

ASSOCIATED FACTORS OF KNOWLEDGE, ATTITUDE AND PRACTICE OF REPRODUCTIVE HEALTH ON STUDENTS IN TIEN HUNG HIGH SCHOOL, DONG HUNG, THAI BINH IN 2023

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ABSTRACT

Background: Reproductive health of adolescents is a critical issue in Vietnam. Improving knowledge on this subject, attitude toward practicing safe intercourse can prevent reproductive health issues, such as HIV/AIDS, unwanted pregnancy, abortion... and enhance adolescent health in general.

Objective: Explore the associated factors on knowledge, attitude and practice toward adolescent reproductive health of students in Tien Hung high school, Dong Hung ward, Thai Binh in 2023.

Methods: A cross-sectional study was conducted. Data were collected from 306 students by self-administered questionnaire. Epidata 3.1 was used for data import, and data analysis was conducted by SPSS 14.0.

Results: Knowledge, attitude and practice toward reproductive health of students associated with: (1) Attendance at adolescent reproductive health education sessions; (2) Sharing information regarding adolescent reproductive health with relatives/friends; (3) Seeking help from health practitioners/school. These factors are statistically significant ($p < 0.05$).

Conclusion: Family members and school administrators should enhance their supports and disclosure, and organize educational programs on adolescent reproductive health for students.

Keywords: Knowledge, attitudes, practices, adolescent reproductive health, associated factors.

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1. INTRODUCTION

In Vietnam, Survey Assessment of Vietnamese Youth in 2003 and 2008 provided a broad perspective on health issues among adolescents, as well as other related aspects on this issue. Regarding sexual intercourse, the rates of adolescents reported to have premarital sex are 7.6% in SAVY 1, and 9.5% in SAVY 2 [1, 2]. However, the age at first-time intercourse is showed to have a downward trend from SAVY 1 to SAVY 2, which are 19.6 and 18.1 respectively. The prevalence of premarital intercourse is different among adolescents from urban areas and from countryside reported in SAVY 2, which are 9% and 7.1% respectively [1, 2]. In terms of contraception use, most of surveyed adolescent reported to have heard of information on pregnancy and family planning from different means of media. Only 7% haven't been exposed to these information. Mainstream media including television, radio, books, magazines, flyers and local loudspeakers were the most impactful sources of information for adolescents. Other impactful sources include teachers (19%), friends and love interests (18%), health workers (14%). Consultancy centers or adolescent clubs were able to reach out to rather small proportion of adolescents [1, 2]. Reported in SAVY 2, the rate of using condom for first-time intercourse in females is relatively lower than in males (14.5% to 36.5% respectively) [2]. Adolescents in urban areas have higher rate than those from countryside. Moreover, this rate is higher among 16-19 year-old age group than among 20-24 year-olds, which showed the improvement of practicing safe sex among younger population (2).

The study aimed to explore the associated factors on knowledge, attitude and practice toward adolescent reproductive health of students in Tien Hung high school, Dong Hung ward, Thai Binh in 2023.

2. METHODS

2.1. Time of study: The study was conducted from March 2023 to October 2023.

2.2. Research subjects and location: Students from Tien Hung high school, Dong Hung ward, Thai Binh

within the age of 16-19 years old were invited to attend the research.

2.3. Study design: A cross-sectional study was conducted.

2.4. Sample size and sampling technique

2.4.1. Sample size:

The minimum sample size for this study was calculated using the one proportion sample formula with relative precision by WHO, which is:

$$n = Z^2_{(1-\alpha/2)} \frac{p(1-p)}{d^2}$$

Where n is the minimum sample size, Z is the statistic corresponding to level of confidence of 95% (which is 1.96), P is the published prevalence of adolescents with adequate knowledge, attitude and practice toward reproductive health reported in SAVY 2 (which is 68.8%), and d is precision (equal 0.05 in this study) [2].

The minimum sample size for this study is 330 observations. Accounting for 10% of potential unfinished respondents, the actual number of participants was 360 students.

2.4.2. Sampling techniques

Applying multistage sampling techniques, each school were divided into 3 grades as clusters. In each cluster, 10 students in each class were randomly picked and invited to participate. With the total number of 12 class, the number of students in each school was 120 students, made up of 360 students in three school.

2.5. Data collection tool

Self-administered questionnaire from SAVY, developed by experts from Hanoi University of Public Health was utilized for data collection [1, 2]. The questionnaire consists of 49 questions with four parts including:

Part 1: General information of students (14 questions)

Part 2: Knowledge of adolescent reproductive health (18 questions)

Part 3: Attitude of students toward adolescent reproductive health (8 questions)

Part 4: Practice of students on adolescent reproductive health (9 questions)



With each question that provided the appropriate answer, the observation will score 1 point. The assessment thresholds are different between dimensions. In particular, for knowledge, with the total of 68 points, the assessment cut-off is 45 points. Any student scores over 45 points is considered having adequate knowledge of adolescent reproductive health, and vice versa. The threshold for attitude dimension is 28 points over 40 points in total, and for practice is 10 points over 15 points in total.

2.6. Data management and analysis

Data were cleansed, coded and imported using EpiData

version 3.1, and were analysed by SPSS 14.0. Summary statistics were applied to describe the characteristics of students, and the status of knowledge, attitudes and practices of adolescent reproductive health among students. Chi-squared test was used to comparing the rates between groups, Fisher's exact test was used when expected value was below 5.

3. RESULTS

3.1. General information regarding adolescent reproductive health of surveyed students

Figure 1: Prevalence of students attending communication sessions on adolescent reproductive health (n=360)

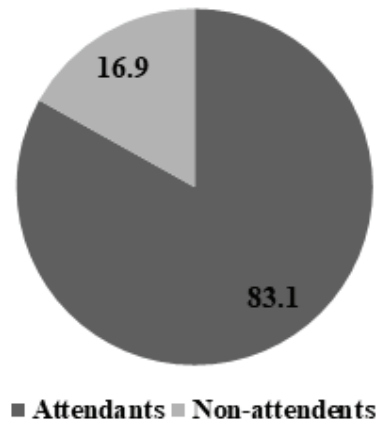


Figure 1 showed that there were 83.1% of students who attended communication sessions on adolescent reproductive health, 16.9% of students did not.

Figure 2. Subjects of sensitive information sharing and help seeking among students on adolescent reproductive health (n=360)

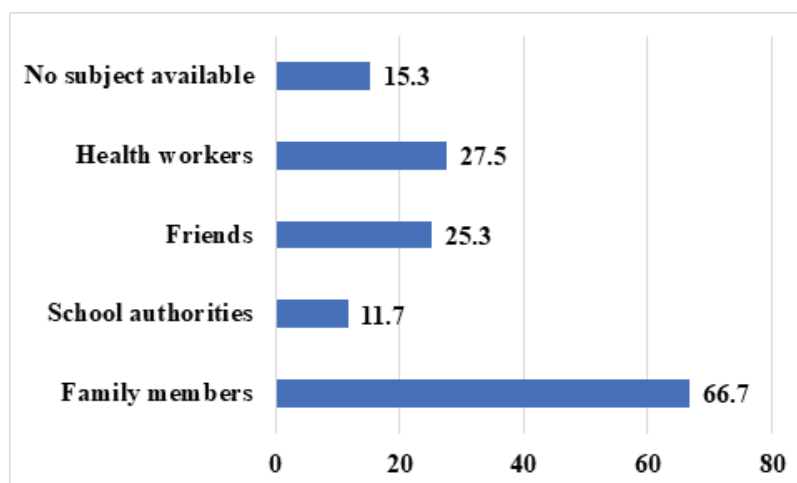


Figure 2 showed that regarding reproductive health issues, 66.7% of students decided to share details and seek for help from family members, 27.5% from health workers, 25.3% from friends. 15.3% of students can not

seek help from anyone.

3.2. Associated factors to knowledge of adolescent reproductive health among students

Table 1. Associated factors to knowledge of adolescent reproductive health among students

Characteristics		Knowledge assessment				OR (95%CI)	p
		Adequate		Not adequate			
		n	%	n	%		
Sex	Female	111	60,0	74	40,0	1	-
	Male	78	44,6	97	55,4	0,54 (0,35-0,83)	0,003
Health education attendance	Non-attendance	23	37,1	39	62,9	1	-
	Attendance	165	55,4	133	44,6	2,10 (1,16-3,88)	0,009
Recent education record	Excellent	48	69,6	21	30,4	1	-
	Good	109	51,2	104	48,8	0,46 (0,26-0,82)	0,008
	Passable	36	46,2	42	53,8	0,38 (0,19-0,74)	0,005
Grade	Grade 10	47	39,2	73	60,8	1	-
	Grade 11	63	52,5	57	47,5	1,72 (1,03-2,87)	0,039
	Grade 12	78	65,0	42	35,0	2,88 (1,71-4,87)	0,001
Reproductive health information sharing	Yes	40	74,1	14	25,9	3,05 (1,54-6,31)	0,001
	No	148	48,4	158	51,6	1	-
Reproductive health information sharing with health workers	Yes	64	65,6	35	35,4	2,02 (1,22-3,37)	0,001
	No	124	47,5	137	52,5	1	-

Table 1 showed that there were 6 related factors to knowledge of adolescent reproductive health of students, including: sex, health education attendance, recent education record, grade, reproductive health information sharing, and sharing with health workers. Accordingly, students with the following characteristics have higher odds of adequate reproductive health

knowledge: being female, attendant of health education sessions, having educational records, higher education grade, willingly sharing sensitive information with health workers and in general. These differences have statistically significant ($p < 0.05$).

3.3. Associated factors to attitude of students toward adolescent reproductive health



Table 2. Associated factors to attitude of students toward adolescent reproductive health (n=306)

Characteristics		Attitude				OR (95%CI)	p
		Positive		Negative			
		Freq.	Rate	Freq.	Rate		
Health education session attendance	Non-attendance	36	58,1	26	41,9	1	-
	Attendance	233	78,2	65	21,8	2,59 (1,39-4,76)	0,001
Parental marital status	Married, live together	247	78,4	68	21,6	1	-
	Divorced/ separated	9	42,3	11	57,7	0,21 (0,08-0,51)	0,001
	Other	13	54,2	11	46,8	0,33 (0,14-0,76)	0,009
Family economic status	Poor/near-poor	9	52,9	8	47,1	1	-
	Regular or better	260	75,8	83	24,2	2,78 (0,9-8,39)	0,034
Reproductive health information sharing	Yes	47	87,0	7	13,0	2,54 (1,08-6,91)	0,02
	No	222	72,5	84	27,5	1	-
School broadcasts reproductive health information	Yes	32	91,4	3	8,6	3,96 (1,19-20,7)	0,014
	No	237	72,9	88	27,1	1	-

There are five factors associated with attitude toward adolescent reproductive health of students as shown in Table 2, including: health education session attendance, parental marital status, family economic status, reproductive health information sharing, and school broadcasts reproductive health information. In particular, students who fit the following characteristics have higher odds of positive attitude: attended health

education sessions, parents live together, regular family economic status, voluntary disclosure of reproductive health information, and studied at school where reproductive health information is broadcasted. These differences are statistically significant ($p < 0.05$)

3.4. Associated factors to practice adolescent reproductive health of students

Table 3. Associated factors to practice adolescent reproductive health of students (n=306)

Characteristics		General practice				OR (95%CI)	p
		Adequate		Not adequate			
		Freq.	Rate	Freq.	Rate		
Reproductive health information sharing	Yes	44	81,5	10	18,5	2,23 (1,05-5,17)	0,027
	No	203	66,3	103	33,7	1	-
Health education session attendance	Non-attendance	217	72,8	81	27,2	2,86 (1,57-5,19)	<0,001*
	Attendance	30	48,4	32	51,6	1	-
School broadcasts reproductive health information	Yes	24	68,6	11	31,4	1	-
	No	277	85,2	48	14,8	2,64 (1,09-6,04)	0,011

Characteristics		General practice				OR (95%CI)	p
		Adequate		Not adequate			
		Freq.	Rate	Freq.	Rate		
Recent education record	Excellent	58	84,1	11	15,9	1	-
	Good	146	68,5	67	31,5	0,41 (0,2-0,84)	0,014
	Passable	60	61,2	38	38,8	0,34 (0,15-0,75)	0,007
Knowledge assessment of reproductive health among students	Adequate					2.43 (1.49-4.0)	<0.05
	Not adequate	120	77,4	35	22,6	2,43 (1,49-4,0)	<0,001*
Attitude assessment toward reproductive health among students	Positive	120	58,5	85	41,5	1	
	Negative	197	72,9	73	27,1	2,16 (1,27-3,64)	0,002*

Table 3 presents four associated factors to practice adolescent reproductive health of students, including: reproductive health information sharing, health education session attendance, school broadcasts reproductive health information, recent education record. Particularly, students with the following characteristics have higher odds of adequate practice on reproductive health: attended health education sessions, had excellent education record, willingly shared reproductive health information, and studied in school where reproductive health information is broadcasted.

4. DISCUSSION

It is vital for the students to attend reproductive health education, enhancing their knowledge and attitudes, and improving practice in adolescent reproductive health. Findings from our research showed that students who attended health education sessions have higher odds (OR = 2.86, CI 95%: 1.57-5.19, $p < 0.05$) of achieving adequate reproductive health practice compared to those who did not. Similar implications were made by Ba Nam et al in their research on high school students from Ninh Kieu, Can Tho. In which, the odds of achieving adequate practice was 3.17 [3]. Nguyen Thi Thuy et al also showed that in Thai Thuy secondary school, Thai Binh, this odds was also 1.71 with statistical significant, favoring students

who attended health education sessions at school [4]. Reproductive health education was proven essential for their healthy behavior promotion among students. Nowadays, schools' systems for the implementation of health education activities and consultancy are yet synchronized or appealed to students. Most of the schools integrated these activities with the education curriculum.

The willingness to share sensitive information regarding reproductive health of students is important. Results from our analysis showed the association in the prevalence of adequate practice and the willingness to share information, with the odds of 2.23 (CI95%: 1.09 – 6.04, $p < 0.05$). Students who sought helps from school authorities for reproductive health assistance had higher odds of achieving adequate practice than those who did not (OR=2.64, CI95%: 1.09-6.04, $p < 0.05$). Similarly, same effects were observed from studies by Vu Viet Hoa and Nguyen Thi Thuy. The odds ratio of this association from the two studies were 2.45 and 2.66, respectively [4, 5]. The appropriateness of knowledge and attitudes regarding reproductive health issues are associated with the adequacy of practice among students. Particularly, the odds ratio of achieving adequate practice is 2.43 (CI95%: 1.49 – 4.0, $p < 0.05$) favoring students with adequate knowledge, and 2.16 (CI95%: 1.27-3.64, $p < 0.05$) favoring students with positive attitude. Reproductive

health education was emphasized on the effects of enhancing students' knowledge and attitude, improving their understandings in self-defence measures towards risk behaviours posed by the society. This activity also helped students to acquire adequate knowledge, attitude and practice on genders and heterosexual relationship. Schools need to reinforce their activities, focusing on genders, reproductive health education, affection and heterosexual friendship, in their education schedule and extracurricular activities to encourage students to willingly share their perspectives and inquiries on the issues. Meanwhile, the consultation on reproductive health for the students also enhances their self-confidence in improving knowledge and attitudes towards adolescent reproductive healthcare services.

5. CONCLUSION

It is vital to reinforce the recurring coordination between family members and school authorities in implementing assistance, information sharing and practice enhancement regarding reproductive health for the students.

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