Factors associated with intentions to quit smoking among smokers: Findings from the International Tobacco Control (ITC) Bangladesh Wave 2 Survey

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BACKGROUND

- Bangladesh is one of the top ten countries with high smoking prevalence where nearly two-thirds of the world's smokers live (WHO, 2008).
- According to the WHO study (WHO, 2006), almost 9% of all deaths of the adult population (aged 30 years and above) are attributable to tobacco-related illnesses (WHO, 2006).
- However, there is scarcity of research on tobacco use reduction and cessation in Bangladesh that would generate local data to support policy initiatives to design smoking cessation programs.

OBJECTIVES

- To examine the patterns of quitting intention among smokers in Bangladesh.
- To identify the factors associated with intention to quit smoking among Bangladeshi smokers.

METHODS AND ANALYSIS

- The ITC Bangladesh Wave 2 Survey is a nationally representative probability sample of users and non-users of tobacco selected through a multi-stage clustered sampling design.
- The target population of the ITC Bangladesh Survey consists of users and non-users of tobacco who were 15 years or older and were interviewed using a structured questionnaire.
- We used only the data from adult smokers in the sample (N=2,938).
- All analyses were performed using SAS.

MEASURES

- Our primary dependent variable was intention to quit smoking in the future (N=882)
- Demographic variables included in the analyses were: sex, age, residence (urban slum, urban non-slum, rural), education level, income, marital status, and religion.
- Other variables examined as potential correlates of quitting intention were: type of tobacco smoked, any previous quit attempt, longest time quit smoking, perceived benefit of quitting smoking, concern about health and how much smokers enjoy smoking.

RESULTS

- Of the respondents (N=2938), 96% were male, 33% were illiterate, 46% were aged 40 or above, and 44% planned to quit in the future.
- Smokers who were significantly more likely to intend to quit in the next 6 months were: those who had made at least one quit attempt in the past (69%) vs. those who did not make any quit attempt (41%); had quit for 6 months or longer in the previous quit attempt (44%) vs. making no attempt (39%); those who do not enjoy smoking (66%) vs. those who enjoy smoking (45%); very worried about future health (66%) vs. not at all worried (14%); and expected greater benefits from quitting smoking (59%) vs. a little benefit (40%).

- The table at right presents the results from the final, weighted logistic regression model, accounting for the sampling design. This analysis revealed the following variables to be significant predictors of intention to quit smoking: nicotine dependence, as measured by the heaviness of smoking index, (OR = 0.80), making a quit attempt in the past year (OR=2.10), perceiving greater benefit from quitting (OR=1.68), being worried about future health (a little worried (OR=4.87), moderately worried (OR=7.96) or very worried (OR=14.81)). Finally, smokers who do not enjoy smoking had greater odds of intending to quit smoking (OR = 2.05).

Table 1. Multi-variable logistic regression model estimating the odds of intending to quit among Bangladeshi smokers (weighted results).			
Effect	**OR**	**95% CI of OR**	**p-value**
Age (grouped)			0.096
25-39 (vs. 15-24)	1.01	(0.71-1.42)	
40-54 (vs. 15-24)	1.00	(0.63-1.61)	
55+ (vs. 15-24)	**1.46**	**(1.06-2.02)**	
Tobacco use			0.242
Exclusive bidi (vs. dual)	1.12	(0.59-2.12)	
Exclusive cigarette (vs. dual)	0.82	(0.45-1.48)	
Heaviness of smoking index			0.001
(continuous, 0-6)	**0.80**	**(0.70-0.91)**	
Made an attempt to quit in past year			0.009
Yes (vs. no)	2.10	(1.21-3.66)	
Longest duration quit			
< 1 month vs. never	1.70	(0.92-3.16)	0.051
1-6 months vs. never	1.36	(0.95-1.93)	
> 6 months vs. never	0.87	(0.37-2.05)	
don't know vs. never	1.16	(0.63-2.14)	
Benefit of Quit			<0.0001
Moderate vs. little benefit	0.50	(0.29-0.83)	
Great vs. little benefit	**1.68**	**(1.04-2.70)**	
Worried about health in future			<0.0001
A little vs. not at all	**4.87**	**(2.21-10.73)**	
Moderate vs. not at all	**7.96**	**(3.49-18.17)**	
Very vs. not at all	**14.81**	**(6.44-34.06)**	
Enjoy smoking			0.006
Neither vs. agree	0.91	(0.56-1.46)	
Disagree vs. agree	**2.05**	**(1.32-3.17)**	
Opinion of smoking			0.301
Very bad vs. otherwise	1.40	(0.74-2.64)	

CONCLUSIONS

- These findings suggest that the prevalence of intention to quit smoking (44%) is lower among Bangladeshi smokers than those among smokers in developed countries (~70%).
- Measures are necessary to increase intention to quit smoking among the smokers in Bangladesh.
- The factors identified as predictors of quit intentions should be taken into consideration while designing population based programs to promote smoking cessation.