

# Determinants of Smoking Behaviour Among Secondary School Students in Bangladesh

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**Abstract** Despite established country's tobacco control law, cigarette smoking by the young people and the magnitude of nicotine dependence among the students is alarming in Bangladesh. This study was aimed to determine the prevalence of smoking and factors influencing it among the secondary school students. A two-stage cluster sampling was used for selection of schools with probability proportional to enrollment size followed by stratified random sampling of government and private schools. The 70-item questionnaire included 'core GYTS' (Global Youth Tobacco Survey) and other additional questions were used to collect relevant information. Analysis showed that the prevalence of smoking was 12.3% among boys and 4.5% among girls, respectively. The mean age at initiation of smoking was 10.8 years with standard deviation of 2.7 years. Logistic regression analysis revealed that boys are 2.282 times likely to smoked than girls and it was 1.786 times higher among the students aged 16 years and above than their younger counterparts. Smoking by teachers appeared to be the strong predictor for students smoking behaviour (OR 2.206, 95% CI: 1.576, 3.088) followed by

peer influence (OR 1.988, 95% CI: 1.178, 3.356). Effective smoking prevention program should to be taken to reduce smoking behaviour. The school curricula had less impact in preventing smoking except teacher's smoking behaviour.

**Keywords** Bangladesh · Secondary school students · Smoking · Tobacco

## Introduction

Tobacco use is one of the leading preventable causes of death in developed countries and a rising concern in developing countries [1]. It causes death of nearly five million people annually from its related illnesses, and is projected to exceed eight million by the year 2030 [2, 3]. The global tobacco burden is mostly seen in developing countries, where an estimated 84% of the world's 1.3 billion current smokers live [4].

The prevalence of smoking among adolescents varies across countries. In Turkey, Thailand and United States, the prevalence ranges from around 22 to 25% [5–7] whereas in African country like Nairobi, the prevalence of ever smoking was higher at 38% for male students and almost 18% for females [8]. High smoking prevalence among secondary students of 29–33%, were also reported in Johor and Kelantan states of Peninsular Malaysia [9, 10]. The smoking prevalence increased with age of the students, varying from 7% in elementary, 17% in middle and 41% in high schools of Ohio, United States [11]. Male students were more likely to smoke compared to females [4, 8, 10, 12, 13].

The determinants of smoking among adolescents include parental influence, peer influence and environmental predisposition [4]. Study showed the associations of adolescent

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