

11.7 years vs. boys 12.0 years and both habits (tobacco and non-tobacco): girls 12.0 years vs. boys 13.0 years. (Table) The mean age of initiating the non-tobacco habit (11.8 years) was significantly lower than the mean age of initiating tobacco habit (12.3 years) irrespective of the gender. While boys adopted these habits usually to refresh themselves or to look smart, girls more often took to these habits to make friends. More than 70% of tobacco users who visited the street vendor were not refused tobacco products despite the ban by Government.

**Conclusion:** The study highlights rising prevalence of non-tobacco habit in addition to tobacco addiction among girl students and early uptake of these habits. Health awareness, Psycho-behavioral change and education programmes, strict enforcement of laws to ban sale of these products to the under aged are urgently needed to curb these habits before they assume epidemic proportions.

#### PP009

##### SMOKELESS TOBACCO SMOKING THE ADOLESCENTS

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**Background:** Although tobacco deaths rarely make headlines, tobacco kills one person every six second worldwide.

Nearly 8–9 lakhs of people die every year in India due to diseases related to tobacco use. According to ICMR, in India each year tobacco use result in about 160,000 cases of cancer, 4.5 million heart disease, 3.9 million COPD.

Global Adult Tobacco Survey (2009–2010) estimated high addiction rate during youth periods of life and problem could be more significant in slum areas.

So, to draft Youth specific tobacco prevention strategies it becomes crucial to estimate magnitude of the problem, determinants associated with their high risk taking behaviour.

**Objective:** The present study examine the prevalence of substance abuse among male slum adolescents of Delhi slum area and various social, contextual determinants like parent education, their socio-economic condition, use of tobacco products, peer pressure etc. influencing their behaviors. to measure the level of awareness regarding side effects of tobacco products and what are the challenges while quitting the habit of tobacco use, and to explore the research based preventive measures at community level.

**Method:** The cross-sectional community based study was conducted among urban male slum adolescents (aged 15–19 years) at New Delhi slum area. Systematic random sampling technique was used to collect the primary data and sample size calculated was 125  $\{N=(1.96)^2 pq/d^2\}$ , taking into consideration the prevalence of substance abuse as 27% with allowable error of 10%, confidence interval of 95% and design effect of 1.5. The statistical analysis was carried out using chi-square, independent T-test by using SPSS software.

**Result:** The prevalence of tobacco use was 38.8% (smokeless tobacco 32 percent) among the respondents and the first tobacco product use was Gutkha (61.1 percent). Average age of initiation of the tobacco products was 14.8 years. There was age gradient increase ( $p<0.001$ ). Main factor for initiation was peer pressure (89%) and only 42% were of their side effects.

**Conclusion:** Tobacco product use being a complex phenomenon with various social, cultural and economic aspects. Present study reveals that the prevalence of tobacco use was significantly high among the adolescents and the smokeless tobacco was the first product used, so the sales and use of smokeless tobacco be banned at public places and adolescent friendly initiative for cessation of tobacco use could be started involving peer group for the implementation.

#### PP016

##### MICROBIAL CONTAMINATION OF TOOTHBRUSH IN NON-SMOKERS, SMOKERS AND PATIENTS ON NRT GUMS

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**Background:** Oral health is an integral part of systemic health. It directly or indirectly reflects the overall well-being of an individual.

The oral cavity is free of microorganisms at birth, as the foetus develops its own sterile conditions. The transmission of the microorganisms was found to be because of bacteria passing directly from saliva of mother or other family members and indirectly through fomites such as spoons, cups, toys or contaminated toothbrushes.

Today, the market is flooded with various brands of toothbrushes each claiming superiority over the other. However, little do we think that instead of cleaning the teeth, the brush could be possibly contaminating the teeth.

Toothbrushes may be heavily contaminated with cariogenic, periodontopathogenic as well as microorganisms causing systemic infections.

These microorganisms on the toothbrush reflect the oral flora of the patient using the brush and the risk to which the patient is exposed due to the microbial colonization.

Satyanaryana et al (2007) compared the cumulative risk of tobacco related cancers (TRC) in

various cities of India and found Bhopal city in Madhya Pradesh to have the highest ratio of tobacco related cancers as compared to all other cancers in males (56.9%). The cumulative risk of tobacco related cancers among males was 3.82% and females was 1.15%. So the risk of developing tobacco related cancer is 1 out of 26 in males and 1 out of 87 in females in Bhopal.

**Objective:** Extensive exploration of the literature reveals lack of studies conducted to assess the microbial contamination of toothbrush among smokers, non-smokers and patients on nicotine replacement therapy.

Hence, this study was conducted to assess the microbial load and colonization among the smokers, non-smokers and patients on nicotine replacement therapy.

**Result:** It was seen that the toothbrushes of smokers harboured more microorganisms and in larger quantity as compared to smokers. The toothbrushes of patients using nicotine chewing gums harbored microorganisms in much lesser number as compared to smokers.

**Conclusion:** It can be concluded that the smokers exhibit more pathogenic and extensive microbial load and patients on NRT are at a comparable risk for diseases as non-smokers. And NRT does not pose any harm to the patient.

#### PP022

##### ELECTRONIC CIGARETTE – REPRODUCING PLEASURE OF SMOKING WITHOUT HARM

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**Background:** Cigarette smoking is a tough addiction to break. One of the novel and effective approach of smoking cessation is electronic cigarette. It is a battery-powered electronic nicotine delivery device (ENDD) resembling a cigarette designed for the purpose of nicotine delivery, where no tobacco or combustion is necessary for its operation.

**Objective:** The aim and objective of the presentation is to study the health effects of e-cigarettes, focusing particularly on its safety and effectiveness as a tool for smoking cessation.

**Method:** An electronic search was conducted using the following parameters: Terms: “smoking cessation”, “electronic cigarette”, and “electronic nicotine delivery device sports”; Fields: all; Limits: within the last 10 years, humans, English. There were 426 articles that matched these criteria. Papers for review were chosen from this list and from references within select articles.

**Result:** Although there is general lack of substantiated fact as a pharmaceutical product, the e-cigarette users have reported that it help them quit smoking, to reduce cigarette consumption, to relieve tobacco withdrawal symptoms due to workplace smoking restrictions and to continue to have a ‘smoking’ experience but with reduced health risks.

**Conclusion:** E-cigarettes pose a safe harm-reduction strategy and healthy option to oneself and companions.

#### PP023

##### STRENGTHENING IMPLEMENTATION OF TOBACCO-FREE POLICIES TO RESTRICT YOUTH ACCESS TO TOBACCO PRODUCTS: MOVING TOWARDS TOBACCO-FREE GENERATION IN BIHAR, INDIA

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**Background:** In India, 90% oral cancers are related to tobacco use. 5500 Indian youth initiate tobacco use every day. With high prevalence, a total of 54% adults (62% males and over 40% female) and 60% youth use tobacco in the state of Bihar. Easy accessibility of tobacco products is a cause of high prevalence especially among youth.

**Objective:** The project aimed at sinking lid at minors’ access to tobacco products and to make the state compliant with the provision of the law (COTPA) prohibiting sale to and by minors and prescribing warning boards outside educational institutions.

**Method:** Intervention included capacity building of law enforcers and NGOs; multi-sectoral advocacy; rallies/exhibitions; institutionalizing enforcement mechanisms; compliance evaluations, violations reporting by NGOs/youth and media engagement to create an enabling environment for strengthening policies which prevent youth access to tobacco and denormalize tobacco use to move towards the endgame for tobacco.

**Result:** Government of Bihar issued directives to make all educational institutions in the state “tobacco-free”. Youth volunteers reported 475 violations of law prohibiting minors’ access to tobacco products to the concerned authorities. The sustained advocacy effort received extensive coverage in local and state level media. Pre vs. Post-intervention: The knowledge of the provision of the law banning sale of tobacco products to and by minors increased by 23% ( $p<0.001$ ). Sale of tobacco products to and by minors reduced from 54.6% to 3.6% and 59.3% to 4%, respectively; sale of tobacco products within 100 yards of educational institutions reduced from 42.9% to 3.4%; absence of warning boards at points of sale and outside educational institutions reduced from 51.7% to 24.9% and 77.4% to 7.8%, respectively. Results of an endline third party compliance monitoring for implementation of COTPA are being analyzed and will be shared in detail at the conference.

**Conclusion:** Supportive state government, committed district administration and effective civil society engagement were pivotal in creating institutional mechanism for enforcement of the Indian tobacco control law in the state. Capacity building, Government–NGO partnership and engagement with youth and media are key to a sustainable model for preventing youth access to tobacco and help in building tobacco-free generation in the state.