Awareness of the health risks of smoking, including lung cancer and heart disease, is an important predictor of smoking-related behavior, such as quitting. However, most research conducted thus far in this area has been in high-income countries; little is known about awareness of the harms of tobacco in low- and middle-income countries such as Bangladesh.

**Objectives**

1) Examine levels of knowledge of the harms of smoking and secondhand smoke among a large probability sample of smokers from the ITC Bangladesh Survey.
3) Understand factors associated with knowledge of the health effects of smoking, such as education level and illiteracy.

**Methods**

Analyses were conducted on unweighted data from the first two waves of the International Tobacco Control (ITC) Bangladesh Survey, a nationally representative, face-to-face household survey of adult tobacco users and non-users.

We used only the data from adult smokers (≥15 yrs old who reported smoking at least once a week), including cigarette, bidi, and dual smokers (both cigarettes and bids).

Sample Sizes: Wave 1: N=2,367; Wave 2: N=2,311; Cohort (completed both waves): N=2,188

Knowledge of health effects was assessed by asking smokers whether they believed smoking causes each of 7 specific health effects associated with smoking cigarettes and bids, and 2 specific health outcomes associated with passive smoking (secondhand smoke).

Responses were coded as 0="no/don’t know" vs. 1="yes". A health knowledge scale was then created by summing the number of "yes" responses across the 9 health effects to create a single score.

**Results**

**Knowledge of Specific Health Effects**

- Overall, smokers demonstrated high levels of knowledge at each wave. Smokers at Wave 2 correctly believed that smoking cigarettes or bidis causes tuberculosis (97%), lung cancer in smokers (85%), bronchitis (84%), stroke (83%), heart disease (79%), and mouth cancer (74%).
- Knowledge of the harms of secondhand smoke (SHS) was lower, including asthma in children (67%) and lung cancer in non-smokers (66%), and only 62% of smokers believed that smoking causes impotence.
- Levels of knowledge were consistently lower at Wave 2 compared to Wave 1 for each of the health effects measured except for bronchitis.
- Among the cohort sample, there were significant decreases in knowledge for each health effect except two (bronchitis and TB), as shown in Figure 1. The largest decline was found for mouth cancer, which decreased by almost 20% percentage points - from 91% in 2009 to 73% in 2010. Similarly large declines were observed for awareness of the harms of secondhand smoke (from 87% to 67% for asthma in children; and 82% to 66% for lung cancer in non-smokers).

**Conclusions**

An important finding from this study was that awareness of many of the well-known health effects of smoking appeared to have decreased among smokers in Bangladesh from 2009 to 2010. These findings highlight the need for stronger efforts to educate the public about the harms of tobacco, particularly among the illiterate population, who had the lowest levels of health knowledge.

However, further investigation is needed in order to more clearly understand the factors influencing the decrease in knowledge of smoking-related health effects over time in Bangladesh.