**Topic:** Regular use of alcohol and tobacco in India and its association with age, gender, and poverty

**Details**

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**Abstract**

This study provides national estimates of regular tobacco and alcohol use in India and their associations with gender, age, and economic group obtained from a representative survey of 471,143 people over the age of 10 years in 1995–96, the National Sample Survey. The national prevalence of regular use of smoking tobacco is estimated to be 16.2%, chewing tobacco 14.0%, and alcohol 4.5%. Men were 25.5 times more likely than women to report regular smoking, 3.7 times more likely to regularly chew tobacco, and 9.7 times more likely to regularly use alcohol. Respondents belonging to scheduled castes and tribes (recognized disadvantaged groups) were significantly more likely to report regular use of alcohol as well as smoking and chewing tobacco. People from rural areas had higher rates compared to urban dwellers, as did those with no formal education. Individuals with incomes below the poverty line had higher relative odds of use of chewing tobacco and alcohol compared to those above the poverty line. The regular use of both tobacco and alcohol also increased significantly with each diminishing income quintile. Comparisons are made between these results and those found in the United States and elsewhere, highlighting the need to address control of these substances on the public health agenda

**1. Introduction**

Regular use of tobacco and alcohol is clearly associated with the development of significant disease and disability (Murray & Lopez, 1996). For example, numerous studies have documented a myriad of seriously debilitating and often deadly health effects of regular tobacco use (Rehm et al., 2003) and misuse of alcohol (Doll & Peto, 1981; Andreasson & Brandt, 1997). These associations have motivated considerable interest in the epidemiology of tobacco and alcohol use in the world’s population.

Despite the growing global interest in the problem, considerably less is known about the prevalence of tobacco and alcohol use in many developing countries, when compared with developed nations (Chopra, 2018). One of the largest developing countries in the world is India: with a population exceeding one billion people, India already bears a large proportion of the world’s disease burden (over 20% of all disability adjusted life years lost) and additional information on the prevalence of tobacco and alcohol use in this country has both national and global importance (Peters et al., 2002).

**1.1. Scope of the study**

The prevalence rates of substance use in India have not been accounted for in any largescale epidemiological studies. This study presents age- and sex-specific rates of regular tobacco and alcohol use in the general population of India. Data are also presented on the associations of regular tobacco and alcohol use with age, gender, social exclusion, poverty, residence, and education.

**2. Methods**

**2.1. Sampling**

***2.1.1. Sample summary***

This study presents data from the 52nd round of the National Sample Survey (NSS), a national household survey conducted in India from June 1995 to June 1996 across all of
India (National Sample Survey Organization- NSSO, NSSO, 1995, 1998).

***2.1.2. Sampling design***

The NSS followed a stratified two-stage design: the first-stage units were census villages in the rural areas and sampling frame blocks in urban areas; the second-stage units were households. Each of the 35 states and union territories of India was divided into one of the 78 mutually exclusive agro-climatic regions. In each of these regions, the survey was conducted in four waves throughout the year to reduce seasonal biases.

***2.1.3. Sampling procedure***

The survey was conducted by direct interview of the head of the household after verbal consent was obtained. No personal identifiers were contained in the database, thus decreasing the risk of violating confidentiality of the respondents. The survey was sponsored and approved for implementation by the government of India.

**2.2. Study instruments**

The 52nd round of the NSS was specifically designed to assess morbidity and private health expenditures in India. In addition to multiple questions pertaining to household
income, purchases, and health history, all household members aged 10 years and above were surveyed “whether regularly consuming: alcohol; biri/cigar/cigarette/hukka; or tobacco”.

**2.3. Variables of the study**

Socio-economic variables were determined in the following manner. Income quintiles were estimated using monthly per capita household consumption of all food and non-food items. Individuals were ranked according to per capita consumption level and assigned to their respective quintile of the population. The poverty line was established by the Planning Commission of India for rural and urban populations in each state, and was based on an estimate of the per capita consumer expenditure required to ensure an intake of 2100 calories per day in urban areas and 2400 calories per day in rural areas.

**3. Results**

The total sample revealed prevalence estimates of regular smoking of tobacco products of 16.2% (95% confidence interval (CI): 16.1–16.3) for the population of individuals 10 years and older and regular use of chewing tobacco of 14.0% (95% CI: 13.9–14.1). The prevalence of regular alcohol use was 4.5% (95% CI: 4.5–4.6).

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| **Table 1***Gender wise prevalence of tobacco and alcohol use* |
| **Variables** | **Males** | **Females** |
| Total number | 242,827 | 228,239 |
| Smoking tobacco | 29.6% | 2.2% |
| Chewing tobacco | 20.2% | 7.4% |
| Alcohol | 7.9% | 1.0% |

**4. References**

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