

Factors Associated with Tobacco Use among Female Adolescent Students in Dharan Municipality of Eastern Nepal

Pradhan PMS,¹Kalra S²

¹Department of Community Medicine and Public Health, Institute of Medicine, Tribhuvan University, Nepal, ²MD Anderson Cancer Center, Houston, Texas, United States.

ABSTRACT

Background: Rising trend of female tobacco use is a serious concern in South East Asia Region. Gender differences in tobacco use is likely to be reduced in the future with continuous modernization in low and middle income countries like Nepal.

Methods: Pre tested self administered questionnaire adapted from Global Youth Tobacco Survey was used to assess tobacco use among the representative sample of 618 female adolescent students selected by stratified random sampling from different schools of Dharan Municipality from July 2011 to July 2012. Chi square test and binary logistic regression were applied. Probability of significance was set at 5%.

Results: Prevalence of ever tobacco use was 4% (95% CI 2.4% to 5.5%). The mean age of initiation of tobacco smoking was 13.58 years (SD = 1.71) and that of tobacco chewing was 13.80 years (SD = 1.47). More than a third of the tobacco users (36%) consumed tobacco at home whereas three fifth (60%) of the users purchased tobacco directly from the shops. The major reasons behind initiation of tobacco use were for recreational use (32%), pressure from friends (32%) and to relieve pain or stress in life (28%). Multivariate analysis showed that ever tobacco use was significantly associated with ever use of alcohol (AOR: 7.54, 95% CI: 2.61 to 21.78).

Conclusions: School and college based awareness raising campaigns are required for female adolescent students to counter the rising tobacco use (smoking and smokeless). Interventions like health education should focus on tobacco to prevent initiation during adolescence.

Keywords: Tobacco; female; adolescent; Nepal.

INTRODUCTION

Tobacco use is a major cause of premature disease and death.¹ Just as global tobacco consumption is shifting between the industrialized and developing countries, the tobacco pandemic is spreading to female population.²

Unlike adults, differences in smoking prevalence between young male and female smokers are less evident.² No differences in cigarette smoking by gender were observed in 87 of the 151 sites where the Global Youth Tobacco Survey (GYTS) was conducted from 2000 to 2007.² Such narrowing of gender gap indicates an increase of tobacco use among young females.

GYTS conducted in Nepal in 2011 showed that 10% of

students had ever smoked cigarettes among which 5.9% were girls.³ Continuing modernization is likely to result in high prevalence of smoking among teen girls in Asian countries.⁴ This study aimed to explore the prevalence of tobacco use and associated factors among female adolescent students of Dharan Municipality in Eastern Nepal.

METHODS

This was a cross sectional study conducted in Dharan Municipality of Sunsari district of Eastern Nepal in July 2011.

Data for this study was obtained from a cross sectional

Correspondence: Dr Pramil Man Singh Pradhan, Department of Community Medicine and Public Health, Institute of Medicine, Tribhuvan University, Kathmandu, Nepal. Email: pramil.pradhan@gmail.com, Phone: +9779841238435.

questionnaire survey conducted to assess the prevalence of tobacco use among adolescent students of Dharan Municipality.⁵ Students who were in middle (14-15 years) and late adolescence (16-19 years) studying in grade 9, 10, 11 and 12 in different schools of Dharan Municipality were included. From the list of 87 schools (80 private and 7 government schools), stratified random sampling with proportionate allocation technique was carried out according to the type of schools. Since the number of students in grades 9-12 in each school was not known, a number of 100 students per school were assumed. This gave the total assumed population size to be 8700. Based on population proportionate to size, 1337 students from private and 117 students from government schools were included in the study sample. We randomly selected 15 private schools and two government schools to enroll the calculated number of students assuming 100 students from each school. This was followed by random selection of classes from the selected schools.⁵ All the students from the selected classes were included in the study. Out of 1312 students surveyed by stratified random sampling, 618 were females and considered as the final sample for this study.

Data collection was carried out using a pre tested self-administered questionnaire adapted from Global Youth Tobacco Survey. Questionnaire was pre tested among adolescent students in neighboring town (Itahari) and necessary modifications were done. The students were briefed on the questionnaire and how to respond to each question prior to collection of data.

Ever user: Ever user of tobacco was defined as one who had not used any form of tobacco (smoked or chewed) in the past 1 month but had tried in the past. To assess the ever use, students were asked, 'Prior to the past one month, have you ever smoked or chewed tobacco?' A positive response to the above question was then followed up with question on type of tobacco consumed. Ever use of tobacco was the outcome variable in this study.

Current user: Current user was defined as one who had used any form of tobacco (smoked or chewed) in the past 1 month.

The following independent variables were chosen based on the previous literature: age group, type of school, type of family, ethnicity, pocket money, parental occupation, parental tobacco use and ever use of alcohol. Type of school was categorized into private and government schools due to the difference in the school environment. Ethnicity was classified into Brahmin/Chhetri, Janajati, Dalit and Terai Major Caste as per the division proposed by Government of Nepal.⁶ Type of family was divided into

nuclear and joint family assuming that nuclear families play protective role in tobacco use. Since it was not possible to estimate a valid socioeconomic status of the family from the students, we used parental occupation as an explanatory variable. Age and pocket money were retained as continuous variables for regression analysis.

Data was entered into Microsoft Excel and analyzed using Statistical Package for Social Sciences (SPSS) Version 17 (SPSS Inc. Released 2008. SPSS Statistics for Windows, Version 17.0. Chicago: SPSS Inc). Descriptive statistics were calculated in terms of frequency, percentage, mean, median, standard deviation (SD) and inter-quartile range (IQR). Bivariate analysis was performed using the Chi Square test. This was followed by binary logistic regression analysis (Enter Method) to determine the independence of association after controlling for potential confounders. Relative Standard Error was calculated for statistically significant odds ratio. Goodness of fit of the model was tested by Homer and Lemeshow test. Probability of significance was set at 5%.

Ethical clearance for this study was acquired from Institution Ethical Review Board (IERB) of B.P. Koirala Institute of Health Sciences, Dharan, Nepal. Informed consent was taken from all the participants and written permission obtained from the school authorities before interaction with the students. Participation in the study was entirely voluntary and full confidentiality of the responses was maintained after clear explanation of the objectives of the study. No teacher or school personnel were allowed in the classroom during the data collection in order to help prevent response bias from the students.

RESULTS

Mean age of the participants was 15.41 years (SD 1.24). There was almost equal representation of students from middle (14-15 years) and late (16-19) adolescence and majority of them attended private schools. Majority of students were Hindu by religion (81.7%) and Janajati by ethnicity (62.3%). Other religions followed by the students were Christianity, Muslim, Jainism and Heavenly path. (table 1)

Table 1. Socio demographic characteristics of the participants (n=618)

Characteristic	Frequency	Percentage
Age Group (years)		
14-15	368	59.5
16-19	250	40.5
Type of School		
Private	538	87.1
Government	80	12.9

Education level		
9	289	46.8
10	181	29.3
11	72	11.7
12	76	12.3
Religion		
Hindu	505	81.7
Buddhist	45	7.3
Kirat	30	4.9
Others	38	6.1
Ethnicity		
Brahmin/Chhetri	152	24.6
Janjati	385	62.3
Dalit	39	6.3
Terai major Caste		
	42	6.8

Two-thirds (66.8%) of the participants belonged to nuclear type of family. Nearly 43% of the students gave positive history of tobacco use by their parents. Only 5.5% of the students had ever used alcohol.

The prevalence of ever tobacco use was 4% (95% CI 2.4% to 5.5%) in this study. The prevalence of current tobacco use was 2.4% (95% CI 1.2% to 3.5%). The proportion of ever smokers was 3% (95% CI 1.6% to 4.4%) whereas that of ever chewers of tobacco was 1.6% (95% CI 0.6% to 2.5%). All of the ever smokers had consumed cigarettes. Among the ever chewers of tobacco, 60% (6/10) consumed Paan Masala (a mixture of betel leaf with lime, areca nut, clove, cardamom, mint, tobacco, essence and other ingredients), 30% (3/10) Zarda (small pieces of tobacco leaves with slaked lime and spices boiled and dried) and 10% (1/10) Surti (dried tobacco leaves).

The mean age of initiation of tobacco smoking was 13.58 years (SD =1.71) and that of tobacco chewing was 13.80 years (SD = 1.47). Among the ever users of tobacco, majority preferred to consume tobacco at home (36%), friend’s house (36%) and public places (16%). When asked about the most common source of tobacco, three-fifth of the ever users bought it from the shops (60%). The major reasons behind initiation of tobacco use were for recreational use (32%), pressure from friends (32%), to relieve pain or stress in life (28%) and seeing a family member smoke/chew tobacco (4%).

The median pocket money received by the female adolescents was Nepalese rupees (NRs.) 500 per month (IQR 300-950; NRs. 16.66 or 0.16 USA dollars per day). The ever users of tobacco spent one-tenth of their pocket money on purchasing tobacco products (Median expenditure NRs. 50, IQR 30-100).

Female adolescents from government schools were more likely to ever use tobacco than those studying in private schools (OR=1.73; 95% CI 0.55 to 5.06, p value=0.283). Students belonging to nuclear families were more likely to ever use tobacco compared to those from joint families (OR=1.36; 95%CI 0.56 to 3.28, p value=0.459). Those students who were Janajati by ethnicity were nine times more likely to ever use tobacco than Brahmins/Chhetris (OR=9.15; 95% CI 1.30 to 184.03, p value=0.021). Students whose fathers were either retired or unemployed were more likely to ever use tobacco than those whose fathers were involved in service or professional jobs (OR=4.43; 95% CI 0.73 to 25.71, p value=0.348). Students whose mothers were farmers or housemakers were less likely to ever use of tobacco than those whose mothers were involved in service or professional jobs (OR=0.76; 95% CI 0.23 to 2.73, p value=0.502). (table 2)

Table 2. Factors affecting ever use of tobacco: bivariate analysis (n=618)

Characteristics	Ever user n(%)	Non user n(%)	Unadjusted OR (95% CI)
Type of School			
Private	20 (3.7)	518 (96.3)	1
Government	5 (6.3)	75 (93.8)	1.73 (0.55-5.06)
Type of family			
Joint	10 (4.9)	195 (95.1)	1
Nuclear	15 (3.6)	398 (96.4)	1.36 (0.56-3.28)
Ethnicity			
Brahmin/Chhetri	1 (0.7)	151 (99.3)	1
Janajati	22 (5.7)	363 (94.3)	9.15 (1.30-184.03)
Dalit/Terai Major Caste	2 (2.5)	79 (97.5)	3.82 (0.27-108.21)
Father’s occupation			
Service/Professional	4 (2.9)	136 (97.1)	1
Retired/Unemployed	3 (11.5)	23 (88.5)	4.43 (0.73-25.71)
Farmer	2 (5.1)	37 (94.9)	1.84 (0.22-12.34)
Business	8 (3.7)	211 (96.3)	1.29 (0.34-5.20)
Foreign/Skilled/Semiskilled	8 (4.7)	162 (95.3)	1.68 (0.45-6.79)
Mother’s occupation			
Service/Professional	4 (4.6)	83 (95.4)	1
Foreign/Skilled/Semiskilled	3 (7.0)	40 (93)	1.56 (0.26-8.78)
Housemaker/Farmer	17 (3.5)	466 (96.5)	0.76 (0.23-2.73)
Parental tobacco use			
Absent	13 (3.7)	335 (96.3)	1
Present	12 (4.4)	258 (95.6)	1.20 (0.50-2.85)
Ever use of alcohol			
Absent	18 (3.1)	566 (96.9)	1
Present	7 (20.6)	27(79.4)	8.15 (2.81-23)

Increase in age decreased the odds of the female adolescents ever using tobacco (OR=0.97; 95% CI 0.68

to 1.39). Students from government schools were more likely to ever use tobacco than those from private schools (OR=2.03; 95% CI 0.54 to 7.60). Students belonging to Janajati ethnicity had higher odds of ever tobacco use compared to Brahmins/Chhetris (OR=6.79; 95% CI 0.863 to 53.54). Those female adolescents whose fathers were either retired or unemployed were four times more likely to ever use tobacco than those whose fathers were in service of professional jobs (OR= 4.35; 95% CI 0.77 to 24.58). However, if the students' mothers were housemakers or farmers, it showed a protective effect towards ever use of tobacco (OR=0.60; 95% CI 0.17 to 2.12). Parental tobacco use showed a protective effect towards ever tobacco use by the female student (OR=0.93; 95% CI 0.38 to 2.22). Students who ever used alcohol were nearly seven times more likely to ever use tobacco (OR=7.54; 95% CI 2.61 to 21.78; Relative Standard Error 7.17%). Increase in monthly pocket money did not have any effect on ever use tobacco (OR=1.00; 95% CI 0.99 to 1.00). (table 3)

Table 3. Factors affecting ever tobacco use: multivariate analysis (n=618)

Characteristic	Adjusted OR (95% CI)
Age	0.97 (0.68 to 1.39)
Type of School	
Private	1
Government	2.03 (0.54 to 7.60)
Type of family	
Joint	1
Nuclear	0.95 (0.38 to 2.35)
Ethnicity	
Brahmin/Chhetri	1
Janajati	6.79 (0.86 to 53.54)
Dalit/Terai Major Caste	3.33 (0.28 to 39.82)
Father's occupation	
Service/Professional	1
Retired/Unemployed	4.35 (0.77 to 24.58)
Farmer	1.08 (0.13 to 8.99)
Business	1.32 (0.35 to 4.92)
Foreign/Skilled/Semiskilled	1.21 (0.30 to 4.88)
Mother's occupation	
Service/Professional	1
Foreign/Skilled/Semiskilled	0.94 (0.14 to 6.14)
Housemaker/Farmer	0.60 (0.17 to 2.12)
Parental tobacco use	
Absent	1
Present	0.93 (0.38 to 2.22)
Ever use of alcohol	
Absent	1

Present	7.54 (2.61 to 21.78)
Pocket money per month	1.00 (0.99 to 1.00)
-2 Log likelihood= 174.259, $\chi^2= 3.88$, df= 8, p=0.868	

DISCUSSION

Tobacco use by female youth has been reported to be lower compared to males across different nations of South-East Asia as per the respective national GYTS (8.3% in India, 3.4% in Maldives, 5.8% in Sri Lanka, 5.1% in Bangladesh).⁷ Higher prevalence of ever use of tobacco has been reported from various places in India (15% in Chandigarh, 4.8% in Haryana, 3.7% in Himachal, 5.3% in Punjab and 10.9% in Goa).^{8,9} The prevalence of ever use of tobacco for female adolescent students in this study was higher than that of a similar study conducted in Western part of Nepal among junior college going female students (2.9%).¹⁰ Although this difference was not large (4% vs. 2.9%), it signals a rising trend in tobacco use among the female youth of Nepal during the course of time.

Prevalence of girls who ever smoked was 5.9% in GYTS Nepal 2011 which was almost two times more than that reported in our study. The fact that GYTS Nepal is a nation-wide survey conducted among students of younger age group (13 to 15 years) could have attributed to the difference which is an alarming sign as well. In a study conducted among similar population of female students from grade 8-12 in Karachi, Pakistan, the prevalence of ever smokers was 16.3%.¹¹ Karachi is the largest metropolitan city of Pakistan. Dharan, a rapidly urbanizing municipality of Eastern Nepal could show comparable figures in the future.

The age of initiation of tobacco use in our study was comparable to similar studies in secondary schools from Western Nepal, Bangladesh and India where age of initiation was 12.40 years, 14 years and 10.2% respectively.¹²⁻¹⁴ In most settings, the initiation usually occurs during the period of early to middle adolescence. In an adolescent survey from China, age of initiation of as early as 10 years has been reported for girls.¹⁵ Adolescents who begin smoking at a younger age are more likely to become regular smokers and are less likely to quit smoking.² Once the habit is initiated, adolescent females have more difficulty quitting smoking than males.¹⁶

Nearly 13% of the female ever smokers preferred to smoke in public places and 4.8% purchased cigarettes from a shop near home in a study from Pakistan.¹¹ In our study, 16% of ever smokers consumed tobacco in public places and majority (60%) purchased tobacco from the shops. These findings are striking in context to Nepal

taking into consideration that smoking or consuming tobacco in public places and selling of tobacco products to a person below the age of 18 years are serious offences as per Tobacco Product Control and Regulatory Act 2011.¹⁷

Major reasons behind initiation of tobacco use were recreational use and peer pressure. Adolescent smokers have less knowledge about the negative consequences of smoking than their non-smoking counterparts, discount the addictive property of tobacco, and negate the risks of experimental smoking.¹⁸ Peer pressure is another factor that is consistently associated with initiation and maintenance of tobacco use among adolescent boys and girls. Adolescents may even regard smoking as a means of coping with the stress, anxiety and depression associated with lack of self-confidence.²

Increase in age decreased the odds of tobacco use in this study. Smoking initiation usually occurs during adolescence, and prevalence increases until early or middle adulthood, beyond which smoking declines with age. Similar study from rural Virginia reported decreased odds of smoking by 0.95 with increase in age.¹⁹ Trends by age within a country are based on changes in the rate and age of initiation and patterns of smoking cessation, which change over time as a result of the interplay between pro-tobacco and anti-tobacco forces.²

Greater likelihood of tobacco use among the Janajatis could be explained from the fact that Janajati ethnicity mainly comprises people originating from the hilly regions of Nepal. It has been mentioned that teen smoking is more prevalent among Hill residents than among Terai residents, especially for girls, perhaps due to ethnic diversity.⁴ In a similar study from Western Nepal, adolescent students of the Gurung/Magar ethnic groups were 1.48 times more likely to use tobacco than those from the Brahmin/Chhetri ethnic group.²⁰

Parental tobacco use did not increase the likelihood of tobacco use among the girls in our study. A cross country comparison of GYTS among different South-Asian countries including Nepal did not show any effect of parental tobacco use on their children's tobacco usage.²¹ Data from a nationally representative sample in New Zealand did not show gender-specific associations of parental smoking with adolescent smoking for the same sex, although it found that parental smoking behavior in combination with other factors under parental control (i.e. provision of pocket money and allowing smoking in the home) is a key determinant of daily smoking by adolescents.²² The finding from this study that the girls whose mothers were housewives by occupation, who could better supervise the children at home, had lesser

chances of tobacco use could be a reflection of this fact.

Greater likelihood of ever tobacco use existed among girls who had the history of ever use of alcohol. This finding is consistent with the study from Western Nepal where ever alcoholics were four times more likely to ever smoke.¹³ Tobacco and alcohol pose the greatest threat to the future health of adolescent girls. Alcohol is the most used psychoactive substance among adolescents. Smoking significantly increases in adolescents who have other risk behaviors such as the consumption of illegal drugs and alcohol.²³

Our study had few limitations. In conservative societies, it is very likely that tobacco use based on self report may be under-reported and biomarkers such as urinary cotinine levels were not used to validate the responses in this study. However, anonymity for the respondents does facilitate in honest responses. Sample size of our study was small and limited to those female students present at school at the time of the survey. Due to the study design being cross sectional, the temporal association between predictor variables and tobacco use could not be established.

CONCLUSIONS

Tobacco use among the adolescent girls is in the rising trend in the urbanizing towns of Nepal like Dharan Municipality. Ever users of alcohol have significantly higher chances of consuming tobacco thereby increasing the risk of ill health in the future posed by these two psychoactive substances. Women specific health education and quitting programs are essential to stop the rising prevalence of tobacco use among women. Awareness rising campaigns and anti-tobacco efforts should be targeted to vulnerable groups like adolescent girls in order to prevent this epidemic from spreading further.

Conflict of interest: None declared

REFERENCES

1. Detels R, Beaglehole R, Lansang M, Gulliford M. Oxford Textbook of Public Health. 5th ed. New York: Oxford University Press; 2009.
2. WHO. Gender, women, and the tobacco epidemic [Internet]. 2010 [cited 2015 Apr 4]. Available from: http://whqlibdoc.who.int/publications/2010/9789241599511_eng.pdf
3. WHO. Global Youth Tobacco Survey (GYTS) Fact Sheet [Internet]. [cited 2015 Apr 5]. Available from: <http://>

- www.searo.who.int/entity/noncommunicable_diseases/data/nep_gyts_fs_2011.pdf
4. Choe MK, Thapa S, Podhisita C, Raymundo C, Hui-Sheng L, Achmad S. The teen tobacco epidemic in Asia: Indonesia, Nepal, Philippines, Taiwan, and Thailand. *J Youth Stud* [Internet]. 2004;7(1):73–87. Available from: <https://pallas2.tcl.sc.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=13310082&site=ehost-live>
 5. Pradhan PMS, Niraula SR, Ghimire A, Singh SB, Pokharel PK. Tobacco use and associated factors among adolescent students in Dharan, Eastern Nepal: a cross-sectional questionnaire survey. *BMJ Open*. 2013;3(e002123).
 6. Government of Nepal Central Bureau of Statistics. *Population Monograph of Nepal Volume 1*. Kathmandu; 2003.
 7. Sinha D, Palipudi K, Rolle I, Asma S, Rinchen S. Tobacco use among youth and adults in member countries of South-East Asia region: Review of findings from surveys under the global tobacco surveillance system. *Indian J Public Health*. 2011;55(3):169–76.
 8. Jindal S, Aggarwal A, Gupta D, Kashyap S, Chaudhary D. Prevalence of Tobacco Use Among School Going Youth in North Indian States. *Indian J Chest Dis Allied Sci*. 2004;47:161–6.
 9. Pednekar M, Gupta P. Tobacco Use Among School Students in Goa, India. *Indian J Public Heal*. 2004;48(3):147–52.
 10. Sreeramareddy CT, Ramakrishnareddy N, Harsha Kumar H, Sathian B, Arokiasamy JT. Prevalence, distribution and correlates of tobacco smoking and chewing in Nepal: a secondary data analysis of Nepal Demographic and Health Survey-2006. *Subst Abuse Treat Prev Policy* [Internet]. BioMed Central Ltd; 2011;6(1):33. Available from: <http://www.substanceabusepolicy.com/content/6/1/33>
 11. Ganatra H, Kalia S, Haque A, Khan J. Cigarette smoking among adolescent females in Pakistan. *Int J Tuberc Lung Dis*. 2007;11(12):1366–71.
 12. Paudel D, Pathak R. Tobacco Use among Adolescent Students in Secondary Schools of Pokhara Sub Metropolitan City. *J Nepal Heal Res Counc*. 2003;1(2):35–40.
 13. Binu V, Subba S, Menezes R, Kumar G, Ninan J, Rana M, et al. Smoking among Nepali Youth - Prevalence and Predictors. *Asian Pacific J Cancer Prev*. 2010;11:221–6.
 14. Narain R, Sardana S, Gupta S, Sehgal A. Age at initiation & prevalence of tobacco use among school children in Noida, India: A cross-sectional questionnaire based survey. *Indian J Med Res*. 2011;133:300–7.
 15. Yang G, Ma J, Chen A, Brown S, Taylor C, Samet J. Smoking among adolescents in China: 1998 survey findings. *Int J Epidemiol*. 2004;33(5):1103–10.
 16. Brownson R, Dilorenzo T, Tuinen M, Finger W. Patterns of cigarette and smokeless tobacco use among children and adolescents. *Prev Med*. 1990;19(2):170–80.
 17. WHO FCTC. Tobacco Product (Control and Regulatory) Act, 2011 [Internet]. [cited 2015 May 2]. Available from: http://www.who.int/fctc/reporting/party_reports/nepal_2012_annex1_tobacco_product_control_regulatory_act_2011.pdf
 18. US Department of Health and Human Services. Women and smoking A report of the Surgeon General. 2001.
 19. Huebner AJ, Shettler L, Matheson JL, Meszaros PS, Piercy FP, Davis SD. Factors associated with former smokers among female adolescents in rural Virginia. *Addict Behav* [Internet]. 2005;30(1):167–73. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/15561457>
 20. Paudel D. Tobacco Use among Adolescent Students in Secondary Schools of Pokhara Sub Metropolitan City of Nepal [Internet]. [cited 2015 Jan 3]. Available from: <http://www.healthnet.org.np/resource/thesis/cmedicine/deepak/tobacco.pdf>
 21. Kabir M, Goh K, Khan M. A cross-country comparison of tobacco consumption among youths from selected South-Asian countries. *BMC Public Health*. 2013;13(379).
 22. Scragg R, Laugesen M. Influence of smoking by family and best friend on adolescent tobacco smoking: results from the 2002 New Zealand national survey of year 10 students. *Aust N Z J Public Heal* [Internet]. 2007;31(3):217–23. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/17679238>
 23. Ferreira M, Torgal M. Tobacco and Alcohol Consumption among Adolescents. *Rev Latino-Am Enferm*. 2010;18(2):255–61.