Prevalence and patterns of tobacco use in Bangladesh from 2009 to 2012: Evidence from International Tobacco Control Study

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Abstract

BACKGROUND: Smoking and passive smoking are collectively the biggest preventable cause of death in Bangladesh, with major public health burden of morbidity, disability, mortality and community costs. The available studies of tobacco use in Bangladesh, however, do not necessarily employ nationally representative samples needed to monitor the problem at a national scale. This paper examines the prevalence and patterns of tobacco use among adults in Bangladesh and the changes over time using large nationally representative comparable surveys.

METHODS: Using data from two enumerations of the International Tobacco Control (ITC) Bangladesh Project conducted in 2009 and 2012, prevalence estimates are obtained for all tobacco products by socio-economic determinants and sample types of over 90,000 individuals drawn from over 30,000 households. Household level sample weights are used to obtain nationally representative prevalence estimates and standard errors. Statistical tests of difference in the estimates between two time periods are based on a logistic regression model that accounts for the complex sampling design. Using a multinomial logit model, the time trend in tobacco use status is identified to capture the effects of macro level determinants including changes in tobacco control policies.

RESULTS: Between 2009 and 2012, overall tobacco use went down from 42.4% to 36.3%. The decline is more pronounced with respect to smokeless tobacco use than smoking. The prevalence of exclusive cigarette smoking went up from 7.2% to 10.6%; exclusive bidi smoking remained stable at around 2%; while smoking both cigarette and bidi went down from 4.6% to 1.8%; exclusive smokeless tobacco use went down from 20.2% to 16.9%; and both smokeless tobacco use and smoking went down from 8.4% to 5.1%. In general, the prevalence of tobacco use is higher among men, increases from younger to older age groups, and is higher among poorer people. Smoking prevalence is the highest among the slum population, followed by the tribal population, the national population and the border area population, suggesting greater burden of tobacco use among the disadvantaged groups.

CONCLUSIONS: The overall decline in tobacco use can be viewed as a structural shift in the tobacco market in Bangladesh from low value products such as bidi and smokeless tobacco to high value cigarettes, which is expected with the growth in income and purchasing power of the general population. Despite the reduction in overall tobacco use, the male smoking prevalence in Bangladesh is still high at 37%. The world average of daily smoking among men is 31.1%. The Tobacco Control Act 2005 and the Amendment have yet to make a significant impact in curbing tobacco usage in Bangladesh. The findings in this paper further suggest that the tobacco control policies in Bangladesh need to include targeted interventions to restrain the use of particular types of tobacco products among specific demographic and socio-economic groups of the population, such as smoked tobacco among men, smokeless tobacco among women, and both smoked and smokeless tobacco among those living in rural areas, those in low socio-economic status and those belonging to the tribal and the slum population.