Original Article

Knowledge and Attitude Toward Drug Use and Sexual Behavior among Higher Secondary Level Students in Pokhara

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ABSTRACT

Introduction: Adolescent is a period between 10 – 19 years of age, whose behavior is a potential determining factor for their character and behavior of our adults in the future, is highly affected by their knowledge and attitude towards their health. This study was conducted to assess the knowledge and attitude towards drug use and sexual behavior of higher secondary level students in Pokhara, Kaski district.

Methods: An educational institution based cross-sectional study was conducted among the students studying in higher secondary levels and certificate levels. Two stage stratified sampling technique was applied. A structured self administered questionnaire was used as a tool on 942 participants in which responses to statements were measured using a five point Likert scale, out of which some of them also had specific non responses. Data were analyzed using SPSS.

Results: More than 80% of the respondents had satisfactory level of knowledge regarding infection prevention related to sharing of syringe. More than 90% of them are conscious about STDs and sexual issues. The overall tendency to measure the knowledge and attitude towards the statements was tended toward agree in both for using drug (average of 3.34) and sexual behavior (average of 3.39) with greater knowledge on the awareness of drug use and sexual behavior with the possible transmission including HIV. A value 0.7015 for Cronbach's alpha indicates acceptable internal consistency of the items in the scale.

Conclusion: Providing information and education on health related issues will help young people to explore their own attitudes and values, as well as increase their knowledge and understanding of such health issues.

Key words: Adolescents, Attitude, Knowledge, Sexual behavior, Likert scale, Pokhara.

INTRODUCTION

"Adolescent" refers to individuals between the ages of 10-19 years defined by World Health Organization (WHO).[1] It is the period of physical, psychological and social maturation from childhood to adulthood. The health of adolescents is profoundly associated with their behavior and development process. The behavior of adolescents is a potential determining factor for their character and behavior of our adults in the future which is highly affected by their knowledge and attitude toward the matter of interest. Adolescents account nearly one fourth (23.6%) of total population in Nepal and in Kaski 24.65%. Adolescents who are single may be likely to engage in high risk behaviors.[2] Lack of access to adequate information regarding health issues may cause a serious problem to them. To recognize the importance of socioeconomic and cultural factors in prevention efforts related high risk behaviors and others there must be appropriate knowledge related to the concerned behaviors.

According to The World's Youth 2006 Data Sheet (PRB), only a small minority of young people worldwide

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have correct knowledge of HIV/AIDS. Measurable changes in reproductive health knowledge, attitudes or behaviors were obtained by the programs which involved youth. Anecdotal evidence suggested that the activities conducted by youth have an increased success in recruiting young participants, and that they may have increased success in improving knowledge, attitudes, intent and practices of youth target audiences.[3] Poor sexual and reproductive health in adolescents can lead to problems such as teenage pregnancy, sexual exploitation, and gender-based violence and, in some cases, suicide. Children born to adolescents are more likely to die in their first month of life compared with those born to older mothers. A total of 10 per cent of births globally are to an adolescent mothers and about 60,000 of these young women die every year from pregnancy and childbirth complications. Adolescent girls aged 15-19 years run a risk two times higher of dying in childbirth than women aged 20-24.[4] It is known that there remains a significant gap between adolescents having accurate information and its translation into behaviour. Adolescents with low levels of life skills are known to develop high risk behaviours which lead to long lasting health and social consequences.[5] Empirical evidence on sexual behaviour among young people in Nepal is rare, since most of the study focus on knowledge and attitudes. One study shows that sexual behaviour in Nepal is affected by different factors such as age, sex, education, ethnicity, culture and religion.[6]

Nepalese adolescent health and development issues are poorly understood because few studies on the subject have been conducted. The attitudes and behaviors of one group of adolescents are not necessarily consistent among different groups of adolescents. Although extensive research on young people's behaviours in Nepal is rare, existing data reveals that young people do not have adequate access to appropriate information and services about sexual and reproductive health issues.[7] Various studies conducted on knowledge, attitude and practice in the region reveal that the adolescents and young people are looking forward to receive the correct and scientific knowledge about their reproductive and sexual health.[8] Knowledge of preventive practices and negotiation skills are necessary to refrain from unprotected sexual practices.[9]

Results indicated that the Brief Sexual Attitudes Scale is a reliable and valid measure of the four sexual attitudes and has strong psychometric properties. It should be effective and efficient for both research and clinical uses.[10] Measurement scales for attitude have been surrounded by a lot of controversies. There is an extraordinary number and diversity of measurement scales.[11] Likert-type scales it is imperative to calculate and report Cronbach's alpha coefficient for internal consistency reliability for any scales or subscales one may be using. Cronbach's alpha does not provide reliability estimates for single items.[12]

In a transitional phase of adolescents they may adopt harmful behaviors so the study was conducted with an objective to assess the knowledge and attitude of the higher secondary level and equivalent students on drug use and sexual behaviour in Pokhara in which majority of them are adolescents.

METHODS

This was the institution based cross-sectional study performed among the students studying in grade 11, 12 and equivalent levels during September to December 2009. Two stage stratified sampling technique was adopted in which first stage involved selection of 16 academic institutions according to type namely government, private and community and second stage according to disciplines within the academic institutions namely Science and Technology, Management, Humanities and Social Sciences, and Education. Using a self allocated weightage, desired sample was collected from different disciplines of the institutions. A weightage of 35%, 35%, 15% and 15% were given from Science and Technology, Management, Humanities and Social Sciences, and Education respectively to select the samples. More and equal weightage was given to Science and Technology and Management on the assumption that there will be more flow of the respondents in these two disciplines. The schools/campuses were selected purposively. Verbal permission from the concerned authority (Principal, Campus chief, Asst. campus chief, Coordinator) of the higher secondary school/campus was taken before distribution of questionnaire. Pretest was done in Diamond Higher Secondary School, Talchowk, Lekhnath by introducing self administered structured anonymous questionnaire. Finalized questionnaire was then distributed to all participants to fill their responses. Altogether 15 statements were asked to the participants to express agreement or disagreement of a five-point scale. Each degree of agreement is given a numerical value from one to five. Data were analyzed using SPSS (16).

Statements regarding attitude and knowledge towards drug use

1. We have to gain experience on different modes of taking drugs.
2. Peer group influence is one of the factor for initiated using drugs.
3. Sharing of drugs and equipment took place especially when there is scarcity of money.
4. Needle and syringe availability is high and there is no need of needle prescription.
5. It will be less enjoyable while injecting alone.
6. Before engaging sharing injection we should think about it carefully.
7. Sharing syringes puts the intravenous drug users at a greater risk of contracting HIV.

Statements regarding attitude and knowledge towards sexual behavior

1. Sex is a very important part of life.
2. It is good to know as much as possible about sexually transmitted disease.
3. Before engaging into sexual relations we should think about it carefully.
4. It is fun to sexually experiment with strangers.
5. I do not need to be committed to a person to have sex with him/her.
6. I would like to have sex with many partners.
7. Sex is the closest form of communication between two people.
8. Premarital sex is necessary for better sexual life.

RESULTS

Using an equal proportionate method of selection of samples in type of institutions and disproportionate method in disciplines within the institutions, the samples were collected from higher secondary school/ campus. Using two stage stratified sampling technique the data obtained is presented in the table 1.

Table 1: Distribution of samples in disciplines and type of institution

Discipline	Type of institution			Total
	Government	Private	Community	
Science and technology	104	162	64	330
Management	64	152	114	330
Humanities and social sciences	67	0	74	141
Education	79	0	62	141
Total	314	314	314	942

Respondents by age and gender: The majority 844 (89.6%) of the respondents were of the age group 16–19. About 557 (59.1%) males and 385 (40.9%) females were participated in the study. The minimum and the maximum age of the respondents were reported as 15 and 33 years with a mean and standard deviation of 17.72 and 1.588 years respectively.

Analysis of measuring attitude and knowledge in each statement on drug use: In each statement, a weightage of 1, 2, 3, 4, 5 was given to strongly disagree, disagree, undecided, agree and strongly agree respectively to measure both the behavior.

The percentage of responses regarding the statements drug use is presented in table 2.

Table 2: Percentage of response in each possible answer for each statement on drug use

Statement Number	Percentage of Respondents					Weighted Mean Value
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	
1	52.5	21.0	12.2	11.8	2.5	1.91
2	12.7	9.5	11.3	43.1	23.4	3.55
3	13.2	13.3	15.4	41.1	17.1	3.36
4	17.7	16.6	28.1	24.5	13.1	2.99
5	6.3	6.7	72.7	12.0	2.3	2.97
6	5.4	2.5	11.9	28.4	51.8	4.19
7	4.9	1.6	4.0	27.1	62.5	4.41

From the above table it was found that, statement no. 1 was obtained as tended towards disagree; statement no. 2 was obtained as tended toward agree; statement no. 3 was obtained as tended towards agree; statement no. 4 was obtained as not agree; statement no. 5 was obtained as not agree; statement no. 6 was obtained as tended toward strongly agree; statement no. 7 was obtained as tended toward strongly agree.

Analysis of measuring attitude and knowledge in each statement on sexual behavior: The percentage of responses regarding the statements sexual behavior is presented in table 3.

Table 3: Percentage of response in each possible answer for each statement on sexual behavior

Statement Number	Percentage of Respondents					Weighted Mean Value
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	
1	4.5	5.3	11.2	45.3	33.6	3.98
2	2.7	1.0	2.3	27.0	67.1	4.55
3	2.8	1.0	3.0	33.0	60.2	4.47
4	18.6	12.6	47.2	13.8	7.8	2.80
5	14.2	18.1	38.3	21.8	7.6	2.91
6	42.6	18.6	16.8	13.4	8.5	2.27
7	11.7	16.1	18.8	35.7	17.8	3.32
8	20.6	21.4	23.1	22.1	12.8	2.85

From the above table, it was found that statement no. 1 was obtained as tended toward agree; statement no. 2 was obtained as tended toward strongly agree; statement no. 3 was obtained as tended toward strongly agree; statement no. 4 was obtained as not agree; statement no. 5 was obtained as not agree; statement no. 6 was obtained as not agree; statement no. 7 was obtained as tended toward agree; statement no. 8 was obtained as not agree.

Reliability analysis–scale (Alpha) was obtained as follows:

Table 4: Item analysis from SPSS output

Statistics for scale	Mean	Variance	Standard deviation	No. of variables
	50.9769	55.4078	7.4436	15

	Mean	Minimum	Maximum	Range	Max/Min	Variance
Item Means	3.3985	1.9366	4.5793	2.6427	2.3646	.6378
Item Variances	1.2754	.4805	1.8697	1.3892	3.8914	.1924
Inter - item Correlations	.1410	-.1187	.6837	.8024	-5.7617	.0203

Reliability Coefficients: 15 items; Alpha = .7015; Standardized item alpha = .7111
A value 0.7015 for Cronbach's alpha indicates acceptable internal consistency of the items in the scale.

DISCUSSION

Nearly about three fourth (73.5%) of the respondent disagree they have to gain experience on different modes of taking drugs which shows that they were aware of the effect of using drug. Nearly 7 out of 10 (66.5%) agreed that peer group influence is one of the factor for initiated using drugs which reflects the majority of them feel that company choosing is one of the cause. Nearly 6 out of 10 agreed that sharing of drugs and equipment took place especially when there is scarcity of money which shows economic condition is also one of the responsible factor for the equipments. Nearly 4 out of 10 (37.6%) of the respondents gave the opinion on prescription is not necessary to buy needles. Nearly three fourth (72.7%) remained undecided on the statement it will be less enjoyable while injecting alone which shows majority of them had not experienced on injecting drug. A good proportion of knowledge among respondents (80.2%) was found in the statement before engaging sharing injection we should think about it carefully and similarly 9 out of 10 (89.6%) have a knowledge on the transmission of HIV by showing agreement on the statement sharing syringes puts the intravenous drug users at a greater risk of contracting HIV which reveals that majority of the respondents had satisfactory level of knowledge regarding infection prevention related to sharing of syringe.

More than three fourth (78.9%) agreed that sex is a very important part of life. More than 9 out of 10 (94.1%) agreed on the statement it is good to know as much

as possible about sexually transmitted disease (STDs) which shows most of the respondents were aware of the STDs. Also the similar proportion as before (93.2%) agreed on before engaging into sexual relations we should think about it carefully which shows that most of them are conscious about STDs and sexual issues. Majority (47.2%) remained undecided on it is fun to sexually experiment with strangers which may be they had not kept a sexual relation till yet with stranger. Similarly, majority (38.2%) remained undecided on I do not need to be committed to a person to have sex with him/her also. More than 6 out of 10 (61.2%) would not like to have sex with many partners which also indicate the awareness toward possibilities of STDs. More than half (53.5%) agree that sex is the closest form of communication between two people and 4 out of 10 (42%) disagreed on premarital sex is necessary for better sexual life which is till now can not be adopted in our society. Also more than 3 out of 10 (34.9%) agreed on the above statement which seems the desire of sexual activity in this age.

CONCLUSION

The respondents have a good knowledge on transmission of disease by injecting drug as well as unsafe sexual practices along with the awareness on these issues. The overall tendency to measure the knowledge and attitude based on the research tools was tended toward agree in both for using drug (average of 3.34) and sexual behavior (average of 3.39). Acceptable internal consistency of the items in the scale was obtained in testing the reliability of the tools used. To develop to their full potential, enjoy a healthy and responsible adulthood, proper environment and adequate support should be created and provided to enable them. Providing information and education on health related issues will help young people explore their own attitudes, values and options, as well as increase their knowledge and understanding of such health issues.

Acknowledgement: I would like to express my sincere and heartfelt gratitude to Prof. Naveen Shrestha for his guidance and generous support during the entire process of research activity along with Faculty of Science and Technology, Pokhara University for providing the research grant and to my colleagues of School of Health and Allied Sciences, Pokhara University for their manifold support. Special thanks goes to Principal, Campus chief, Asst. Campus chief, Coordinators of the selected higher secondary school/ campus on the study for providing great help during the process of data collection. Thank are also to all the respondents for providing their valuable time on filling the questionnaire.

REFERENCES

1. WHO. The Health of Young People: A Challenge and A Promise. Geneva: World Health Organization; 1993.
2. CBS. Population monograph of Nepal. Vol. II, Central Bureau of Statistics; 2003.
3. HIV/AIDS & Communities: Involving Children and Youth as Part of the Solution. Christian Children's Fund, Inc.; 2008.
4. Peter F. Chen. HIV/AIDS Prevention among Young People in East and South-East Asia in the Context of Reproductive and Sexual Health. Asia-Pacific Population Journal; April 2008.
5. Sharma S. Measuring life skills of adolescents in a secondary school of Kathmandu: an experience. KUMJ (2003), Vol. 1, No. 3, Issue 3, 170-176.
6. Dahal G, Hennink M and Hinde A. Risky sexual behaviour among Young Men in Nepal, Applications and Policy Working Paper A05/01.England: Southhampton University; 2005.
7. Pradhan A and Strachan M. Adolescent Reproductive Health in Nepal, Status, Policies, Programs and Issues. Kathmandu: POLICY Project; 2003.
8. Capoor I and Patel P. Adolescent and Young People's issues and concerns in South Asia. Challenges Ahead Centre for Health Education Training and Nutrition Awareness (CHETNA); 2006.
9. Brown A, Jejeebhoy S, Shah I and Yount K. Sexual relations among young people in developing countries: evidence from WHO case studies. Geneva: World Health Organization; 2001.
10. Clyde Hendrick, Susan S. Hendrick, and Darcy A. Reich. 2006; The Brief Sexual Attitudes Scale. Journal of Sex Research; 43(1):76-86.
11. Pauline V. Young, Scientific Social Surveys and Research. Fourth Edition, Prentice Hall, India Publisher, New Delhi; 2000.
12. Joseph A. Gliem, Rosemary R. Gliem Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. Midwest Research to Practice Conference in Adult, Continuing, and Community Education; 2003: 82 – 88.