

REPRODUCTIVE HEALTH LITERACY AMONG ADOLESCENTS IN THE PHILIPPINES: A CONVERGENT MIXED-METHODS STUDY OF KNOWLEDGE, ATTITUDES, AND BARRIERS TO INFORMATION ACCESS

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ABSTRACT

Adolescent reproductive health remains a significant public health concern, particularly in low-resource settings where limited reproductive health literacy and restricted access to reliable information contribute to poor health outcomes. This study examined the knowledge, attitudes, and awareness of adolescents regarding reproductive health in Tabuk City, Kalinga, Philippines, and explored the individual, familial, and sociocultural factors influencing access to reproductive health information and services. A convergent mixed-methods design was employed involving 386 adolescents aged 13–19 years selected through purposive sampling. Quantitative data were collected using a validated structured questionnaire, while qualitative data were generated through key informant interviews and focus group discussions with healthcare providers, educators, and community stakeholders. Descriptive statistics and thematic analysis were used to analyze and integrate the findings. Most participants were aged 15–19 years, enrolled in formal education, living with both parents, and had no history of sexual intercourse. However, discussions on sexuality and reproductive health within families were generally limited. Fewer than half of the participants demonstrated adequate reproductive health knowledge, with misconceptions particularly related to fertility, pregnancy, contraceptive methods, and HIV/AIDS, despite generally favorable attitudes toward responsible reproductive health behaviors. Qualitative findings further revealed that misinformation, limited awareness of adolescent-friendly health services, inadequate access to reliable reproductive health information, poor internet connectivity, and sociocultural norms continue to hinder adolescents' reproductive health literacy and utilization of available services. These findings highlight a critical gap between adolescents' positive attitudes and their actual reproductive health knowledge, underscoring the need for integrated, culturally responsive interventions that strengthen comprehensive sexuality education, improve parent–adolescent communication, and enhance equitable access to adolescent-friendly reproductive health services. The study provides context-specific evidence to inform reproductive health policies and adolescent health promotion strategies in the Philippines and other comparable resource-constrained settings.

KEYWORDS: adolescents; reproductive health; reproductive health literacy; sexuality education; mixed-methods; Philippines.

INTRODUCTION

Background of the Study

Adolescence has been coined as one of the most challenging phases of life, within which the individual attains physical, sexual and social maturity (Mitsiwat & Eshetu, 2015). Being an adolescent is especially challenging: the youth is mostly left alone to face the risks of sexually transmitted illnesses (STIs), unwanted pregnancies and unsafe, illegal abortions. Also, sexual violence is becoming increasingly prevalent. Studies show that for many adolescent girls the first sexual experience is coercive, and that physical abuse and violence are significant parts of young women lives. In many cases, sexual coercion and violence start in childhood and adolescence.

The World Health Organization implies that adolescents are engaged in risky reproductive health choices that can negatively affect their reproductive health. Adolescents have challenges utilizing available reproductive health services because of socio-cultural and health system barriers. Some of the challenges adolescents face across the world include early pregnancy and parenthood, difficulties accessing contraception and safe abortion, and high rates sexually transmitted infections.

The youth of Tabuk is not exempted from the situation mentioned above. In the Tabuk City National High School alone, a recent report (2019) of the principal shows that for the first quarter of the year a total of 30 teenager students were pregnant. These were from Grades 9, 10, 11 and 12. The report shows though Maternal and Reproductive Health Care and Services is one of the useful programs under Social Development Sector of the City as contained in its 2017-2022 Comprehensive Development Plan, there are still alarming cases.

With the more considerable bulk of Tabuk youth opting to pursue college degrees, this places them in a position where information should be readily available, and given a choice, they made in attaining higher education. Therefore, they can make intelligent decisions advantageous to them and their future. However, this assumption is betrayed by the reality that everyone gets to learn now and then about young people's unscheduled deviation from career paths and early termination of dreams, because of sexual activities resulting from knowledge and awareness resolve to apply sound reproductive health practices.

The recent study of Acuat (2018) among college students in the City of Tabuk showed that significant number of the adolescents were not knowledgeable on when pregnancy will likely to happen during a woman's menstrual cycle, influenced by their friends/peers/barkadas in drinking alcoholic beverages, and early marriages, youth criminality, and abortion were considered as severe societal problems by the adolescents.

Adolescent Reproductive Health is understanding the salient details about the adolescents' knowledge, attitudes, practices, and awareness on reproductive health. The question relative to the strategic direction of the adolescent and includes the challenges, critical areas, and strategies towards effective implementation of the adolescent reproductive health program

World Health Organization defines adolescents as those who belong to the age group 10-19 years. The onset of adolescence often coincides with the onset of adolescence which is more or less coinciding with puberty. Youth constitutes a large proportion of the population in developing countries and are disproportionately affected by sexually transmitted infections (STI's) and other adverse reproductive health outcomes (Adebayo & Adegboyega, 2016).

The existing literature documents that adolescents engage in premarital sex with insufficient knowledge of reproductive health and family planning, and the small proportion use contraceptive, especially condom (Gebremichael & Chaka, 2015). Adolescent women are vulnerable to use and to misuse contraceptive than older women resulting in pregnancies among unmarried women. Reproductive health among young people is a public health concern that plays a significant role in health and development.

Young people may know little about reproductive health and receive incorrect or misleading information about fertility and contraception. Many have negative attitudes about contraceptives (Jaffer, Afifi, Al Ajmi, & Alouhaishi, 2006). With this, it is essential not only to meet the reproductive health needs of youth but also changing attitudes, overcoming community opposition, building understanding, and educating adults about young people's reproductive health needs.

The World Health Organization (2016) underscores the importance of the biological reproductive system in understanding reproductive health well-being in all life stages. People are advised to become responsible in their safe sex life and the capability to reproduce and the freedom to decide if, when and how often. The author further argues that health intervention services in most developing countries are difficult to access because of information awareness and limited knowledge (Adebayo & Adegboyega, 2016).

In a similar study conducted by Acuat (2018), the adolescents were not knowledgeable that both boy and girl should be responsible to ensure safe sex. Anent to this finding, the researcher recommended the need for the Population Commission with the line agencies to intensify the conduct information dissemination on pregnancy and sex; mores seminars and information dissemination on early marriages, youth criminality, and abortion; conduct of information dissemination on the concepts and issues on reproductive health to adolescents in Tabuk City and in the province of Kalinga; regular conduct of information dissemination and education on smoking, drinking alcohol, and drugs and drug addiction to adolescents; and the conduct of more related studies to more adolescents including drop-outs.

This study considered that existing reproductive health studies conducted in Tabuk City are not that many. The study's main aim was to conduct a situational probe on existing reproductive health knowledge, attitudes, practices, and awareness of adolescents in Tabuk City, Kalinga.

It is then urgent to honor these rights by focusing attention to the youth. Therefore, a survey study on adolescents' knowledge, attitude and awareness about reproductive health in Tabuk City may significantly better understand this young population and the issues affecting them. There is a need to establish a database on adolescents' knowledge, attitudes, practices, and awareness in different areas in order to signal authorities in reviewing and enhancing policies and programs exclusively for this group. It is for this goal that this survey study was proposed.

Conceptual Framework/Theoretical Framework

The framework of the study will be anchored on the assumption that activated health education model is a quintessential element to better understand the dynamic of effective implementation of adolescent reproductive health program through the identification of active involvement, awareness on behavioral influences, and personal responsibility (Dennison & Golaszewski, 2002). This study will identify the level of knowledge, attitudes, awareness, and practices among adolescents in Tabuk City, Kalinga. The result will serve as baseline information in future development of trending and effective adolescent reproductive health program.

According to Dennison and Golaszewski (2002), the activated health education model, actively engages individuals in the assessment of their health (experiential phase); presents information and creates awareness of the target behavior (awareness phase), and facilitates its identification and clarification of personal health values and develops a customized plan for behavior change (responsibility phase).

Moreover, the Sexual and Reproductive Health (SRH) Life stages Framework also guided this study because of its relevance and timeliness (Evidence to Action (E2A), 2017). In this framework, it describes the three primary agencies that play significant roles in the design and implementation of context-specific SRH interventions. Factors are delineated based on individual, immediate, and distant relational agencies. The individual agency refers to the individual factors including the profile characteristics (e.g., age, gender, among others). The immediate relational agency includes the household influencers and sexual partners, and the distant relational agency reflects the importance of peers and community, and systems, structures, and policies.

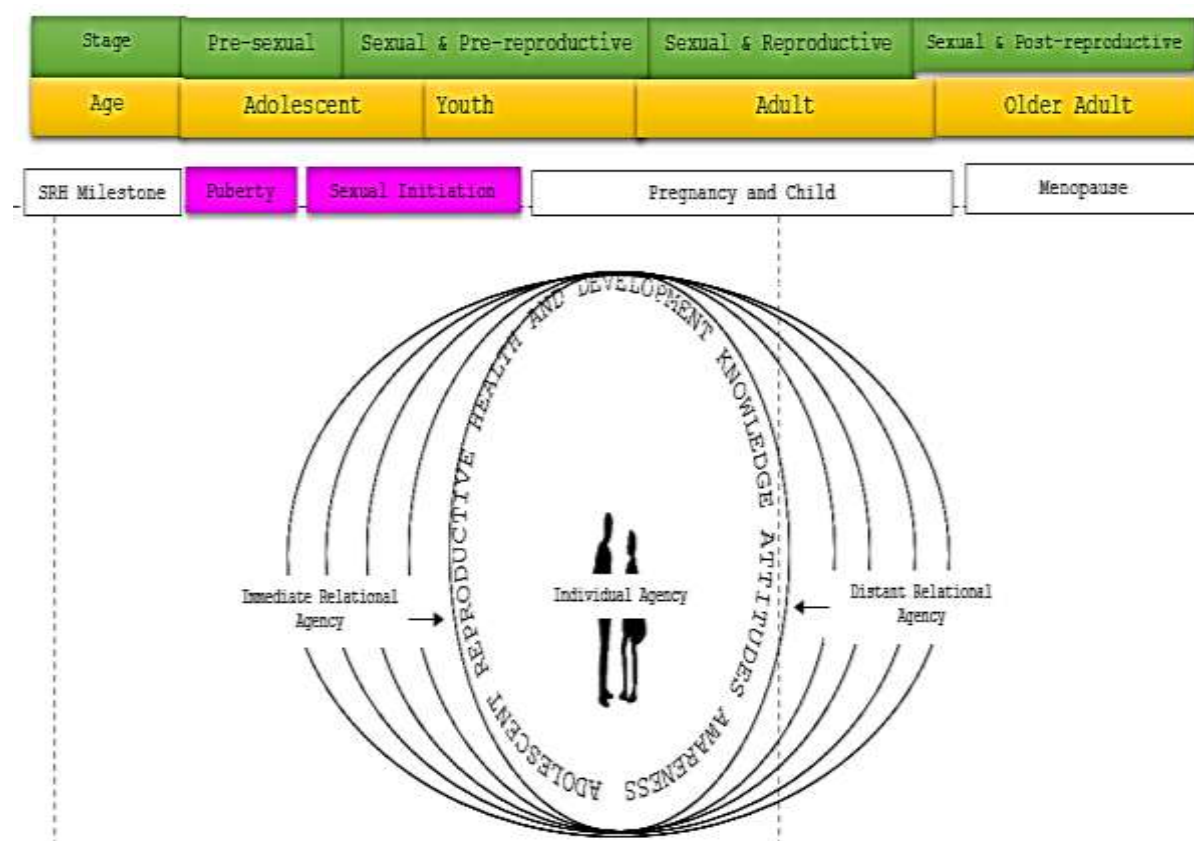


Figure 1. The Conceptual Model

Objectives of the Study

The study aimed to explore the knowledge, attitudes, and awareness on adolescent reproductive health among adolescents in Tabuk City, Kalinga. Specifically, the study focused to these objectives:

1. To determine the demographic profile of the adolescent-participants in terms of:
 - 1.1. age range
 - 1.2. status of school attendance
 - 1.3. sexual preference
 - 1.4. living status
 - 1.5. discussion of sex related matters with parents
 - 1.6. love relationship status
 - 1.7. sexual experience
 - 1.8. age during first intimate sexual relationship
 - 1.9. social gathering status
2. To assess the level of the adolescent-participants' knowledge, attitudes, and awareness on adolescent reproductive health.

Significance of the Study

The result of this study will provide basic information and empirical benchmark data, and the findings will be beneficial to the following:

Higher Education Institutions Secondary schools. The findings of this study will help develop a reproductive health awareness extension program as one of the four-fold functions of the State Universities and Colleges.

Government and Non-Government Institutions. The result of the study may guide policy maker and program implementers to make the best use of the logical framework and have a unique role, through service provision, review of regulatory frameworks, education, and advocacy, for the promotion of reproductive health.

Health Workers and Providers. The findings will assure the availability and access to a full range of methods, techniques, supplies, and services that contribute to reproductive and sexual health and well-being. With these, the number will become manageable and eventually, and the country will be in progress.

Local Municipality. The result of the study may farther contribute to the exhaustive inquiry of the Reproductive Health Bill. It will also be a basis to formulate local legislative measures to be implemented by responsible departments in the exigency of their mandated functions.

Community Organizations. The findings of this study may provide strategies and data to scrutinize reproductive health intervention being implemented by Pro- Health advocates in the community.

Parents. The findings of the study may provide learning strategies for parents to actively participate in the education of their adolescents regarding sexual and reproductive health and the critical role of parents in the early stage of their children.

The findings of the study may contribute to the formulation of Reproductive Health Awareness Program.

Future Researchers. The findings of this study may contribute in the identification of research priorities and research gaps to improve reproductive health issues and concerns and to bring local knowledge, attitude, and practices as interventions in the success of further research endeavors.

Researcher. The result of the study will provide the authors insights and information as guide in her aim of developing an Adolescent Health and Development Program.

Scope and Delimitation

The study will cover the adolescent-participants knowledge, attitudes, practices, and awareness on reproductive health. The profile of the participants will be determined in terms of age range, status of school attendance, type of school last attended, sexual preference, tribal affiliation, religion, living status, discussion of sex related matters with parents, love relationship status, sexual experience, age during first intimate sexual relationship, social gathering status, alcohol drinking status, and cigarette smoking status. It also includes the government entities as key informants in the series of interviews.

METHODOLOGY

This chapter presents the methods and procedures that will be used in the study. It includes research design, locale and population/participants of the study, instrumentation, data gathering procedure, analysis of data and statistical tool.

Research Design

This study utilized a mixed method design that collects the responses of the students about their knowledge, attitudes, and awareness on adolescent reproductive health in Tabuk City, Kalinga.

Locale and Population/Participants of the study

There are forty-three (43) barangays in Tabuk City. The required sample size is proportionally allocated to each barangay, while the selection of actual participants was taken by picking at random with the assistance of respective barangay officials.

Table 1 presents the predetermined criteria or qualifications during the sampling selection and data collection. The inclusion criteria are (a) ages belonging to adolescence groups from 13-19, (b) able to read and write, (c) understand English, and (d) willing to participant and consent. The exclusion criteria were (a) Below 13 or above 19 years of age, (b) ages belonging to 20-23 years old (c) unable to read and write, (d) limited English proficiency, and (e)unwilling to participate and consent

Table 1 also presents the criteria or qualification for the key informants required for the interview. The inclusion criteria are (a) at least 5-10 years of experience, (b) willing to participate and with consent, (c) have at least knowledge about the adolescent reproductive health. Furthermore, they were excluded based on (a) less than 5-10 years of experience, (b) unwilling to participant and without consent, and (c) no knowledge about the adolescent reproductive health.

Table 1. Inclusion and Exclusion Criteria of Adolescent as participants and Key Informants

Adolescents		Key Informants	
Inclusion	Exclusion	Inclusion	Exclusion
At least 13 to 19 years old	Below 13 and above 19 years old	At least 5-10 years of experience	Less than 5-10 years of experience
Able to read and write	Unable to read and write	Willing to participate and consent	Unwilling to participant and consent
Understand English			

	Limited English proficiency	Have at least a knowledge about the adolescent reproductive health	No knowledge about the adolescent reproductive health
Willing to participate and consent	Unwilling to participate and consent	Willing to participate and consent	Unwilling to participate and consent

Instrumentation

This study utilized questionnaires as the primary instrument for data collection and based on relevant literature and related studies and the questionnaires were divided into two parts. The first questionnaire is intended for the adolescent group and second was for the key informants.

The questionnaires are adopted from Cleland and Stone (2001). For the questionnaire on asking young people about sexual and reproductive behaviors, it was divided into three parts. Part I determined the adolescent profile characteristics as to age range, status of school attendance, type of school last attended, sexual preference, tribal affiliation, religion, living status, discussion of sex related matters with parents, love relationship status, sexual experience, age during first intimate relationship, and social gathering status. These profile characteristics were identified as critical factors to determine any relationship or association with other variables.

Part I determined the Knowledge on Reproductive Health as to the Current Statistics, Reproductive Physiology, Use of Contraceptive Method and knowledge on HIV/AIDS and Sexually Transmitted Diseases.

Part II determined the Attitudes and Sexual Ideology on Adolescent Reproductive Health (Sexuality, Gender, and Norms).

Part III are currently implemented programs/services for adolescents by key informants in Tabuk City.

Part IV determined the Awareness on Adolescent Reproductive Health (STIs/HIV/Aids and Preventive Measures) and Source of Information.

To measure the knowledge on reproductive health, adolescents based on the components above also comprises of fifteen (15) question items using Yes, No. For each question item, one correct answer was expected. On the other hand, for Attitude, twenty-two (22) items consisted of expected responses using Agree, Disagree, not sure choices of correct answer. The level of awareness used the Yes or No with eleven (11) items, lastly in the source of information one (1) preference and two (2) whom it is applicable.

Another questionnaire was provided for the key informants. Part I of the questionnaire describes their profile characteristics including their age, gender, marital status, tribal affiliation, total years of experience, higher educational attainment, current job function, institutional affiliation, name of the institution, classification, or category of the institution.

There are open-ended questions that guided the semi-structured interview to elicit responses on the challenges, and the critical areas. Further questions will be asked for clarifications on the answers or responses that were ambiguous or unclear. Also, the responses are either typed in a paper-based prepared survey or recorded using audio-tape recorder upon each key informant consent approval.

The self-administered questionnaires were based on the relevant literature and previous studies subjected to reliability and validation. Before the distribution of the questionnaires, a pre-test will be conducted to 20-30 participants who are not included in the actual data collection. Through the reliability analysis using Cronbach alpha coefficients with estimated values greater than 0.70 are the baseline for item evaluation and inclusion and are compared with all other similar studies (Polit & Beck, 2012).

There are ten subject matter experts who were consulted for content validation of the instrument. These experts are invited to review the research instrumentation having specific qualifications including doctorate and master's degrees, specializations of adolescent reproductive health, linguistics, and vast experience in the area of the study. The content validity was used to estimate the validity of the questionnaire items and the researcher adapted this tool from (Lynn, 1986). This tool reflects a complete range of attributes under study and it is usually undertaken by seven or more experts (DeVon et al., 2007; Polit & Beck, 2012). In the first instance, questionnaire items were distributed among 10 experts to ascertain whether the content of the questionnaire was appropriate and relevant to the study purpose. Each expert rated the relevance of each item on the questionnaire using a 4-point Likert scale (1=not relevant, 2=somewhat relevant, 3=relevant, 4=very relevant).

Table 2. Complete List of Barangays in Tabuk City, Kalinga

Name of Barangays	Total Population	Number of participants
Agbannawag	5,723	16
Amlao	903	
Appas	3,252	
Bagumbayan	824	16
Balawag	1,852	
Balong	2,297	

Bantay	1,302	
Bulanao	21,522	
Cabaritan	1,090	
Cabaruan	2,222	16
Calaccad	1,458	
Calanan	1,826	16
Dilag	4,451	
Dupag	1,083	16
Gobgob	2,251	16
Guilayon	955	
Lanna	1,424	16
Laya East	2,752	16
Laya West	3,017	16
Lucog	1,670	16
Magnao	1,228	
Magasaysay	4,921	16
Malalao	566	
Masablang	1,085	
Nambaran	4,254	16
Nambucayan	1,374	
Naneng	778	
Dagupan Centro (Poblacion)	2,633	
San Juan	3,233	
Suyang	456	16
Tuga	1,691	
Bado Dangwa	2,305	16
Bulo	4,125	16
Casigayan	2,548	
Cudal	3,090	16
Dagupan West	5,029	
Lacnog	3,515	16
Malin-awa	2,120	16
New Tanglag	1,544	
San Julian	1,364	16
Bulanao Norte	6,225	17
Ipil	3,615	16
Lacnog west	1,460	<u>16</u>
TOTAL		386

Table 3. List of Key Informants for Interview

Office in Charge	Total Number of RH Provider
1. HEIs-Tabuk City	
a. Clinical Instructors	5
b. School Nurse	5
2. LGU-Tabuk City	
a. Rural Health Unit-	3
b. City Health Office	2
c. City Population Office	1
d. City Social Welfare and Development Office	1
3. NCIP-Tabuk City	1
4. DepEd (Secondary School- school nurse)	5
Total Number of RH Service Providers	23

Table 4. Distribution of the Items in the Questionnaire

Parts	Description	Components	Number of Items
I Profile of Adolescents	Adolescent Profile Characteristics, Family Characteristics, Family Composition and Communication Risk behavior Profile (sexual partner) Peers and Community	Age Parents Age Barangay	14 items
Part II	Knowledge	Current Statistics, Reproductive Physiology, Use of Contraceptive Methods, STD/HIV/AIDS	15 items
	Attitudes	Sexuality, Gender, and Norms	24 items
	Practices	Sexuality and Reproductive Health	10
	Awareness	STD/HIV/AIDS, Source of Information	14 items

Data Gathering Procedure

This study was completed a research proposal review presentation to ensure that the university standards are met. The comments, suggestions, and recommendation of each panel member of the panel of experts will be integrated into the revised texts.

The questionnaires were administered in the selected barangays of Tabuk City as to the following: Dagupan West, Dilag, Magsaysay, San Juan, Balong, Appas, San Julian, Cabaruan, Casigayan, Laya West, Laya East (source, RHU I report 2019) Bado Dangwa, Lanna and Tuga, Gobgob, Calanan, Lucog (source, RHU- II report 2019) Bulanao West, Ipil Nambaran, Cudal. Bulanao Centro (source, RHU III)

Moreover, permission to conduct the study from authorities among the target barangays were also taken before data collection. The study guaranteed confidentiality since no identity of each participant were recorded. Informed and written consent from the participants were also taken before administration of the questionnaires. In addition, interviews, focus group discussions and documentary analysis were employed in the gathering of data.

Ethical Consideration and Data Gathering Procedure

Ethical consideration was observed by securing approval of the Institutional Review Board (IRB) of Kalinga State University. Then regulatory clearance needs were obtained from the office of the city mayor, head of NCIP, school and division heads and once approved, and permission to conduct the study was forwarded to the punong barangays. This was followed by securing the written consent of the parents, and respondents with free will and without any kind of force before the interview. The researcher informed the participants that they may withdraw anytime from the study if it is deemed necessary without undue consequences.

All collected data were kept confidential. Observance of the ethical guidelines was strictly observed in the conduct of this study for the protection of human rights (Wood & Haber, 2002).

Data Analysis

Data analysis provides a blueprint on how responses were measured, calculated, analyzed, and interpreted. The data plan for this study was divided into two parts since it will utilize a mixed method design. For the quantitative data, descriptive statistics will include means and standard deviations, frequency, and percentage. These were used to describe the individual and institutional characteristics along with the knowledge, attitudes, and awareness in light of the adolescent reproductive health program.

On the other hand, for the qualitative data, the researcher used a thematic analysis to pinpoint, examine and record the patterns within the data (Saldana, 2013). In this study, the challenges, and critical areas were supported by the responses of the key informants through the interview and focus group discussions. Also, Braun and Clarke (2006) guided the thematic analysis as shown in Figure 2.

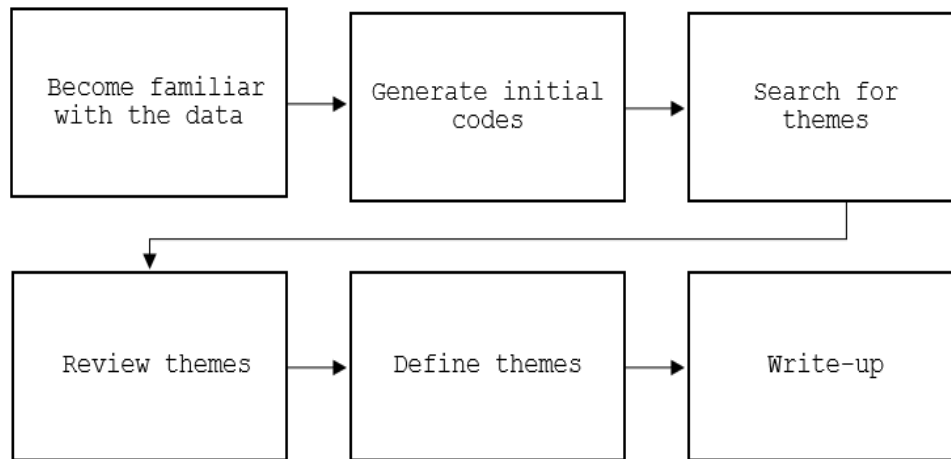


Figure 2. Thematic Analysis Six Steps

During the qualitative analysis, the responses from the interview and focus group discussions were transcribed by the researcher. The first step was to become familiar with the data by reading and re-reading the transcripts. In so doing, it provides the baseline impression on how data corpus created patterns within the data. Second, the researcher generated initial codes in a meaningful and systematic approach through line-by-line coding to develop codes guided by the open-ended questions during the interview and focus group discussion. Third, the researcher searched for themes that captured the essences and meanings based on the responses of each key informant. Fourth, the researcher reviewed the themes that offered a modification of the emerging themes. Fifth, the researcher defined the themes that also provided definitive connotation about the essences and meanings. Lastly, the write-up was developed showing the final themes, definitions, and relationship with other themes within the data corpus (Braun & Clarke, 2006).

RESULT AND DISCUSSION

This section presents the gathered data in textual and tabular form based on the study's objectives with their corresponding analysis and interpretation.

The Demographic Profile of the Adolescent-Participants

1. Age Range

Table 5. Frequency and Percentage Distribution of the Adolescent- Participants' Age Range

Age Range	Frequency	Percentage
10 to 14 years	111	28.76
15 to 19 years	275	71.24
Total	386	100.00

The table shows a total of 386 adolescent-participants with 111 or 28.76 % whose age range is from 10 to 14 years and 275 or 71.24% whose age range is from 15 to 19 years old. Based on the data, majority of the adolescent participants belong to the late adolescent stage.

2. Status of School Attendance

Table 6. Frequency and Percentage Distribution of the Adolescent-Participants' Status of School Attendance

Are you currently attending regular school?	Frequency	Percentage
NO	50	12.95
YES	336	87.05
Total	386	100.00

The table shows the frequency and percentage distribution of the adolescent-participants as to their status of school attendance. When asked whether they were currently attending regular school at the time of the study, 50 or 12.95 % answered no while 336 or 87.05 % answered yes. It means that majority of the adolescents involved in the study attended regular school.

3. Sexual Preference

Table 7. Frequency and Percentage Distribution of the Adolescent- Participants' Sexual Preference

Sexual Preference	Frequency	Percentage
Both equally	71	18.39
Opposite Sex	284	73.58
Same Sex	31	8.03
Total	386	100.00

Table 9 presents the adolescent-participants' sexual preference. The table reveals that 71 or 18.39 % preferred both equally while 284 or 73.58 % preferred the opposite sex, and only 31 or 8.03 % preferred the same sex. This indicates that majority of the participants preferred the opposite sex as their sexual preference.

4. Living Status

Table 8. Frequency and Percentage Distribution of the Adolescent Participants' Living Status

Living Status	Frequency	Percentage
Living alone or with friends	2	0.52
Living with both parents	287	74.35
Living with single parent	67	17.36
Living with the relative	17	4.40
Living with the siblings	13	3.37
Total	386	100.00

The table reveals the living status of the adolescent-participants. From the total number of 386 participants, only 2 or .52 % are either living alone or with friends. Majority or 74.35% are living with both while 67 or 17.36 % are living with their single parents followed by 17 or 4.40 percent are living with their relative/s. Finally, 13 or 3.37 % live with their siblings.

The profile of the participants indicates that majority of the adolescent-participants live with both of their parents.

5. Discussion of Sex-Related Matters with Parents

Table 9. Frequency and Percentage Distribution of the Adolescent - Participants' Discussion of Sex-Related Concerns with Parents

Do you discuss sex-related concerns with your parents?	Frequency	Percentage
NO	284	73.58
YES	102	26.42
Total	386	100.00

The table presents the profile of the participants in terms of their openness to discuss sex-related concerns with their parents. The result of the study shows that 284 or 73.58 % answered no while 102 or 26.42 % answered yes. The finding shows that majority of the adolescent-participants do not open and discuss with their parents about sex. At the same time, it could be the parents themselves who do not like to talk about sex-related matters to their adolescent children.

6. Love Relationship Status

Table 10. Frequency and Percentage Distribution of the Adolescent Participants' Love Relationship Status

Are you in a relationship?	Frequency	Percentage
NO	277	71.76
YES	109	28.24
Total	386	100.00

The table shows the profile of the adolescent-participants in terms of their relationship. The findings reveal that 277 or 71.76 % answered no while 109 or 28.24 % answered yes. This further indicates that majority of the participants are not in a love relationship, or they do not have boy or girl friends.

7. Sexual Experience

Table 11. Frequency and Percentage Distribution of the Adolescent-Participants' Sexual Experience

Have you ever had sexual intercourse?	Frequency	Percentage
NO	323	83.68
YES	63	16.32
Total	386	100.00

The table reveals the sexual experience of the adolescent-participants. When asked if they ever had sexual intercourse with somebody, 323 or 83.68 % answered no while the remaining or 16.32 % responded yes. The finding reflects that majority of the adolescent participants have no sexual experience.

8. Age During First Intimate Sexual Encounter

Table 12. Frequency and Percentage Distribution of the Adolescent-Participants' Age During First Intimate Sexual Encounter

How old were you when you had sexual intercourse for the first time?	Frequency	Percentage
14 years old	1	1.59
15 years old	3	4.76
16 years old	7	11.11
17 years old or older	21	33.33
No Answer	31	49.21
Total	63	100.00

Table 12 shows the ages of the participants when they had sexual intercourse for the first time. Of the 63 participants who had sexual experience, one or 1.59 % is 14 years old while 3 or 4.76 % are 15 years old followed by 7 or 11.11 % are 16 years old. Moreover, 21 or 33.33 % are 17 years old or older, finally, 31 or 49.21 % have no answer. The findings reflect that majority of those who had sexual experience for the first time cannot recall their exact ages when they had sexual intercourse.

9. Social Gathering Status

Table 12. Frequency and Percentage Distribution of the Adolescent-Participants' Social Gathering Status

Do you ever go to clubs or parties where young people dance?	Frequency	Percentage
NO	342	88.60
YES	44	11.40
Total	386	100.00

The table shows the responses of the adolescent-participants on the question if they ever go to clubs or parties where young people dance. The findings show that 342 or 88.60 % answered no while 44 or 11.40 % responded yes. The result indicates that majority of the adolescent-participants have not gone to social gathering parties or clubs.

The Level of the Adolescent-Participants' Knowledge, Attitudes, Practices, and Awareness on Adolescent Reproductive Health.

1. Knowledge on Adolescent Reproductive Health

Table 13. Frequency and Percentage Distribution Correct Responses on Participants' Knowledge on adolescent Reproductive Health.

	Statement	Frequency of Correct Answer	Percentage
1	Tabuk has a high prevalence in teenage pregnancy	213	55.18
2	A woman can get pregnant on the very first time that she has sexual intercourse.	124	32.12
3	Masturbation causes serious damage to health.	82	21.24
4	A woman is most likely to get pregnant if she has sexual intercourse halfway between her periods.	108	27.98
5	Woman can take an oral contraceptive pill each day to prevent pregnancy	196	50.78
6	Woman can have Depo-Provera injection every three (3) months to prevent pregnancy	145	37.56
7	A male condom prevents pregnancy by acting as a physical barrier to the passage of semen into the vagina	262	67.88
8	Emergency Contraceptive Pills (ELP) can be taken up to 3 days after unprotected sex	146	37.82

9	Withdrawal method of contraception happens when a man take the penis out of the vagina to prevent pregnancy	204	52.85
10	Periodic abstinence is a method to avoid sexual intercourse when the woman is most fertile	180	46.63
11	It is possible to cure Acquired Immunodeficiency syndrome (AIDS)	155	40.16
12	A person with Human Immuno deficiency Virus (HIV) always looks emacipated or unhealthy	212	54.92
13	People can take a simple test to find out whether they have HIV infection	216	55.96
14	The signs and symptoms of a sexually transmitted disease in a male or female include discharge from penis, pain during urination, and sores in genital area.	197	51.04
15	Condoms are an effective way of protecting against HIV/AIDS	224	58.03

The table shows the result of the survey on the knowledge of the adolescent-participants on adolescent reproductive health using fifteen items statement indicators.

The finding reveals that on the first statement of Tabuk has a high prevalence in teenage pregnancy, 213 or 55.18 % answered correctly. The result indicates an average level of percentage of the adolescent-participants are knowledgeable on the high prevalence of teenage pregnancy in the city. The second statement, a woman can get pregnant on the very first time that she has sexual intercourse was answered correctly by 124 or 32.12 %. The result indicates a low percentage of those who are knowledgeable of the fact that a woman can get pregnant on the very first time she had sexual intercourse with a man.

For the 3rd statement that masturbation causes serious damage to health, it was answered correctly by 82 or 21.24 % indicating a low percentage of the adolescent-participants who were knowledgeable of the serious damage of masturbation to health. Similarly, the 4th statement, a woman is most likely to get pregnant if she has sexual intercourse halfway between her periods was answered correctly by 108 or 27.98 %, an indication of a low percentage of the participants who had knowledge that a woman is most likely to get pregnant if she had sexual intercourse halfway between her periods.

On the 5th statement that women can take a pill every day (Pill), there are 196 or 50.78 % who answered it correctly which means they are knowledgeable that women can take a pill every day. The result implies an average percentage of the participants knowledgeable of the statement that women can take a pill every.

For the 6th statement that women can have an injection every 3 months , 145 or 37.56 % are knowledgeable of it, an indication of a low percentage of the adolescent-participants.

The 7th statement that a man can put a rubber device on his penis before intercourse (Condom) was answered correctly by 262, equivalent to 67.88 %. The findings imply that there is a high percentage of the participants who are knowledgeable on the use of condom before sexual intercourse. However, for the 8th statement that “a woman can take pills soon after intercourse (Emergency Contraceptive Pills)”, it was only known by 146, indicating a low percentage of those who are knowledgeable.

The 9th statement that a man can pull out of a woman before climax (withdrawal) was answered correctly by 204 or 52.85 %. Based on the total number of adolescent-participants, there is an average percentage who are knowledgeable of the practice of withdrawal during sexual intercourse. In addition, 180 or 46.63 % are knowledgeable on the 10th statement that a couple can avoid sex on days when pregnancy is most likely to occur (Periodic Abstinence/Rhythm), indicating that almost half of the participants are knowledgeable of the statement. The 11th statement that it is possible to cure AIDS was answered correctly by 155 or 40.16 %. The finding implies the need for the adolescent-participants to increase their level of knowledge on AIDS being a serious disease among adolescents. For the succeeding statements, the findings show that more than half of the adolescent-participants are knowledgeable. These statements include a person with HIV always looks emaciated or unhealthy in some way with 212 or 54.92 %; people can take a simple test to find out whether they have HIV by 216 or 55.96 %; the signs and symptoms of sexually transmitted disease in a male or female include discharge from penis, pain during urination, and sores in genital area with 197 or 51 %. And condoms are an effective way of protecting against HIV/AIDS 224 or 58.03 %.

The discussion contradicts the findings of Pasay- an et. al., (2020) that the knowledge of adolescent regarding sexuality and reproductive health-related to transfer of infection, possible source of sexually transmitted diseases is described as low level of knowledge.

In summary, less than 50 % of the adolescent-participants who answered the questions asked are knowledgeable on adolescent reproductive health along the following statement indicators: a woman can get pregnant on the very first time that she has sexual intercourse, masturbation causes serious damage to health, a woman is most likely to get pregnant if she has sexual intercourse halfway between her periods, woman can take pills soon after intercourse (Emergency Contraceptive Pills) an injection every 2 or every 3 months (Injection), a couple can avoid

sex on days when pregnancy is most likely to occur (Periodic Abstinence/Rhythm), and it is possible to cure AIDS.

Table 14. Frequency and Percentage Distribution of the Adolescent-Participants' level of Knowledge

Range of Score (Knowledge)	Frequency	Percentage
0 to 5 (Low)	131	33.94
6 to 10 (Average)	196	50.78
11 to 15 (High)	59	15.28
Total	386	100.00

Table 14 presents the adolescent-participants' range of knowledge score.

As shown, 131 or 33.94 % whose score is from 0 to 5 from the 15 statement indicators described as low level of knowledge. This finding reflects low scores of the 131 adolescent-participants.

This was followed by 196 or 50.78 % whose scores are from 6 to 10 described as average while the remaining 59 or 15.28 % scored 11 to 15 described as high. It is further implied that there is a majority range on the level of knowledge of the adolescent participants which is described as average in percentage as compared to least percentage of high range level of knowledge.

In summary, there is a need for the 131 adolescent-participants who scored from 0 to 5 to increase their knowledge on the identified adolescent reproductive health statements. This corroborates the finding of Panda and Seagal (2009) that reveals that adolescents lack complete knowledge of vital life processes and several aspects of reproductive health.

Table 15. Frequency and Percentage Distribution of the Adolescent-Participants' Attitudes toward Adolescent Reproductive Health

	Statement	Agree		Disagree	
		f	%	f	%
1	It's alright for unmarried boys and girls to have dates	236	77.89	67	22.11
2	It's alright for boys and girls to kiss, hug and touch each other.	134	43.37	175	56.63
3	When an adolescent man and woman love each other, they are free to have sexual activity	105	34.20	202	65.80
4	Sex act should be free of coercion Sometimes a boy has to force a girl to have sex if he loves her.	98	29.70	232	70.30
5	A boy will not respect a girl who agrees to have sex with him.	78	30.35	179	69.65
6	Most girls who have sex before marriage regret it afterwards.	150	67.57	72	32.43
7	Adolescents having sex at early age may regret in afterwards because of consequences	118	57.56	87	42.44
8	A boy and a girl should have sex before they become engaged to see whether they are suited to each other.	78	30.83	175	69.17
9	Girls should remain virgins until they marry.	229	81.49	52	18.51
10	Adolescent should not engage in sex until they get married	194	70.04	83	29.96
11	It is sometimes justifiable for a boy to hit his girlfriend	76	25.50	222	74.50
12	Most of my friends think that one-night stands is socially accepted	72	28.69	179	71.31
13	It's alright for boys and girls to have sex with each other provided that they use methods to prevent pregnancy.	148	56.06	116	43.94
14	Most of my friends who have sex with someone use condoms regularly	84	50.30	83	49.70
15	I am confident that I can insist on condom use every time I have sex.	119	53.60	103	46.40

16	I would never contemplate having an abortion myself or for my partner.	183	70.93	75	29.07
17	It is mainly the woman's responsibility to ensure that contraception is used regularly.	142	62.28	86	37.72
18	One should be in love with someone before having sex with them.	199	71.58	79	28.42
19	I know how to use a condom properly.	100	47.17	112	52.83
20	Most of my friends would never contemplate having an abortion for themselves or their partner.	103	67.76	49	32.24
21	Men contemplate of having sex more frequently than do women	104	61.90	64	38.10
22	Most of my friends believe that one should be in love before he can have sex with someone.	163	70.56	68	29.44
23	I would refuse to have sex with someone who is not prepared to use a condom.	171	70.37	72	29.63
24	It's alright to have one-night stand with your boyfriend/girlfriend	62	21.60	225	78.40

Table 15 shows the result of the study on the adolescent-participants' attitudes towards adolescent reproductive health using 24 statement indicators. There are 236 or 77.89 % agreed on the first statement indicator it's all right for unmarried boys and girls to have dates while 67 or 22.11 % disagreed. The finding shows that adolescents agreed on dating. In can also be seen that 134 or 43.37 % agreed on the second statement that it's all right for boys and girls to kiss, hug and touch each other while 175 or 56.63 disagreed. The finding denotes that more than half of the adolescent-participants were not in favor that boys and girls can kiss and hug each other. The result reflects the common identity among Kalinga people of being timid and shy to express their respect and love thru kissing and hugging.

Furthermore, 105 or 34.20% agreed on the 3rd statement that There is nothing wrong with unmarried boys and girls having sexual intercourse if they love each other while 202 or 65.80 % disagreed. The result shows the kind of attitude of the participants on this indicator and that they observe what is legal that a boy and a girl will only have sexual intercourse when they are married.

On the 4th statement, 98 or 29.70 % agreed that sometimes a boy has to force a girl to have sex if he loves her while 232 or 70.30 disagreed. The result shows the right attitudes of adolescents in Tabuk City of not forcing girls to have sex with them due to their respect to girls. In addition, the culture and practice of the place help mold right attitudes of adolescents towards sex.

On the succeeding statement which is a boy will not respect a girl who agrees to have sex with him, 78 or 30.35 % agreed on it while 179 or 69.65 % disagreed. The result coincides with the earlier finding of the respect of boys to girls in terms of sex unless they were married.

Moreover, 150 or 67.57% showed agreement on that 6th statement that most girls who have sex before marriage regret it afterwards while 72 or 32.43 disagreed with it. The adolescents are aware of the consequence of having sex before marriage, hence they are not in favor of it. Similarly, the participants were also aware that "most boys who have sex before marriage regret it afterwards". Adolescents having sex at early age may regret it afterwards because of consequences as reflected by 118 or 57.56 % who agreed. However, 87 or 42.44 % disagreed on these statement. There are 78 or 30.83 % of the participants agreed that a boy and a girl should have sex before they become engaged to see whether they are suited to each other however, 175 or 69.17% disagreed which implies that the adolescents were not in favor of having sex before being engaged. Again, the finding is consistent with the earlier findings that adolescents respect each other in terms of sex that unless they are married, they do not engage themselves in sex.

The 9th indicator shows that 229 or 81.49 % agree that girls should remain virgin until they marry while 52 or 18.51 % disagreed. Similarly, on the 10th statement of "Adolescents should not engage in sex until they marry is also favored by 194 or 70.04 % while 83 or 29.96 % did not favor it. From the result, it could be noticed that both boy and girl adolescents were not in favor of having sex before marriage.

On the 11th indicator which is it is sometimes justifiable for a boy to hit his girlfriend , 222 or 74.50 % disagreed with it while 76 or 25.50 % agreed. Then, on the 12th indicator which states that most of my friends think that one-night stands are alright, 72 or 28.69 % agreed on it while 179 or 71.31 % disagreed. Despite some who agreed with the statement, it is noticed that nearly 75 percent disagreed.

On the 13th indicator which is it's alright for boys and girls to have sex with each other provided that they use methods to prevent pregnancy, 148 or 56.06 % agreed on it while 116 or 43.94 did not. Moreover, on the 14th statement, most of my friends who have sex with someone use condoms regularly 50.30 % agreed on it while 49.70 % disagreed, an indication that there is almost the same number of the participants who agreed and who disagreed.

The next statement which is I am confident that I can insist on condom use every time I have sex shows that 53.60% agreed to it while 46.40 % disagreed. It means that on the number of the adolescent-participants using condom, majority insist of using condom every time they have sex.

The 16th statement, which is I would never contemplate having an abortion myself or for my partner shows that 70.93 % agreed on it while 29.07 disagreed. The finding implies that adolescents in Tabuk City never contemplate having abortion.

It is seen on the 17th statement; it is mainly the woman's responsibility to ensure that contraception is used regularly that 142 or 62.28 agreed on it while 86 or 37.72 disagreed which means that the adolescent-participants considered the use of contraception regularly as the main responsibility of the woman.

For the 18th statement, you should be in love with someone before having sex with them 99 or 71.58 agreed while 79 or 28.42 % disagreed. This further indicates that the adolescent-participants have the right attitude wherein when they love someone, they get married first before having sex. On the succeeding statement, 100 or 47.17 % agreed that they feel that they know how to use a condom properly while 112 or 52.83 % disagreed, implying that more than half of those using condom accepted that they do not know how to use it properly.

On the 20th statement which is most of my friends would never contemplate having an abortion for themselves or their partner 103 or 67.76 % agreed on it while 49 or 32.24 % disagreed. The finding indicates that the adolescents themselves never contemplate of having abortion which is reflective of the earlier data on their profile that they are all Christians. For the 21st indicator men need sex more frequently than do women, 104 or 61.90 % agreed on it while 64 or 38.10 disagreed. It implies that the adolescent- participants have the right attitude towards sex as a more frequent need of men than women.

On the 22nd statement that most of my friends believe that you should be in love before you have sex with someone, 163 or 70.56 % agreed on it while 68 or 29.44 % disagreed, an indication that most of the friends of the adolescent participants have the right attitudes on this indicator. Moreover, on the 23rd statement, I would refuse to have sex with someone who is not prepared to use a condom, 171 or 70.37 % while 72 or 29.63 % disagreed. The result shows the good attitude of the adolescents on the use of condom.

Finally, on the 24th statement, it's alright to have one-night stand with your boyfriend/girlfriend, 62 or 21.60 % agreed while 225 or 78.40 did not agree which means that the adolescent-participants possessed the right attitude that one-night stands with their boyfriend/girlfriends is not right.

In summary, the findings revealed that the adolescent-participants who responded to the statements related to adolescent reproductive health have the right attitudes.

Table 16. Frequency and Percentage Distribution of the Adolescent-Participants' Awareness on Adolescent Reproductive Health

	Statement	Aware		Not Aware	
		f	%	f	%
1	There are other diseases that men and women can catch by having sexual intercourse (STIs)	314	81.35	72	18.65
2	If a friend needed treatment for a sexually transmitted disease, he or she could obtain such treatment shop, pharmacy, govt. hospital/health center/clinic, private doctor/nurse/clinic(STIs)	301	77.98	85	22.02
3	Condoms are an effective way of protecting against sexually transmitted diseases	290	75.13	96	24.87
4	Condoms are barrier method of contraception. It is made of very thin latex (rubber)designed to prevent pregnancy by stopping sperm from meeting an egg.	334	86.53	52	13.47
5	Pill prevents the ovaries from releasing an egg each month(ovulation).It also thickens the mucus in the neck of the womb, so it is harder for sperm to penetrate the womb and reach an egg.	314	81.77	70	18.23
6	Depo-provera is given as injection to a woman every three months. It suppresses ovulation, keeping ovaries from releasing an egg.	241	62.44	145	37.56

7	Withdrawal method of contraception happens when you take the penis out of the vagina to prevent pregnancy	231	60.00	154	40.00
8	Safe period is a day that is believed to be safe for having unprotected sex without resulting in pregnancy based on the woman's menstrual cycle	198	51.30	188	48.70
9	Intrauterine device (IUD) is a contraceptive device for women, often T-shaped that is inserted into the uterus (internal part of the reproductive system of a girl) to prevent pregnancy	196	50.78	190	49.22
10	Progestin sub-dermal implant (PSI) is a contraceptive implant inserted in the left or right arm of a woman and can provide protection up to three years .	200	51.81	186	48.19
11	Jelly/foam it is the least effective methods of birth control when in use.	127	32.90	259	67.10
12	Female Sterilization is a tubal ligation surgical procedure. It prevents the fertilization of eggs by sperm and thus the implantation of a fertilized egg. It is also considered as permanent method.	153	39.64	233	60.36
13	Male Sterilization is an elective surgical procedure called vasectomy. It is to prevent sperm from entering into the urethra and thereby prevent fertilization of a female through sexual intercourse.	146	37.82	240	62.18
14	Are you aware of a health facility or doctor of any kind to receive services or information on contraception, pregnancy, abortion or sexually transmitted diseases?	126	32.64	260	67.36

Table 24 shows the result of the study on the awareness of the adolescent-participants on reproductive health. The findings show that on the 1st statement “there are other diseases that men and women can catch by having sexual intercourse (STIs)”, 314 or 81.35 % of the participants are aware of it while 72 or 18.65 % are not. The result shows that the adolescents are aware of the diseases caught by men and women thru sexual intercourse.

The result of the 2nd statement “if a friend needed treatment for a sexually transmitted disease, he or she could obtain such treatment from a shop, pharmacy, govt. hospital/health center/clinic, private doctor/nurse/clinic (STIs)” reveals that 301 or 77.98 % are aware while 85 or 22.02 % are not aware. Similarly, the 3rd indicator “Condoms are an effective way of protecting against sexually transmitted diseases” is known by 290 or 75.13% while 96 or 24.87 % are not aware.

For the following identified contraceptive indicators, there are 334 or 86.53 % of adolescent-participants who are aware of condom as a contraceptive or as protection against infection while 52 or 13.47 % are not aware. On the use of oral contraceptive pill, 314 or 81.77 % are aware while 70 or 18.23 % are not aware. On the Depo- Provera injection, 241 or 62.44 % are aware while 145 or 37.56 are not. On the withdrawal method, 231 or 60 % aware while 154 or 40 % are not. For safe period method, 198 or 51.30 % are aware while 188 or 48.70 are not. For Intrauterine Device (IUD), 196 or 50.78 % are aware of it while 190 or 49.22 % are not aware. For Progestin sub-dermal Implant, 200 or 51.81 % are aware while 186 or 48.19 % are not aware. On Jelly/foam contraceptive, 127 or 32.90 % are aware while 259 or 67.10 % are not aware. For Female Sterilization, 153 or 39.64 % are aware while 233 or 60.36 % are not aware. Finally, for Male Sterilization, 146 or 37.82 % are aware while 240 or 62.18 % are not aware.

The results imply that for the indicators Jelly/foam, Female Sterilization, and Male Sterilization, there is a need for more information dissemination to let the adolescents be aware of them. Finally, on the question, “are you aware of a health facility or doctor of any kind to receive services or information on contraception, pregnancy, abortion or sexually transmitted diseases?”, 126 or 32.64 percent are aware while 67.36 % are not aware. The result implies the need for information dissemination on the availability of health facilities and doctors to receive services or information on contraception, pregnancy, abortion or sexually transmitted diseases in the community. In summary, majority of the adolescent-participants are aware on the indicators for reproductive health except for Jelly/foam, Female Sterilization, Male Sterilization, and the availability of health facilities and doctors to receive

services or information on contraception, pregnancy, abortion or sexually transmitted diseases wherein majority are not aware about.

CONCLUSION

This study provides important evidence on the reproductive health knowledge, attitudes, and awareness of adolescents in Tabuk City, Kalinga, revealing a notable disconnect between favorable attitudes toward responsible reproductive health behaviors and adequate factual knowledge. Although most adolescents demonstrated positive perceptions regarding responsible sexuality and reported limited engagement in risky sexual behaviors, substantial misconceptions persisted regarding pregnancy, fertility, contraceptive methods, and HIV/AIDS. These knowledge deficits were compounded by limited parent–adolescent communication, inadequate awareness of available reproductive health services, misinformation, and sociocultural barriers that restrict access to reliable reproductive health information.

The mixed-methods findings indicate that adolescent reproductive health literacy is influenced not only by individual knowledge but also by family communication, community norms, accessibility of youth-friendly services, and the availability of credible information sources. Consequently, positive attitudes alone may be insufficient to support informed reproductive health decision-making when adolescents lack accurate knowledge and appropriate support systems.

These findings underscore the need for a comprehensive and multisectoral approach that integrates schools, families, healthcare providers, local government units, and community organizations in strengthening adolescent reproductive health education. Rather than focusing solely on information dissemination, interventions should emphasize health literacy, communication skills, critical evaluation of misinformation, and equitable access to adolescent-friendly reproductive health services. Such strategies have the potential to improve informed decision-making, reduce preventable reproductive health risks, and contribute to healthier developmental outcomes among Filipino adolescents.

Implications

The findings of this study have important implications for adolescent reproductive health promotion, health education, and public policy in the Philippines. Although most adolescents demonstrated favorable attitudes toward responsible reproductive health behaviors and relatively low engagement in risky sexual practices, their limited factual knowledge and persistent misconceptions regarding fertility, contraception, pregnancy, and HIV/AIDS indicate that positive attitudes alone do not necessarily translate into adequate reproductive health literacy. This discrepancy suggests that existing reproductive health education programs may be insufficient in providing adolescents with the knowledge required for informed decision-making.

The study further highlights the central role of the family as a source of reproductive health information. The limited communication between parents and adolescents regarding sexuality reflects persistent sociocultural barriers that may restrict adolescents' access to accurate and trusted information, thereby increasing their reliance on peers, social media, or other potentially unreliable information sources. Strengthening parent–adolescent communication therefore represents a critical component of adolescent reproductive health promotion.

From a public health perspective, the findings demonstrate the need to improve adolescents' awareness of available reproductive health services. The low level of awareness regarding youth-friendly health facilities suggests that service availability alone is insufficient unless accompanied by effective information dissemination and community engagement. Increasing service visibility and accessibility may contribute to improved utilization of preventive reproductive health services among adolescents.

The qualitative findings further indicate that reproductive health literacy is shaped by multiple interconnected factors, including schools, families, health systems, community norms, and digital information environments. These findings reinforce the importance of adopting a multisectoral approach that integrates education, healthcare, local governance, and community participation in promoting adolescent reproductive health. Such an approach aligns with the principles of the Philippine Responsible Parenthood and Reproductive Health Act and supports the achievement of Sustainable Development Goals related to health, education, and gender equality.

Finally, the study provides baseline evidence for policymakers, educators, healthcare providers, and researchers in designing culturally responsive and evidence-based adolescent reproductive health interventions that address both knowledge deficits and structural barriers affecting access to reproductive health information and services.

Recommendations

Based on the findings of this study, the following recommendations are proposed to strengthen adolescent reproductive health education, service delivery, and future research.

1. Strengthen Comprehensive Sexuality Education

Educational institutions should strengthen the implementation of evidence-based Comprehensive Sexuality Education (CSE) that is developmentally appropriate and culturally responsive. Educational interventions should prioritize correcting misconceptions identified in this study regarding fertility, pregnancy, contraceptive methods, HIV/AIDS, and sexually transmitted infections while promoting critical thinking and responsible decision-making.

2. Enhance Parent–Adolescent Communication

Schools, local government units, and community organizations should develop structured parent education programs that equip parents with practical communication skills for discussing sexuality and reproductive health with adolescents. Improving family communication may increase adolescents' access to reliable reproductive health information and strengthen parental support during adolescence.

3. Improve Access to Youth-Friendly Health Services

Health authorities should strengthen adolescent-friendly reproductive health services by improving accessibility, confidentiality, and responsiveness to adolescents' needs. Information campaigns should increase awareness of available reproductive health facilities and services, particularly among adolescents who are unaware of where to obtain professional reproductive health information and counseling.

4. Develop Community-Based Information Campaigns

Local government units, schools, and health agencies should collaborate in implementing sustained community-based reproductive health education programs using multiple communication platforms, including schools, community outreach activities, peer education, and digital media. Such initiatives should provide scientifically accurate and culturally appropriate reproductive health information while addressing misinformation commonly encountered by adolescents.

5. Establish School–Health System Partnerships

Formal collaboration between schools and local health offices should be strengthened to facilitate regular reproductive health education sessions, counseling services, referrals, and health promotion activities. Integrating healthcare professionals into school-based reproductive health programs may improve adolescents' trust in health information and increase service utilization.

6. Prioritize High-Risk and Underserved Adolescents

Targeted interventions should be developed for adolescents who demonstrate lower reproductive health knowledge, limited parental communication, or restricted access to health services, including out-of-school youth and adolescents residing in geographically isolated communities. Tailored interventions may reduce disparities in reproductive health literacy and service access.

7. Strengthen Monitoring and Evaluation

Government agencies and educational institutions should establish monitoring and evaluation systems that periodically assess adolescents' reproductive health knowledge, attitudes, awareness, service utilization, and behavioral outcomes. Continuous assessment will enable evidence-informed improvements to reproductive health programs and policies.

8. Future Research

Future studies should employ probability sampling and include multiple provinces or regions to improve the generalizability of findings. Longitudinal and explanatory studies are recommended to examine causal pathways linking reproductive health knowledge, family communication, digital media exposure, health service utilization, and adolescent reproductive health behaviors. Future intervention studies should also evaluate the effectiveness of school-based, family-centered, community-based, and technology-assisted reproductive health education programs in improving reproductive health literacy and health outcomes among Filipino adolescents.

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