

Exploring the Knowledge, Behavior Gap in Adolescent Sexual Health: Risky Sexual Behaviors and Their Health Consequences Among Adolescents in Chitwan, Nepal

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doi: 10.51505/ijmshr.2026.10505

URL: <http://dx.doi.org/10.51505/ijmshr.2026.10505>

Received: Sep 09, 2026

Accepted: Sep 21, 2026

Online Published: Oct 08, 2026

Abstract

Adolescence sexuality is a major concern globally because of its attendant unfavorable reproductive health indices. There have been so many misconceptions about discussing sexuality issues with the adolescent and this in way has really jeopardized the health of the nation as most country is youthful population. While the goal of sex education is to educate and therefore protect oneself from high-risk sexual behaviors, research suggests support that knowledge and attitudes do not always comply with behavior. The descriptive cross-sectional study utilized 105 respondents with validated questionnaire developed by the researcher after reviewing wealth of literature. The study indicates that students' knowledge about sexual issues is poor. The study found several common risky sexual behaviors including sex without a condom due to drugs and/or alcohol, ceasing to use a condom as a result when respondents became more comfortable in their relationships, early sexual debut, oral sex and anal sex.

Keywords: risky sexual behaviors, sexual health, adolescents

1. Introduction

Adolescence, the period from ages 10 to 19, is one of the critical transitions in the lifespan, characterized by a tremendous pace in growth and change second only to infancy. This period has witnessed many changes over the past century, namely the earlier onset of puberty, later age of marriage, urbanization, global communication, and changing sexual attitudes and behaviors (World Health Organization, 2017). Today there are more than one billion 10–19-year-olds, 70% of whom live in developing nations. The environment in which young people make decisions

related to sexual and reproductive health is rapidly evolving, with rates of sexual initiation rising or remaining unchanged in many developing countries (Hindin & Fatusi, 2009).

High-risk sexual behavior including unprotected intercourse, early sexual debut, multiple sex partners, and sex trade work puts young people at risk for sexually transmitted infections (STIs), unplanned pregnancy, and unhealthy relationships (Blahd & O'Connor, 2014). According to WHO (2002), unsafe sex was second among the top ten risk factors in the global burden of disease. Recent studies show a declining age of first sexual debut and increasing high-risk behaviors among adolescents, meaning young people now face a longer period of sexual maturity before marriage and a correspondingly longer period of risk of unwanted pregnancy, unsafe abortion, and STIs/HIV. Lack of information and guidance about sex and sexuality makes young people vulnerable to diseases and exploitation, as they unknowingly engage in behaviors that expose them to these consequences (Oluwatoyin & Modupe, 2014).

Empirical evidence from various settings confirms the alarming prevalence of risky sexual behavior. In a study at Jimma University Community High School, Ethiopia, among 229 adolescent respondents, 73.8% knew about risky sexual behavior, yet 32.75% had practiced sexual intercourse and 27.07% had sex within three months prior to the study (Ena, Hurissa & Aliyu, 2015). A study at Jigjiga University, Ethiopia, found that 70.53% of 236 undergraduate students were sexually experienced, with only 59.6% using a condom in their most recent sexual engagement (Mavhandu-Muduzusi, 2016). In Nepal, a survey of 339 men who have sex with men found that 78% did not use condoms at their last anal sex, 70% had experienced violence, and 47% had thought of committing suicide (Deuba et al., 2013). A study at the University of Central Florida revealed that 27% of respondents did not use a condom due to drug or alcohol use during sexual activity (Castora, 2005). Similarly, a study in Banepa Municipality, Kavrepalanchowk, Nepal, showed that only 44% of 270 respondents used contraceptives, 27% had multiple sex partners, and 70% faced some form of health consequences (Nepal Health Research Council [NHRC], 2016). According to the Center for Disease Control and Prevention (2016), young people aged 13–24 accounted for 22% of all new HIV diagnoses in the United States in 2014, and half of the nearly 20 million new STDs reported each year were among those aged 15 to 24.

These studies collectively reflect a persistent and alarming level of risky sexual behavior and its negative health impacts, while also indicating that students' knowledge about sexual issues remains insufficient. Very few studies have been conducted on this topic in the context of Nepal, and none in the Chitwan and Nawalparasi districts. This study therefore aims to assess the risky sexual behaviors and their health consequences among adolescents, specifically to assess the level of knowledge and attitude on risky sexual behaviors and health consequences, identify the risky sexual behaviors practiced by adolescents, and find out the association between risky sexual behaviors and socio-demographic variables. The findings will provide baseline information for further research and for planning awareness programs and policies related to adolescent sexual health.

2. Method

2.1 Research Design

A descriptive cross sectional study design was adopted to assess the risky sexual behavior and health consequences among adolescents studying in Diploma in Certificate PCL of Kalika Medical & Technical College.

2.2 Research Setting

The study was conducted among students of Kalika Medical and Technical College, who received their theoretical education at the college and attended clinical practice at Manakamana Hospital. The two institutions are under the same management/founder and provide an integrated academic and clinical learning environment. A total of **105 eligible students participated in the study.**

2.3 Population and Sampling

The study population consist of adolescents of within 19 years age group studying in PCL Level. Simple Random Sampling Technique of probability sampling method was used for sampling process. PCL level colleges were selected by lottery method and nonprobability purposive sampling technique was used to select study sample.

Sample size was based on the following assumption.

As there is no standard prevalence rate for risky sexual behavior for research study so the researcher has used the approximate prevalence rate for the study that is 50%.

Sample Size

Where Z_{α} =standard value $\left(\frac{1.96}{0.1}\right)^2 \times PQ$

E= Error= 10%= 10/100= 0.1

P= Prevalence = 50% = 50/100 = 0.5

Q= (1-P) = (1-0.5) = 0.5

By using the formula, the sample size is calculated as

$$= 96.04 = \left(\frac{1.96}{0.1}\right)^2 \times 0.5 \times 0.5$$

$$= 96$$

10% none response rate

10% of 96= 10/100*96= 9.6 (approx 9)

Total sample size = 96+9= 105

So, the calculated sample size is 105

2.4 Instrumentation

A self-administered questionnaire was developed to collect the data after receiving the related literature, research advisor and subject expertise to measure research variable. Questionnaire consist four parts:

Part I consist questionnaires related to socio demographic variable.

Part II consist questionnaire related to knowledge regarding risky sexual behavior and health consequences among adolescents of Kalika Medical & Technical College.

Part III consist questionnaire related to attitude on risky sexual behavior and health consequences among adolescents of Kalika Medical & Technical College.

Part IV consist questionnaire related to risky sexual practiced and health consequences faced by adolescents of Kalika Medical & Technical college.

The validity of the instrumentation was established by developing instruments on the basis of extensive literature review, consulting subject expert, research advisor and pretesting will be conducted. Modification was done according to the result of the pretesting.

Reliability of research instrument was maintained by conducting pilot study in 10% of total sample size in same setting and that sample size was excluded during the study sample.

2.5 Data Collection Procedure

The research study was conducted Kalika Medical & Technical College. The written consent was obtained from the respondents by explaining the objectives of the study before data collection. Voluntary participation was done. The data was collected by the researcher herself using the self-administered questionnaire.

2.6 Data Analysis Procedure

The collected data was checked, reviewed and organized for accuracy and completeness. All collected data was analyzed and interpreted by using descriptive statistics method in terms of the frequency, mean and percentage and inferential statistics.

2.7 Ethical Consideration

Ethical permission was obtained from the relevant authorities of Kalika Medical and Technical College and Manakamana Hospital before data collection. Participation was entirely voluntary. The purpose and procedures of the study were explained to potential participants, and only those who agreed voluntarily were included. Participants were informed that they could refuse or discontinue participation without any consequences. Confidentiality and privacy were maintained throughout the study, and the collected information was used solely for research purposes.

3. Results

The obtained data were analyzed according to the objective of the study. The data were collected from students of PCL Certificate of Kalika Medical & Technical College. The total numbers of respondents were 105. Classification of data was done by arranging in table. Analysis is done using statistical tools e.g. number, frequency, percentage etc. The data analysis consists of four parts.

Table 1. Distribution of socio-demographic information

Category	Frequency	Percentage
Age Group		
18	19	18.1
19	86	81.9
Mean= 18.81	Mean±SD= 18.81±0.38	Range=1.00
Sex		
Male	40	38.1
Female	65	61.9
Religion		
Hindu	95	90.5
Buddhist	10	9.5
Caste		
Brahmin	62	59.0
Gurung	6	5.7
Newar	3	2.9
Chhetri	18	17.1
Others	16	15.2
Sexual Category		
Heterosexual	90	85.7
Homosexual	3	2.9
Bisexual	12	11.4
Marital Status		
Married	2	1.9
Single	103	98.1
Whom do you live with		
With own parents	85	81.0
Alone	7	6.7
Family relatives	10	9.5
Grandparents	1	1.0

Husband	2	1.9
Father's Education		
No Formal Education	7	6.7
Primary Education	14	13.3
Secondary education	29	27.6
Higher Secondary Education	37	35.2
Graduated	18	17.1
Mother's Education		
No Formal Education	10	9.5
Primary Education	25	23.8
Secondary education	35	33.3
Higher Secondary Education	25	23.8
Graduated	10	9.5
Family Income		
10000-75000	74	70.5
76000-150000	29	27.6
>150000	2	1.9
Mean= 64019.04	Mean±SD= 64019.04±34627.96	Range=190000
Source of informatioun about risky sexual behavior		
Magazine	1	1.0
Pamphlet	1	1.0
Friends	20	19.0
Health Personnel	8	7.6
Teachers	8	7.6
Internet	67	63.8
Have you ever taken alcohol		
Yes	47	44.8
No	58	55.2
Do you smoke cigarette		
Yes	13	12.4
No	92	87.6
Have you ever worked for money		
Yes	37	35.2
No	68	64.8
Which of your parents drink alcoholic beverages		

Father	40	38.1
Both	3	2.9
None	62	59.0

Above table indicates that out of total 105 study sample, majority of the respondents 86 (81.9%) were of 19 years of age and the rest 19 (18.1%) were of 18 years of age. The mean age of the respondents was 18.81. Majority 61.9% (65) were female respondents while 38.1% (40) were male respondents. Majority of the respondents 90.5% (95) followed Hindu religion. Majority of the respondents 59.0% (62) were Brahmin while minority 2.9% (3) were Newar. On the basis of the sexual category, majority of the respondents 85.7% (90) were heterosexual while least 2.9% (3) were homosexual. Majority of the respondents 98.1% (103) were single while 1.9% (2) were married. On the basis of living arrangements, majority of the respondents 81.0% (85) live with their own parents while least 1.0% (1) live with their grandparents.

Majority of the respondents' father's education 35.2% (37) was higher secondary level while minority 6.7% (7) did not gain any formal education. Similarly, majority of the respondents' mother's education 33.3% (35) was secondary level while minority 9.5% (10) did not gain any formal education and 9.5% (10) were graduated and above respectively. According to family income, majority of the respondents' 70.5% (74) family income ranges from Rs. 10000-75000 while minority 1.9% (2) range above Rs. 150000.

On the basis of the source of information about risky sexual behavior, majority of the respondents 63.8% (67) gained information through internet while minority 1.0% (1) gained information through magazine and pamphlet respectively. Majority of the respondents 55.2% (58) haven't taken alcohol till now while 44.8% (47) respondents have taken alcohol. Similarly, 87.6% (92) respondents did not smoke cigarette while 12.4% (13) respondents smoke cigarette. Majority of the respondents 64.8% (68) have ever been employed while 35.2% (37) haven't been employed yet. Majority of the respondents parents 59.0% (62) did not drink any alcoholic beverages, 38.1% (40) of the respondents' father drink alcoholic beverages and 2.9% (3) of the respondents' both father and mother drink alcoholic beverages.

Table 2. Respondents' knowledge on meaning of risky sexual behavior

Variables	Frequency	Percentage
Having sex before marriage	20	19.0
Sexual practice with multiple partners	18	17.1
Unprotected sex	50	47.6
Sexual practice after taking alcohol, substance	4	3.8
Sexual practice with incomparable age partners	10	9.5
Unusual sexual practice like anal, oral sex	3	2.9

Table 2 shows that out of total 105 study sample, majority of the respondents 47.6% (50) define risky sexual behavior as unprotected sex while minority 2.9% (3) define risky sexual behavior as unusual sexual practice like anal, oral sex.

Table 3. Respondents' Knowledge on Vulnerability to Risky Sexual Behavior

Variables	Frequency	Percentage
Children	36	34.3
Youths*	65	61.9
Older aged people	4	3.8

Table 3 shows that majority 61.9% (65) responded that youth are more vulnerable to risky sexual behavior which is the correct answer while least 3.8% (4) responded that older aged people are more vulnerable to risky sexual

Table 4. Respondents' Knowledge on predisposing factor of Risky Sexual Behavior

Variables#	Frequency	Percentage
Low parental education	51	48.6%
Substance abuse	31	29.5%
Out of college	9	8.6%
High divorce rate of parents	19	18.1%
Unmet intimacy needs	23	21.9%
Impulsive nature	18	17.1%
Early dating	48	45.7%

Table 4 shows that out of total 105 respondents, majority 48.6% (51) responded that low parental education is the predisposing factor to risky sexual behavior while minority 8.6% (9) responded that out of college is the predisposing factor of risky sexual behavior.

Table 5. Respondents' Knowledge on Physical problems due to Risky Sexual Behavior

Variables	Frequency	Percentage
Chronic pain*	16	15.2%
Unwanted pregnancy*	72	68.6%
Insomnia	6	5.7%
Genital injuries*	23	21.9%
HIV/AIDS*	89	84.8%
Mood changes	7	6.7%

Table 5 shows that out of 105 respondents, majority 84.8% (89) responded HIV/AIDS, 68.6% (72) responded unwanted pregnancy, 21.95 (23) responded genital injuries and 15.2% (16) responded chronic pain as the physical problems due to risky sexual behavior which is the correct answer as well.

Table 6. Respondents' Knowledge on Psychological Problem due to Risky Sexual Behavior

Category	Frequency	Percentage
Depression*	81	77.1%
Anxiety*	15	14.3%
Suicidal thought*	47	44.8%
Nausea	5	4.8%
Fear*	27	25.7%
Lack of family support	25	23.8%

Table 6 shows that majority of the respondents 77.1% (81) responded depression, 44.8% (47) responded suicidal thought, 23.8% (25) responded fear and 14.3% (15) responded anxiety as the psychological problems due to risky sexual behavior which is the correct answer as well.

Table 7. Respondents' Knowledge on protection from Risky Sexual Behavior

Variables	Frequency	Percentage
By having one sex partner who has no other partner	42	40.0
By using a condom during intercourse	53	50.5
By abstaining from sex	4	3.8
By isolating myself	6	5.7

Table 7 shows that out of total 105 respondents, majority of the respondents 50.5% (53) responded that using a condom during intercourse protects from risky sexual behavior while

minority of the respondents 3.8% (4) responded that abstaining from sex protects from risky sexual behavior.

Table 8. Distribution of Respondents according to Level of Knowledge

Table 8 shows that majority of the respondents 99% (104) had poor knowledge on risky sexual behavior and health consequences while only 1% (1) had good knowledge.

Level of Knowledge	Frequency	Percent
Poor(≤ 50)	104	99
Good(> 50)	1	1

Table 9. Respondents' attitude on risky sexual behavior and health consequences

Attitude related items	n=105			
	Strongly Agree	Agree	Disagree	Strongly Disagree
Contraceptives decreases the sex drive	27(25.7)	34(32.4)	31(29.4)	13(12.4)
Risky sexual behavior invite for various health consequences including physical, mental and social consequences	72(68.6)	28(26.7)	3(2.9)	2(1.9)
Boys put girls under pressure to have sex.	25(23.8)	29(27.6)	40(38.1)	11(10.5)
Condoms are not good for youth because they encourage them to have sex.	19(18.1)	25(23.8)	47(44.8)	14(13.3)
Girls do not use condoms because they trust their partners	36(34.3)	30(28.6)	21(20.0)	18(17.1)
I like the idea of sexual abstinence (not having sex) as the best way of avoiding STDs	19(18.1)	24(22.9)	45(42.9)	17(16.2)
I think watching/reading pornographic materials can contribute to risky sexual practices	35(33.3)	53(50.5)	14(13.3)	3(2.9)
Drinking alcoholic beverages prior to sexual intercourse contribute to risky sexual practices	22(21.0)	71(67.6)	8(7.6)	4(3.8)
At the beginning of the relationship my partner and i practice safe sex, but the more comfortable we become, the less we protect ourselves	18(17.1)	44(41.9)	29(27.6)	14(13.3)
I consider myself irresponsible when it comes to practicing safe sex	13(12.4)	22(21.0)	49(46.7)	21(20.0)
If I have unprotected sexual intercourse, I am most concerned about:				
Getting HIV	50(47.6)	47(44.8)	6(5.7)	2(1.9)
Getting STDs aside from HIV	46(43.8)	50(47.6)	6(5.7)	3(2.9)
Unwanted pregnancy	48(45.7)	46(43.8)	4(3.8)	7(6.7)

Table 9 shows the attitude related items towards risky sexual behavior and health consequences. There are total 13 attitude related items which were based on strongly agree, agree, disagree and strongly disagree. Out of the total 105 respondents, majority 32.4% (34) agree that a contraceptive decreases the sex drive while 12.4% (13) strongly disagree to it. Majority of the respondents, 68.6% (72) strongly agree that risky sexual behavior invite for various health consequences including physical, mental and social consequences while 1.9% (2) respondents strongly disagree to it. The highest 38.1% (40) respondents disagree that boys put girls under pressure to have sex while 27.6% (29) respondents agree to it and 10.5% (11) respondents strongly disagree to it. 44.8% (47) respondents disagree that condoms are not good for youth because they encourage them to have sex, 23.8% (25) respondents agree to it while lowest 13.3% (14) respondents strongly disagree to it. Similarly, majority of the respondents 34.3% (36) strongly agree that girls do not use condom because they trust their partners while lowest 17.1% (18) strongly disagree to it. Majority 42.9% (45) respondents disagree to the idea of sexual abstinence as the best way of avoiding STDs while 18.1% (19) respondents strongly agree to it. The highest 50.5% (53) respondents agree that watching/reading pornographic materials can contribute to risky sexual practices while the lowest 2.9% (3) respondents strongly disagree to it. Majority 67.6% (71) respondents agree that drinking alcoholic beverages prior to sexual intercourse contribute to risky sexual practices while the minority 3.8% (4) respondents strongly disagree to it. Majority of the respondents 41.9% (44) agree that at the beginning of the relationship my partner and I practice safe sex, but the more comfortable we become, the less we protect ourselves while the minority of the respondents 13.3% (14) strongly disagrees to it. Similarly, 46.7% (49) respondents disagree to consider himself or herself irresponsible when it comes to practicing safe sex while 12.4% (13) respondents strongly agree to it. Similarly, majority 47.6% (50) respondents strongly agree that I am most concerned about getting HIV if I have unprotected sexual intercourse while minority 1.9% (2) strongly disagrees to it. Majority of the respondents 47.6% (50) agree that I am most concerned about getting STDs aside from HIV while minority of the respondents 2.9% (3) strongly disagrees to it. Majority of the respondents 45.7% (48) strongly agree that I am most concerned about unwanted pregnancy while the minority of the respondents disagree to it.

Table 10. Dating Status of the Respondents

Variables	Frequency	Percent
Still a virgin	83	79.0
≤17	6	5.7
>17	16	15.2
Mean= 4.46	Mean±SD= 4.46±6.78	Range= 18.00
do not date	37	5.2
date only one person	58	5.2
date a lot of people	8	.6
engaged	2	.9

Table 10 shows that majority of the respondents 55.2% (58) date only one person, 35.2% (37) respondents do not date, 7.6% (8) respondents date a lot of people while 1.9% (2) respondents are engaged

Table 11. Age of the respondents during first sexual intercourse

Table 11 shows the age of the respondents during their first sexual intercourse. Majority of the respondents 79.0% (83) were still a virgin, 15.2% (16) respondents were more than 17 years of age during their first sexual intercourse while 5.7% (6) were less than or equal to 17 years of age during their first sexual intercourse.

Table 12. Current sexual partners of the respondents

Variables	Frequency	Percent
No sexual partners	4	18.18
One-two	10	45.45
Three	2	9.09
More than 3	6	27.27

Table 12 shows the current sexual partners of the respondents. Out of the total 22 respondents who ever had sex, 45.45% (10) respondents has 1-2 sexual partners, 27.27% (6) respondents has more than 3 sexual partners, 9.09% (2) respondents has 3 sexual partners currently while 18.18% (4) respondents had no any sexual partners currently.

Table 13. Number of individuals that respondents had sexual intercourse with

Variables	Frequency	Percent
Only 1	12	54.54
Between 2 and 5	7	31.81
Between 6 and 10	2	9.09
Over 10	1	4.54

Table 13 shows that out of total 22 respondents who ever had sex, majority 54.54% (12) respondents had sexual intercourse with only one individual, 31.81% (7) respondents had sexual intercourse with between 2-5 individuals, 9.09% (2) respondents had sexual intercourse with between 6-10 individuals and 4.54% (1) had sexual intercourse with more than 10 individuals.

Table 14. Respondents' engagement in sexual intercourse in a week

n=22		
Variables	Frequency	Percent
Once a week	17	77.27
Between 2 and 4 times a week	2	9.09
Between 5 and 7 times a week	2	9.09
More than 7 times a week	1	4.54

Table 14 shows that out of total 22 respondents who ever had sexual intercourse, majority 77.27% (17) respondents engage in sexual intercourse once a week while minority of the respondents 4.54% (1) respondents engage in sexual intercourse more than 7 times a week.

Table 15. Time of last sexual activity encountered by respondents

Variables	Frequency	n=22
		Percent
Less than a week ago	7	31.81
Between one week and 3 months ago	7	31.81
Between 3 and 6 months ago	1	4.54
More than 6 months ago	7	31.81

Table 15 shows that out of total 22 respondents who ever had sex, majority 31.81% (7) respondents encountered their last sexual activity less than a week ago, between one week and three months ago and more than 6 months ago respectively while minority of the respondents 4.54(1) encountered their last sexual activity between 3 and 6 months ago.

TABLE 16. Respondents' first sexual intercourse with

Variables	Frequency	n=22
		Percent
Fellow youth	17	77.27
Commercial sex worker	3	13.63
Husband	2	9.09

Table 16 shows that out of total 22 respondents who ever had sexual intercourse, majority 77.27% (17) respondents had first sexual intercourse with their fellow youth, 13.63% (3) respondents had their first sexual intercourse with commercial sex worker and 9.09% (2) had their first sexual intercourse with their husband.

Table 17. Types of sexual practices practiced by the respondents in the past

n=22		
Variables	Frequency	Percent
Vaginal sex with a condom	17	77.27
Unprotected vaginal sex	3	13.63
Anal sex with a condom	2	9.09

Table 17 shows that out of total 22 respondents who ever had sexual intercourse, majority 77.27% (17) respondents had vaginal sex with a condom in the past, 13.63% (3) respondents had unprotected vaginal sex and 9.09% (2) had anal sex with a condom.

Table 18. Use of condom in the last sexual intercourse

n=22		
Variables	Frequency	Percent
Yes	18	81.81
No	4	18.18

Table 18 shows that out of 22 respondents who had experienced sexual intercourse, majority of the respondents 81.81% (18) used condom in the last sexual intercourse while 18.18% (4) did not use condom in the last sexual intercourse.

Table 19. Physical health consequences faced by respondents

n=22		
Variables#	Frequency	Percent
Not faced any problem	14	63.63
Chronic pain	2	9.09
Genital injuries	1	4.54
Genital itching	4	18.18
Migraines and other frequent headache	1	4.54

Table 19 shows that out of total 22 respondents who had ever sexual intercourse, majority 63.63% (14) respondents did not face any physical problem while 18.18% (4) respondents faced genital itching, 9.09% (2) respondents faced chronic pain while 4.54% (1) respondents faced genital injuries and migraines and other frequent headaches each respectively

Table 20. Psychological health consequences faced by the respondents

n=22		
Variables#	Frequency	Percent
Not faced any problem	9	40.90
Depression	1	4.54
Anxiety	1	4.54
Suicidal thought	2	9.09
Fear	6	27.27
Shock	1	4.54
Shame or guilt	2	9.09

Table 20 shows that out of total 22 respondents who had sexual intercourse, majority 40.90% (9) respondents did not face any psychological problem, 27.27% (6) respondents faced fear, 9.09% (2) respondents faced shame or guilt and suicidal thought respectively while 4.54% (1), 4.54% (1) and 4.54% (1) respondent faced depression, anxiety and shock respectively.

Table 21. Mean, Median and Std. Deviation of Risky Sexual Behavior

Risky sexual behavior	Mean	Median	Std. Deviation
Knowledge	9.50	10.00	2.48
Attitude	27.24	27.00	4.48
Practice	41.86	43.00	2.65

Table 21 shows that mean, median and standard deviation of knowledge regarding risky sexual behavior are 9.50, 10.00 and 2.48 respectively. Similarly, mean median and std. deviation of attitude regarding risky sexual behavior are 27.24, 27.00 and 4.48 respectively. In the same way, mean, median and std. deviation of practice regarding risky sexual behavior are 41.86, 43.00 and 2.65 respectively.

Table 22. Association of knowledge with socio-demographic variables

Demographic Variable	N	Knowledge Median Score	P value
Age Group β			
18	19	55.16	0.725
19	86	52.52	
Sex β			
Male	40	60.18	0.051
Female	65	48.58	
Religion #			
Hindu	95	51.83	0.211
Buddhist	10	64.1	
Caste #			
Brahmin	62	54.73	0.251
Gurung	6	72.67	
Newar	3	56.67	
Chhetri	18	49.67	
Others	16	42	
Sexual Category #			
Heterosexual	90	51.94	0.465
Homosexual	3	46.33	
Bisexual	12	62.58	
Marital Status β			
Married	2	70	0.411
Single	103	52.67	
Living Arrangements #			
With own parents	85	49.98	0.082
Alone	7	58.29	
Family relatives	10	74.70	
Grandparents	1	22.00	
Husband	2	70.00	
Father's Education #			
No Formal Education	7	55.43	0.559
Primary Education	14	43.50	
Secondary education	29	50.03	
Higher Secondary Education	37	55.03	

Graduated	18	60.06	
Mother's Education #			
No Formal Education	10	50.00	0.81
Primary Education	25	48.56	
Secondary Education	35	52.57	
Higher Secondary Education	25	58.56	
Graduated	10	54.70	
Source of Information #			
Magazine	1	22.00	0.438
Pamphlet	1	74.00	
Friends	20	51.05	
Health Personnel	8	69.13	
Teachers	8	44.00	
Internet	67	52.88	
Taken Alcohol β			
yes	47	54.15	0.72
No	58	52.07	
Smoke Cigarette β			
Yes	13	48.69	0.574
No	92	53.61	
Ever been employed β			
Yes	37	43.86	0.019*
No	68	57.97	
Alcoholic Beverages by parents #			
Father	40	51.20	0.519
Both	3	71.33	
None	62	53.27	

Table 22 shows the association of knowledge with socio-demographic characteristics. Respondents' employment status (0.019) had significant association with knowledge regarding risky sexual behavior and health consequences while rest of the other socio-demographic characteristics is not significantly associated with knowledge regarding risky sexual behavior and health consequences.

Table 23. Association of attitude with socio-demographic variables

Demographic Variable	N	Attitude Median Score	P value
Age Group β			
18	19	55.74	0.664
19	86	52.40	
Sex β			
Male	40	58.94	0.116
Female	65	49.35	
Religion #			
Hindu	95	52.35	0.501
Buddhist	10	59.15	
Caste #			
Brahmin	62	47.68	0.041*
Gurung	6	68.08	
Newar	3	89.17	
Chhetri	18	63.36	
Others	16	49.53	
Sexual Category #			
Heterosexual	90	52.42	0.339
Homosexual	3	34.67	
Bisexual	12	61.92	
Marital Status β			
Married	2	69.75	0.431
Single	103	52.67	
Living Arrangements #			
With own parents	85	54.01	0.325
Alone	7	56.36	
Family relatives	10	36.10	
Grandparents	1	79.50	
Husband	2	69.75	
Father's Education #			
No Formal Education	7	68.64	0.476

Primary Education	14	59.39	
Secondary education	29	53.64	
Higher Secondary Education	37	48.19	
Graduated	18	50.81	
Mother's Education #			
No Formal Education	10	55.00	0.022*
Primary Education	25	66.84	
Secondary Education	35	44.27	
Higher Secondary Education	25	45.42	
Graduated	10	65.90	
Source of Information #			
Magazine	1	4.00	0.095
Pamphlet	1	16.50	
Friends	20	44.88	
Health Personnel	8	44.00	
Teachers	8	44.00	
Internet	67	58.85	
Taken Alcohol β			
yes	47	53.02	0.995
No	58	52.98	
Smoke Cigarette β			
Yes	13	68.04	0.056
No	92	50.88	
Worked For Money β			
Yes	37	57.54	0.258
No	68	50.53	
Alcoholic Beverages #			
Father	40	58.05	0.196
Both	3	70.67	
None	62	48.89	

Table 23 shows the association of attitude with socio-demographic characteristics. Respondents' caste (0.041) and respondents' mother's education (0.022) had significant association with attitude regarding risky sexual behavior and health consequences.

Table 24. Association of practice with socio-demographic variables

Demographic Variable	N	Practice Median Score	P value
Age Group			
18	19	58.61	0.346
19	86	51.76	
Sex			
Male	40	42.24	0.003*
Female	65	59.62	
Religion			
Hindu	95	52.93	0.935
Buddhist	10	53.70	
Caste			
Brahmin	62	53.53	0.002*
Gurung	6	35.83	
Newar	3	24.17	
Chhetri	18	42.64	
Others	16	74.44	
Sexual Category			
Heterosexual	90	53.15	0.591
Homosexual	3	67.17	
Bisexual	12	48.33	
Marital Status			
Married	2	19.25	0.093
Single	103	53.66	
Living Arrangements			
With own parents	85	54.18	0.255
Alone	7	39.50	
Family relatives	10	60.40	
Grandparents	1	40.50	
Husband	2	19.25	
Father's Education			
No Formal Education	7	48.86	0.481
Primary Education	14	50.96	

Secondary education	29	45.97	
Higher Secondary Education	37	57.76	
Graduated	18	57.75	
Mother's Education			
No Formal Education	10	52.60	0.861
Primary Education	25	51.92	
Secondary Education	35	52.73	
Higher Secondary Education	25	57.52	
Graduated	10	45.75	
Source of Information			
Magazine	1	40.50	0.849
Pamphlet	1	40.50	
Friends	20	50.88	
Health Personnel	8	43.13	
Teachers	8	50.50	
Internet	67	55.49	
Taken Alcohol			
yes	47	44.10	0.004*
No	58	60.22	
Smoke Cigarette			
Yes	13	31.23	0.003*
No	92	56.08	
Worked For Money			
Yes	37	48.20	0.206
No	68	55.61	
Alcoholic Beverages			
Father	40	44.76	0.029*
Both	3	36.67	
None	62	59.10	

Table 24 shows the association of practice with socio-demographic characteristics. Respondents' sex (0.003), caste (0.002), respondents' habit of taking alcohol (0.004), smoking cigarette (0.003) and taking alcoholic beverages by respondents' parents (0.029) had significant association with practice regarding risky sexual behavior and health consequences.

4. Discussion

The descriptive cross sectional study design was used to find out risky sexual behavior and health consequences among adolescents.

Regarding socio-demographic information, this study showed that out of 105 respondents 81.9% respondents belong to the age group of 19 years and 18.1% of respondents belong to the age group of 18 years. Majority of the respondents 61.5% were female followed by 38.1% were male respondents. The findings of the study showed that majority of the respondents 90.5% followed Hindu religion and regarding caste majority of the respondents 59.0% were Brahmin while the minority of the respondents 2.9% were Newar. 85.7% of the respondents were heterosexual followed by 11.4% were bisexual and the least 2.9% were homosexual. On the basis of the marital status, majority of the respondents 98.1% were single while 1.9% was married. Majority of the respondents 81.0% live with their own parents. Regarding source of information about risky sexual behavior, majority of the respondents 63.8% gained information through internet.

Regarding respondents' level of knowledge on risky sexual behavior and health consequences among adolescents, majority 99% had poor knowledge while only 1% had good knowledge. Majority of the respondents 47.6% define risky sexual behavior as unprotected followed by 2.9% as unusual sexual practice like anal, oral sex. 61.9% of the respondents responded youths are more vulnerable to risky sexual behavior. Regarding predisposing factors of risky sexual behavior, more or less similar 48.6% and 45.7% responded that low parental education an early dating respectively are the predisposing factors of risky sexual behaviors. Regarding knowledge on physical problems due to risky sexual behavior, 84.8% responded HIV/AIDS followed by 68.6% responded unwanted pregnancy, 21.9% responded genital injuries, 15.2% responded chronic pain as the physical problems while only 6.7% and 5.7% respondents responded mood changes and insomnia as the physical problems respectively. Likewise, 77.1% responded depression, 44.8% responded suicidal thought, 25.7% responded fear and 14.3% responded anxiety as the psychological problems due to risky sexual behaviors while 23.8% and 4.8% of the respondents responded lack of family support and nausea as the psychological problems. Majority of the respondents 50.5% responded using a condom protects from risky sexual behavior.

There are total 13 attitude related items which were based on strongly agree, agree, disagree and strongly disagree. Out of the total 105 respondents, majority 32.4% agree that a contraceptive decreases the sex drive while 12.4% strongly disagree to it. Majority of the respondents, 68.6% strongly agree that risky sexual behavior invite for various health consequences including physical, mental and social consequences while 1.9% respondents strongly disagree to it. The highest 38.1% respondents disagree that boys put girls under pressure to have sex while 27.6% respondents agree to it and 10.5% respondents strongly disagree to it. 44.8% respondents disagree that condoms are not good for youth because they encourage them to have sex, 23.8% respondents agree to it while lowest 13.3% respondents strongly disagree to it. Similarly, majority of the respondents 34.3% strongly agree that girls do not use condom because they trust their partners while lowest 17.1% strongly disagree to it. Majority 42.9% respondents disagree to

the idea of sexual abstinence as the best way of avoiding STDs while 18.1% respondents strongly agree to it. The highest 50.5% respondents agree that watching/reading pornographic materials can contribute to risky sexual practices while the lowest 2.9% respondents strongly disagree to it. Majority 67.6% respondents agree that drinking alcoholic beverages prior to sexual intercourse contribute to risky sexual practices while the minority 3.8% respondents strongly disagree to it. Majority of the respondents 41.9% agree that at the beginning of the relationship my partner and I practice safe sex, but the more comfortable we become, the less we protect ourselves while the minority of the respondents 13.3% strongly disagrees to it. Similarly, 46.7% respondents disagree to consider himself or herself irresponsible when it comes to practicing safe sex while 12.4% respondents strongly agree to it. Similarly, majority 47.6% respondents strongly agree that I am most concerned about getting HIV if I have unprotected sexual intercourse while minority 1.9% strongly disagrees to it. Majority of the respondents 47.6% agree that I am most concerned about getting STDs aside from HIV while minority of the respondents 2.9% strongly disagrees to it. Majority of the respondents 45.7% strongly agree that I am most concerned about unwanted pregnancy while the minority of the respondents disagree to it.

This study showed that out of 105 respondents, 55.2% respondents date only one person while 7.6% date a lot of people. Out of 105 respondents, majority of the respondents 79.0% respondents were still as virgin, 15.2% had their first their first sexual intercourse at more than 17 years of age while 5.7% were less than 17 years during their first sexual intercourse.

Out of 22 respondents who were sexually active, 45.45% had one-two current sexual partners, 9.09% had three current sexual partners and 27.27% had more than three sexual partners. Majority 54.54% respondents had sexual intercourse with only one individual while only 4.54% had sexual intercourse with more than ten individuals. 77.27% of respondents engage once a week in sexual intercourse while 4.54% of respondents engage more than seven times a week. 77.27% of respondents had their first sexual intercourse with fellow youth, 13.63% with commercial sex worker and 9.09% with husband. Regarding sexual practices in the past, 77.27% had vaginal sex with a condom, 13.63% had unprotected vaginal sex and 9.09% had anal sex with a condom. 81.81% of respondents used condom in their last sexual intercourse while 18.18% of respondents did not use condom in their last sexual intercourse.

Out of 22 respondents, 8 respondents faced physical health consequences. 18.18% faced genital itching, 9.09% faced chronic pain, 4.54% and 4.54% respectively faced genital injuries and migraines and other frequent headaches while remaining 63.63% did not faced any physical problems. Similarly out of 22 respondents, 13 respondents faced psychological health consequences. 27.27% faced fear, 9.09% and 9.09% respectively faced suicidal thought and shame or guilt while 4.54%, 4.54% and 4.54% respectively faced depression, anxiety and shock and the remaining 40.90% did not face any psychological problems. Regarding association of knowledge with socio demographic characteristics, respondents' employment status (0.019) had significant association with knowledge regarding risky sexual behavior and health consequences.

Regarding association of attitude with socio demographic characteristics, respondents' caste (0.041) and mother's education (0.022) had significant association with attitude regarding risky sexual behavior and health consequences. Regarding association of practice with socio demographic characteristics, respondents' sex (0.003), caste (0.002), respondents' habit of taking alcohol (0.004), smoking cigarette (0.003) and taking alcoholic beverages by respondents' parents (0.029) had significant association with practice regarding risky sexual behavior and health consequences.

The study was done only among late adolescents i.e. 18 years and 19 years. The study was done kalika Medical & Technical College respectively. The duration for data collection was only 2 weeks. So, it was not possible to include more colleges for the study. The study can also be done in large scale. This study can be done in rural area to assess the knowledge, attitude and practice on risky sexual behavior and health consequences among adolescents. Awareness program can be launched to enhance and upgrade knowledge on risky sexual behavior and its consequences upon the health and decrease the practice of risky sexual behavior.

5. Conclusion

Based on the findings of the study, 99% of the respondents had poor knowledge regarding risky sexual behavior and health consequences. The mean age of the respondents was 18.81. Out of 105 respondents only 22 (20.95%) were sexually active. 5.7% of respondents were below 17 years of age at their first sexual intercourse. 4.54% of respondents engage in sexual intercourse more than seven times a week. Similarly, 13.63% respondents had first sexual intercourse with commercial sex worker. Regarding sexual practices in the past, 13.63% had unprotected vaginal sex and 9.09% had anal sex with a condom. 18.18% of respondents did not use condom in their last sexual intercourse. The physical health consequences faced by the respondents are genital itching, chronic pain, migraines and other frequent headaches and genital injuries. Similarly the psychological health consequences faced by the respondents are fear, suicidal thought, depression, anxiety and shock.

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