



## ADOLESCENTS' AWARENESS REGARDING SMOKING AND ITS IMPACT ON HEALTH

### Health Science

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### ABSTRACT

**Background:** Tobacco consumption is a major health menace owing to its widespread use particularly among adolescents. The objective was to find out prevalence and awareness regarding impact of smoking on health among adolescents.

**Methods:** Descriptive, cross sectional research design was used. A total of 160 adolescents were selected by non-probability, purposive sampling technique from Besishahar VDC -1 and -4, Besisahar, Lamjung from 29 September to 8 October, 2013.

**Results:** Prevalence of smoking among adolescents was found in 12.5%. Nearly half (48.8%) adolescents had good level of awareness regarding smoking and its impact among adolescents. Level of awareness regarding smoking and its impact on health is not significantly associated with age of the adolescents, sex, education, type of family, smoking by members of the family and smoked cigarette/local pipes/cigar.

**Conclusion:** Less than one fourth of adolescents smoked. Nearly half of adolescents had good level of awareness regarding smoking and its impact. Greater enforcement of existing policies need to be implement to prevent adolescents' prevalence of smoking as well as to reduce morbidity and mortality regarding smoking.

### KEYWORDS

Adolescents, Awareness, Smoking

### INTRODUCTION

Tobacco use is a major worldwide public health problem. Tobacco consumption is a major health menace owing to its widespread use particularly among adolescents. Owing to the presence of impressionable, curious minds, adolescents are highly prone to a number of influences within and outside home, leading them to experiment with tobacco (Ravishankar & Nagarajappa, 2009). Smoking can be viewed as a rite of passage from childhood to adulthood. An adolescent's first cigarette is usually obtained from a friend or family member (Simon-Morton, Chen, Abrams & Haynie, 2004).

The death toll from tobacco consumption is now 4.9 million people a year; if present consumption patterns continue, the number of deaths will increase to 10 million by the year 2020, 70% of which will occur in developing countries (WHO, 2005). Smoking and the use of other tobacco products kill 15,000 people in Nepal each year (Ministry of Health and Population (MoHP)/Nepal, 2011).

Studies have confirmed the quantitative relationship between smoking and many diseases such as coronary artery disease, lung cancer, bladder cancer, oral cancer, pulmonary emphysema and chronic bronchiolitis (Jha et al., 2013) (WHO, 2012). The costs of tobacco go far beyond the health consequences as it has a significant economic and social burden on families and societies.

Parents, teacher and healthcare professionals play an ideal position to advise and educate adolescents about the dangers of smoking. The WHO Framework Convention on Tobacco Control emphasizes on the role of professional healthcare providers and organizations in reducing tobacco consumption (WHO, 2003). The WHO encourages health care professionals, including physicians, dentists, nurses and pharmacists, to take a leadership role in reducing the use of tobacco (WHO, 2005).

Nepal signed the World Health Organization's Framework Convention for Tobacco Control in 2003 (MoHP/Nepal, 2012). The problems associated with smoking are multifaceted and no single control measure will resolve these problems on a wide scale. Strategies that have been adopted by government in curriculum of schools and colleges: Anti-tobacco education. Legislative restrictions on smoking in enclosed public places need to be enforced. Primary smoking prevention in the paediatric and adolescent age groups may be the most effective program.

### MATERIALS AND METHODS

Descriptive, cross sectional research design was used. A total of 160

adolescents were selected by using non-probability, purposive sampling technique from Besishahar village development committee (VDC)-1 and 4, Besishahar, Lamjung from 29 September to 8 October, 2013. The population of the study was all the adolescents who were  $\geq 13$  years and  $\leq 19$  years of age. The verbal informed consent was obtained from each respondent's guardian (who were  $< 18$  years) and respondents ( $\geq 18$  years) before data collection. The sample size was 160. Half (80) samples from Besishahar VDC-1 and 80 samples from Besishahar VDC-4 were collected. The data was statistically analyzed by using Chi square test.

### RESULTS

Table 1 shows that, out of 160 respondents, 12.5% respondents had done smoking. Among smoked, 16 (80%) were male and 4 (20%) were female. Minimum age was 14 years and maximum 19 years.

**Table 1 Prevalence of Smoking among Adolescents**

n=160

Smoked cigarette/local pipe/bidi	Frequency	Percentage
Yes	20	12.5
No	140	87.5

In this study, mean level of awareness is found 11.16. If the awareness score is found more than mean score, then it is categorized as good awareness and if it is below mean score, it is categorized as poor awareness.

Table 2 shows that among 160, 82 (51.2%) respondents had poor level of awareness and 78 (48.8%) respondents had good level of awareness regarding smoking and its impact among adolescence.

**Table 2 Level of Awareness regarding Smoking and its Impact**

n=160

Level of knowledge	Frequency	Percentage
Poor	82	51.2
Good	78	48.8

Mean score = 11.16; minimum score = 6; maximum score = 17

Table 3 shows that level of awareness regarding smoking is not significantly associated with age of the respondents ( $p=0.683$ ), sex ( $p=0.994$ ), education ( $p=0.617$ ), type of family ( $p=0.507$ ), smoking by members of the family ( $p=0.746$ ) and smoked cigarette/local pipes/cigar ( $p=0.550$ ).

**Table 3 Association between Level of Awareness regarding Smoking and Demographic Variables**

n = 160

Demographic Variables	Level of Awareness		$\chi^2$	p-value
	Poor	Good		
<b>Age</b>			3.950	0.683
13 yrs	13 (46.4%)	15 (53.6%)		
14 yrs	12 (50%)	12 (50%)		
15 yrs	15 (57.7%)	11 (42.3%)		
16 yrs	14 (50%)	14 (50%)		
17 yrs	7 (46.7%)	8 (53.3%)		
18 yrs	14 (66.7%)	7 (33.3%)		
19 yrs	7 (38.9%)	11 (61.1%)		
<b>Sex</b>			0.000	0.994
Male	40 (51.3%)	38 (48.7%)		
Female	42 (51.2%)	40 (48.8%)		
<b>Education</b>			0.966	0.617
Basic	37 (52.9%)	33 (47.1%)		
Secondary ≥ PCL	28 (46.7%) 16 (57.1%)	32 (53.3%) 12 (42.9%)		
<b>Type of family</b>			0.441	0.507
Nuclear	56 (49.6%)	57 (50.4%)		
Extended	26 (55.3%)	21 (44.7%)		
<b>Smoking by members of the family</b>			0.105	0.746
Yes	41 (50%)	41 (50%)		
No	41 (52.6%)	37 (47.4%)		
<b>Smoked cigarette/local pipes/cigar</b>			0.357	0.550
Yes	9 (45%)	11 (55%)		
No	73 (52.1%)	67 (47.9%)		

Significance level at 0.05

Table 4 shows that level of awareness regarding impact of smoking is not significantly associated with age of the respondents ( $p=0.606$ ), sex ( $p=0.668$ ), education ( $p=0.366$ ), type of family ( $p=0.643$ ), smoking by members of the family ( $p=0.285$ ) and smoked cigarette/local pipes/cigar ( $p=0.505$ ).

**Table 4 Association between Level of Awareness regarding Impact of Smoking and Demographic Variables**

n = 160

Demographic Variables	Level of Awareness		$\chi^2$	p-value
	Poor	Good		
<b>Age</b>			4.523	0.606
13 yrs	15 (53.6%)	13 (46.4%)		
14 yrs	12 (50%)	12 (50%)		
15 yrs	15 (57.7%)	11 (42.3%)		
16 yrs	21 (75%)	7 (25%)		
17 yrs	9 (60%)	6 (40%)		
18 yrs	11 (52.4%)	10 (47.6%)		
19 yrs	10 (55.6%)	8 (44.4%)		
<b>Sex</b>			0.184	0.668
Male	44 (56.4%)	34 (43.6%)		
Female	49 (59.8%)	33 (40.2%)		
<b>Education</b>			2.010	0.366
Basic	36 (51.4%)	34 (48.6%)		
Secondary ≥ PCL	38 (63.3%) 17 (60.7%)	22 (36.7%) 11 (39.3%)		
<b>Type of family</b>			0.215	0.643
Nuclear	67 (59.3%)	46 (40.7%)		
Extended	26 (55.3%)	21 (44.7%)		
<b>Smoking by members of the family</b>			1.145	0.285
Yes	51 (62.2%)	31 (37.8%)		
No	42 (53.8%)	36 (46.2%)		
<b>Smoked cigarette/local pipes/cigar</b>			0.444	0.505
Yes	13 (65%)	7 (35%)		
No	80 (57.1%)	60 (42.9%)		

Significance level at 0.05

## DISCUSSION

Out of 160 adolescents, 48.8% were male and 51.2% were female. The

overall prevalence of smoking among adolescents was 12.5%, whereas 87.5% didn't have smoking habits. Among smoked, 80% were male and 20% were female. Smoking was more prevalent within age group 14-19. Current findings in contrast and similar somehow with the findings of Salawu, Danburam, Isa, & Agbo (2009) revealed that out of 125 adolescents, 71.2% were males and 28.8% were females. The overall prevalence of smoking was 32.8%, where 78% were male and 22% were female. Smoking was more prevalent within age group 15-17 in both sexes, and in both age groups.

In this study, regarding education, 1.2% was illiterate and 98.8% were literate. Among literate, 44.4% were studying in basic education and 0.6% was studying in bachelor level. About source of information regarding smoking, 78.1% got information of smoking from teachers and 1.2% from internet.

This study showed that 70.6% were living in nuclear family and (29.4%) extended family. About 51.2% adolescents had family members smoke habit in the family; Out of that, (24.4%) father smoker in the family, (15%) mother, (8.8%) grandmother, (7.5%) grandfather, (3.8%) siblings, (1.9%) brother and (0.6%) husband smoker in the family. Type of family does not play a significant role on level of awareness regarding smoking.

This study showed that, 95% answered lung cancer likely to develop in smoker, (36.9%) bronchitis, (26.9%) hypertension, (25.6%) anorexia, (23.6%) gastric ulcer, (18.8%) abdominal disease and (5.6%) diarrhea. About 56.9% answered smoking can induce heart attack; 29.4% can induce infertility; (98.1%) smoking affects other members in family; (78.1%) can causes quarrel in the family; (94.4%) can causes economic burden in the family. Whereas, current findings in contrast with the findings of Aigbiremolen, Asalu, Ejyere, Momoh & Ogi (2013) that overall awareness level for health problems associated with cigarette smoking was 86.1% while specific awareness was highest for chest infection (81.9%) and lowest for peptic ulcer disease (59.2%)

Salawu et al. (2009) showed that 76% of adolescents identified smoking as a cause of respiratory disease but only 43.2% thought it could cause cancer; and only 13.6% mentioned smoking as a risk factor for heart disease. Current study showed that 72.5% said reason for smoking could be to reduce stress, (36.2%) to give company to friends, (30.6%) to show friends and (30%) to add personality. This study is supported by the study carried out by Ravishankar & Nagarajappa (2009) showed that various reasons are attributable for trying tobacco, peer pressure (31.4%), tobacco to impress the opposite sex (15.7%).

The findings of study showed that, 51.2% adolescents had poor level of awareness and 48.8% had good level of awareness regarding smoking and its impact on health among adolescents. This finding in contrast with the study by Ravishankar & Nagarajappa (2009) showed that the awareness regarding health hazards inflicted by tobacco use was good; out of 590 subjects 83% were aware of the disastrous effects of tobacco on health.

## CONCLUSION

The study findings reveal that less than one fourth of adolescents smoked. Nearly half of adolescents had good awareness regarding smoking and its impact. Adolescents' level of awareness regarding smoking and its impact on health is not significantly associated with age, sex, education, type of family, smoking by members of family, history of smoked cigarette/local pipes/cigar. Greater enforcement of existing policies need to be implement to prevent adolescents' prevalence of smoking as well as to reduce morbidity and mortality regarding smoking.

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