

## **Tobacco Consumption and Awareness of their Health Hazards Amongst Lower Income Group School Children in National Capital Territory of Delhi**

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*Consumption of tobacco is a complex and multidimensional problem faced by the country. It is the main culprit behind oral cancer. The present study was undertaken to assess the prevalence of consumption of tobacco amongst adolescent school children of low-income group in National Capital Territory (NCT) of Delhi and to study the perception of the children regarding the health hazards of tobacco. A cross-sectional study was conducted amongst 3,422 children in the age group of 10-18 years studying in government schools in NCT of Delhi. About 9.8% of the study children had at least once experimented with any form of tobacco in their lifetime. The proportion of children who were "current users" of tobacco products was 5.4% (boys: 4.6%, Girls: 0.8%). Nearly eighty percent of the study subjects knew that, tobacco consumption is injurious to health. The parents of 59% of the children discussed the harmful effects of tobacco consumption with their children.*

**Key words:** *Tobacco consumption.*

The consumption of tobacco causes maximum health damage, worldwide. Epidemiological research over the past several years has confirmed the harmful effects of tobacco consumption(1). Developing countries are projected to contribute 70% of tobacco-related deaths by 2020(2). In a recent study in 52 countries, 35.7% of myocardial infarctions were attributed to smoking(3). Approximately 90% of oral cancers in Southeast Asia are linked to tobacco chewing and tobacco smoking(4). Tobacco consumption usually begins in adolescence; the time for discovery, challenge and experimentation. There is limited data available on Tobacco Consumption and Awareness of their Health Hazards amongst Lower Income Group school Children in the age group of 10-18 years from National Capital Territory of Delhi. Hence, the present cross-sectional study was undertaken.

All Middle and Senior Secondary Government Schools in NCT of Delhi were enlisted along with student enrollment. Subsequently using population proportionate to size sampling methodology (PPS)(5), thirty clusters (schools) were selected. From each cluster, 100 children in the age group of 10-18 years were selected with the help of random number table for the detailed study. The exact age

of the children was verified from school records. The informed consent was obtained from the parents for participation of their children in the study. Each subject was interviewed using the pre-tested structured questionnaire. The child was taken into a separate room and was briefed about the objectives of the study. The child was requested to provide information and was reassured about the anonymity and confidentiality of the information. The data was collected on age, sex, socio-demographic profile of the child, occupation and literacy status of their parents, family structure, religion, household monthly income, amount of pocket money received *etc.* Data was also obtained on consumption of tobacco, age of initiation, reason of initiation of consumption of tobacco, places of tobacco consumption, money spent on the purchase of tobacco, frequency of consumption *etc.* The sample size was calculated keeping in mind the least prevalence of tobacco as 6%. Considering a relative precision of 15% and confidence interval of 95%, the minimum sample size calculated was 2,785 children.

A total of 3,422 children (boys: 56.5%, girls: 43.5%) were included in the present study. The mean age of the children was 14.2 years (S.D.  $\pm$  2.09). It was found that 5.4% of the children (boys:

4.6%, girls: 0.8%) were “currently” consuming (Consumed tobacco in last 30 days of survey) tobacco products; out of these, nearly 70% of the children (boys: 85.6%, girls: 14.4%) consumed gutkha (tobacco + crushed betel nut + sweet or savory flavorings).

The mean age of initiation of tobacco consumption was  $12.2 \pm 1.34$  years. Nearly, 55% of the children initiated tobacco consumption before the age of 13 years (4% at the age of 7 years or below). About 38% of children reported that tobacco was first introduced to them by their friends. Nearly 23% of the children were influenced by advertisements of tobacco by various mass media (TV, videos, movies). Enjoyment (30.3%) and curiosity (26.1%) were the two major factors that instigated the consumption of tobacco amongst adolescent children. Twenty one percent of the children mentioned that peer pressure as the main reason for initiation of consuming tobacco.

Twenty-seven and six percent of the children were consuming tobacco since last 2 and 5 years, respectively. Public places (80.9%) were the major place where the tobacco products were consumed by the children. Nearly 84% of the children could freely purchase tobacco products for consumption from the shop or from street vendors. Only 0.5% of the children did not have knowledge about the place of availability of tobacco products. Ten percent of the children spent all their pocket money received for buying tobacco. Seven percent of the children mentioned that the desire for tobacco consumption increased after alcohol intake.

Majority (80%) of the children knew that, tobacco consumption is injurious to health. Nearly 22% of the children consumed tobacco as a first item in the morning and 37% children had belief that tobacco consumption helps in relieving toothache and morning motions. About 47% of the children believed that consumption of tobacco made no difference on their body weight, while, 37.8% had knowledge that consumption of tobacco leads to weight loss.

More than forty one percent of the children had knowledge that their school teachers consumed tobacco. Over 56% of the father and 2% of the mother of the subjects also consumed tobacco. It

was observed that 59% of parents discussed the harmful effects of tobacco consumption with their children.

The progressive increase of tobacco consumption in various forms in recent years can be viewed as an emerging epidemic. The findings of the present study provide an important data that school children which belonged to lower income group preferred gutkha over other tobacco products. This is an alarming finding since gutkha is more hazardous to health than plain tobacco. Gutkha has been proved to be carcinogenic(6). Children preferred to buy tobacco products from vendors at public places away from their homes as there is no fear to be caught by their parents.

A recent study from two schools in Delhi showed almost 42% of tobacco users started before the age of 12 years(7). In a study among school children in Mumbai it was found that 46% of children had first heard about tobacco from peers just like the present study(8).

The adolescent tobacco consumption has been found to be a major contributor of adult habit of tobacco consumption. For preventing tobacco consumption, intervention in adolescence period is required when children are more amenable to modifications in behavior and adoption of good habits.

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### Self Abortion of Attacks in Patients with Hot Water Epilepsy

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*A cross sectional hospital based study was undertaken to find out the various clinical aspects and management of Hot Water Epilepsy (HWE) in children. Of the 71 cases analysed, 67.6% had onset of seizures in the first decade of life. Seizures occurred frequently towards the end of head bath (71.8%). In 14.1% cases, seizures were precipitated with cold-water head bath also. Complex partial seizures (60.6%) and generalized atonic seizures (21.1%) were common. Spontaneous non-reflex epilepsy was seen in 47.9% cases. Self-induction and self-abortion of seizures were seen in 16.9% and 12.7% patients respectively. Family history was available in 32.4% of cases. Majority had good response to continuous prophylactic treatment with antiepileptic drugs. We conclude that high incidence of spontaneous seizures and generalized atonic seizures seem to be peculiar to our geographical area. "Self abortion of attacks" may be of immense help in controlling the attacks.*

**Key words :** Hot water epilepsy.

Hot water epilepsy (HWE) is a type of reflex epilepsy(1) precipitated by the stimulus of bathing with hot water pouring over the head(2,3). Studies have shown clustering of cases in South India(3,4) with a prevalence of 60/100,000(5). The present study was taken-up to report the various clinical aspects of childhood onset of HWE.

#### Subjects and Methods

This study was conducted from March to

September 2004 in a teaching hospital in Mysore, Karnataka State. Each patient had to satisfy the clinical criteria for seizures as elucidated by the ILAE 2001(6). Additionally, all seizures had to have been precipitated by bathing with hot water pouring over the head. Hence, newly registered cases with HWE with age of onset of less than or equal to 18 years were included. Also, adult patients with age of onset of HWE of less than or equal to 18 years, who came to hospital for follow-up of HWE