationship between student's knowledge and preventive measures against vaginal infections among female undergraduate students of university of Ibadan. The result shows that there is significant relationship between student's knowledge and preventive measures against vaginal infections among female undergraduate students of university of Ibadan at ($r = .169^*$ $df = 200$, $P < .05$). It can be deduce that the knowledge of female undergraduate students of university of Ibadan on vaginal infection have significant influence on their preventive measures against it.

4. Discussion

Research question one stated that, what percentage level is the knowledge of female undergraduate students of university of Ibadan regarding genital infections? The research question was analysed using frequency count and mean, and the result showed that half of the selected female undergraduate students reported adequate knowledge of genital tract infection while the remaining half of them also reported inadequate knowledge of genital tract infection. This implies that there is still more to do in educating the female undergraduate students on vaginal infection as this will shape their attitude and preventive measure attitude against the infection. It is expected that female undergraduate students should have some basic knowledge of health related issues as this will be of help to them or this will empower them on how to manage their health and guide against some unhealthy attitude that can detriment their wellbeing. This inadequate knowledge of genital tract infection could also be attributed to the minor role that educational curriculum played in covering this area of knowledge. This finding is slightly better in comparison with the results reported by Verma, Bhalanik and Pandya, [11] who they reported that only one quarter of the girls had good knowledge about the anatomy of the female reproductive system. This finding is in agreement with Yameen [12] who mentioned that half of the girls were unable to name three organs of the female reproductive system. This could be attributed to the insufficient basic information gained from their academic study. This finding is also partially supported by Ibrahim, Morad, El Nashar, Mohamed and Hafez, [13] who revealed that most of the students had unsatisfactory knowledge score level about reproductive health education.

Research question two stated that, what percentage level is the attitude of female undergraduate students of university of Ibadan toward genital tract infections/ vaginal infection? The research was analysed using frequency count and percentage, and the result revealed that the attitude of female undergraduate students of university of Ibadan toward genital tract infections/ vaginal infection is adequate and positive as the result indicated that majority of the female undergraduate students who participated in this study reported agree to the following items used to assess their attitude. Majority of the selected female undergraduate students reported agree that they make sure the toilet is clean before use to avoid vaginal infection while the rest reported disagree. The result also indicated that majority of the selected female undergraduate students reported agree that it is really important to them that they wash their buttocks after toilet from 'front to back' to avoid vaginal infection while the rest reported disagree. It was also discovered that majority of the selected female undergraduate students reported agree to the other following statement that was used to assess their attitude toward genital tract infections/ vaginal infection; they usually observe their genital area against any vaginal infection, they change my sanitary pads whether soaked or not to avoid vaginal infection, they admitted that vaginal infection is real and abnormal, therefore make all effort to avoid it, and that they make sure that their hands are clean before using it on their genital area when feeling itches. This shows that the female undergraduate students have adequate and positive attitude toward genital tract infections/ vaginal infection.

Research question three stated that, what percentage level of prevalence of genital tract infections/ vaginal infection among female undergraduate students of university of Ibadan? The result was analysed using frequency count and percentage. The result revealed that the prevalence rate of genital tract infections/ vaginal infection among selected female undergraduate students of university of Ibadan is 90% as it was discovered that majority 180 (90.0%) of the respondents reported a case of experiencing sign and symptoms of genital tract infection such as vaginal itching and discoloration. This finding is partially consistent with the finding of Okiki, Amiegheme, and Oyinloye [14] who found high prevalence of infection among women of reproductive age in Owo, Nigeria.

Research question four stated that, what is the level of female student's preventive measures against vaginal infections among female undergraduate students of university

of Ibadan? This was analysed using frequency count and percentage, and the result shows that majority of the female undergraduate students engaged in inadequate preventive measure against genital tract infection. It can be deduce that inadequate preventive measure against genital tract infection may be one of the causes of the high prevalence rate of the infection among the female undergraduate students.

Research question five stated that, what pattern of relationship exists between the knowledge of genital tract infection and preventive measure against genital tract infection among female undergraduate students of university of Ibadan? This was analysed using Pearson product moment correlation analysis and the result revealed that there is significant relationship between student's knowledge and preventive measures against vaginal infections among female undergraduate students of university of Ibadan. It can be deduced from the finding that the knowledge of female undergraduate students of university of Ibadan on vaginal infection have significant influence on their preventive measures against it. This is the reason why the university health council/committee should intensify on educating female student on vaginal infection because this will invariably influence their attitude and reduce the prevalence rate of the infection in the university environment. Previous studies have not delineated the direction of relationship between student's knowledge and preventive measures against vaginal infections among female undergraduate students.

5. Conclusion

The conclusion of this study is based on findings of this study, also take into consideration additional support from research observation, the conclusions that are made are:

Finding of the study revealed that half of the selected female undergraduate students reported adequate knowledge of genital tract infection while the remaining half of them also reported inadequate knowledge of genital tract infection. Also, the result shows that the attitude of female undergraduate students of university of Ibadan toward genital tract infections/ vaginal infection is adequate and positive. Also, the study revealed that the prevalence rate of genital tract infections/ vaginal infection among selected female undergraduate students of university of Ibadan is high.

In addition, this study discovered that majority of the female undergraduate students of university of Ibadan engaged in inadequate preventive measure against genital tract infection and finding also revealed that there is significant relationship between student's knowledge and preventive measures against vaginal infections among female undergraduate students of university of Ibadan.

The present research has assessed university of Ibadan female undergraduate's knowledge, attitude and practices regarding genital tract Infections. Based on this finding of the study, the following recommendations are made:

It is recommend that health professionals in the university health setting should or should be organizing educative programme on yearly bases to educate the female

undergraduate student on practical ways and methods of living healthy without vaginal infection because the finding of the study revealed that female undergraduate students of the university of Ibadan had inadequate knowledge and the prevalence rate of the vaginal infection is high.

It is also recommended that the university council should empower the university health center to start campaign against vaginal infection because of the prevalence rate and the fact that some infection are beginning to develop resistance to drug, and this can lead to infertility in them at the long run. Educating female student on vaginal infection will invariably influence their preventive measure attitude and reduce the prevalence rate of the infection in the university environment.

The findings of this study have implication for counselling, more precisely, psycho-education intervention to facilitate or help female students who are infected out of the infection and live healthy life.

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