STUDENTS' KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES IN RELATION TO THEIR SEXUAL ATTITUDES AND BEHAVIORS

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ABSTRACT

This descriptive-correlation study assessed the level of knowledge on sexually transmitted diseases (STDs) of college students and its influence on their sexual attitudes and behaviors. The participants comprised 700 students from different colleges and universities in Tuguegarao and boarding within the City. The Sexual Attitude and Behavior Inventory (de Jose, 2013) and Sexually Transmitted Disease Knowledge Questionnaire (Jaworski & Carey, 2007) were used. The participants used a 5-point Likert scale to reflect the option in assessing their sexual attitude and behavior. In measuring the level of knowledge on STDs, each participant's answer was scored with 0 or 1 depending on wether the answer is correct. Data were treated using SPSS version 17, the weighted mean, independent t-test, Analysis of Variance and Pearson-r correlation. Results show that participants possess a "neutral sexual attitude" and practice "moderately negative sexual behavior." Majority of the participants have a low level of knowledge on STDs. A significant difference exists in participants' sexual attitude according to gender, age, sexual preference, school, course, living arrangement and type of boarding house. Also, a significant difference exists in the participants' sexual behaviors relative to their gender, age, school, course, living arrangement and type of boarding house. Furthermore, there is a significant difference in participants' level of knowledge on STDs when they are grouped according to age, school, course and living arrangement. There is a significant relationship between the sexual attitude and sexual behavior of the participants which implies that sexual attitude affects the sexual practices of an individual.

Keywords: College students, level of knowledge, sexually transmitted diseases, sexual attitude, sexual behavior

INTRODUCTION

Adolescence is typically defined as the period between 13 and 18 or 20 years, a time that serves as the transition between childhood and young adulthood. When a person reaches adolescence, the individual is expected to have commenced growth concerning every aspect of life. The onset of puberty marks the manifestation of mature sexual desire and the period of making independent decisions when the individual assumes an adult role in the society.

Adolescence occurs when the individual experiences an upsurge of sexual feelings following the dormant sexuality of childhood. It is the turning point wherein one becomes more conscious and at the same time curious about his/her sexuality. In connection to this, sexual attitude is developed as an outcome of adolescents' growing interest in exploring his/her sexuality. Furthermore, a relationship exists between the adolescents' curiosity in sexuality and the adolescents' risk in acquiring problems related to sexual behavior.

Sexual behavior of the individual, like sexual attitude, changes as a product of reaching puberty. The World Health Organization (as cited in Naukowe, 2011) describes adolescence as a "gateway to health" because behavioral pattern acquired during this period tend to last throughout adult life. According to Owuamanam (2013), in his study of adolescents' sexual behavior, he presented the various behaviors such as kissing, breast fondling, embracing, hand holding, and sexual intercourse that are widely practiced among youths. These risk-taking behaviors of adolescents are described as principal motivators for acquiring sexually transmitted diseases.

Sexually transmitted infections are infections which are mainly transmitted from one person to another through intimate contact (WHO, 2016). The infection can be spread through anal, oral or vaginal sex or through contact with blood during sexual activity. Several risk factors are linked to increased risk of sexually transmitted infections (STIs). These include earlier age at first intercourse, various sexual partners within the past year, history of STIs, and anal intercourse. Moreover, the World Health Organization (2005) highlighted the lack of education as another reason why young people are particularly vulnerable to STIs.

As a result, many adolescents are dramatically increasing as victims of sexually transmitted diseases. According to WHO (2005), 333 million new cases of curable STIs occur worldwide each year. Filling up the greatest part to the overall fraction of STD cases are among age bracket of 20-24 year-olds, followed by 15-19 year-olds. This has always been an alarming health concern being faced by many countries in the world.

To show the trend of the increase in cases of sexually-related diseases among adolescents in the Philippines, the Department of Health (DOH) reported that the HIV infection tripled between 2007 and 2008 among the 15-24 years old. The institution added that the increase in cases could be traced primarily from adolescents' early engagement in health risk behavior due to gaps in knowledge (WHO, 2012).

This research investigated the sexual attitude and sexual behavior of college students from different universities and colleges in Tuguegarao City and also the level of knowledge on sexually transmitted diseases. It aimed to explore the influence of the level of knowledge on sexually transmitted diseases on the youth's sexual attitude and behavior. Furthermore, this study seeks to contribute to broadening the existing knowledge on the relationship between level of knowledge on STD and sexual attitude and behavior among youth.

Conceptual Framework



Figure 1. Conceptual paradigm of the study

As the figure shows, three variables are the foci of the study which include: sexual attitudes, sexual behavior, and level of knowledge on STDs. The participants were assessed along these variables including their profiles such as their gender, age, sexual preference, year level, school, course, living arrangement and type of boarding house. The three key variables were correlated, and the study further established the causal effect of the personal profiles to these variables.

Statement of the Problem

This study aimed to assess the students' level of knowledge on sexually transmitted diseases, their sexual attitudes, and their behavior. A correlational analysis of these students' variables was conducted.

Specifically, it sought answers to the following:

- 1. What is the profile of the participants when grouped according to:
 - 1.1 Gender;
 - 1.2 Age;
 - 1.3 Sexual preference;
 - 1.4 Year Level;
 - 1.5 School;
 - 1.6 Course;
 - 1.7 Living arrangement, and
 - 1.8 Type of boarding house?
- 2. What are the participants' sexual attitudes, sexual behaviors, and level of knowledge on sexually transmitted disease?
- 3. Is there a significant difference in the participants' sexual attitudes, sexual behaviors and level of knowledge on sexually transmitted diseases when they are grouped according to profile variables?
- 4. Is there a significant pairwise relationship between the participants' sexual attitudes, sexual behaviors and their level of knowledge on sexually transmitted disease?

Research Design

This study used a quantitative approach, and particularly the

descriptive-correlational research design. The researchers used the descriptive method since the study ascertained the participants' perspectives and experiences, specifically their level of knowledge with regard to STDs and their sexual attitudes and behaviors.

Participants of the Study

The participants of the study include second, third, fourth, and fifth-year college students from five (5) identified colleges and universities in Tuguegarao City. The participants were chosen using a snowball sampling method. The participants of the study composed of 700 students who met different criteria such as age-18 years old and above, officially enrolled in one of different colleges and universities in Tuguegarao, and boarding within the City. Moreover, participants were equally divided in terms of gender. The participants are presented in the following table.

Number of Participants						
Sahaal		Tatal				
301001	2nd	3rd	4th	5th	TOLAI	
А	140	109	97	10	356 (50.86%)	
В	10	9	14	1	34 (4.86%)	
С	22	18	18	4	62 (8.86%)	
D	49	52	28	2	131 (18.71%)	
E	37	37	33	10	117 (16.71%)	
Total	258 (36.82%)	226 (32.24%)	190 (27.20%)	26 (3.73%)	700 (100%)	

Instrumentation

The study utilized three instruments for three variables. These are the Checklist, Sexual Attitude and Behavior Inventory (SABI), and

the Sexually Transmitted Diseases - Knowledge Questionnaire (STD-KQ).

- 1. The checklist was used to determine the profile of the participants.
- The Sexual Attitude and Behavior Inventory (De Jose, 2013) was used to gather data regarding the adolescents' sexual attitude and behavior. For both instruments, test-retest reliability estimates range from 0.75 to 0.96 (median = 0.86).

A modified 5-point Likert Scale was used for both the sexual attitude and sexual behavior. To facilitate interpretation, the theoretically relevant variables were all coded so that higher scores reflect a more positive attitude and signify more liberal sexual practices. Responses to the sexual attitude items ranged from 1 (strongly disagree) to 5 (strongly agree) (De Jose, 2013). Originally, the sexual behavior inventory has seven-point response format; however, to pattern the response format like the sexual attitude scale, the researchers modified the response format into five-point with the approval of the author of the tool in which responses "No. However, I am open/willing to give it a try" and "No/ None/Never" were merged to become 1 "Yes. Few times or 2 to 3 times" and "Yes. Just one time" were merged to become 2 (No I have not done it, but I am open to doing it); 3 (Yes, I have done it only once); 4 (Yes, I have done it a few number of times); 5 (Yes, I have done it frequently/many times). Mean scores were taken and were grouped according to the 0.8 interval Mean Range where it falls.

The assessment rating is summarized as follows:

Rate	Interpretation
1	No. I have not done it, and will never do it
2	No, I have not done it, but I am open to doing it
3	Yes, I have done it only once
4	Yes, I have done it a few number of times
5	Yes, I have done it frequently/many times

3. The third instrument that was utilized for the measurement of the

level of knowledge on sexually transmitted diseases is the Sexually Transmitted Disease Knowledge Questionnaire (STD-KQ) which was developed by Jaworski & Carey (2007).

Data Gathering Procedure

The researchers obtained permission and approval from the University's Research and Publication Office to conduct the research. The research proposal was thoroughly reviewed and after that, was approved. Revisions were made in line with some suggestions and recommendations. Upon approval, the researchers wrote a letter to the Commission on Higher Education (CHED) to obtain the total number of enrolled college students in all colleges and universities in Tuguegarao City.

The researchers also mapped out the entire city to determine the location of boarding houses where participants lodge/ live. Then, the researchers obtained permission from landlords/ guardians to allow the researchers to conduct the study on their selected participants. After recruiting participants on their vacant time, the informed-consent letter was distributed prior to the administration of the tool. The context of the informed consent was discussed by the researchers to clarify any misunderstanding or unclear concepts on the tool to be answered. More so, the researchers also explained and reiterated the purpose of the informed-consent letter and that the participants are not forced to cooperate on the survey, and they have the choice to withdraw and are respected for whatever reasons they have. Then, the researchers personally handed over the questionnaires which the participants answered for 20 to 30 minutes.

Data Analysis

The tallied and tabulated data were treated using the SPSS version 17. More specifically, the following tools were used:

1. Frequency counts and percentages were used to determine and interpret the participants' profile, the level of knowledge on sexually transmitted diseases (STDs), sexual attitude and behavior.

The total scores were utilized to determine the level of knowledge. Table 1 shows the score range and its qualitative description.

Table 1

Sexually Transmitted Disease-Knowledge Questionnaires Scoring Guide

Score Range	Qualitative Description
0-9	Low Score/ Low Level of Knowledge
10-18	Moderate Score/ Moderate Level of Knowledge
19-27	High Score/ High Level of Knowledge

2. Mean was used as central tendency measure to Sexual Attitude and Behavior. Table 2 was used to interpret the obtained mean scores.

Table 2

Mean Scores of Sexual Attitude and Attitudes Inventory

Maan Danga	Qualitative Description				
wean Kange	Sexual Attitudes	Sexual Behavior			
1.00-1.79	Negative sexual attitude	Conservative			
1.80-2.59	Moderately negative sexual attitude	Moderately conservative			
2.60-3.39	Neutral sexual attitude	Neutral sexual behavior			
3.40-4.19	Moderately positive sexual attitude	Moderately liberate			
4.20-5.00	Positive sexual attitude	Liberate			

- 3. The significant difference among groups was computed using the t-test for independence and Analysis of Variance (ANOVA).
- 4. The pairwise relationship among variables was analyzed through the Pearson Product Moment correlation coefficient (r).

RESULTS AND DISCUSSION

Based on the data gathered, the following findings were derived:

Table 3

Distribution of Participants in Terms of Profiles

Profile	Specific Variables	Frequency	Percentage
Condor	Male	350	50.00
Gender	Female	350	50.00
	18	327	46.70
Age	19	198	28.30
	 Specific Variables Male Female 18 19 20 and above Heterosexual Homosexual Bisexual 2nd year 3rd year 4th year 5th year A B C D E Business-Related Courses Engineering Courses Ingineering Courses IT-related Courses Social Science Courses Health Related Courses 	175	13.90
	Heterosexual	571	81.60
Sexual Preference	Homosexual	60	8.60
	Bisexual	69	9.90
	2nd year	258	36.90
Voorlovol	3rd year	225	32.10
rear Lever	4th year	190	27.10
	5th year	27	3.90
	А	356	50.9
School	В	34	4.90
	С	62	8.90
	D	131	18.70
	E	117	16.70
	Business-Related Courses	292	41.71
	Engineering Courses	138	19.71
Specific Course	Education Courses	122	17.43
·	IT-related Courses	35	5.00
	Social Science Courses	22	3.14
	Health Related Courses	91	13.00

(table continues)

Research Digest			
Table 3 (continued)			
Living	Living with a guardian	522	74.60
Arrangement	Living without a guardian	thout a 178 25.4	25.40
Type of	Mixed boys and girls	460	65.70
Boarding House	All boys/ All girls	240	34.30

The equal number of participants represents the gender groups. Most (46.7%) of the participants are 18 years old in age, and 36.9% are second year. Majority of them (50.9%) are enrolled in School A. Most (41.71%) of the participants are enrolled in business courses. The majority (81.6%) of the participants are heterosexual (81.6%). It, therefore, reveals that there are many students in higher education institutions who are heterosexuals which is considered as the social norm in terms of sexual preference. The majority (74.6%) of the participants are living with a guardian. The majority (65.7%) of the participants are residing in mixed girls/boys boarding house indicating that they prefer to socialize with both sexes than to confine themselves in their own gender.

Variable	Mean	Descriptive Ir
Participants' Sexual Attit	tudes and Sexu	al Behavior
Table 3		

Variable	Mean	Descriptive Interpretation
Sexual Attitude	2.61	Neutral sexual attitude
Sexual Behavior	2.11	Moderately conservative

Participants have "neutral sexual attitude" with an overall mean of 2.61, indicating that their sexual attitudes or beliefs about sexuality are not that firm. In addition, Filipino youth have open attitude toward specific sexual issues and negative attitude toward other controversial issues; these differing attitudes toward sexuality make them having over-all neutral beliefs.

Participants' "moderately conservative behavior" connotes that youth nowadays still carry the Filipino attitude of being conservative in terms of sexual behavior. It carries the statement written by Leyson (2001) that a very conservative interpretation of Catholic decrees about sexuality and marriage have been inculcated in the minds of the Filipino people, in a way that has proven difficult to alter.

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Level	Frequency	Percentage
Low level	581	83.00
Moderate level	115	16.40
High level	4	0.60
Total	700	100.00

Level of Knowledge on Sexually Transmitted Diseases of the Participants

In terms of the level of knowledge on sexually transmitted diseases, the majority (83.0%) of the participants have a low knowledge level. It implies that they lack education and awareness on sexually transmitted diseases due to inadequate reproductive health programs conducted by the local health workers. This is supported by the findings of UNICEF (2010) stating that there is a substantial increase in new HIV infections due to lack of information existing on HIV/AIDS which therefore calls for action of Philippine government but more so cause worries for young Filipinos.

Table 5

Table 4

Grouping Profile	Specific Profile	Mean	SD	Computed Value	Probability Value	Decision
Candan	Male	2.92	0.71	11.07	0.00	Deiget IIe
Genuer	Female	2.31	0.64	11.97	0.00	кејест по
Age	18	2.51	0.71			
	19	2.64	0.69	3.25	0.00	Reject Ho
	20 and above	2.92	0.93			
Sexual Preference	Heterosexual	2.57	0.74			
	Homosexual	2.83	0.65	5.13	0.00	Reject Ho
	Bisexual	2.77	0.80			

Results of Comparative Analysis on the Sexual Attitude when They are Grouped According to Profile Variables

(table continues)

Table 5 <i>(continu</i>	ed)					
	2nd year	2.59	0.78			
Year Level	3rd year	2.64	0.68	2.25	0.00	A
	4th year	2.60	0.75	3.25	0.86	Ассерт но
	5th year	2.66	0.82			
	А	2.53	0.70			
	В	2.74	0.90			
School	С	2.56	0.90	4.80	0.00	Reject Ho
	D	2.85	0.66			
	E	2.59	0.76			
	Business Courses	2.57	0.75			
	Engineering Courses	2.61	0.63			
Course	Education Courses	2.34	0.63			
Clusters	IT Courses	2.79	0.59	3.25	0.00	Reject Ho
	Social Science Courses	2.53	0.79			
	Health Courses	2.72	0.54			
Living	Living with a guardian	2.57	0.73			
Living Arrangement	Living without a guardian	2.73	0.77	-2.36	0.02	Reject Ho
Type of Boarding	Mixed boys and girls	2.65	0.74			
	All boys/ All girls	2.53	0.73	2.12	0.03	Reject Ho
	Mixed boys and girls	2.65	0.74			

There is a significant difference in the sexual attitude when grouped according to profile variables; thus, the null hypothesis is rejected. Significantly, the male has more positive sexual attitude compared to females since the male is more sexually permissive. Moreover, older participants have higher means and that they have a positive sexual attitude because of their maturity. As to sexual orientation, homosexuals hold more positive sexual attitude because they are more accepting of the unusual norms in the society as a way to combat prejudice and discrimination. School D which is a non-catholic school has the highest mean indicating that values of an institution are being imparted to an individual. Male-dominated courses such as IT Course exhibit positive sexual attitude. Students living without a guardian are more positive on their sexual attitude because of their autonomy to talk about sexual-related topics which are unacceptable in a conservative social setting. Students living in mixed boys and girls are more positive on their sexual attitude for the shared values between opposite sex.

Table 6

Grouping Profile	Specific Profile	Mean	SD	Computed Value	Probability Value	Decision
Gender	Male	2.70	1.10	16.61	0.00	Reject Ho
	Female	1.51	0.78			
Age	18	1.93	1.07			
	19	2.09	1.09	4.81	0.00	Reject Ho
	20 and above	2.76	1.21			
	Heterosexual	2.06	1.10			
Sexual Preference	Homosexual	2.31	1.20	2.68	0.07	Accept Ho
	Bisexual	2.31	1.20			
	2nd year	2.01	1.09		0.05	Accept Ho
Voarlovol	3rd year	2.24	1.16	2.60		
	4th year	2.04	1.09			
	5th year	2.38	1.26			
	A	1.98	1.07	5.75	0.00	Reject Ho
	В	2.54	1.32			
School	С	1.99	1.12			
	D	2.44	1.10			
	E	2.06	1.16			
	Business Courses	2.08	1.05			
	Engineering Courses	1.95	0.8			
Course	Education Courses	1.64	0.69	3.75	0.00	Reject Ho
Course Clusters	IT Courses	2.55	1.08			
	Social Science Courses	2.53	0.79			
	Health Courses	2.11	0.69			
Living Arrangement	Living with a guardian	2.04	1.12			
	Living without a guardian	2.30	1.19	-2.68	0.00	Reject Ho

Results of Comparative Analysis on the Sexual Behavior when They are Grouped According to Profile Variables

(table continues)

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Table 6 (continued)							
Type of Boarding	Mixed boys and girls	2.19	1.14				
	All boys/ All girls	1.95	1.08	2.611	0.00	Reject Ho	
	Mixed boys and girls	2.19	1.14				

There is a significant difference in sexual behavior when grouped according to gender, age, school, course, living arrangement and types of boarding; thus, the null hypothesis is rejected. Extensively, male participants are more liberated than female because the male is sexually permissive. As participants age, their sexual behavior liberates because of sexual experience and maturity. Participants from non-Catholic schools are more liberated in their sexual practices due to lack of imposed moral implications toward their sexual act. A student who has background knowledge of sexuality are more liberated in terms of sexual behavior. The absence of guardian supervision enables students to explore further with their sexual behavior. Participants' living in a mixed boys/girls boarding house tend to explore further their sexual behavior due to the availability of opposite sex.

Table 7

Grouping Profile	Specific Profile	Mean	SD	Computed Value	Probability Value	Decision
Gender	Male	5.03	4.32	0.16	0.87	Accept Ho
	Female	4.98	4.61			
Age	18	1.93	2.05			
	19	2.09	2.24	4.81	0.00	Reject Ho
	20 and above	2.76	3.69			
Sexual Preference	Heterosexual	5.04	4.50			
	Homosexual	5.58	4.25	1.56	0.21	Accept Ho
	Bisexual	4.23	4.27			
Year Level	2nd year	4.60	4.39			
	3rd year	5.46	4.40	1.61	1.61 0.19	Accortillo
	4th year	4.94	4.34			Ассерт по
	5th year	5.52	6.15		(ta	ble continues)

Results of Comparative Analysis on the Participants' Level of Knowledge when They are Grouped According to Profile Variables

Table 7 (continued)						
School	А	4.59	4.25			
	В	4.91	4.68			
	С	7.15	5.52	4.46	0.00	Reject Ho
	D	5.02	3.95			
	E	5.15	4.70			
	Business Courses	4.68	3.63			
	Engineering Courses	2.28	2.20			
Caura	Education Courses	2.53	0.79			
Clusters	IT Courses	3.89	4.47	8.06	0.00	Reject Ho
	Social Science Courses	5.05	4.04			
	Health Courses	9.51	3.16			
Living Arrangement	Living with a guardian	4.72	4.28	2.00	0.00	Deiest II-
	Living without a guardian	5.84	4.87	-2.89	0.00	Reject Ho
Type of Boarding	Mixed boys and girls	4.95	4.43			
	All boys/ All girls	5.11	4.53	-0.43	0.67	Accept Ho
	Mixed boys and girls	4.95	4.43			

As shown, there is a significant difference in the level of knowledge of the participants when grouped according to age, school, course and living arrangement; thus, the null hypothesis is rejected. Considerably, as an individual ages, he/she is exposed to a more formal sexual education, has more sexual experiences due to becoming sexually active, and being mature enough in dealing with topics related to sexually transmitted diseases and other reproductive health topics. Catholic school setting plays a very big role in increasing the awareness of students when it comes to sexually transmitted diseases, thereby emphasizing the values about human reproductive health as well as sexuality and behavior which Catholic educators are teaching. Nursing students have a higher level of knowledge when it comes to reproductive health issues due to the fact that their field of study includes the awareness on certain health issues as well as its prevention and health promotion. Unsupervised students have a higher level of knowledge since they have the freedom to talk and are more capable of learning a sexual-related topic that has social stigma.

Table 8

Correlational Analysis on the Participants Level of Knowledge on Transmitted Diseases with their Sexual Attitudes and Sexual Behavior

Variables Correlated	Computed r	p-value	Decision
Sexual Attitude and Sexual Behavior	0.64	0.00	Reject Ho
Level of Knowledge and Sexual Attitude	0.04	0.34	Accept Ho
Level of Knowledge and Sexual Behavior	0.04	0.28	Accept Ho

There is a significant relationship between the sexual attitude and sexual behavior of the participants; hence, it reveals that sexual attitude and sexual behavior are associated, and they are positively correlated. Theoretically, it means that if they have a positive sexual attitude, they tend to have a more liberated sexual behavior. Based on the result, their sexual attitude is neutral, and their sexual behavior is moderately conservative.

CONCLUSION

Based on the results of the study, the researchers inferred that knowledge on sexually transmitted diseases does not necessarily affect the students' sexual attitude and behavior. Sexual attitude, however, was shown to affect the sexual practices of an individual.

The sexual attitude of the participants manifested neutral whereas their sexual behavior was moderately conservative. Moreover, there is a low level of knowledge of sexually transmitted diseases among the participants.

There were gender, age, sexual preference, course, living arrangement and type of boarding house differences regarding sexual attitude, with male, older adolescents, homosexuals, IT students, unsupervised students, and mixed-gender boarders having a more positive attitude towards sexuality. Also, there were gender, age, course, living arrangement, and type of boarding house differences in terms of sexual behavior, with male, older adolescents, ITstudents, unsupervised students and mixedgender boarders practicing more liberal sexual acts.

Moreover, there were school, course and living arrangement differences in terms of the level of knowledge on sexually transmitted diseases, with Catholic school, health courses and unsupervised students reporting to have a higher level of STD knowledge.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are offered:

Healthcare educators may conduct awareness programs such as sex education among college students and parents to inform them regarding sexual-related diseases and to promote a positive attitude toward sex.

Psychology instructors may reinforce human sexuality topics in their psychological development subject so that awareness on sexuality and sexually transmitted diseases can be raised among their students.

Health care providers, teachers, guidance counselors, and parents may take extra effort in opening awareness about sexuality and sexually transmitted diseases among adolescents by conducting orientations or awareness programs.

Health care providers, teachers, guidance counselors may develop a positive and welcoming attitude to adolescents who may need these services in terms of problems about sexuality and reproductive health as a whole.

Service providers may work with other sectors to collectively address adolescent health issues especially reproductive health.

Guidance counselors and teachers may attend seminars and trainings to enrich their knowledge and skills on human sexuality.

Reproductive Health and Adolescent Program planners from the Department of Health may involve the youth in planning, implementing, monitoring, and evaluating reproductive health programs to guarantee that these are acceptable, appealing, and appropriate to them.

Students may participate in activities that the Department of Education in partnership with the Department of Health will implement concerning reproductive health.

Other researchers may incorporate in their future studies some demographic data that could affect the level of knowledge on STD, such as socioeconomic status, religiosity, and educational attainment of parents.

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