



DETERMINE THE AWARENESS OF REPRODUCTIVE HEALTH AMONG SCHOOL GOING ADOLESCENTS

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ABSTRACT **BACKGROUND:** Adolescence is ideally a healthy period, having the lowest mortality and morbidity compared with other population age groups. Adolescence is the transitional stage of development between childhood and full adulthood, representing the period of time during which a person is biologically adult but emotionally not at full maturity. Puberty is a unique and distinctive period and is characterized by certain developmental changes that occur in no other time in life span. During adolescence, puberty can occur at anytime between ages thirteen to nineteen year.

MATERIAL AND METHODS: It was a Community based cross sectional study. The study was carried out at senior secondary Govt. and private school (students from class 11th to 12th) of Patna city. All the school going students of class 11th and 12th (late adolescents) of selected schools of Patna city were selected as participants. The proposed study duration was 6 months, Sample size of 800 was calculated at 95% confidence interval and α error of 0.05 assuming willingness for better perception of reproductive health among school going late adolescent level 76.3%.

CONCLUSION: The present study revealed that the majority of the adolescents have correct knowledge about puberty, pregnancy and childbirth, family planning methods, STDs, and request for treatment. Moreover, adolescents had correct knowledge about the appropriate age for marriage and HIV than other STDs. Regarding the hygiene practices, most students had correct practices with respect to menstruation, while a few had incorrect practices. The majority had positive attitudes regarding RH, while a few had negative attitudes. The main reason behind high awareness and knowledge among adolescents about reproductive health is due to change in educational system and easy access to internet. Improved education status of parents also plays an important contribution towards this.

KEYWORDS : School going adolescents, Childhood, Full adulthood.

INTRODUCTION

Adolescence is ideally a healthy period, having the lowest mortality and morbidity compared with other population age groups. Adolescence is the transitional stage of development between childhood and full adulthood, representing the period of time during which a person is biologically adult but emotionally not at full maturity. During this period of life, most children go through the various physical developmental stages of puberty, which often begin around the age of 13. Most of the adolescents go through this phase with little or no knowledge of the body's impending physical and physiological changes.

Adolescence is a period when the individual is vulnerable and exposure to sexually implicit/explicit programs on television and internet can influence their sexual behaviour and make them more permissive towards premarital sex, which is known to influence their academic performance. This can be modified by parental discussion on these matters with their children. There are nearly 1.2 billion adolescents (10- 19 years old) worldwide. Around 243 million of them live in India. From the total population of the adolescents in India around 9.7% of the total population is male adolescents and around 8.7% of the total population is females.

The reproductive and sexual health of young adults is a growing global public health issue. Reproductive health is a vulnerable and complex matter since it is concerned with culture, norm, belief, diverse customs and traditions. The health related problems and needs of the young adults are different from that of the others.

The fact that young adults are now exposed to many kind of changes in values- social, cultural, material and media influence- results in corresponding changes in their typical lifestyle.

Sex education is defined as a broad program that aims to build a strong foundation for lifelong sexual health by acquiring information and attitudes, beliefs and values about one's identity, relationships, and intimacy. Primarily, during adolescence (10-19 years) its provision is a crucial preventative tool, as it is the opportune time when young people experience developmental changes in their physiology and behaviour as they enter adulthood¹.

AIM AND OBJECTIVES

- To study the awareness and perception of reproductive health

among school going late adolescents (class 11th and 12th) and factors associated with it.

- To find out the awareness and perception about reproductive health among school going late adolescents of class 11th and 12th.
- To determine the factors (socio-demographic, academic factors) associated with awareness and perception of reproductive health among school going late adolescents of class 11th and 12th.

MATERIAL AND METHODS

Permission: It was a Community based cross sectional study. At Nalanda Medical College and Hospital Patna Bihar.

Study period: The proposed study duration was 6 months.

Sample size: Sample size was calculated at 95% confidence interval and α error of 0.05 assuming willingness for better perception of reproductive health among school going late adolescent level 76.3% as per seed article 2. At an absolute allowable error of 3% the required sample size for this study was 772 which was further rounded off to 800 as final sample size.

INCLUSION CRITERIA

- Schools having co-education facility and having all three streams i.e. Science, Commerce and arts were included in the present study.
- School students of class 11th to 12th
- Student between age 16 to 19 years
- Students present on the day of study

EXCLUSION CRITERIA

- Absent students during two visits of school for study survey.
- Student on psychiatric consultation or critical ill.
- Those who refused to participate in the present study

RESULTS

Table 1: Age of Respondent

Age of respondent	Frequency	Percent
16 years	261	32.6
17 years	274	34.3
18 years	265	33.1
Total	800	100.0

The above result showed that highest participants (34.3%) were 17 year of age.

Table 2: Sex Distribution of Study Population

Sex	Frequency	Percent
Female	413	51.6
Male	387	48.4
Total	800	100.0

Above result showed that majority was of female respondents (51.6%) and remaining (48.4%) were males.

Table 3: Awareness regarding the process of conception

Process of conception		Sex		Total
		Male	Female	
When male & female do intercourse.	Count	197	204	401
	%	50.9%	49.4%	50.1%
When sperms of male enter in ovum of female	Count	190	209	399
	%	49.1%	50.6%	49.9%
Total	Count	387	413	800
	%	100.0%	100.0%	100.0%

As per the results, majority of the males (50.9%) feel that female conceives when male and female do intercourse. On the other hand, majority of the females (50.6%) feel that female conceives when sperms of male enter into ovum of female.

Table 4: Individuals with whom adolescents share private talks

Individuals with whom adolescents share private talks		Sex		Total
		Male	Female	
Mother	Count	66	83	149
	%	17.1%	20.1%	18.6%
Father	Count	61	70	131
	%	15.8%	16.9%	16.4%
Classmate	Count	64	67	131
	%	16.5%	16.2%	16.4%
Cousins	Count	68	66	134
	%	17.6%	16.0%	16.8%
Friend	Count	62	54	116
	%	16.0%	13.1%	14.5%
Do not discuss	Count	66	73	139
	%	17.1%	17.7%	17.4%
Total	Count	387	413	800
	%	100.0%	100.0%	100.0%

As per the results, highest number of males (17.6%) shares their private talks with cousins whereas highest number of females (20.1%) shares with their father.

Table 5: Source of exposure to sex related literature/visuals

Source		Sex		Total
		Male	Female	
Magazine	Count	74	89	163
	%	19.1%	21.5%	20.4%
Sex Related photo	Count	83	78	161
	%	21.4%	18.9%	20.1%
Adult movies	Count	85	85	170
	%	22.0%	20.6%	21.3%
Website of sex on internet	Count	82	87	169
	%	21.2%	21.1%	21.1%
Do not want to tell	Count	63	74	137
	%	16.3%	17.9%	17.1%
Total	Count	387	413	800
	%	100.0%	100.0%	100.0%

As per the above table, highest number of male participants (22%) watches adult movies, whereas, highest number of female participants (21.5%) refer magazines to gain reproduction and sex education.

Table 6: Awareness about person responsible for determining the sex of the foetus

Person responsible for determining the sex of the foetus.		Sex		Total
		Male	Female	
Mother	Count	134	151	285

	%	34.6%	36.6%	35.6%
Father	Count	135	119	254
	%	34.9%	28.8%	31.8%
Both	Count	118	143	261
	%	30.5%	34.6%	32.6%
Total	Count	387	413	800
	%	100.0%	100.0%	100.0%

Table 7: Individual with who adolescent discuss various sexual and reproductive health problems

Person		Sex		Total
		Male	Female	
Mother	Count	58	74	132
	%	15.0%	17.9%	15.9%
Friends	Count	59	53	112
	%	15.2%	12.8%	14.0%
Father	Count	53	49	102
	%	13.7%	11.9%	13.4%
Brothers/Sisters	Count	53	49	102
	%	13.7%	11.9%	12.8%
Relatives	Count	65	59	124
	%	16.8%	14.3%	15.5%
Teacher	Count	45	59	104
	%	11.6%	14.3%	13.0%
Doctor	Count	54	70	124
	%	14.0%	16.9%	15.5%
Total	Count	387	413	800
	%	100.0%	100.0%	100.0%

As per the above table, highest (16.8%) of the male respondents said that they consult relative about problems related to reproductive and sexual health. On the other hand, highest (17.9%) of the female participants consult mother about problems related to reproductive and sexual health.

Table 8: Good Source Of Awareness About Family Planning According To Adolescents

Source of awareness		Sex		Total
		Male	Female	
Speech	Count	32	30	62
	%	8.3%	7.3%	7.8%
Radio	Count	30	28	58
	%	7.8%	6.8%	7.2%
T.V	Count	36	39	75
	%	9.3%	9.4%	9.4%
News reel	Count	31	41	72
	%	8.0%	9.9%	9.0%
Poster	Count	33	32	65
	%	8.5%	7.7%	8.1%
Internet	Count	43	34	77
	%	11.1%	8.2%	9.6%
Books	Count	37	40	77
	%	9.6%	9.7%	9.6%
Parents	Count	33	36	69
	%	8.5%	8.7%	8.6%
Peer group	Count	20	41	61
	%	5.2%	9.9%	7.6%
Teacher	Count	31	30	61
	%	8.0%	7.3%	7.6%
Counsellor	Count	37	29	66
	%	9.6%	7.0%	8.3%
Doctor	Count	24	33	57
	%	6.2%	8.0%	7.1%
Total	Count	387	413	800
	%	100.0%	100.0%	100.0%

As per the results, highest number of male respondents (11.1%) feels that internet is good source of gaining knowledge about family planning, whereas higher number of female respondents (9.9%) feels that peer group is best source for gaining knowledge about family planning. From the above result it would showed that 97.3% of respondent age 16 years were highly aware. On the other hand 2.7% were less aware. 97.4% of respondent age of 17 years highly aware but

2.6% respondents was less aware. Respondents of age 18 years out of 97.5% were highly aware whereas 2.5% were less aware.

Table 10: Association between awareness and Gender of study population

Sex	Awareness		Total	P- value
	Highly Aware n (%)	Less Aware n (%)		
Male	378 (97.6)	9 (2.4)	387	>0.05
Female	402 (97.3)	11 (2.7)	413	
Total	780 (97.5)	20 (2.5)	800	

From the above result it can be seen that 97.6% were males was highly aware. On the other hand 2.4% were less aware. 97.3% of females were highly aware whereas 2.7% were less aware.

Table 11: Association of awareness regarding menstrual cycle with age of the respondents

What do you know about menstrual cycle? N (%)		Age of respondent			Total	P- value
		16 years	17 years	18 years		
Dirty blood comes out in menstrual cycle	Count	31	41	28	100	>0.05
	%	25.8%	26.3%	20.4%	24.2%	
Menstrual Cycle starts at puberty.	Count	28	33	29	90	
	%	23.3%	21.2%	21.2%	21.8%	
Sign of reproductive maturity	Count	38	40	41	119	
	%	31.7%	25.6%	29.9%	28.8%	
It is a physical process in which blood comes out from vagina every month	Count	23	42	39	104	
	%	19.2%	26.9%	28.5%	25.20%	
Total	Count	120	156	137	413	
	%	100.0%	100.0%	100.0%	100.0%	

From the above result it can be seen that 25.8% of age of respondent of 16 years were comes under Dirty blood comes out in menstrual cycle other than 26.3% of respondent of 17 years and 20.4% of age 18 years respondent also comes under this. 23.3% of 16 years were comes under Menstrual Cycle starts at puberty and respondent of 17 years 21.2% and respondent of age 18 years 21.2% also comes under Menstrual Cycle starts at puberty.

31.7% of respondent age of 16 years comes under Sign of reproductive maturity whereas 25.6% of age 17 years and 29.9% of age 18 years were also categorized in Sign of reproductive maturity

Respondent of age 16 years 19.2% of them were know about It is a physical process in which blood comes out from vagina every month 26.9% of age 17 years and 28.5% of age 18 years were also know about It is a physical process in which blood comes out from vagina every month.

Table 9: Association of awareness regarding menstrual cycle with sex of the respondents

What do you know about menstrual cycle?	N (%)	Sex		Total	P- value
		Male	Female		
Dirty blood comes out in menstrual cycle	Count	0	105	105	<0.05
	%	0.0%	25.4%	13.1%	
Menstrual Cycle starts at puberty.	Count	0	94	94	
	%	0.0%	22.8%	11.8%	
Sign of reproductive maturity	Count	0	110	110	
	%	0.0%	26.6%	13.8%	
It is a physical process in which blood comes out from vagina every month	Count	0	104	104	
	%	0.0%	25.2%	13.0%	
NA	Count	387	0	387	
	%	100.0%	0.0%	48.4%	
Total	Count	387	413	800	
	%	100.0%	100.0%	100.0%	

Result showed that 25.4% of female know about the Dirty blood comes out in menstrual cycle. 22.8% of female know about the Menstrual Cycle starts at puberty. 26.6% of female know about the Sign of

reproductive maturity. 25.2% of female know about the It is a physical process in which blood comes out from vagina every month.

Table 12: Association of age of the adolescent with awareness in context with intercourse during menstruation and pregnancy

Can a woman get pregnant after intercourse during menstruation?	N (%)	Age of respondent			Total	P- value
		16	17	18		
No	Count	162	171	166	499	>0.05
	%	62.1%	62.4%	62.6%	62.3%	
Yes	Count	61	82	75	218	
	%	23.4%	29.9%	28.3%	27.2%	
Do not know	Count	38	21	24	83	
	%	14.5%	7.7%	9.1%	10.3%	
Total	Count	261	274	265	800	
	%	100.0%	100.0%	100.0%	100.0%	

From the above result 62.1% of age 16 years respondents know that a woman do not get pregnant after intercourse during menstruation whereas 62.4% of age group 17 years 62.6% of age 18 years know that a woman do not get pregnant after intercourse during menstruation. 14.5% of age 16 years respondents didn't know can a woman get pregnant after intercourse during menstruation. Whereas 7.7% of 17 years didn't know can a woman get pregnant after intercourse during menstruation. 9.1% of age 18 years didn't know can a woman get pregnant after intercourse during menstruation. 23.4% of age 16 years respondent know about the woman get pregnant after intercourse during menstruation. 29.9% of age group of 17 years knows about the woman get pregnant after intercourse during menstruation. 28.3% of age 18 years respondent were known about woman get pregnant after intercourse during menstruation.

Table 13: Perception of adolescents in context with reproductive health education

Reproductive health education is an important subject matter	Frequency	Percent
Agree	780	97.5
Disagree	9	1.1
Don't Know	11	1.4
Total	800	100.0

In the current study it was found that 97.5% of the participants agreed that reproductive health education is an important subject matter.

Table 14: Perception of adolescents in context with reproductive health education in Indian education system

The India education system is not ready for reproductive health education	Frequency	Percent
Agree	280	35.0
Disagree	259	32.4
Don't Know	261	32.6
Total	800	100.0

In the present study it was found that 35.0% of the participants agreed that the Indian education system is not ready for reproductive health education.

Table 15: Perception of adolescents regarding the role of reproductive health education in prevention of teenage pregnancy

I think reproductive health education is helpful towards preventing teenage pregnancy among the youth	Frequency	Percent
Agree	780	97.5
Don't Know	20	2.5
Total	800	100.0

In the current study 48.4 % of the participants were male and 51.6% of participants were females. On the other hand, in the study of Gupta et al. (2015), 62.9% of the participants were male and 37.0% of the participants were female. Furthermore, the current study the 100% parents are educated on the other hand in the study of Iqbal et al. (2017), 75.3% parents are educated and 24.7% parents are uneducated. In the current study it was found that 97.5% of the participants agreed that reproductive health education is an important subject, 1.1% of them had disagreed and 1.4% of them don't know about it. On the other hand, in the study of Kapinga and Hyera (2015)¹⁶, 74% of the

participants had agreed, 17% of them had disagreed and 9% don't know about it. As per the current study, majority of the participants had knowledge HIV/AIDS. Similarly, Gupta et al. (2015)⁷ found that majority of the participants had knowledge regarding HIV/AIDS.

CONCLUSION

In the light of the current study findings, it is concluded that RH knowledge among the adolescents was satisfactory based. Majority of the participants had awareness regarding reproductive health. The present study revealed that the majority of the adolescents have correct knowledge about puberty, pregnancy and childbirth, family planning methods, STDs, and request for treatment. Moreover, adolescents had correct knowledge about the appropriate age for marriage and HIV than other STDs. Regarding the hygiene practices, most students had correct practices with respect to menstruation, while a few had incorrect practices. The majority had positive attitudes regarding RH, while a few had negative attitudes.

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