

Tobacco: Culture and legislature worldwide

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ABSTRACT

Oral cancer affects as many as 274000, people worldwide annually. Tobacco use is one of the major preventable cause of premature death and disease in the world. TSNAs are considered the most potent classes of carcinogens with N-nitrosornicotine (NNN) and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK). Risk Factors for Smoking includes family factors, school factors, peer factors, community factors, stress and domestic violence. Tobacco is an integral part of the culture and tradition in many countries of the South-East Asia Region. Tobacco use resulting in 5.4 million deaths every year. A new term, "thirdhand" smoke, has been proposed to describe the particulate residual toxins deposited in layers all over the home furniture after a cigarette has been extinguished. Many countries are putting ban for smoking in public places. Half measures are not enough, when one form of advertising is banned; the tobacco industry simply shifts its vast resources to another channel. Governments are urged to impose a complete ban to break the tobacco marketing net. An effort is made to comprehend articles on tobacco by searched from journals through Google and Ebscohost

Keywords: Tobacco legislation, TSNAs, third hand smoke, betel quid chewing, FCTC

Introduction

Tobacco plant was first grown (5000–3000 BC) in Peruvian / Ecuadorian Andes. After the discovery of America tobacco was introduced to Europe. Court physicians in the European palace garden grew tobacco plants for its medicinal potential. Jean Nicot, a French ambassador to Portugal used an ointment made from tobacco leaves 'to cure' the tumor of a man in Lisbon. His name was immortalized by labelling the genus, 'Nicotiana'.^[1] Tobacco was introduced in India by Portuguese 400 years ago during the Mughal era. India is also the second largest consumer of tobacco in the world, second only to China.^[2, 3] India is the world's third largest producer of tobacco.^[4] Oral cancer affects as many as 274,000 people worldwide annually.^[5] Tobacco deaths are preventable resulting in premature death and disease in the

world.^[6] Smoking is the single most significant risk factor for periodontal disease^[7] although potential periodontal health effects of smokeless tobacco (ST) have received much less attention.^[8]

Chemical contents of tobacco products

Oral tobacco products contains more than 30 carcinogens- volatile aldehydes, lactones, polycyclic aromatic hydrocarbons (PAHs), heavy metals, radioactive metals and tobacco-specific N-nitrosamines (TSNAs)^[9, 10] TSNAs are considered the most potent classes of carcinogens with N-nitrosornicotine (NNN) and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK).TSNA, 4-(methyl-nitrosamino)-1-(3-pyridyl)-1-butanol (NNAL) has recently been reported in US moist snuff products.^[10]

In response to local exposure to smokeless tobacco an increase in blood

flow in the gingiva of humans is found, increased IL-2 production and decreased IL-12 production from macrophages, decrease in growth of human oral fibroblasts, prevalence of gingival recession is also reported in snuff users.^[11] CSC (cigarette smoke condensate) can increase P. gingivalis HGF (human gingival fibroblast)-mediated collagen degradation.^[12] Bidis can deliver more tar and carbon monoxide than manufactured cigarettes.^[12] Conversely in India the most common form of smoking tobacco is in the form of bidis.^[13]

Risk factors for smoking

Parental monitoring and conflict, school factors include low academic achievement; peer-factors: drug using peers and individual level risk factors such as impulsivity, rebelliousness, and depression. Community factors including community disorganization, is also a risk factor. Youth who smoke may do so to alleviate or reduce stress both general stress and family stress.^[14] Domestic violence is associated with higher odds of smoking and chewing tobacco in India.^[15]

Sociocultural dimension

Tobacco is an integral part of the culture and tradition in many countries of the South-East Asia Region. Offering raw tobacco by children to the elderly in celebrations is a common practice in some communities in Kerala, India. In Myanmar people believe that tobacco smoke harms the fetus and husbands keep away from smoking. Bhutanese people consider using tobacco as a sin hence tobacco consumption in the country is very low. In Sri Lanka, smoking among women is regarded as a "village behavior" and not appreciated by urban women.^[16] It is not quite clear why the Betel Quid Chewing habit is vanishing in Thailand, the

interviews with the vendors explained oral aesthetics and behavioral aspects.^[17] In Javanese culture, it is considered inappropriate and dangerous to experience and / or express strong emotions. Taking time out to smoke a cigarette helped men reduce their feeling of stress and helped control perceived negative emotions, such as anger.^[18] Gift giving has long been considered a tactic of establishing and maintaining guanxi (relationships) in Chinese milieus. Cigarettes were the most popular gift during Chinese New Year.^[19]

Public health problem

Tobacco use results in 5.4 million deaths every year.^[20] In 2007, 19.3% of the United State's adult population smoked tobacco cigarettes.^[21] Over half of all tobacco consumed in India is smoked as bidi (Indian specific non-filtered cigarette) and about one-fourth of tobacco consumption is in smokeless form, such as chewing tobacco and Mishri (tooth cleaner applied tobacco).^[22] In Europe, cigarette smoking is most common risk factors for death from cardiovascular disease.^[23] In Britain, mortality rates from these cancers have fallen since 1950 for males and females despite rises in tobacco and alcohol consumption for much of that period.^[24] About 40% of tobacco users in Thailand believe that a hand-rolled cigarette is less harmful than manufactured cigarettes and this belief is common particularly among the rural population where its use is also high.^[16]

A new term, "thirdhand" smoke, has been proposed to describe the particulate residual toxins that are deposited in layers all over the home after a cigarette has been extinguished. These volatile compounds are deposited and "off gas" into the air over months.^[25] Health promotion researchers state that

culturally specific (CS) interventions are important in addressing smoking-related health disparities.^[26]

Tobacco legislation

Tobacco companies link their products to every conceivable cultural symbol, icon and image.^[27] The tobacco industry is now turning increasingly to developing countries. World's 1.3 billion smokers, live in developing and transitional economy nations (February 2006 WHO fact sheet).^[28] Smokeless tobacco use is on the upswing in parts of the world, including some countries of the South East Asian Region (SEAR) of the World Health Organization.^[29] They have been striving to increase the tax rates on tobacco products and strengthen the tax administration for tobacco control. Snus has been heavily marketed in its native Sweden, as well as Norway, Canada and the USA.^[2] However, test marketing in Japan is still there.^[30] Tobacco cultivation in India began in the late seventeenth century, and bidis were first created when tobacco workers took left over tobacco and rolled it in leaves for smoking.^[13] The tobacco industry's efforts to assuage health concerns in smokers by marketing cigarettes labeled as "light" and "mild" and low tar cigarettes are well documented. Tobacco defined mild as "delicacy of aroma and taste, soft-touch in mouth, smooth to throat, and low irritation," and light as "low tar and nicotine as well as still providing impact in the mouth"^[31, 32] Cigarettes that are frequently labeled light, mild or low tar, the smoke usually tastes weaker and produces less irritation to the throat and chest than smoke from regular cigarettes because it is inhaled in larger, more dilute puffs.^[33] Recent significant increases in funding for tobacco control media campaigns may contribute to meaningful

reductions in smoking among US adults.^[34] In India, accepting the suggestions of the 1995 Parliamentary Committee on Subordinate Legislation, the Ministry of Health and Family Welfare introduced the Tobacco Control Bill in the Rajya Sabha in 2001. (Bill No. XXIX-F of 2001) "The bill may be supported to evolve into an Act as follows:—"This Act may be called the Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003."^[3] Gutka smokeless tobacco is banned from sale in India from March 2011 because its plastic packaging is harmful to the environment. The case was brought under the country's Plastic Management and Disposal Rules, 2009.^[35] The World Health Assembly in May 2003 finally adopted the Framework Convention on Tobacco Control (FCTC), which the member states of WHO adopted.^[36] The WHO FCTC also calls on countries to establish surveillance programs of the consequences of magnitude to which tobacco is consumed.^[6] The minimum age for the legal purchase of tobacco increased from 16 to 18 years in England, Scotland and Wales on 1st October 2007.^[37] In 2003 the Health Promotion Law was introduced in Japan, which remains one of the most influential tobacco policies introduced in recent years in Japan.^[38] The Member countries of South-East Asia have been striving to increase the tax rates on tobacco products and strengthen the tax administration for tobacco control. Bangladesh is imposing duty and VAT on the unmanufactured tobacco products and smokeless products. India is going to introduce the Goods and Services Tax (GST) with cascading tax rates.^[16] Research indicates that people who experiment with smokeless tobacco

generally develop a pattern of regular use, and increase consumption over time. ^[39]

The New Zealand Government has recently committed to the goal of making New Zealand (NZ) smokefree by 2025. ^[40] In order to achieve a significant impact on the reduction of smoking and ETS (environmental tobacco smoke) exposure among adolescents in Juarez, Mexico, greater compliance and enforcement of the existing laws is needed, which prohibit sales of tobacco to minors and smoking on school grounds. ^[41] Researchers have observed increased advertising and promotion of smokeless tobacco in recent years, which target cigarette smokers. Additionally, the opportunity exists to use smokeless tobacco for nicotine delivery in public places and workplaces covered by smoke-free indoor air policies, a behaviour which could deter smoking cessation attempts and negate social norm change induced by this policy intervention. These two factors may result in increased use of cigarettes and smokeless tobacco, termed 'dual use'. ^[42]

President Barack Obama signed the Tobacco Control Act on June 22, 2009, the FDA's actions to protect the public health have included launching and enforcing a ban on fruit- or candy-flavored cigarettes, prohibiting the labeling of products with the misleading terms "light," "low," and "mild;" and issuing a broad set of laws restricting access to and marketing of cigarettes and smokeless tobacco products to young people. ^[43] Every nation and sub-national entity with an efficient tax system that has significantly increased its cigarette tax has enjoyed substantial increases in revenue, even while reducing tobacco use.

In South Africa, every 10% increase in excise tax on cigarettes has been associated with an approximate 6% increase in cigarette excise revenues,

even as tobacco use declined. From 1994 to 2001, excise revenues more than doubled as a result of tax increase in South Africa. In Thailand, tax increases between 1994 and 2007 raised cigarette excise taxes from 60% to 80% of wholesale price, increasing tax revenue from 20,002 million THB in 1994 to 41,528 million THB in 2007 even as consumption decreased. ^[44]

On average, from 2001 to 2005 the price of tobacco products rose by an annual rate of 6.8% above inflation in the European Union countries, which was good progress when compared to the previous annual rate of increase of 2.7% observed in the same group of countries during the period 1997–2001. Cyprus, France, Germany, Hungary, Lithuania and Slovakia managed a greater increase. However, real prices increased by less than 3% annually in Austria, Greece, Luxembourg, Poland, Spain and the United Kingdom over the same period. Prices were almost stable in Sweden and even fell in Denmark and Finland. The prices of cigarettes and rolling tobacco followed similar trends. In the CIS (Commonwealth of Independent States) and SEE (south eastern European) countries (apart from Bulgaria) there was an unpromising trend towards cheaper tobacco products. On 29 March 2004, a major development occurred in Ireland when smoking bans were extended for the first time in the European Region to pubs, bars and restaurants. On 1 June 2004, Norway became the second country in Europe to impose a countrywide ban on smoking in all public places, including all restaurants and bars. ^[45]

Belgium, Greece, Ireland, Luxembourg, and Austria regulate tobacco advertising, although it is still allowed. The laws have set out terms and conditions for the advertising of tobacco products, such

as the inclusion of health warnings (except in Luxembourg) or specifications regarding the design of the ads. Denmark, The Netherlands, Germany, Spain, and the United Kingdom are among the countries that have voluntary agreements between their governments and the tobacco industry to regulate the advertising of tobacco products.^[46]

Conclusion

A ban on all tobacco advertising, promotion and sponsorship is a powerful tool we can use to protect the world's youth. The tobacco industry employs predatory marketing strategies to get young people hooked to their addictive drug. But comprehensive advertising bans do work, reducing tobacco consumption by up to 16% in countries that have already taken this legislative step. Half measures are not enough, when one form of advertising is banned; the tobacco industry simply shifts its vast resources to another channel. Governments are urged to impose a complete ban to break the tobacco marketing net.

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