

Research Article

Examining the Association of Sexual Health Knowledge and Sexual Attitude of Filipino College Students

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Abstract: This study aims to uncover the association between sexual health knowledge and sexual attitude, explore the various factors, and evaluate its significance in today's generation. There are a total of 328 individuals who participated in this study comprising first year to fourth year level of students from University of Mindanao Digos College. This study is quantitative and employs a descriptive-predictive research design. Using the Shapiro-Wilk test, to test the normality; however, the test did not show if the continuous variables have a normal distribution by assumption. Mean and Standard Deviation were used to test the levels of both variables, results showed that level of sexual health knowledge among participants is moderate and level of sexual attitudes of college students was marked neutral. Where in the results revealed that general sexual attitude has an inversely positive relationship with reproductive health, contraception, condom use, has a positive correlation with HIV/AIDS, but has no relationship with Sexually Transmitted Disease (STD). Moreover, personal sexual attitude has no significant relationship with reproductive health, but has a very weak positive relationship contraception, condom use, has a weak positive relationship with STD and HIV/AIDS.

Keywords: sexual health knowledge; sexual attitude; correlation

1. Introduction

The World Health Organization (WHO, n.d.) defines adolescents as people between 10 and 19, accounting for more than 20% of the world's population. Adolescents must manage a variety of physical, mental, emotional, and behavioral changes as they grow more independent and experiment with various activities, including smoking, drinking, and having sex. There is much promise in sexual health education to provide teenagers with the information and abilities they need to make healthy sexual decisions. It can lessen false information and raise critical reasoning, speaking, and having self-assurance (Haruna et al., 2018). Sexual health knowledge is crucial in human development, especially health and well-being. Also, knowledge of reproductive health services is critical for people to make informed decisions concerning their intimate partnerships. Sexual attitudes shape people's perceptions of sexual expressions, practices, and relationships. Millions of teenagers are simultaneously addressing sexual issues related to reproductive health (SRH), such as high incidence of undesired pregnancy, unsafe and covert abortions, and unfulfilled need for contraception. These difficulties might be lessened or made worse by social norms or common ideas about appropriate behavior for oneself and other people. The last 25 years have seen rapid changes in the world, bringing attention to the connections between development, health, and social norms (Pulerwitz et al., 2019). According to Mukherjee et al. (2019), societal, cultural, environmental, and physical factors influence sex and sexuality knowledge, as well as sexual attitudes and behavior have a beneficial or detrimental impact on their lives, loved ones, and community as a whole.

According to Kyilleh et al. (2018), on a global scale, adolescents lacked awareness of the risks associated with unprotected premarital intercourse. Within conflict- or disaster-affected populations, adolescent girls and young women are an underserved demographic, and their sexual and reproductive health (SRH) needs are overlooked. As a result, the crisis increases adolescent girls' vulnerability to undesired pregnancies, HIV and sexually transmitted infections (STIs), maternal death, and sexual assault (Ivanova et al., 2018). Over one million

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sexually transmitted infections are acquired globally every day, an estimated 22 million unsafe abortions take place annually, and the rate of new HIV infections among young people is increasing globally (WHO, 2019). Approximately 11% of pregnancies worldwide occur in teenagers between the ages of 15 and 19, and 95% of these pregnancies take place in low- and lower-middle-income nations (Vongxay et al., 2019) and the primary causes of death due to difficulties from pregnancy and childbirth affect 15 to 19-year-old girls globally (Turi et al., (2020). Moreover, adolescents and young people comprise an increasing percentage of HIV/AIDS patients worldwide. Six hundred seventy thousand young people acquire HIV yearly (Kassahun et al., 2019).

Nevertheless, conditions in the Philippines are getting worse, according to recent trends in HIV incidence and teen pregnancies. According to UN Projections 2017, adolescent fertility in the Philippines and other regions was higher in 2015–2020 than the average of 44 births per 1000 women aged 15–19 (Habito et al., 2019). In addition, the Philippines has the most significant rate of unplanned pregnancies (29%) compared to other nations, with roughly one in three recent births being labeled by women as unwanted or mistimed (Narasimhan & Gipson, 2022). According to Tanaka et al. (2020), one in ten Filipino women between the ages of 15 and 19 have been reported to experience a teenage pregnancy. Between 2006 and 2010, there were 25% more HIV-positive cases in the 15 to 24 age group than between 2011 and 2018. With the number of new infections more than doubled in the past six years, the Philippines has an HIV epidemic that has grown most rapidly in Asia and the Pacific (Gipson et al., 2020). As stated in the recent study by Pasay-an et al. (2020), teenagers typically have limited understanding. However, they exhibit favorable attitudes and ethical behavior regarding reproductive health and sexuality.

The Commission on Population XI reported that adolescent pregnancies are at an alarming rate in the Davao Region. The fact that 44% of female youngsters in the Davao Region have had sexual experience is one explanation for these results (Galabo, 2019). Furthermore, according to Enilo et al. (2020), the figures are equally concerning in Davao City as they are nationwide. Between January and September 2022, the Regional HIV/STI Surveillance Unit of the Davao Center for Health Development recorded 612 confirmed cases of HIV or the Human Immunodeficiency Virus. As of September 2022, the Davao Region ranked fifth, contributing to 1,347 new cases nationwide (Philippine Information Agency, 2022). Moreover, a recent study claimed that respondents have a high degree of health orientation, in particular when it comes to internal health control; they merely have a modest drive to prevent unhealthy living (Enilo et al., 2020). The study contributes by utilizing intricate and subtle variables of sexual health knowledge and sexual attitude, exploring the various factors such as reproductive health, contraception, and associated diseases in both general and personal aspects, and evaluating their significance in today's generation. Also, this study aims to ascertain the relationship between variables underlying different factors and specify which domain has a significant influence between the variable's sexual health knowledge and sexual attitude. It can be an eye-opener to enhance and improve the dissemination of factual information on the awareness of one's sexual well-being.

2. Materials and Methods

2.1 Research Participants

Table 1 shows the participants who took part in the researchers' study are exclusively University of Mindanao Digos College students from all year levels in every department within the school year 2023. The researcher utilized a simple random sampling method for their study. Simple random sampling is used to make statistical inferences about a population. It helps ensure high internal validity: randomization is the best method to reduce the impact of potential confounding variables. According to Berndt (2020), a feature of probability sampling techniques is that random selection guarantees that any instance in the population has an equal chance of being chosen. The straightforward, random sampling approach is simple and equitable because respondents can be selected equally.

The respondents are comprised of 328 college students with the liberty to join or be excluded from the involvement of the study. All data will either be disregarded or kept, depending on the participant's choice. Most of the participants consist of First Year students (n=87, 26.5%), followed by Fourth Year students (n=84, 25.6%), Third Years (n=79, 24.1%), and Second Year (n=78, 23.5%) with the least number of participants. The majority of respondents are male participants (n=161, 49.1%), followed by female participants (n=142, 43.3%), and the most minor participants are the LGBTQ+ (n=25, 7.6%). Finally, the

participants with the most respondents by age are from 20-22 years old (n=176, 53.7%), followed by students who are 17-19 years old (n=114, 34.8%), then students the age of 23-25 years old (n=30, 9.1%), and lastly with the least number of respondents are 26-32 years old students (n=8, 2.4%).

Table 1. Characteristics of Respondents (n= 328)

PROFILE	f	%
GENDER		
Male	161	49.1
Female	142	43.3
LGBTQ+	25	7.6
AGE		
17-19	114	34.8
20-22	176	53.7
23-25	30	9.1
26-32	8	2.4
YEAR LEVEL		
1 st	87	26.5
2 nd	78	23.8
3 rd	79	24.1
4 th	84	25.6
TOTAL	328	100.0

2.2 Research Instrument

The instruments that were utilized in gathering data are questionnaires through a survey adapted from the Sexual Health Knowledge Scale and the Sexual Attitude Questionnaire. The Sexual Health Knowledge Scale from the study by Chi et al. (2015) is a 27-item questionnaire with five indicators: Reproductive Health, Condom Use, Sexually Transmitted Disease, and HIV/AIDS. The questionnaire was tested to measure its reliability of the previous studies which resulted a Cronbach's α ranged from .76 to .85 during the three measurement waves investigation of the study, similar to that of the initial validation study ($\alpha = .83$) and additional follow-up studies ($\alpha = .81$). In addition, the researchers conducted pilot testing to test the validity and reliability of the questionnaire as tested if the instrument was fitted in the Philippine setting, particularly in University of Mindanao Digos College. For Sexual Health Knowledge, all of the questions tested using Pearson-r Correlation Coefficient are valid and indicated an almost perfect reliability with overall value of 0.877 using Cronbach's Alpha.

In addition, the Sexual Attitude Questionnaire from the study of Lyu et al. (2020) is an 18-item questionnaire with two factors: personal and general. Researchers conducted pilot testing to ensure the validity and reliability of a questionnaire in the Philippine setting, specifically at the University of Mindanao Digos College. For Sexual Attitude, all of the questions tested using Pearson-r Correlation Coefficient are valid and using Cronbach's Alpha with an overall value of 0.838, indicated almost perfect reliability. Moreover, the Likert Scale is utilized to evaluate the corresponding interpretations.

2.3 Design and Procedure

This study is quantitative and employs a descriptive-predictive research design. At the onset, the researchers accumulated related literature from this study. The researchers used validated questionnaires from Chi et al. (2015) and Lyu et al. (2020), tackling Sexual Health Knowledge and Sexual Attitude, respectively, with no further modifications and revisions. The researchers conducted a traditional distribution of printed questionnaires to the prospective respondents. Before administering questionnaires, the researcher sent letters of permission to conduct the study, signed by the adviser and favorably endorsed by the Dean of the Professional School, and provided letters to participants to ensure the ethical considerations of the research. Lastly, after accumulating the data, the researchers tabulated and analyzed the data using the statistical treatments needed with the help of the tool IBM Statistical Package version 25 for

the Social Sciences (IBM SPSS 25) and interpreted by the study’s primary objective.

2.4 Statistical Treatment

In order to test the normality of the data, the researchers utilized the Shapiro-Wilk Test to check to see if the null hypothesis will be rejected; however, the test did not show if the continuous variables have a normal distribution by assumption ($W=.90$, $p\text{-value}=.39$). Based on the results, the researchers decided to use the tools Mean and Standard Deviation, Pearson Correlation Coefficient, and Linear Regression Analysis. Guetterman (2019) states that the mean describes all responses with an average value. The standard deviation reports the average amount of matters that deviate from the norm, which provides a spread indicator. Both are used to evaluate the levels the variables. Armstrong (2019) states that the product-moment correlation coefficient, also known as Pearson’s (r), is one of the most widely used statistical methods for determining the degree of correlation between two or more variables. Moreover, linear regression is a statistical method for determining the value of a dependent variable from an independent variable. This modeling technique predicts a dependent variable based on one or more independent variables (Kumari & Yadav, 2018).

2.5 Ethical Consideration

The research study strictly adheres to ethical standards. Participants are guaranteed voluntary participation and the right to withdraw at any point, ensuring their freedom and comfort throughout the study. The confidentiality of participants’ data is paramount, with stringent measures in place to prevent external dissemination. Before joining, participants are fully informed about the study’s purpose and potential risks. Although the study does not offer direct benefits, it aims to enhance awareness about sexual well-being, particularly benefiting young adults. The research maintains originality by citing sources accurately and ensuring no data fabrication. It is based on reliable studies, and potential conflicts of interest are transparently managed. The study also upholds honesty, employing ethical techniques to gather truthful responses without deceit. All necessary permissions were obtained from the relevant institutional authorities before data collection.

3. Results and Discussion

3.1 The Level of Sexual Health Knowledge of College Students

Table 2 summarizes the statistical analysis findings used to gauge assessed levels of Sexual Health Knowledge of college students at the University of Mindanao Digos College in five criteria: Reproductive Health, Contraception, Condom Use, Sexually Transmitted Disease, and HIV/AIDS.

Table 2. Level of Sexual Health Knowledge Among Participants

Indicator	\bar{X}	SD
Reproductive Health	3.75	.67
Contraception	3.47	.63
Condom Use	3.22	.78
Sexually Transmitted Disease	3.25	.71
HIV / AIDS	3.26	.81
TOTAL	3.39	.72

Based on the provided results, there is an overall total of ($\bar{X}=3.39$, $SD=.72$) for the level of sexual health knowledge among participants, interpreted as ‘moderate’. This indicates that the level of sexual health knowledge among college students at the University of Mindanao Digos College is moderate. This result is similar to the study of Santos et al. (2016), as cited by Sleiman et al. (2023), which stated that students possessed a moderate level of sexual health knowledge. Cultural values appear to significantly influence the instillation of health

behaviors. Cultural, social, and familial factors mold perspectives and convictions, impacting health literacy as per Rashidi et al. (2023). Moreover, according to Melgar et al. (2018), in the Philippines, adolescents face barriers to complete access to sexual and reproductive health (SRH) services due to cultural and social norms, legal constraints, and a lack of significant political power, which make them exposed to SRH issues. Per item evaluation, reproductive health has the highest level ($X=3.75$, $SD = .67$), interpreted as ‘high’, which demonstrates that the level of sexual health knowledge of college students in UMDC relating to reproductive health is high and consistently observed. It is followed by contraception ($X=3.47$, $SD= .63$), HIV/AIDS ($X=3.26$, $SD=.81$), Sexually Transmitted Disease ($X=3.25$, $SD=.71$), and condom use ($X=3.22$, $SD=.78$), all with a verbal equivalent of ‘moderate’. This underscores that the level of knowledge associated with contraception, HIV/AIDS, Sexually Transmitted Diseases, and condom use is the level of sexual health knowledge among participants is moderate or sometimes observed.

3.2 The Level of Sexual Attitude of College Students

Table 3 summarizes the survey results that measure the level of Sexual Attitude of college students at the University of Mindanao Digos College in two criteria: general sexual attitude and personal sexual attitude.

Table 3. Level of Sexual Attitude Among Participants

Indicator	\bar{X}	SD
General Sexual Attitude	3.16	.68
Personal Sexual Attitude	2.86	.66
TOTAL	3.01	.01

The level of sexual attitude among participants has an overall mean score of ($X=3.01$, $SD=.01$) with a verbal description of ‘uncertain’. This indicates that the level of sexual attitudes of college students at the University of Mindanao Digos College is neutral or sometimes observed. This result is similar to the study of Shin et al. (2019), in which data revealed that most participants have neutral views on sexuality. Prior research by Lin et al. (2021) stated that sexual attitudes evolve from personal intentions influenced by perspectives, norms, and perceived capabilities. College students, exposed to misinformation about sexuality, may see shifts in their attitudes, beliefs, and intentions regarding sexual conduct. Additionally, James et al. (2023) discovered a noteworthy correlation between affirmative sexual attitudes regarding sexual modifications and sexual activities, with research showing that negative sexual attitudes reduce participation in sexual behaviors. On per item evaluation, general sexual attitude obtained the highest level of mean score ($X=3.16$, $SD = .68$) and personal sexual attitude ($X=2.86$, $SD = .66$) with the lowest level, both interpreted as uncertain. The results emphasize that the level of sexual attitude associated with general sexual attitude and personal sexual attitude are either infirm or biased levels.

3.3 Relationship between Sexual Health Knowledge and Sexual Attitude

Table 4 summarizes the results of the correlation between the factors from Sexual Health Knowledge, namely Reproductive Health, Contraception, Condom Use, Sexually Transmitted Disease, HIV/AIDS, and Sexual Attitude, namely, general sexual attitude and Personal Sexual Attitude.

Table 4. Summary of Pearson R Correlation between Sexual Health Knowledge and Sexual Attitude Among Participants

Sexual Health Knowledge	Sexual Attitude	
	General	Personal
Reproductive Health	.118 (.033)	-.032 (.569)
Contraception	.115 (.037)	.102 (.066)
Condom Use	.103 (.061)	.163 (.003)

Sexually Transmitted Disease	.053 (.338)	.332 (.000)
HIV / AIDS	.181 (.001)	.230 (.000)
OVERALL	.644 (.000)	.681 (.000)

Per item evaluation, the general sexual attitude has an inversely positive relationship with reproductive health ($r=.118$, $p\text{-value}=.033$). It indicates that there is a significant positive correlation between general sexual attitude and reproductive health. The finding suggests that the more individuals are knowledgeable about reproductive health, the more positive they are towards sexuality in general. It is corroborated by a recent study by Chen et al. (2018), which identified that approach to the critical themes of emerging concerns about reproductive health, like their attitude toward the stigma associated with sexual or gender or the impact of gender-affirming treatments on fertility. The need for more information about reproductive health that is specific to their experiences as well as for sexual and gender minority people see it as positive.

Moreover, contraception has an inversely positive relationship with general sexual attitude ($r=.115$, $p\text{-value}=.037$). This indicates that there is a significant positive correlation between general sexual attitude and contraception. The results suggest that knowledge of contraception has led to a positive approach towards sexuality in general. To affirm, in a study by Asiedu et al., 2020, a higher use of contemporary contraceptives was linked to knowledge of contraceptive methods. Also, understanding contraception and busting myths about it can have a positive impact on sexual behavior and lead to changes in attitudes and a more profound comprehension of one's sexuality.

On the other hand, condom use has an inversely positive relationship with general sexual attitude ($r=.103$, $p\text{-value}=.061$). This indicates that there is a significant positive correlation between general sexual attitude and condom use. Findings affirm that knowledge regarding condom use has a positive approach toward general sexual attitudes. The study by Neelan et al. (2023) stated that studies reading attitudes toward condom use, intentions to use condoms, knowledge of sexual health and condom use, perceptions of condom use, and attitude towards sexuality found statistically significant impacts. Lower scores for these variables were linked to sexually risky behavior. In addition, Sexually Transmitted Disease (STD) has no relationship with general sexual attitude ($r=.053$, $p\text{-value}=.338$). The results indicated that the individuals' knowledge of STD does not correlate with their attitude towards general sexual attitude. This study is supported by the study of Al-Gburi et al. (2023), which reported that despite students' awareness of sexually transmitted infections and their openness to public health campaigns and sex education in the classroom, negative attitudes about condom use, general sexual behavior, and STD-infected people with specific gender variations were still present.

Nevertheless, HIV/ AIDS has a very weak positive relationship with general sexual attitude ($r=.181$, $p\text{-value}=.001$). The results indicated that the individuals' knowledge of HIV/AIDS has a positive correlation with their attitude towards general sexual attitude. This implication is supported by the study of Qashqari et al. (2022), which stated that a participant who knows about HIV/AIDS have positive attitudes toward HIV/AIDS-positive individuals and the general public's level of HIV/AIDS awareness. A study by Elghazaly et al. (2023) supports this finding by stating that there was a negative attitude toward people living with HIV due to incorrect knowledge about the virus. Hence, understanding HIV/AIDS is a critical factor in determining prejudices against people living with the virus.

On the other hand, reproductive health knowledge and personal sexual attitude have no significant relationship ($r=-.032$, $p\text{-value}=.569$). Results indicated that one's reproductive health knowledge does not have any correlation with personal sexual attitude. According to Uluc et al. (2019), as cited by the results of Guan (2021), there are no meaningful relationships between knowledge, behavior, and attitude. Undergraduates tended to have more sources and categories of sexual reproductive knowledge, less knowledge about the safety period and using condoms, but a more positive attitude toward unmarried sex.

Moreover, contraception has a very weak positive relationship with personal sexual attitude ($r=.102$, $p\text{-value}=.066$). This indicates that individuals' knowledge of contraception

has an impact on their sexual attitude. Munakampe et al. (2018) reported that teenagers generally used or planned to use contraception to avoid getting pregnant. One's knowledge of the method influences the use of contraceptives. Research has demonstrated that insufficient knowledge directly affects behavior because it fuels incorrect or insufficient information. In addition, condom use has a very weak positive relationship with personal sexual attitude ($r=.163$, $p\text{-value}=.003$). This indicates that individuals' knowledge of condom use has an impact on their sexual attitudes. This implication is affirmed by the study of Boti et al. (2019), which stated that students' attitudes and intentions were influenced by comprehensive sexual knowledge. According to the study by McCarthy et al. (2024), students' knowledge regarding sexual reproduction plays a significant role in their sexual attitude and exceptionally consistent condom use. However, results indicate that despite university students have a good awareness of contraceptive methods, they cannot comprehend the mechanisms, efficacy, and possible side effects of these methods, according to Oonyu (2020).

On the other hand, Sexually Transmitted Disease (STD) has a weak positive relationship with personal sexual attitude ($r=.332$, $p\text{-value}=.000$). This implication suggests that knowledge of individuals regarding Sexually Transmitted Disease (STD) correlates with their sexual attitude positively. Understanding sexual reactions and STDs had a substantial favorable effect on reproductive health-related behaviors and attitudes in personal aspects, according to Kim et al. (2018). College students engaged in more personal reproductive health behaviors the more knowledge they had about STDs and sexual reactions, and steer clear of dangerous sexual behavior. Lastly, HIV/AIDS has a weak positive relationship with personal sexual attitude ($r=.230$, $p\text{-value}=.000$). Results indicate that HIV/AIDS knowledge has a positive relationship with one's sexual attitude. According to Bhagavathula et al. (2021), false beliefs about HIV/AIDS may be exacerbated by incomplete knowledge. Qing et al. (2022) reported that a growing proportion of students exhibit a risk-taking attitude towards premarital sex and participate in risky sexual behaviors and that respondent lacked knowledge about HIV/AIDS.

3.4 Regression Analysis of Variables

The table 5 shows the regression analysis for variables predicting the sexual attitudes of students. The table shows that two significant predictors contributed to the students' varied sexual attitudes.

Table 5. Regression Analysis for Variables Predicting Student Sexual Attitude (n=328)

VARIABLE	<i>B</i>	<i>SE B</i>	β
Reproductive Health	-.021	.046	-.027
Contraception	.026	.053	.030
Condom Use	.038	.042	.054
Sexually Transmitted Disease	.107	.048	.142
HIV / AIDS	.127	.039	.190
R²		.094	
F		6.684	

Linear regression with coefficients of correlation applied with the significance was tested at the level $\alpha=0.05$. These subscales are HIV/AIDS ($B=.127$, $p=.001$) and Sexually Transmitted Disease (STD) ($B=.107$, $p=.026$) from highest value to lowest value, respectively. On per item evaluation, results emphasize that HIV/AIDS ($B=.127$, $p=.001$) is a significant predictor of sexual attitude. This indicates that knowledge of HIV/AIDS has an impact on individuals varied sexual attitude. This is affirmed by the study of Estifanos et al. (2021), which emphasized that respondents who had a sufficient and thorough understanding of HIV/AIDS were more likely than their counterparts to have a positive acceptance attitude towards HIV/AIDS in general and personal. In addition, prevalence of HIV/AIDS is found to be significantly higher among those who are unaware of the possible routes of transmission (Sameen et al., 2023). Insufficient knowledge can lead to unjustified fear when interacting with people who are HIV/AIDS positive, which exacerbates stigma, claim Alwafi et al. (2018).

In addition, results also emphasize that STD ($B=.107$, $p=.026$) is a significant predictor of sexual attitude. This indicates that knowledge of STD has an impact on individuals varied sexual attitude. This result is supported by the study of Sleiman et al. (2023) which stated that

higher knowledge scores were linked to a more positive attitude toward STDs. In addition, research indicated that increasing knowledge improved attitudes and helped young adolescents comprehend the significance of different preventive strategies. However, this implication contradicts to the results gained from the study of Osanyin et al. (2020), which emphasized that despite being aware of the risk factors associated with sexually transmitted diseases, students exhibited a high degree of risk-taking in their sexual behavior, as demonstrated by the low percentage of condom users and the high percentage of partners.

4. Conclusions

The relationship between Sexual Health Knowledge (SHK) and Sexual Attitude (SA) of College Students at the University of Mindanao Digos College was evaluated in this study. Using the Shapiro-Wilk test, to test the normality; however, the test did not show if the continuous variables have a normal distribution by assumption. Mean and Standard Deviation were used to test the levels of both variables, results showed that level of sexual health knowledge among participants is moderate and level of sexual attitudes of college students was marked neutral. The sexual health knowledge of college students at the University of Mindanao Digos College is moderately understood. However, their sexual attitudes remain uncertain, with indications of both firmness and bias. Where in the results revealed that general sexual attitude has an inversely positive relationship with reproductive health, contraception, condom use, has a positive correlation with HIV/AIDS, but has no relationship with Sexually Transmitted Disease (STD). Moreover, personal sexual attitude has no significant relationship with reproductive health, but has a very weak positive relationship with contraception, condom use, has a weak positive relationship with STD and HIV/AIDS.

Future researchers can leverage the findings of this study as a blueprint for conducting analogous research, enhancing the methodology and insights gleaned. The outcomes provide a foundational understanding of the intricacies of sexual health knowledge and attitudes across various contexts. Subsequent studies might consider additional variables that influence sexual attitudes among respondents, such as the quality of sexual education, accessibility to sexual health services, individual experiences, behaviors, and practices.

Furthermore, this dataset can highlight existing research gaps, prompting future investigations to refine methodologies. For instance, adopting more sophisticated sampling techniques like stratified sampling—categorizing participants based on age, gender, and educational background—can offer more precise insights and facilitate a more accurate representation of findings. Ultimately, ongoing efforts should prioritize raising awareness about the importance of sexual well-being. Ensuring precise and relevant information dissemination remains paramount for advancing knowledge and fostering healthier attitudes toward sexuality in the coming years.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. Each participant was requested to allow a discussion of the study's key aspects, including expectations for both participants and researchers. This section outlines the study's benefits, risks, and institutional approval. Researchers assured participants that their data would remain confidential, and their decisions would be honored.

Conflicts of Interest: The authors declare no conflict of interest.

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Appendix A

Questionnaire for Sexual Health Knowledge Scale: Chi et al. (2015)

ITEMS	5	4	3	2	1
A. Reproductive Health					
Fertilization of the egg by the sperm (conception) occurs in the woman's uterus.					
Sexual dysfunction is often a symptom of underlying problems like diabetes or hypertension in men.					
Consumption of significant amounts of alcohol can have serious negative effects on men's sexual functioning.					



A female ovum (egg) is viable for fertilization for approximately 1 week after it is released.					
A small amount of sperm can be released prior to ejaculation.					
B. Contraception					
If a woman has taken the pill for 2 years and then stops, she will have a much more difficult time getting pregnant, compared with a woman who has never used the pill.					
In terms of preventing pregnancy, antibiotics do not reduce the effectiveness of birth control pills.					
After unprotected sex, more than 98% of women will not get pregnant if the emergency contraceptive pill is taken in the first 72 hours.					
Oral contraceptives work immediately, therefore backup methods (additional methods of contraception) are not necessary when a woman is on her first cycle of the pill.					
During the mid-cycle part of the menstrual cycle, girls are more fertile and therefore more at risk of pregnancy.					
C. Condom Use					
Using Vaseline or petroleum jelly is a good way to increase the effectiveness of a condom.					
A condom should be worn so it is snug at the tip of the penis.					
It is a good idea to use hand lotion for lubrication when using a condom.					
A condom should not be unrolled before putting it on a man's penis.					
The man should hold onto the open end of the condom when withdrawing after ejaculation.					
D. Sexually Transmitted Disease					
Withdrawing ("pulling out") the penis before ejaculating works just as well as a condom for preventing sexually transmitted diseases.					
If your symptoms go away you probably don't have a sexually transmitted disease.					
Some kinds of sexually transmitted diseases don't give you symptoms until 6 weeks or more after you catch the infection.					
Chlamydia is a significant cause of infertility in women.					
Only people who have lots of sexual partners get sexually transmitted diseases.					
If you have a sexually transmitted disease, you probably got it from the last person you had sex with.					
E. HIV/AIDS					
Women are more likely to get AIDS during their period.					
You can get HIV/AIDS from heterosexual (penis/vagina) sex.					
A person can be infected with HIV and not have the disease AIDS.					

You can get HIV/AIDS from a person with HIV/AIDS who sneezed on you.					
You can get HIV/AIDS from oral sex (with the same or opposite sex).					
A woman can only get HIV from a man if she has anal sex with him.					

Questionnaire for Sexual Attitudes: Lynn et al. (2020).

ITEMS	5	4	3	2	1
A. General Sexual Attitude					
Prostitution should be legalized.					
Homosexual behavior is an acceptable variation in sexual orientation.					
Abortion should be made available whenever a woman feels it would be the best decision.					
Access to pornography should be restricted among young people under the age of 18.					
A person who catches a sexually transmitted disease is probably getting exactly what he/she deserves.					
A person's sexual behavior is his/her own business, and nobody should make value judgments about it.					
Parents should be informed if their children under the age of eighteen have visited a clinic to obtain contraception.					
B. Personal Sexual Attitude					
It's all right for boys and girls to kiss, hug and touch each other					
There is nothing wrong with unmarried boys and girls having sexual intercourse.					
A boy and a girl should have sex before they marry to see whether they are suited to each other					
It is all right for boys and girls to have sex with each other provided that they use methods to stop pregnancy.					
One-night stands are acceptable.					
A boy will not respect a girl who agrees to have sex with him.					
A girl will not respect a boy who agrees to have sex with her.					
Girls should remain virgins until they marry.					
Boys should remain virgins until they marry.					
Men need sex more frequently than do women.					
It is sometimes justifiable for a boy to force a girl to have sex.					