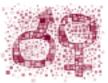
Gender and Health



November 2003

Gender, Health and Tobacco

"Gender", meaning socially-determined norms and roles for each sex, provides the social explanation for sex-linked patterns of tobacco use. However, these social origins are rarely given the attention they deserve, as if these behaviours were natural, rather than learned. Popular interest in "gender and health" is synonymous with "women and health", with the result that connections between masculinity and risk behaviours are overlooked. Both sex and gender are in fact relevant for tobacco control.

Tobacco is cultivated around the world and can be legally purchased in all countries. The dried leaf is smoked in the form of manufactured cigarettes, *bidis*, cigars, *kreteks*, pipes and sticks. It is also chewed throughout the world, but principally in South and Southeast Asia, often together with areca nuts and staked lime.

In 2002, tobacco killed 4.83 million people, 50% coming from developing countries. This represents a sharp increase from previous estimates. Unless action is taken to prevent this trend it is likely that the number

of deaths will double in the next two decades. It is projected that more than 70% of these deaths will be in developing countries. Half of today's smokers will die from tobacco-related causes.

Health behaviour does not occur in a vacuum, but is influenced by normative values, lay health beliefs, and the surrounding environment. Tobacco use is generally more prevalent among lower-income populations, those with mental disorders

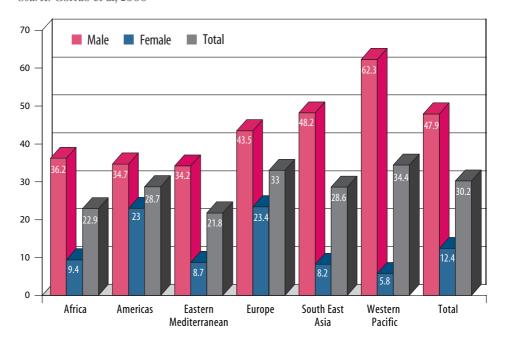
(including depression) and, in most countries, among men and boys.

What do we know?

Higher prevalence among men in most countries

Comparable data on the prevalence of tobacco consumption (in all its forms) are not widely available and are often misleading due to lack of disaggregation by age and sex. Worldwide, in 1998, there were an estimated

Smoking prevalence among men and women aged 15 years and above by WHO Region, 1998
Source: Corrao et al, 2000



1.2 billion adult smokers (aged 15 years and above) among the world's 6 billion people. However, this may understate the epidemic because many smokers begin before the age of 15, and surveys often exclude non-commercial and/or smokeless tobacco.

Nonetheless, available evidence compellingly demonstrates that in most countries being born male is the greatest predictor for tobacco use, with overall prevalence about four times higher among men than women globally (48% versus 12%). As can be seen in the figure, sex-linked differences are highest in the Western Pacific Region and lowest in the Americas and European Region, where about one-quarter of women smoke. The most recent data for China show a dramatic sex gap (63% for men and 3.8% for women). That gap persists even among a highly educated sub-group in Chile, where 40% of male doctors smoke compared to 24% of female doctors.

The World Health Organization (WHO) has staged a continuum of tobacco use in countries as follows:

- Stage I low (<20%) male and minimal female prevalence
- Stage 2 high (>50%) male and rising female prevalence
- Stage 3 sharp declines among men, gradual declines in women
- Stage 4 further declines in both; peaks in tobacco-related deaths.

Typically, smoking occurs first among the more wealthy, but later is more popular among low-income populations (of both sexes). The epidemic is now shifting to low- and middle-income countries among men and, increasingly, among women. At present in Denmark and Germany, more young women (aged 14–19) than young men smoke.

It should also be remembered that the large population base of China and India means that tens of millions of women are smokers, despite a low female prevalence.

Changing norms may put women and girls at risk

Greater female autonomy and changes in women's roles are associated with smoking uptake in countries like the USA, prompting predictions of similar patterns in developing countries. A recent national survey in Vietnam, where 50% of men and just 3.4% of women smoke, reported that the main reason women gave for shunning tobacco was "women shouldn't smoke". Among 2020 young urban Vietnamese women, 76% attributed low female prevalence to gender norms (social disapproval), versus just 20% to health concerns.

Anecdotal evidence suggests increased smoking among young affluent urban women in China and India, where female rates are very low, while in Singapore, rates among women aged 20–24 climbed from 2.5% to 6.7% between 1992 and 1998 (male rates fell during the same period).

Different motivations for taking up, continuing or ceasing to use tobacco

Better health knowledge alone, though crucial, cannot stem the tobacco epidemic, especially because smoking ordinarily starts in adolescence, when long-term risk may be of less concern than peer influences. This is also a life phase during which gender identity is firmly established.

Surveys among American secondary school students found similar smoking rates for girls and boys. But girls who had experienced depression or family violence were more likely to smoke than boys with similar backgrounds. Depression is strongly associated with smoking, and women have about twice the rate of depression than men. However, it is not known whether depression is a cause or an effect of smoking, or whether common factors predispose people to both.

Studies show girls and women are more likely to fear weight gain than boys, and to initiate and continue smoking for weight control. Some surveys find women gain more weight after quitting than men. Recent review articles agree that women and girls tend to smoke as a "buffer" against negative feelings, while men smoke more from habit or to enhance positive sensations. Some studies among low-income mothers in Western countries found smoking was used as a "time out" from the demands of caring for young children.

Ethnographic research in the Philippines found females expressed emotional dependence on tobacco in the midst of life difficulties, while young urban Vietnamese women said they might start smoking if they become "very unhappy".

There is evidence women and men respond somewhat differently to nicotine. Female addiction may be reinforced more by the sensory and social context of smoking, rather than by nicotine, suggesting that patches may not be so effective an aid. This may help explain why some studies have found that women quit less easily than men; other explanations include lack of social support, fear of weight gain, depression and hormones.

Research suggests that men and boys perceive greater pressure than women and girls to accept the gendered stereotype that men should be rugged, robust and strong. Such concepts lead to a dangerous combination of risk-taking and lack of preventive health activities, with relevance for tobacco uptake, quitting and self-care. In many countries, smoking marks the transition to manhood, and is deeply embedded in everyday male social relations, both business and personal.

Recent findings of the Global Youth Tobacco Survey, the largest global survey on adolescents aged 13 to 15 and tobacco, show that, although young people's use of cigarettes and other tobacco products varied dramatically by site, young girls are smoking almost as much as young boys and that girls and boys are using non-

cigarette tobacco products such as spit tobacco, bidis, and water pipes at similar rates. These findings suggest that projections of future tobacco-related deaths worldwide might be underestimated because they are based on current patterns of tobacco use among adults, where women are only about one-fourth as likely as men to smoke cigarettes. Nearly 24% of all young smokers started by the age of ten, when they are far too young to understand or resist social expectations.

Exploiting gender psycho-social aspirations to promote tobacco

Through comprehensive social research, the tobacco industry understands popular culture and psycho-social aspirations, and it incorporates this knowledge within massive promotional efforts to seek new markets and sustain existing ones. Prevailing gender norms are a key feature within promotion for both sexes.

Using seductive but false images of vitality, slimness, emancipation, sophistication, and sexual allure, the industry targets women. Liberation, autonomy, and even female friendship feature in developed countries advertising, and, increasingly, in regions where female roles have begun to change. The Tobacco Reporter, an industry document, optimistically discussed its prospects in Asia in 1998: "Rising per capita consumption...and an increasing acceptance of women smoking continue to generate new demand". Slender, so-called "light", cigarettes packaged in pastel colours convey femininity and slimness in Japan and industrialized countries. The industry has sponsored fashion shows in shopping malls linked to magazine promotions in the USA. Such sponsorship, and public smoking by super-models and film stars, associates tobacco with glamour.

Smoking is portrayed as a manly habit linked to happiness, fitness, wealth, power and sexual success, while in reality it brings premature death and sexual problems. Given that disregard for danger is an idealised masculine value, it is hardly surprising advertisements show men in rough terrain, undertaking risky sports (sometimes in industry-sponsored competitions). Smoking as a symbol of financial success may have particular appeal where such dreams seem out of reach. Adventure-style clothing for men and youth produced by tobacco companies reinforces themes of rugged fitness and independence.

Health impact - sex, gender and tobacco

Current smoking figures do not reflect the cumulative hazards of smoking, which depend on several factors including the age of initiation, duration, cigarettes smoked per day, degree of inhalation, tar and nicotine content, and use of smokeless tobacco. Among the estimated 4.2 million premature deaths worldwide from tobacco in 2000, 3.4 million were among men and 0.8 million among women.

Tobacco causes similar health problems for men and

women, including lung cancer, upper aerodigestive cancer, several other cancers, heart disease, stroke, chronic bronchitis and emphysema. Tobacco poses additional specific threats for men and women. Men risk declines in fertility and sexual potency, and female smokers risk increased cardiovascular disease, in particular while using oral contraceptives, and higher rates of infertility, premature labour, low birthweight infants, cervical cancer, early menopause, and bone fractures. Smoking during pregnancy adversely affects foetal development.

Female non-smokers are more likely to be exposed to environmental tobacco smoke (ETS), with its elevated risks of lung cancer and heart disease. ETS exposure was higher for Chinese women (57%) than for men (45%) according to the 1996 national survey. Lung cancer death rates in the European Union are nearly three times higher for female compared to male non-smokers, which researchers attribute to exposure to spouse smoking.

A recent meta-analysis found women develop lung cancer with lower levels of smoking compared to men, and are more at risk of contracting the (more aggressive) small cell lung cancer. Among non-small cell cancer types, adenocarcinoma is more common among women. Explanations centre on women's greater use of low-tar cigarettes and more "compensatory" smoking (deeper inhalation), and faster smoking in response to work-place bans. Hormones and reproductive status may also be implicated. It appears women are most at risk of lung cancer if they begin smoking by age 25, six years later than for men. By contrast, research suggests that prognosis may be better for females, due to protective biological factors.

In industrialised countries, where smoking has been common for decades, it is estimated to cause over 90% of lung cancer in men and about 70% of lung cancer among women, and about 22% of all cardiovascular disease. In the US, where the female smoking epidemic first emerged, lung cancer has overtaken breast cancer as the principal cause of female cancer mortality.

Very little is known about the health effects of other forms of tobacco. A study in Mumbai, India, revealed that *bidi* smoking (commonplace for men) is no less hazardous than cigarette smoking, and the relative risk of mortality from smokeless tobacco (popular among women) was 1.35 among women and 1.22 among men. A recent investigation in the Philippines among 61 female "reverse smokers" (lighted end inserted into the mouth) found 96.7% showed mucosal changes and other abnormalities. Growing and manufacturing of tobacco is typically undertaken by women (e.g. in Indonesia and South Asia), exposing workers to nicotine through the skin.

Social and economic consequences of tobacco consumption and gender

The enormous cost of tobacco-related illness at the

community level has some gender implications. Health services will be overstretched as they attempt to meet the tobacco health burden, which may further jeopardise primary health care delivery aimed at women and children. Women are more likely to be caring for partners with smoking-related illnesses.

Women often have less disposable income than men and are more likely to spend it on their children. The diversion of scarce family resources for tobacco (most frequently by men) may significantly contribute to malnutrition and school drop-out, with potential longterm consequences. In Bangladesh, tobacco accounts for 2.8% of the average household's total expenditure, and for 15% of total expenditure among the lowest income group in Indonesia in 1996. Loss of the (male) breadwinner to illness or death and medical care costs may leave families destitute.

What research is needed?

Regular data collection on tobacco use disaggregated by sex and age will permit identification of trends and health effects on males and females of all ages. This coverage should also include co-morbidities, such as depression, drug addiction, etc. Put another way, clinical researchers should include questions about tobacco use as a means of monitoring known connections and revealing potential links.

There is a need for additional clinical research in women on the health effects of tobacco, including use of hand-rolled cigarettes, snuff, reverse smoking and smokeless forms, as well as nicotine dependence and effects of handling tobacco. It should not be assumed that results from studies on men apply to women.

Social research, including qualitative approaches that illuminate the impact of gender on smoking initiation, types of tobacco used, depth and frequency of inhalation, response to diagnosis and health-seeking behaviour, would help explicate health impacts and provide a sound basis for policies and programmes. It is imperative that men and boys are included in gender and tobacco research.

What are the implications for tobacco control policies and programmes?

The need for continuing research should distract from the urgent imperative to undertake tobacco control activities, including enacting policies and legislation that hold the greatest promise for reducing and preventing consumption. This year provides a special focus due to completion of who-sponsored intergovernmental negotiations on the who Framework Convention on Tobacco Control (FCTC).

The WHO Framework Convention on Tobacco Control: a new opportunity

In May 2003, the 192 who Member States adopted the wно Framework Convention on Tobacco Control (FCTC), a new legal instrument to address issues as diverse as tobacco promotion and sponsorship, illicit trade of tobacco products, tobacco taxes and agricultural diversification. With the Convention as a coordination vehicle, national public health policies, tailored around national needs, can be advanced without obstruction from transnational phenomena such as smuggling, as well as advertising, promotion and sponsorship.

Strong government action in individual countries has the greatest potential to stem the tobacco epidemic. Most countries treat sex-linked differentials only as indicators for targeted delivery of generic messages and programmes rather than beacons directing attention to underlying causes. The FCTC's implementation could be enhanced further by applying a gender perspective to each component, but this will require sound multidisciplinary research (described above) to produce appropriate recommendations for the most effective directions within individual countries. For example:

- Differential impacts on men and women of different ages should be considered when deciding upon tobacco pricing, health warnings, access and bans;
- Women may benefit more from messages destroying the myth of the 'light' cigarette, while men may be concerned by tobacco's threats to virility;
- Too often, the sole group singled out by sex is pregnant women, primarily driven by foetal health concerns. Smoking by the father should be addressed as well;
- Community interventions are important to supplement the macro impacts of legislation. Media and community-based campaigns and workplace activities should ensure messages and actions work successfully with both sexes;
- If it is true that women have less success in quitting, more complex approaches may be needed to achieve better outcomes. Intensive counseling would address the circumstances that create obstacles to
- Awareness and advocacy are also needed. Investigative journalism offers scope for mass exposure about gender and tobacco;
- Community and school-based discussion of the health impacts of gender expectations for both males and females would foster greater self-awareness and, thus, resistance to gender-based advertising and harmful social norms.

