# Knowledge and Attitude on Sexually Transmitted Infections among College Students in Selected Barangays of Echague Isabela 

Markhipolito P. Galingana, Virgilio D. Ganadin, Rosebud D. Comilang, Jeremey A. Ballesteros, Francis Thea S. Delos Santos, Kurt Russel M. Aquino, Elaine A. Basabica, Jireh Mae S. Agustin College of Nursing, Isabela State University, San Fabian, Echague, Isabela, Philippines


#### Abstract

Echague is one of Isabela's most populated place in the province because it is one of the largest towns composing of 64 barangays with 6 regions, and according to the 2021 data reported by the Rural Health Unit-Echague, there are 107 total cases of adolescent deliverieswhich is a great concern due to lack of knowledge and attitude towards contraception and protection during sexual intercourse. In relation to sexually transmitted infections, due to lack of information and misinformation, sexually transmitted infections can be acquired or transferred during intercourse due to these certain factors. In January December 2021 there are 165 cases of Syphilis and 274 cases of Hepatitis B mostly pregnant women regardless of agewas reported by the Rural health Unit-Echague, which is quite alarming because it shows that there are people who are still not knowledgeable enough concerning sexually transmitted infections. This study aimed to know and be aware with the knowledge and attitudes of the college students of Echague, Isabela particularly the riverside region towards sexually transmitted infections. Data were collected from 104 college students in Riverside Region, Echague, Isabela. Results showed in knowledge that majority of the respondents knew about other sexually transmitted infections other than HIV as well as the transmission, causes, kinds, signs and symptoms and complications. Majority of the respondents also knew the Infections through different sources and most of the respondents knew no one who has an STI. Results showed in attitudes that the respondents believed that contraceptive pills is a method to avoid STIs, little did they know that contraceptive methods are only ways to prevent unwanted pregnancy. The rest of the result showed majority on the about their concerns in getting an HIV when having sexual intercourse, their worries in acquiring those diseases, condom use, education to boost knowledge regarding STI's, seeking professional medical consultation if they are unsure whether they acquire the disease or not, treatment, and the danger it can bring. The result showed in the relationship between knowledge and demographic profile has significant relation in terms of what respondents think are the possible causes of STI's, and the rest shows no significant relationship. In relationship between the respondent's demographic profile and attitude, the result shows significant relationship in terms of avoiding a person with STI, people who are infected with STI should get treatment, and the use of contraceptive pills in avoiding STI. The rest of the result showed no significant relationship.


Keywords: Sexually transmitted infections, riverside region, knowledge, attitudes, Echague, Isabela

## I. INTRODUCTION

In the Philippines, the prevalence rate of Human Papilloma Virus cervical cancer in squamous cell carcinoma is $93.8 \%$ and $90.9 \%$ in adenocarcinoma. (Domingo and Dy Echo, 2009). In August 2021, there are 878 confirmed cases of Human Immunodeficiency Virus adding to the total number of 90, 031 cases since January 1984. A number of 427 of the 878 cases were $25-34$ years old, 291 of the 878 cases were 15-24 years old, and 138 of 878 cases were $35-49$ years old, 18 of the 878 cases were 50 years old and above, 4 of the 878 cases were less than 15 years old. (Department of Health, 2021). In addition, UNAIDS/WHO (2004) reported a $27 \%-36 \%$ prevalence rate of chlamydial infection. (Saison et. al, 2007). In 2011, the PDS or Philippine Dermatological Society have treated 977 cases of herpes and 665 cases of syphilis. (Vista, 2018). Lastly, the prevalence rate of genital warts is $4.78 \%$. (Buenesejo et. al, 2019)The

IJARSCT

Echague Isabela Rural Health Unit reports that 6 cases of hepatitis B were reported there in 2020; this number rose to 11 in 2021; however, only 2 cases were reported there in 2022.
This research study was based on the 2013 study of Linn Svensson where he found out that the results showed a less STDs knowledge among Thai students which accord with the findings of other authors on the same topic. The authors believe that the questionnaire was not affected by cultural differences regarding Sweden and Thailand, and both Swedes and Thai could relate to the questions that were being asked. Although the authors do believe that it was unclear regarding some of the questions whether or not they were placed in the correct category. Therefore, question number 17 and 18 from part 3 "attitude" were regarded as knowledge questions instead and therefore included in the sum of knowledge. Forty-eight students ( $32 \%$ ) chose the alternative "Others" on question number 10 regarding if anyone had told the students that they have/have had an STD, which could be explained by the question not having "No" as an alternative. Some students even wrote, "No one has told me that" next to the question, despite there not being an alternative saying "Other, please specify". (Svensson, 2013)

### 1.1 Purpose

- The goal of this study was to determine the extent of knowledge of the college students of Echague, Isabela towards Sexually Transmitted Infections.
- To assess the attitude of the college students of Echague, Isabela towards Sexually Transmitted Infections.
- To determine the significant relationship between the knowledge and attitude of students towards Sexually Transmitted Infections and their demographic profile


## II. METHODS

This research study a Descriptive Correlational research. The researchers used Purposive Sampling procedure in selecting the participants. The researchers identified the barangay with the highest incidence of teenage pregnancy. A total of 104 respondents were included in the sample. A survey questionnaire adapted from the works of Dr. Pranee Lundberg was administered to the selected respondents. The researchers utilized Statistical Package for Social Sciences (SPSS). Descriptive Statiscal Analysis was used in this study to organize, interpret and communicate the gather data using the following statistical tools: The frequency and percentage that are used in categorizing the respondent's profile; and Chi Square test that used for non parametric test of statistical significance which is the instant data in the form of frequency counts. It differentiates the frequencies in the study with expected frequencies to identify whether there is a significant relationship.This determined the significant relationship between the knowledge and attitude of the respondents to the respondent's demographic profile.

## III. RESULTS AND DISCUSSION

## Respondents Profile

Table 1: Frequency distribution of respondents' profile based on age

| Age | Frequency | Percent |
| :--- | :--- | :--- |
| 19.00 | 3 | 2.9 |
| 20.00 | 38 | 36.5 |
| 21.00 | 54 | 51.9 |
| 22.00 | 5 | 4.8 |
| 23.00 | 4 | 3.8 |
| Total | 104 | 100.0 |

Table 1 showed that most of the respondents are 21, with the frequency of 54 or 51.9 percent, and the age of respondents with the fewest numbers is 19 , with the frequency of 3 or 2.9 percent.

Impact Factor: 7.301

|  | Frequency | Percent |
| :--- | :--- | :--- |
| Female | 72 | 69.2 |
| Male | 32 | 30.8 |
| Total | 104 | 100.0 |

Table 2: Frequency distribution of respondents' profile based on gender
Table 2 As gleaned from the data above, women make up the majority of responders, 72 in total, or 69.2 percent. In contrast, 32 , or 30.8 percent, are men.

Table 3 Frequency distribution of respondents' profile based on year level

|  | Frequency | Percent | Rank |
| :--- | :--- | :--- | :--- |
| 1st Year | 8 | 7.7 | 3 |
| 2nd Year | 11 | 10.6 | 2 |
| 3rd Year | 78 | 75.0 | 1 |
| 4th Year | 7 | 6.7 | 4 |
| Total | 104 | 100.0 |  |

Table 3 showed that majority of the respondents are $3^{\text {rd }}$ year which comprises a frequency of 78 or 75 percent. Whereas the year level of respondents with the fewest numbers is $4^{\text {th }}$ year with the frequency of 7 or 6.7 percent.

Table 4: Frequency distribution of respondents' profile based on Course

|  | Frequency | Percent |
| :--- | :--- | :--- |
| Bachelor of Science in Agriculture | 3 | 2.9 |
| Bachelor of Science in Biology | 3 | 2.9 |
| Bachelor of Science in Business Administration and <br> Accountancy | 23 | 22.1 |
| Bachelor of Science in Criminology | 15 | 14.4 |
| Bachelor of Science in Education | 10 | 9.6 |
| Bachelor of Science in Engineering | 25 | 24.0 |
| Bachelor of Science in Fisheries | 4 | 3.8 |
| Bachelor of Science in Information Technology | 8 | 7.7 |
| Bachelor of Science in Social Work | 3 | 2.9 |
| Bachelor of Science in Tourism | 10 | 9.6 |
| Total | 104 | 100.0 |

The table 4 revealed that most of the respondents ( 25 or 24 percent) are engineering students. Whereas the course of respondents with the fewest numbers are agriculture, biology and social work students with a frequency of 3 or 2.9 percent.

|  | Frequency | Percent |
| :--- | :--- | :--- |
| In a Relationship | 25 | 24.0 |
| Single | 79 | 76.0 |
| Total | 104 | 100.0 |

Table 5: Frequency distribution of respondents' profile based on civil status:
The data above showed that majority of the respondents are single with the frequency of 79 or 76 percent. Whereas 25 or 24 percent are in a relationship.

Table 6: Frequency distribution of respondents' profile based on residency

|  | Frequency | Percent |
| :--- | :--- | :--- |
| Boarding House | 31 | 29.8 |
| Living alone | 3 | 2.9 |
| Parent's House | 70 | 67.3 |
| Total | 104 | 100.0 |

IJARSCT

The table 6 above showed that most of the respondents ( 70 or 67.3 percent) are still living in their parent's house. Whereas the residency of the respondents with the fewest numbers are living alone with the frequency of 3 or 2.9 percent.

Table 7: Frequency distribution of respondents' profile based on sexual preferences to be in relationship

|  | Frequency | Percent |
| :--- | :--- | :--- |
| Both | 2 | 1.9 |
| Both men and women | 1 | 1.0 |
| Men | 60 | 57.7 |
| no specific gender | 1 | 1.0 |
| Women | 40 | 38.5 |
| Total | 104 | 100.0 |

The table 7 above showed that most of the respondents ( 60 or 57.7 percent) are interested in men and the sexual preference of the respondents with the fewest numbers are "both men and women" and "specific gender" with a frequency of 1 or 1 percent.

## Knowledge of the respondents towards Sexually Transmitted Infections

Table 8: Knowledge of the respondents towards Sexually Transmitted Infections

|  | $\begin{aligned} & 3 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |  | Z |  | $\stackrel{\sim}{8}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \ddot{0} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | 䔍 |  |  |
| 8.1. Have you heard about infections or Infections other than HIV that one can get through sex? | 2 | 1.9 | 13 | 12.5 | 89 | 85.6 |
| 8.2. Do you think it is possible for a man to have a sexual transmitted infection other than HIV without having symptoms? | 18 | 17.3 | 11 | 1.6 | 75 | 72.1 |
| 8.3. Do you think it is possible for a woman to have a sexual transmitted infection other than HIV without having symptoms? | 18 | 17.3 | 11 | 10.6 | 75 | 72.1 |

Table 8.1 showed that majority of the respondents with the frequency of 89 or $85.6 \%$ said that they were aware of the possibility of contracting illnesses and infections other than HIV through intercourse. Whereas $2(1.9 \%)$ of them didn't know the other Infections that can also get through sex other than HIV. Bretas et. Al stated that during this time, sexuality gets more intense. On the other hand, it is mainly visible through unprotected sexual activity. Due to a lack of information and communication, some people engage in unethical practices. Because of various beliefs or taboos, or a fear of assuming one's own sexuality, between family members. Consequently, the desire for and curiosity in new experiences, as well as lack of advice on the changes that adolescents are undergoing exposes kids to potentially dangerous circumstances, including Acquired Immunodeficiency Syndrome (AIDS) is one of the most common sexually transmitted infections (STIs). (Almeida et. al, 2017).
Table 8.2 showed that majority of the respondents with the frequency of 75 (72.1) answered "yes" that it is possible for a man to have a Sexually transmitted infection other than HIV without having symptoms. Fewest number (11 or 10.6\%) of respondents answered no.
Table 8.3 showed that majority of the respondents with a frequency of $75(71.1 \%)$ answered "yes" that it is possible for a woman to have a sexually transmitted infection other than HIV without having symptoms. Fewest number (11 or $10.6 \%$ ) of respondents answered no. According to a health research, many Sexually Transmitted Infections are
asymptomatic that's why seeking a professional medical advice is a must. A birth control method is effective against pregnancy but not Sexually Transmitted Infections. (Centers for Disease Control and Prevention, 2019)

Table 9: Knowledge of the respondents towards Sexually Transmitted Infections

| Please tell us what You think are possible "causes" of sexually <br> transmitted infections (You can mark more than one alternative) | Frequency | Percent |
| :--- | :--- | :--- |
| Bacteria | 70 | 21.0 |
| Bad hygiene of men | 39 | 11.7 |
| Bad hygiene of women | 39 | 11.7 |
| Blood transfusion | 57 | 17.1 |
| Fungus | 20 | 6.0 |
| Having sex soon after giving birth | 10 | 3.0 |
| I don't know | 8 | 2.4 |
| Infected swimming pool water | 8 | 2.4 |
| Sex during menstruation | 20 | 6.0 |
| Using unclean water | 9 | 2.7 |
| Virus | 54 | 16.2 |
| Total | 334 | 100.0 |

Table 9 showed frequency and percentage of respondents' knowledge on the different causes of STI's. It shows that majority of the respondents answered the most possible cause of Sexually Transmitted Infections is bacteria with a frequency of $70(20.1 \%)$ and the least possible causes are infected swimming pool and I don't know with a frequency of $8(2.4 \%)$. The main causes of these Infections are bacteria, viruses, and parasites. (World Health Organization, 2021). Virus and bacteria are the only causes of these diseases.

Table 10: Knowledge of the respondents towards Sexually Transmitted Infections

| Please choose which Infections are Sexually Transmitted <br> Infections (You can mark more than one alternative) | Frequency | Percent |
| :--- | :--- | :--- |
| Chlamydia | 41 | 13.5 |
| Don't Know | 1 | .3 |
| Gonorrhea | 38 | 12.5 |
| Hepatitis B | 24 | 7.9 |
| Hepatitis C | 14 | 4.6 |
| Herpes | 36 | 11.9 |
| HIV/AIDS | 97 | 32.0 |
| Syphilis | 43 | 14.2 |
| Tuberculosis | 9 | 3.0 |
| Total | 303 | 100.0 |

Table 10 showed frequency and percentage of respondents' knowledge on the different types of STI's. The data above shows that the majority of the respondents chose HIV/AIDS with a frequency of 97 and a percentage of 32.0 , The fewest number of respondents ( 1 or. $3 \%$ ) chose I don't know. There are different types of STI and these are bacterial vaginosis, chlamydia, gonorrhea, hepatitis b, herpes, HIV/AIDS, human papillomavirus, cancroid, scabies, trichomonas's, syphilis, and more. (Center for Disease Control and Prevention, 2021). Chlamydia, Gonorrhea, Hepatitis B, Herpes, HIV/AIDS and Syphilis are the known STI's

Table 11: Knowledge of the respondents towards Sexually Transmitted Infections

| What are routes of Sexually Transmitted Infections? <br> (You can mark more than one alternative) | Frequency | Percent |
| :--- | :--- | :--- |
| Blood Transfusion | 62 | 22.8 |
| Mother to child | 49 | 18.0 |
| Sexual Intercourse | 98 | 36.0 |

IJARSCT

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Volume 3, Issue 1, July 2023

| Sharing Food | 10 | 3.7 |
| :--- | :--- | :--- |
| Sharing needles | 46 | 16.9 |
| Sharing of clothes/things | 7 | 2.6 |
| Total | 272 | 100.0 |

Table 11 showed frequency and percentage of respondents' knowledge on the different routes of STI's. The data above shows that majority of the respondents answered the most common routes of having Sexually Transmitted Infections is through sexual intercourse with a frequency of 98 ( $36.0 \%$ ). The fewest number of respondents ( $7 \mathrm{or} .2 .56 \%$ ) chose sharing clothes/things. These Infections can be spread through sexual intercourse which includes oral, vaginal, and anal. It can also be passed down through the infected mother-to-child during pregnancy as well as breastfeeding. (World Health Organization, 2021) Blood transfusion and sharing needles are obviously given. Sharing of food is not necessarily the answer.

Table 12: Knowledge of the respondents towards Sexually Transmitted Infections

| What are signs and symptoms of sexually transmitted infections? | Frequency | Percent |
| :--- | :--- | :--- |
| Abdominal Pain | 26 | 5.8 |
| Blood in urine | 31 | 7.0 |
| Burning pain or urination | 36 | 8.1 |
| Discharge from penis/vulva | 44 | 9.9 |
| Failure to urinate | 36 | 8.1 |
| Genital Ulcers or open sores | 31 | 7.0 |
| I don't know | 19 | 4.3 |
| Itching in Genital Area | 61 | 13.7 |
| Loss of weight | 24 | 5.4 |
| Pain during intercourse | 55 | 12.3 |
| swelling in Genital Area | 46 | 10.3 |
| Weakness | 37 | 8.3 |
| Total | 446 | 100.0 |

Table 12 shows frequency and percentage of respondents' knowledge on the different signs and symptoms of STI's.The data above shows that most of the respondents answered that itching in the genital area is the number one sign and symptom of sexually transmitted infection with a frequency of 61 or $13.7 \%$. The fewest number of respondents ( 19 or. $4.3 \%$ ) answered I don't know. Common signs and symptoms are urethral discharge, abdominal pain, genital ulcers, vaginal discharge and burning sensation. (World Health Organization, 2021).

Table 13: Knowledge of the respondents towards Sexually Transmitted Infections

| What are complications of STI's if untreated? (You can mark <br> more than one alternative) | Frequency | Percent |
| :--- | :--- | :--- |
| Arthritis inflammatory disease | 1 | .4 |
| Cervix Cancer | 54 | 19.0 |
| Ectopic | 36 | 12.7 |
| I don't know | 2 | .7 |
| Infertility | 55 | 19.4 |
| Miscarriage | 35 | 12.3 |
| Pre-Mature Birth | 41 | 14.4 |
| Pregnancy | 37 | 13.0 |
| Still Birth | 23 | 8.1 |
| Total | 284 | 100.0 |

Table 13 showed frequency and percentage of respondents' knowledge on the different complications of STI's if untreated. The data above shows a frequency of 55 (19.4\%) that infertility is the most common complications of Sexually Transmitted Infections. The fewest number of respondents ( 2 or.7\%) answered "I don't know". Complications

IJARSCT
are: still birth, low-birth weight, neonatal death, neonatal conjunctivitis, prematurity, congenital deformities, pneumonia, pelvic inflammatory disease, infertility, liver cirrhosis, and more. (World Health Organization, 2021)

Table 14: Knowledge of the respondents towards Sexually Transmitted Infections

| From where have you received information on Sexually Transmitted <br> Infections? (You can mark more than one alternative) | Frequency | Percent |
| :--- | :--- | :--- |
| Family | 17 | 4.9 |
| Friends | 38 | 11.0 |
| Hospital/Clinic | 42 | 12.1 |
| Internet | 84 | 24.2 |
| LGU | 1 | .3 |
| Magazine | 13 | 3.7 |
| Radio | 17 | 4.9 |
| School/College | 83 | 23.9 |
| Symposiums | 1 | .3 |
| Television | 51 | 14.7 |
| Total | 347 | 100.0 |

Table 14 showed frequency and percentage of respondents' knowledge on their sources of information about STI's. The data revealed that most of the respondents answered that internet is their source of information on Sexually Transmitted Infections with a frequency of $84(24.2 \%)$ The least common source of information is from LGU and symposium with a frequency of $1(.3 \%)$. All of these are sources of information regarding Sexually Transmitted Infections, but it is hard to avoid misinformation and the ability to understand these diseases. We cannot also hide the fact that we sometimes cannot control the urge or sexual desires of young people or adolescents. For it is sometimes true that when teenagers explore themselves as well as their environment, one factor that influences them to do so is their peers and the social media. Therefore, sometimes the urge to involve in premarital sex is highly due to peer pressure and social media influences. These will lead to Sexually Transmitted Infections and pregnancy termination (Pasay-an et. al, 2020)

Table 15: Knowledge of the respondents towards Sexually Transmitted Infections

| Have any of the following people told you that they have/have had a sexually <br> transmitted disease other that HIV? (You can mark more than one alternative) | Frequency | Percent |
| :--- | :--- | :--- |
| Brother/Sister | 2 | 1.8 |
| Friends | 46 | 40.4 |
| None | 52 | 45.6 |
| Other family member | 8 | 7.0 |
| Parent | 2 | 1.8 |
| Sexual Partner/Lover | 1 | .9 |
| Spouse/live-in-partner | 3 | 2.6 |
| Total | 114 | 100.0 |

Table 15 showed frequency and percentage of respondents' knowledge on people they know who have/had STI's other than HIV. The data revealed that most of the respondents answered they do not encounter people with HIV or STIs with a frequency of $52(45.6 \%)$. The fewest number of respondents ( 1 or $.9 \%$ ) answered that their sexual partner or lover told them that they have/had sexually transmitted disease other than HIV. These indicators aside from none are risk factor in transmitting Sexually Transmitted Infections without proper action implemented upon them. These indicators aside from none are risk factor in transmitting Sexually Transmitted Infections without proper action implemented upon them

Impact Factor: 7.301

Table 16: Attitude of the respondents towards Sexually Transmitted Infections

|  | Agree |  | Disagree |  | I don't know |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \underline{0} \\ & 0.0 \\ & 0 \end{aligned}$ | N <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 10 | $\begin{aligned} & \ddot{U} \\ & \text { U0 } \\ & \text { U } \end{aligned}$ |  | $\begin{aligned} & \overrightarrow{0} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |
| 16.1. Sexually Transmitted Infections are not dangerous because they can be cured | 15 | 14.4 | 76 | 73.1 | 13 | 12.5 |
| 16.2. It is necessary to avoid a person who has contracted a sexually transmitted infection because they can transmit it to other people | 52 | 50.0 | 43 | 41.3 | 9 | 8.7 |
| 16.3. People who are infected with an STI must get treatment | 95 | 91.3 | 3 | 2.9 | 6 | 5.8 |
| 16.4. If a person believes that he or she had gotten a sexually transmitted infection and is unsure about the symptoms he/she should directly contact health personnel | 94 | 90.4 | 3 | 2.9 | 7 | 6.7 |
| 16.5. Young people should get information/knowledge about STI's in order to prevent these diseases | 100 | 96.2 | 1 | 1.0 | 3 | 2.9 |
| 16.6. Young people should be educated on knowledge of STI's at school to prevent these diseases | 100 | 96.2 | 0 | 0 | 4 | 3.8 |
| 16.7. A person who does not want to become infected with a sexually transmitted infection should use condom when having sexual intercourse. | 82 | 78.8 | 9 | 8.7 | 13 | 12.5 |
| 16.8. A person who does not want to become infected with a sexually transmitted infection should use emergency contraception pills. | 45 | 43.3 | 41 | 39.4 | 18 | 17.3 |

Table 16.1 showed the frequency and percentage of the respondents' attitude in Sexually Transmitted Infections in terms of being dangerous. Data revealed that $76(73.1 \%)$ of the respondent disagree that sexually transmitted is not dangerous. As evidence to this matter, it is truly revealed that knowledge of sexually transmitted infections (STIs) and their complications, as well as young people's attitudes toward sexual health, are crucial in developing prevention and treatment measures, Upchurch (2004) stated. Although most individuals are aware of HIV/AIDS as a result of media and government efforts, understanding of other sexually transmitted infections (STIs) is poor in underdeveloped nations, Anwar (2010) stated. (Subbarao and Akhilesh 2017)
Table 16.2 showed the frequency and percentage of the respondent's attitude in sexually transmitted disease in terms to transmission. Majority $52(50 \%)$ of the respondents agreed that it is necessary to avoid a person contracted a sexually transmitted infection. Therefore, it is considered important for societies that its individuals are well-informed about sex, sexual practices, child sexual abuse and Sexually Transmitted Infections. (Agustin et. al, 2017) because if we look at the frequency who disagreed (43), there is still a high number of people who thinks that a person who has a Sexually Transmitted Infections should not be avoided. In short, there is a very close difference between those people who agreed and disagreed.
Table 16.3 showed the frequency and percentage of the respondents' attitude in Sexually Transmitted Infections in terms of necessity to be treated. Majority $95(91.3 \%)$ of respondents agreed that persons with STI must get treatment. As a result, if STIs are not treated properly, they can cause infertility, urethral stricture, abortions, malignancies, perinatal, and neonatal morbidities, among other things, WHO (2015) and De Waure (2015) claimed. (Subbarao and Akhilesh 2017)

Table 16.4 showed frequency and percentage of the respondent's attitude in Sexually Transmitted Infections in terms of contacting a medical personnel if the person with STI is not sure if he/she has STI. Majority ( $90.4 \%$ ) of the respondents agreed that persons who are unsure if they have STI or not must contact health care personnel. According to a health research, many Sexually Transmitted Infections are asymptomatic that's why seeking a professional medical advice is a must. (Centers for Disease Control and Prevention, 2019).
Table 16.5 showed frequency and percentage of respondents' attitude in terms of having knowledge about STI in able to prevent it. Majority ( 100 or $96.2 \%$ ) of the respondents agreed that young people need to have knowledge about STI in able to prevent it. Sex education, on the other side, influences students' views toward supporting safer sexual practices. (Agustin et. al, 2017)
Table 16.6 showed frequency and percentage of respondents' attitude in terms of being educated on knowledge of STI's at school to prevent these diseases. Most ( 100 or $96.2 \%$ ) of the total respondents agreed that young people should be educated on knowledge of STI's at school to prevent these Infections and 4 (3.8\%) of the total respondents answered I don't' know. Even though it has been found that knowledge and awareness have a limited impact on modifying attitudes and behaviors, they are critical components of sex education in promoting informed and healthy choices. (Samkange-Zeeb, 2011)
Table 16.7 showed frequency and percentage of respondents' attitude in terms of using a condom when having sexual intercourse in order not to be infected with STI's. Majority ( 82 or $78.9 \%$ ) of the total population agreed that if a person who doesn't want to become infected with sexually transmitted infection should use condom when having sexual intercourse. Whereas $9(8.7 \%)$ disagreed with the idea and 13 (12.5) of the population answered "I don't know". Premarital sex without protection or condom use will lead to pregnancy complications, Sexually Transmitted Infections, complications due to pregnancy termination, death or physical and mental effect on the mother, and other consequences. (Pasay-an, et. al, 2020) The risk of HIV and STI transmission can be significantly decreased, but not completely eliminated, by using a latex male or female condom. The only way to totally prevent the spread of HIV or STI's through sexual contact is abstinence (Healthy, 2014).
Table 16.8 showed frequency and percentage of respondents' attitude in terms of taking emergency contraception pills when having sexual intercourse in order not to be infected with STI's. Majority ( 45 or $43.3 \%$ ) of the total population agreed that if a person who doesn't want to become infected with sexually transmitted infection should use emergency contraception pills. Whereas 41 (39.4\%) disagreed with the idea and 18 ( $17.3 \%$ ) answered "I don't know". A birth control method is effective against pregnancy but not Sexually Transmitted Infections. (Centers for Disease Control and Prevention, 2019)

Table 17: Attitude of the respondents towards Sexually Transmitted Infections

| How worried are you that you might catch a sexually <br> transmitted infection? | Frequency | Percent |
| :--- | :--- | :--- |
| I don't know | 17 | 16.3 |
| Not worried at all | 29 | 27.9 |
| Worried a little | 24 | 23.1 |
| Worried a lot | 34 | 32.7 |
| Total | 104 | 100.0 |

Table 17 showed frequency and percentage of respondents' attitude in terms being worried about catching STI's. Majority ( 34 or $32.7 \%$ ) of the total population are worried a lot that they might catch sexually transmitted infection. The fewest number of respondents ( 17 or $16.3 \%$ ) answered "I don't know". According to a health research, many Sexually Transmitted Infections are asymptomatic that's why seeking a professional medical advice is a must. (Centers for Disease Control and Prevention, 2019).

Table 18: Attitude of the respondents towards Sexually Transmitted Infections

| When having unprotected sexual intercourse, <br> what are you most concerned about? | Frequency | Percent |
| :--- | :--- | :--- |
| Becoming pregnant | 36 | 34.0 |
| Getting another sexually transmitted infection | 19 | 17.9 |

IJARSCT

Volume 3, Issue 1, July 2023

| Getting HIV | 40 | 37.7 |
| :--- | :--- | :--- |
| getting STIs | 1 | .9 |
| I don't' know | 10 | 9.4 |
| Total | 106 | 100.0 |

Table 18 showed frequency and percentage of respondents' attitude on their most concerned when having unprotected sexual intercourse. Majority ( 40 or $37.7 \%$ ) are most concerned on getting HIV when having unprotected sexual intercourse. The fewest number of respondents ( 1 or $.9 \%$ ) answered that they are most concerned about getting STI's. As evidence on this matter, teenage pregnancy may lead young people to health problem outcomes because of lack of information and knowledge. One of these examples are, premarital sex without protection or condom use will lead to pregnancy complications, Sexually Transmitted Infections, complications due to pregnancy termination, death or physical and mental effect on the mother, and other consequences. (Pasay-an, et. al, 2020). HIV and other Sexually Transmitted Infections sometimes comes with teenage pregnancy or vice versa.

## PEARSON CHI SQUARE TEST

Table 19: PEARSON CHI SQUARE TEST


IJARSCT

Volume 3, Issue 1, July 2023

| 19.5. What are signs and symptoms of sexually transmitted infections? | $220.271^{\text {a }}$ | 272 | . 991 | 150.479 | 272 | 1.000 | 104 | a. 343 cells (99.4\%) have expected count less than 5. The minimum expected count is .03 . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19.6. Do you think it is possible for a man to have a sexual transmitted infection other than HIV without having symptoms? | $11.566^{\text {a }}$ | 8 | . 172 | 14.167 | 8 | . 078 | 104 | a. 10 cells ( $66.7 \%$ ) have expected count less than 5. The minimum expected count is . 32 . |
| 19.7. Do you think it is possible for a woman to have a sexual transmitted infection other than HIV without having symptoms? | $8.923{ }^{\text {a }}$ | 8 | . 349 | 10.183 | 8 | . 252 | 104 | a. 10 cells ( $66.7 \%$ ) have expected count less than 5. The minimum expected count is . 32 . |
| 19.8. What are complications of STI's if untreated? | $116.485^{\text {a }}$ | 136 | . 886 | 85.388 | 136 | 1.000 | 104 | a. 171 cells ( $97.7 \%$ ) have expected count less than 5. The minimum expected count is .03 . |
| 19.9. From where have you received information Sexually <br> Transmitted Infections? | $177.974^{\text {a }}$ | 172 | . 362 | 117.310 | 172 | 1.000 | 104 | a. 220 cells ( $100.0 \%$ ) have expected count less than 5. The minimum expected count is 03 . |
| 19.10. Have any of the following people told you that they have/have had a sexually transmitted disease other that HIV? | $65.608^{\text {a }}$ | 68 | . 560 | 48.594 | 68 | . 964 | 104 | a. 86 cells ( $95.6 \%$ ) have expected count less than 5. The minimum expected count is . 03 . |

Only table 19.2 demonstrated a substantial correlation between respondents' demographic profile and their knowledge toward sexually transmitted illnesses; the other tables do not demonstrate such a correlation.

Table 20: PEARSON CHI SQUARE TEST

|  | Pearson Chi-Square | Likelihood Ratio | N of <br> Valid <br> Cases |  |
| :--- | :--- | :--- | :--- | :--- |

Impact Factor: 7.301


IJARSCT

| 20.8.A person who <br> does not want to <br> become infected with <br> a sexually transmitted <br> infection should use <br> emergency <br> contraception pills. | $\mathbf{2 2 . 5 6 7 ^ { \text { a } }}$ | $\mathbf{8}$ | $\mathbf{. 0 0 4}$ | $\mathbf{1 9 . 3 9 5}$ | $\mathbf{8}$ | $\mathbf{. 0 1 3}$ | $\mathbf{1 0 4}$ |  <br> have expected count <br> less than 5. The <br> minimum expected <br> count is .52.. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20.9.How worried are <br> you that you might <br> catch a sexually <br> transmitted infection? | $10.886^{\text {a }}$ | 12 | .539 | 14.586 | 12 | .265 | 104 | have expected count <br> less than 5. The <br> minimum expected <br> count is .49. |
| 20.10. When having <br> unprotected sexual <br> intercourse, what are <br> you most concerned <br> about? | $44.987^{\text {a }}$ | 56 | .854 | 37.236 | 56 | .975 | 104 | a. |

Only tables 20.2, 20.3 and 20.8 demonstrated a substantial correlation between respondents' demographic profile and their attitude toward sexually transmitted illnesses; the other tables do not demonstrate such a correlation.

## IV. CONCLUSION

This study showed the knowledge and attitude on sexually transmitted diseases among college students of Echague, Isabela.
Most of the respondents are at the age of 21, female and a $3^{\text {rd }}$ year students. Majority of the respondents are engineering students and are single. Most of the Respondents are still living in their parent's house and they are all interested in men.
This study found out that the respondents are aware of other infections/diseases aside from HIV that can get through sex. They are also aware on the possible causes but some also think that it because of bad hygiene of men and women. The respondents are also aware on the different types of STD's and the routes on getting the disease. In the subject of signs and symptoms of STD, the respondents are mindful but some really don't know about it. They are also aware that it is possible for a men and women to have sexually transmitted diseases other than HIV without having symptoms. In addition, the respondents are also knowledgeable on the possible complications if it is left untreated. Most of the respondents often get information through the internet, school/college, television and hospital. The respondents do not encountered people with STD but somehow, a friend told them.
In line with the attitude of students on Sexually Transmitted Diseases, the respondents disagreed that Sexually transmitted diseases is dangerous because it can be cured. The respondents also know that it is necessary to avoid a person who has contracted a Sexually transmitted infection because they can transmit it to other people but some of the respondents disagree. Majority of the respondents are aware that people who are infected with a Sexually Transmitted Diseases must get treatment and should directly contact some health care personnel if they are unsure about the symptoms. In addition, they also agreed and concerned that young people must know information about STD's and be educated on knowledge on STDs at school to prevent these diseases. The respondents are also aware that a person who does not want to become infected with a Sexually transmitted infection should use condom when having sexual intercourse and by using emergency contraception pill but some of the respondents disagree and didn't know about it at all. In addition, most of the respondents worried a lot that they might catch a Sexually transmitted infection but others are not worried at all, worried a little and others didn't know. When having unprotected sexual intercourse most concerned of the respondents is Getting HIV, others are becoming pregnant and getting another Sexually transmitted infection but few of the respondents didn't know.

Only table 19.2 demonstrated a substantial correlation between respondents' demographic profile and their knowledge toward sexually transmitted illnesses; the other tables do not demonstrate such a correlation and only tables 20.2, 20.3 and 20.8 demonstrates a substantial correlation between respondents' demographic profile and their attitude toward sexually transmitted illnesses; the other tables do not demonstrate such a correlation.

## REFERENCES

[1]. Agustin, C.P. et. al, (2017). ACCEPTABILITY OF THE INCORPORATION OF SEX AND SEXUALITY EDUCATION IN THE CURRICULA. International Journal of Advanced Research in Management and Social Sciences. ISSN: 2278-6236. https://garph.co.uk/IJARMSS/Dec2017/12.pdf
[2]. Almeida, R.A.A.S. et. al. (2017). Knowledge of adolescents regarding sexually transmitted infections and pregnancy. Rev Bras Enferm [Internet]. http://dx.doi.org/10.1590/0034-7167-2016-0531
[3]. Ayalnesh Asmamaw Kassie, Temesgen Worku Gudayu, Bilen Mekonnen Araya, "Knowledge, Attitude, and Preventive Practices towards Sexually Transmitted Infections among Preparatory School Students in West Gojjam Zone, Ethiopia", Advances in Public Health, vol. 2020, Article ID 6894394, 9 pages, 2020. https://doi.org/10.1155/2020/6894394
[4]. Buenconsejo, L. et. al. . (2019). Estimating the burden of illness related to genital warts in the Philippines: a nationally representative cross-sectional study. Infectious Agents and Cancer. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6781391/
[5]. Center for Disease Control and Prevention. (2019). STI Awareness Month. https://www.cdc.gov/STI/sam/gyt/knowthefacts.htm
[6]. Center for Diseae Control And Prevention. (2021). Sexually Transmitted Infections (STI's). cdc.gov/STI/general/default.htm
[7]. De Jose, E.G (2013). Filipino Adolescents' Sexual Attitudes and Behaviors: Results from a University Cohort. Academic Journal of Interdisciplinary Studies MCSER Publishing, Rome-Italy. Doi:10.5901/ajis.2013.v2n8p719
[8]. De Torres, R.Q. (2020). Facilitators and barriers to condom use among Filipinos: A systematic review of literature. Health Promotion Perspectives. https://doi.org/10.34172/hpp. 2020.49
[9]. Emerita. (2011). Health Promotional Model Manual. Health Promotional Model Manual.Retrievedfrom https://deepblue.lib.umich.edu/bitstream/handle/2027.42/85350/HEALTH_PROMOTION_MANUAL_Rev_ 5-2011.pdf
[10]. Eunice Kennedy Shriver National Institute of Child Health and Human Development. (2017, January 31). US Department of Health and Human Services. What are the symptoms of Sexually Transmitted Infections (STI's) or sexually transmitted infections (STIs)? Retrieved from https://www.nichd.nih.gov/health/topics/STI's/conditioninfo/symptoms
[11]. Formplus Blog. (October 13). What is Stratified Sampling? Definition, Examples, Types. Retrieved from https://www.formpl.us/blog/stratified-sampling
[12]. Hossam S. El-Tholoth et. al (2017) Knowledge and attitude about sexually transmitted Infectionsamong youth in Saudi Arabia https://dx.doi.org/10.4103\%2FUA.UA_14_17
[13]. IvyPanda Free Essays. (2020, July 6). Descriptive Statistics and Correlational Design Research Paper. Retrieved from https://ivypanda.com/essays/descriptive-statistics-and-correlational-design/
[14]. Leifer (2018). Intorduction to Maternity and Pediatric Nursing. ELSEVIER.
[15]. Pender, et al. (2011). Health Promotion in Nursing Practice. Retrieved from Pender, N. J., Murdaugh, C. L., \& Parsons, M. A. (2011). Health promotion in nursing practice
[16]. Pasay-an, et. al, (2020). Knowledge, attitudes, and practices of adolescents regarding sexuality and reproductive issues in the Cordillera administrative region of the Philippines. Makara Journal of Health Research. https://scholarhub.ui.ac.id/cgi/viewcontent.cgi?article=1245\&context=mjh
[17]. Pepito, V.C. et. al. (2021). Determinants of consistent condom use among Filipino women: Results from the 2017 Philippine National Demographic and Health Survey. Research Square. https://doi.org/10.21203/rs.3.rs-588095/v1

IJARSCT

# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) 

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Volume 3, Issue 1, July 2023
[18]. Philippine Commission on Women (2022). Republic Act 10354: The Responsible Parenthood and Reproductive Health Act of 2012. Republic of the Philippines. https://pcw.gov.ph/republic-act-10354/
[19]. Ramos, P.A.R. et. al. (2021). Factors Affecting Teenage Pregnancy at Selected Barangay of Echague Isabela Philippines. Health Notions, Volume 5 Number 7. http://dx.doi.org/10.33846/hn50701
[20]. Rural Health Unit-Echague. (2021). Teenage Pregnancy Cases.
[21]. Samkange-Zeeb, F. et. al. (2011). Awareness and knowledge of sexually transmitted Infections(STI's) among school-going adolescents in Europe: a systematic review of published literature. BMC Public Health. Retrieved from https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186/1471-2458-11-727.pdf
[22]. Subbarao, N.T. et. al. (2017). Knowledge and attitude about sexually transmitted infections other than HIV among college students. Indian Journal of Sexually Transmitted Infections and AIDS. https://dx.doi.org/10.4103\%2F2589-0557.196888
[23]. Sunuwar, U. (2019). Knowledge and Attitude towards Sexually Transmitted Disease and HIV/AIDS among Secondary Level School Students. KMC Research Journal, 3(3), 159-170. https://doi.org/10.3126/kmcrj.v3i3.35723
[24]. Svensson, L. and Waern, S. (2013). Knowledge of and attitudes to Sexually Transmitted Infections among Thai university students: A questionnaire study.
[25]. Tanaka, Y. et. al. (2017). Knowledge, Behavior and Attitudes Concerning STI Prevention among Out-ofSchool Youth in the Philippines. Universal Journal of Public Health. 10.13189/ujph.2017.050307
[26]. The Philippines (2004). UNPROTECTED: SEX, CONDOMS AND THE HUMAN RIGHT TO WEALTH. Human Rights Watch. Retrieved from: https://www.hrw.org/reports/2004/philippines0504/philippines0504.pdf
[27]. World Health Organization. (2021). GUIDELINES FOR THE MANAGEMENT OF SYMPTOMATIC SEXUALLY TRANSMITTED INFECTIONS. Retrieved from https://www.who.int/publications-detailredirect/9789240024168
[28]. Department of Health. (2022). HIV, AIDS AND STI PREVENTION AND CONTROL PROGRAM. https://doh.gov.ph/national-hiv/sti-prevention-program
[29]. Svensson, L. and Waern, S. (2013). Knowledge of and attitudes to sexually transmitted diseases among Thai university students: A questionnaire study. https://www.divaportal.org/smash/get/diva2:632901/FULLTEXT01.pdf

