Gutka advertisement and smokeless tobacco use by adolescents in Sikkim, India

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Gutka Advertisement and Smokless Tobacco Use by Adolescents in Sikkim, India

D.N. Sinha

Abstract

Research question: To examine impact of Gutka advertisement on smokeless tobacco use. Objective: To investigate tobacco use prevalence and related issues among 13-15 years students in Sikkim, India. Study design: Survey through anonymous, self-administered questionnaire on a two-stage probability sample proportional to the enrollment size. Setting: Schools having grade 8-10. Participants: Students in grade 8-10. Study Variables: Tobacco use, gender, exposure to gutka advertisements. Statistical Analysis: With Epi-Info software, percentage with 95% confidence interval. Results: The overall response rate was over 85% and the proportion of boys was 55%. Current smokeless tobacco (boys, 35.5-49.5%, girls, 27.2-36.4%) and gutka (boys 8.4-22.2%, girls, 14.2-22.2%) use and exposure to gutka advertisements was reported equally by boys and girls. Current smokeless tobacco users than never tobacco users were significantly more likely to watch gutka advertisements in all media; to have something with gutka brand names; and to have positive attitude towards tobacco use. Conclusion: Strong association between exposure to gutka advertisement and current smokeless tobacco use among boys and girls in Sikkim is shown. Stronger restriction by the government is recommended.

Introduction

Sikkim, India, is geographically located at latitude 27.3 N and longitude 88.8 E, covering a population of 540, 493 (288, 217 men, 252, 276 women) at a decadal growth rate 33.0%. Density (per sq. km.) was 76 with a sex ratio 875 women per 100 men and literacy rate 69.7% (76.7% men, 61.5% women). The Tobacco Free Initiative of the World Health Organization in collaboration with the Office on Smoking and Health, Centers for Disease Control, USA has undertaken Global Youth Tobacco Survey (GYTS). The GYTS includes data on prevalence of tobacco use, as well as information on access, availability, and price; environmental tobacco smoke exposure (ETS); school curriculum; media and advertisement; and cessation. These factors could provide important inputs in a comprehensive tobacco control at country or state level. Earlier published reports on the Global Youth Tobacco Survey (GYTS) have not covered the issue of Gutka advertisement in different media and its impact. Gutka is one of the industrially prepared and highly advertised tobacco products in India and most popular among all smokeless tobacco products especially among youth. This report examines GYTS data from Sikkim and attempted to correlate gutka advertisement and current smokeless tobacco use by students.

Methods

The study was carried out during January-March 2001. In Sikkim as in rest of India, 13-15 year old students corresponded to grade 8-10. A two-stage cluster sample design was used to produce representative sample of students. A list of all schools having grade 8-10 was prepared with enrollment numbers for boys and girls in each school. At the first stage, schools were selected with probability proportional to enrollment size. At the second stage between 1 to 5 classes were selected by systematic sampling with a random start and a fixed interval depending upon the estimated number of classes in grades 8-10 in the selected school. All students in selected classes were eligible to participate. For India the core questionnaire of the GYTS was suitably expanded to include tobacco use in the form of bidi smoking and smokeless tobacco use. All questions required answering. The questionnaire was self administered with no identification information required maintaining complete anonymity. Responses were recorded on optically readable answer sheets. A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. SUDAAN, a software package for statistical analysis of correlated data, was used to compute 95% confidence intervals. Difference between prevalence estimates were considered statistically significant if the 95% confidence intervals did not overlap.

Results

The study represents results for a sample of 15,247 school going students aged 13-15 years in Sikkim. The school and students response rate for selected 25 schools was 100% and 85.4% (2236/2619) respectively. The cause for non-response was absence on that day. Among 2236 respondent, 55% were boys and 45% were girls; 51.5% were tribal and 48.5% were non-tribal; 52% were Hindus, 36% christian, 10% Buddhist and rest from other religion. There was no significant difference in current smokeless tobacco (boys, 35.5-49.5%, girls, 27.2-36.4%) and gutka (boys, 8.4-22.2%, girls, 14.2-22.2%) use among boys and girls. Boys and girls were exposed to all advertisement and promotions of gutka alike (Table I).

Current smokeless tobacco users than never tobacco users were more likely to watch actors chewing tobacco on TV, video or movies (90.4% vs. 37.8%); to watch gutka brand names on TV sporting events or TV programs (63.1% vs. 36.2%); to watch gutka advertisement on hoardings, buses, bus-stops, etc. (65.8% vs. 40.7%); to watch gutka advertisement in newspapers or magazines (63.8% vs. 33.9%); and gutka advertisement in community events (65.0% vs. 38.7%). Current smokeless tobacco users than never tobacco users
Table I: Current Tobacco Use and Exposure to Advertisement and Promotions by Boys and Girls, Sikkim, India GYTS, 2001

<table>
<thead>
<tr>
<th>Current smokeless tobacco use</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current smokeless tobacco use</td>
<td>42.5(7.0)</td>
<td>42.5(7.0)</td>
</tr>
<tr>
<td>Current Gutka use</td>
<td>15.3(6.9)</td>
<td>18.0(4.2)</td>
</tr>
</tbody>
</table>

Exposure to advertisement and promotion

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actors chewing tobacco on TV, video etc</td>
<td>73.4(±4.7)</td>
<td>62.1(±8.8)</td>
</tr>
<tr>
<td>Brand names on TV</td>
<td>57.8(±7.7)</td>
<td>45.5(±6.9)</td>
</tr>
<tr>
<td>On billboards</td>
<td>60.1(±7.6)</td>
<td>52.1(±9.5)</td>
</tr>
<tr>
<td>In newspapers or magazines</td>
<td>57.1(±6.6)</td>
<td>48.3(±10.2)</td>
</tr>
<tr>
<td>In community events</td>
<td>59.0(±7.6)</td>
<td>53.5(±10.5)</td>
</tr>
<tr>
<td>Something with gutka brand or symbol on it</td>
<td>29.8(±10.6)</td>
<td>18.4(±4.9)</td>
</tr>
<tr>
<td>Offered free product samples by vendors</td>
<td>11.1(±2.3)</td>
<td>13.0(±5.7)</td>
</tr>
</tbody>
</table>

Figure in parentheses denotes 95% confidence interval were more likely to have something with gutka/pan masala brand or symbol on it (45.2% vs. 14.3%).

Compared to never tobacco users, smokeless tobacco users were much more positive towards tobacco use by others such as by students (1.5-6 times). Tobacco users felt that tobacco helped in feeling more comfortable at parties around four times more often than never tobacco users. However, tobacco users also felt that tobacco helped in relieving toothache or in morning motion around seven times more often than never tobacco users. (Table II).

Table II: Positive Attitude Towards Tobacco Use by Smokeless Tobacco User and Never Tobacco User, Sikkim GYTS, 2001

<table>
<thead>
<tr>
<th>Attitude towards tobacco use</th>
<th>Never tobacco users</th>
<th>Smokeless tobacco users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys who smoke or chew looks more attractive</td>
<td>20.8(±6.6)</td>
<td>89.3(±47.7)</td>
</tr>
<tr>
<td>Boys who smoke or chew have more friends</td>
<td>47.2(±5.8)</td>
<td>68.9(±8.4)</td>
</tr>
<tr>
<td>Girls who smoke or looks more attractive</td>
<td>10.4(±3.9)</td>
<td>63.8(±9.7)</td>
</tr>
<tr>
<td>Girls who smoke or chew have more friends</td>
<td>26.1(±5.4)</td>
<td>64.9(±9.2)</td>
</tr>
<tr>
<td>Tobacco helps relieving toothache/morning motion</td>
<td>13.5(±4.1)</td>
<td>89.3(±4.5)</td>
</tr>
<tr>
<td>Tobacco helps to feel more comfortable at parties</td>
<td>25.2(±5.2)</td>
<td>89.5(±5.0)</td>
</tr>
</tbody>
</table>

Discussion

In the west the tobacco industry through advertisement managed to increase the acceptability of smoking by women making it seem to serve as a sign of social liberation and emancipation of women. The data from the present study indicate that India is suffering from a similar insidiously designed strategy, by Gutka industry, Gutka use is portrayed as fashionable and as a sign of equality and social liberation and such portrayal seems to increase current smokeless tobacco among girls.

Temporal association in prevalence study has some difficulty. However, the present study has shown that smokeless tobacco users than never tobacco users were significantly more likely to watch gutka advertisement in all types of outdoor and indoor media and there was significant difference in having something with gutka brand logo between smokeless tobacco users and never tobacco users. Such strong findings support the view that advertisement works and it targets youth. The results from the study are consistent with earlier GYTS reports1 that current smokeless tobacco use among boys and girls was equal and exposure to gutka advertisement among boys and girls in almost all media was statistically equal. This is an additional evidence of association between exposure to gutka advertisement and smokeless tobacco use. In west several studies have shown that exposure to tobacco advertisement by favorite stars changes the adolescent attitude towards smoking23. The data from the present study is in agreement with these studies and show significantly more exposure to actors advertising gutka and positive attitude towards tobacco use by smokeless tobacco users as compared to never tobacco users.

High prevalence of smokeless tobacco use among students (over 37%) in Sikkim indicates that future health consequences of tobacco use and dependency on tobacco will be significant problems in Sikkim, India unless they adopt, implement and enforce comprehensive tobacco control policy soon. Recently enacted “Cigarettes and other tobacco products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Bill, 2001” needs to be properly understood, implemented and enforced urgently. These findings recommends for early ratification of FCTC in India.

Acknowledgement

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9. www.who.int/gb/fctc

Proceedings of the IAPSM (North Zone Chapter) General Council Meeting Held at DMC, Ludhiana on 16.10.2004

The eighth general council meeting of the North Zone Chapter was chaired by Prof. G.P.I. Singh, President, IAPSM Zonal Chapter-North. The agenda was read out for approval of the council. The following resolutions were passed:

1. The minutes of 7th general council meeting held at PGIMER, Chandigarh on February 2004 was confirmed and approved.

2. The report of the activities of the North Zone chapter was presented by the General Secretary. The life membership of IAPSM from North Zone was 150. The budget was presented by the treasurer which was approved by the General council.

3. Prof. Rajesh Kumar, Secretary General, IAPSM assured to give the zonal share to the headquarter of the chapter, Prof. G.P.I. Singh Organizing Secretary of the 8th Conference of Zonal chapter also assured to give financial help.

4. Dr. Bhupinder Sngh, HOD Community Medicine, Government Medical College, Jammu proposed to hold the next conference at Jammu which was unanimously accepted by the general body.

5. In view of the contributions made by Prof. Y.L. Vasudeva in the field of Community Medicine, it was proposed to confer “Y.L. Vasudeva Oration Award” to the eminent scientists who have contributed significantly to the cause of IAPSM Chapter. It was unanimously resolved that the awardee shall be nominated by a three member committee comprising of eminent members. Prof. G.P.I. Singh proposed the name of Dr. Bhupinder Singh for the award for the year 2004-05 which was unanimously approved by the General Council. The award shall be conferred in the 9th Zonal Conference.

6. A crore group comprising of Prof. Rajesh Kumar, Secretary General IAPSM; Prof. Shivinder Singh CMC Ludhiana; Prof. Bhavnesh Gupta, GMC Patiala; Prof. R.K. Sachar, DMC Ludhiana; Prof. Bhupinder Singh, General Secretary, North Zone chapter met to deliberate upon the subject “Role of Public Health Specialists in Primary Health Care Delivery System”. The recommendations of the core group were read to the house and resolution was passed by the General Body. The resolution read as follow:

i. IAPSM (North Zone Chapter) notes with pride that the North Indian State of Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir and Union Territory of Chandigarh have made significant progress in the health field over the last few years. However, the states are facing many public health challenges like control of communicable and non-communicable diseases, reproductive health problems and environmental problems etc. The public health situation has become more complex but the preparedness of the states is not adequate as there is a considerable mismatch between the qualification and job assignment in the state health services. By removing this mismatch, the states can make great progress in health field. State health services must constitute a Public Health Specialist Cadre (MD Community Medicine/MPH/DPH)

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Gutka Advertisement and Smokeless Tobacco