

Gender, Health, Tobacco and Equity

Introduction

Tobacco use is arguably the gender-linked behaviour with greatest public health significance. Globally, being born male has been, and in many parts of the world continues to be, the greatest predictor of tobacco use. Male prevalence and consumption greatly exceeds the figures for females in all regions, though not in all countries. More than 5 million people (mostly men) die annually from tobacco use, a figure expected to exceed 8 million by 2030 on current trends, with 80% of deaths occurring in low- and middle-income countries.¹ While female rates are lower overall, substantial proportions of women smoke in some countries, and smokeless tobacco use by women often goes unreported. Both sex and gender are relevant for understanding the use and impact of tobacco: “sex” means the biological features that differ between males and females, while “gender” means the socially-determined behavioural expectations, norms and roles of boys, girls, men and women.

While scientific evidence has shed increasing light on the demographic factors associated with uptake, maintenance and cessation of tobacco use, gender is rarely discussed – at least in relation to men – despite enormous disparities between the sexes. In terms of consequences, some factors affect men and women differently, because of biology as well as social roles.

While the Millennium Development Goals (MDGs) do not mention tobacco explicitly, tobacco consumption and its health, social and economic impacts directly undermine their achievement.² Indeed, internationally recognized rights to health and equality of boys, girls, men and women are threatened by the global tobacco burden of illness and economic and social costs.³

Gender equality refers to equal opportunities to obtain and use resources (social, economic and political) and protection under the law (e.g. health services, education and voting rights). Gender equity refers to fairness and highlights the different needs of men and women in achieving gender equality.⁴ Both concepts help identify effective responses to the tobacco epidemic. More than 170 countries are signatories to the WHO Framework Convention on Tobacco Control (WHO FCTC), which sets out principles and measures by which countries can reduce the supply of and demand for tobacco. The WHO FCTC acknowledges gender-specific risks and the need for gender-specific strategies for more effective tobacco control.⁵

In this information sheet, we summarize current evidence on gender, health, equity and tobacco, and suggest gender-specific responses to prevent or reduce the use of tobacco.

What do we know?

More men than women continue to smoke in most countries

Most recent evidence compiled by WHO shows the stark sex-linked disparities in smoking across all WHO regions (see Fig. 1).³ The representation of numbers in a bar graph makes plain the scale of differences that are obscured if only total consumption figures for countries or regions are presented. Globally, male smoking prevalence is 4.4 times that of women. The most even division is found in the WHO Region of the Americas and European Region (1.6 times and 2 times higher in men, respectively), with the largest imbalance in the most heavily populated regions of the WHO South-East Asia and Western Pacific Regions (9.3 times and 11.4 times higher, respectively). The sex gap

is even greater in individual countries with large populations, including China (male rates 22 times higher) and India (23 times higher).¹ While the regional smoking figures reflect the current imbalance in tobacco use between the sexes, however, they obscure the large absolute numbers of female tobacco users in heavily populated countries. They also offer no guarantee that many more girls and women will not take up this deadly practice in future. Any trend in health behaviour is always vulnerable to social change, and there is evidence suggestive of precisely this change in some countries, as will be discussed below.

Smoking prevalence among men and women aged 15 years and above by WHO Region, 2006 (source: World Health Organization. *Gender, women and the tobacco epidemic*. Geneva, 2010:30).³

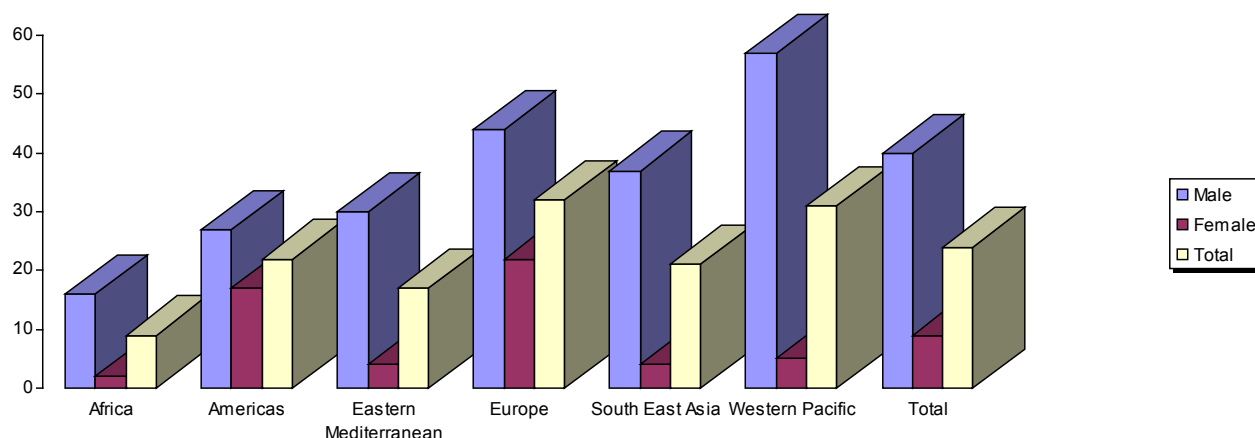


Figure 1. Smoking prevalence among men and women aged 15 years and above by WHO Region, 2006 (source: World Health Organization. *Gender, women and the tobacco epidemic*. Geneva, 2010:30)*

* These estimates are not age-standardized (i.e. the effects of the underlying age structures across countries are not removed) and should be used with caution when making comparisons of smoking prevalence across regions. For this reason, these estimates differ from those published in WHO's World health statistics 2010.

Smokeless tobacco is popular among women in parts of Asia

It is important to note that the statistics cited in Fig. 1 refer specifically to smoking. Tobacco is also consumed in other forms, especially in smokeless form – chewing tobacco leaf on its own, or as part of a mixture in products, such as *paan* and *gutka*, prepared at home and also sold commercially across the vast populations of South Asia. If we consider smokeless tobacco consumption, we find a smaller sex gap in some countries. The Global School Personnel Study, conducted across India in 2006, found smokeless tobacco was consumed by 26% and 21% of women school workers (compared with 27.5% and 23.9% of men) in the north-eastern and northern regions, respectively.⁶ In Bangladesh, the Global Adult Tobacco Survey found 26.4% of men and 27.9% of women were current users of smokeless tobacco. Overall, 58.0% of men and 28.7% of women used any form of tobacco, reflecting much higher male smoking rates.⁷ Smokeless tobacco use is higher among women than men in Thailand (6.3% versus 1.3%).⁸

Boys and girls smoke at the same rates in more than half of the countries of the world

Monitoring tobacco use patterns by age and type of product is essential because it can foreshadow changes in trends and risks. For example, a 2005 national survey in Ukraine among adults aged 15+ found 66.8% of men and 19.9% of women were current smokers.⁹ However, rates were much more even in youth aged 13-15 (surveyed 2005-2006): 29.8% (male) and 22.2% (female).¹ The Global Youth Tobacco Survey (students aged 13-15) found no significant differences by sex in 87 of 151 surveys (2000-2007), higher male rates in 59 sites and higher female rates in five sites. Male students had significantly higher smoking rates in all WHO regions except the Region of the Americas and European Region; boys were more likely to be users of other tobacco products in the Americas, European and South-East Asia regions, but no differences by sex were found in other regions.¹⁰

Other research sheds light on interactions between gender and other social factors. Andreeva et al.⁹ found that the likelihood of earlier male initiation in Ukraine was higher among low-income respondents, while being younger increased the odds for females. Daily smoking for males was higher among the less educated, while for females it was higher for those living in urban centres. Thus, analysis that disaggregates the differential role of gender reveals trends with greater precision and complexity.

Gender-linked impacts of the epidemic: health, equality and equity

The tobacco epidemic's negative health consequences are well understood. There is less awareness about its consequences for equity. Inequity arising from the epidemic can, in turn, adversely affect health. Disproportionate male tobacco use has a range of severe negative consequences for men (as users) and for women (nonusers). For women, some impacts are exacerbated by prevailing gender inequalities. And certain impacts are associated with both gender and sex.

Gender, sex, health and tobacco

Because of their far greater consumption of tobacco, male users have suffered disproportionate morbidity and mortality (and will continue to suffer them, because of the time-lag before diseases emerge). Tobacco kills nearly half of lifetime users, on average 15 years prematurely; men comprise the majority of global deaths. About a quarter of deaths in Indian men are attributable to tobacco, and tobacco is expected to kill 100 million Chinese men currently under 30 years of age.¹¹ Worldwide, of the more than five million people who die each year from tobacco use, approximately 1.5 million are women. Of the more than eight million people who would die from tobacco use by 2030 on current trends, approximately 2.5 million would be women.

Both male and female users suffer from tobacco-induced diseases such as lung cancer, chronic obstructive pulmonary disease and cardiovascular disease. Men's additional health risks include erectile dysfunction and (possibly) reduced sperm quality.¹² Female smokers tend to have higher rates of pregnancy problems and reach menopause about two years earlier than non-smokers. Heavy smokers using the contraceptive pill have much higher heart disease rates than non-smokers not on the pill. Smokers have higher cervical cancer rates, and low bone density and fractures among postmenopausal women have been linked with smoking. Women smoke so-called "light" cigarettes more frequently than men (63% versus 46%), possibly owing to a mistaken belief that these are safer, but people who smoke these products tend to inhale similar amounts of tar and other toxic chemicals compared with non-"light" cigarette smoking.³

Exposure to second-hand smoke

Second-hand smoke causes premature mortality (estimated at more than 600 000 annually worldwide), and is measured as 3-4 times more damaging per gram of particulate matter than smoke directly inhaled by the smoker.^{1,40} Similar proportions of adult male and female non-smokers are exposed in homes and workplaces, but a higher number of women than men are exposed overall, and comprise the bulk of deaths (64%) attributable to second-hand smoke among adult non-smokers. Women are also exposed to "third-hand smoke" – residue left on furniture, clothes and materials – which contains 50 carcinogenic toxins. Indoor pollution from smoking is higher than that found along busy roads or during firestorms.¹ Second-hand smoke is associated with adverse pregnancy outcomes, including pre-term and low-birth-weight infants, who are more likely to die or suffer from infections and poor physical growth that may undermine their health permanently.¹¹ It has also been linked to heart disease and lung cancer in men and women and postmenopausal breast cancer.³ There is some evidence suggesting that childhood exposure contributes to breast cancer later in life.¹ Children growing up around smokers face 50-100% higher rates of respiratory illnesses and increased odds of ear infections and developmental disabilities.¹ Illnesses in children place greater demands on women's time and family income.

Gender, tobacco and equity

The impact that tobacco has on health impairs productivity; the resultant financial cost is felt most keenly among the poor. Given the sex-linked disparities in tobacco use and prevailing gender norms and roles, women bear the brunt of these burdens.

Of additional concern is that those least able to afford the costs of tobacco are most likely to be users. Male tobacco use is concentrated among people with low incomes and less education in nearly all countries.¹¹ About 50% of men in developing countries smoke, compared with 35% in developed countries.¹³ A study in Bangladesh found that 58% of men in the lowest income group used tobacco, compared with 32.3% in the highest income group.¹⁴ The 2009 GATS in Egypt and the Philippines found much higher rates among men with little or no formal education.^{15,16} Smoking was about 2.5 times more common in the lowest income quintile among Filipino men (51.2%) than in the highest (21.1%). Therefore, poor men are far likelier than the rich to become ill and die from tobacco use.¹¹ In Bangladesh in 2004, 57 000 deaths were attributable to tobacco.⁷ Poorer, less educated women are also likelier than other women to use tobacco in many countries,^{11,16,17} and these subgroups will thus suffer more consequences. Medical costs related to smoking have impoverished an estimated 50 million people in China.¹¹

Additionally, household budgets are diminished by spending on tobacco products, even where these products are very cheap. In Mexico, the poorest households spent almost 11% of income on tobacco compared with 1.5% in the richest households¹¹ and nearly 10% of household income went on tobacco in Indonesia in 2001 (compared with 6.4% in 1995).¹⁸ A mean of 15.4% of personal monthly income went on smoking among rural smokers in eastern China in 2004.¹⁹

Household budgets are usually inelastic. In other words, the proportion of total household disposable income devoted to buying tobacco tends to remain the same even when tobacco prices increase. In Bangladesh,¹⁴ per capita spending on clothing, housing, health, and education was just 45% of average male spending on cigarettes. The typical male Bangladeshi smoker spent 18-20 times more on cigarettes than on health or education, in a setting where government support is low for health and education. Opportunity costs (the value of essentials foregone to pay for tobacco) affect girls and women disproportionately where women's position is lower, partly because such societies tend to be poorer. For example, when less money is available, the impact is grave where women and children eat last or where poor households prioritize education of sons over that of daughters.² Women and girls are usually family carers, and thus more burdened by looking after husbands, fathers or other family members who develop tobacco-induced illnesses. If the major breadwinner dies, survivors can be pushed into extreme poverty.¹¹ The fact that tobacco use is widely prevalent in many poor countries, that mortality is so high for smokers and that it often occurs in productive middle age means it can have a catastrophic effect on substantial numbers of women and households.

There is evidence from some countries that women are less successful at quitting than men, possibly because women are more likely to smoke in response to negative moods, stress or for weight control. Women are likelier to report pleasurable effects from smoking and respond more sensitively to nicotine's effects on mood and weight loss. Studies in Europe found women of lower socioeconomic status were less likely to quit, with some researchers linking this with reduced access to information and greater life stress. A recent study in the United Kingdom found more women than men attributed relapse to stress. Generally higher levels of depression in women may also impede quitting. Fear of (and actual) weight gain on quitting has been associated with uptake and relapse among girls and women, mainly in the United States of America and Europe. This association has not been well studied in developing countries, but ideals of slimness in women in some societies could affect initiation and cessation.³

Males and gender: a blind spot for tobacco control

Epidemiological and surveillance data from around the world confirm that risk behaviours such as tobacco use, alcohol abuse, violence, unsafe sex and dangerous driving are practised substantially more often by males than females. When a behaviour differs as dramatically by sex as tobacco use, the primary explanation must lie in prevailing gender norms – for both sexes.

An examination of health risk in India^{20:73} found that “masculinity is an overwhelming construct” and that a “real man should be daring, courageous, confident ... [and] able to prove his manliness”. These norms also discourage “feminine” behaviours such as caring for one’s health. Courtenay found that American men and boys experience more pressure than do females to conform to gender stereotypes, which include health-related concepts such as “independent, self-reliant, strong, robust and tough”.²¹ In the United States of America, men of all ages were more likely than women to practise more than 30 behaviours linked with higher morbidity and mortality, and less likely to take up protective practices. “Being a woman may, in fact, be the strongest predictor of preventive and health-promoting behaviour.”^{21:1386}

Despite this evidence, Courtenay argues, “the discussion of men’s greater risks and of the influence of men’s gender is often conspicuously absent”.^{21:1387} He suggests that earlier “engendering” of health research prompted by the exclusion of women in biomedical studies led to a “gender and health” focus that “has become synonymous with ‘women’s health’”, leaving unexamined the gender dimensions of men’s health.^{21:1386}

Powerful taboos against female smoking that exist across most of Asia, for example, are likely to explain the very low uptake there.²²⁻²⁴ Being born male appears to be the strongest single predictor of tobacco use in much of the developing world, yet there is very little exploration of the role of masculinity in the mainstream tobacco control literature. Where “gender” appears, it almost always relates to sex-linked differences, or is a proxy for women.

Using gender to promote tobacco use

The tobacco industry cannot be accused of being gender-blind in its promotion and marketing. In low-income countries, it has appealed to males using images of risk-taking, e.g. the Marlboro Man and sponsorship of motor racing, alongside those of romantic and financial success.²⁵ Nichter et al.²⁶ reviewed more than five years of advertising of *kretek* cigarettes in Indonesia, which holds 90% of market share in a setting where 62% of males smoke (compared with 1-3% of women). Advertising themes included “smoking to enhance masculinity, and smoking as a means to uphold traditional values while simultaneously emphasizing modernity and globalisation”.^{26:98}

It is estimated that the global tobacco industry spends tens of billions of dollars a year to attract “replacement” (young) smokers – and subgroups with currently low uptake, including women – and to lobby against restrictive legislation.¹¹ Promotion among females has been called “the largest product-marketing opportunity in the world”.³ This marketing has been described as a means “to associate its product with psychological and social needs” of potential consumers, “some of which emanate from the restructuring of social reality that advertising itself provides”.^{3:106} Barbeau et al.’s analysis of internal industry documents reveals the sophisticated segmentation of marketing in the United States of America along lines of age, class, sex and gender as smoking was increasingly concentrated among less-educated, low-income populations, with smaller disparities by sex. The industry called one segment “virile” or “maverick” females, young women who rejected popular feminine images and laughed at middle-class values.¹⁷

The industry has masterfully incorporated gender norms, and other important cultural values, to make its approaches context-specific and flexible in changing environments. In both western countries and Asia (with its vast female non-smoking populations), the industry has used various themes to attract women, including autonomy, romance, fashion, body image, excitement and friendship. It has employed advertising, product placement, sponsorship (e.g. of the arts), female brands, segmentation of ethnic and income subgroups of women, and donations to civic and women’s groups.³ British American Tobacco in Malaysia has helped support a women’s refuge. It profiled the refuge’s founder in an annual report, where she was quoted as saying this donation “goes to show that they do care about the society’s wellbeing”.²⁷

Addressing gender in context for tobacco control

Two of the WHO FCTC's Guiding Principles invite a greater scrutiny of gender within mechanisms to address the tobacco epidemic, calling for:

... comprehensive multisectoral measures ... taking into consideration ... the need to address gender-specific risks when developing tobacco control strategies
*... transfer of ... knowledge ... to establish and implement effective tobacco control programmes, taking into consideration local culture, as well as social, economic, political and legal factors.*⁵

These Principles acknowledge the need for context-specific approaches, implying a crucial role for gender analysis and social research to refine interventions appropriate to local conditions.

An example of such social research was a 2007 qualitative study among boys aged 13-17 in Indonesia,²⁸ which found smoking equated with achieving manhood: "If we don't follow our peers and smoke, they will call us feminine".^{28:798} In a survey of 2000 female students and workers in urban Viet Nam,²⁴ female smoking was rejected by 76% because it was "inappropriate for Vietnamese women". Smoking was seen as a male social lubricant, a concept echoed in the Indonesian study²⁸ and elsewhere.²⁹

There were predictions in the 1990s that Asian women would rapidly take up smoking, seen as "a symbol of women's liberation and freedom from traditional gender roles".^{30:892} Female rates would triple by 2025, a notion based on shifting patterns in the west, tobacco industry targeting of women, release of "female" brands and declining sex-linked differentials among youth in some surveys.^{11,25,31} This grim forecast may yet be realized, but there is little evidence it has arrived as yet (see Fig. 1). Indeed, in some populous Asian nations, prevalence in women has apparently declined slightly (Table 1).

Table 1. Current tobacco smoking by year by sex,* selected Asian countries

China	1996 (Age 15-69) ³² Male 63% Female 3.8%	2009 (Age 15+) ⁴¹ Male 52.9% Female 2.4%
India	1998/99 (Age 15-49) ³³ Male 29.4% Female 2.5%	2009 (Age 15+) ⁴¹ Male 24.3% Female 2.9%
Japan	1990 (Age 20+) ³⁴ Male 61% Female 14%	2009 (Age 20+) ⁴¹ Male 38.2% Female 10.9%
Vietnam	1992 (Age 15+) ²³ Male 63.1% Female 4.7%	2010 (Age 15+) ⁴¹ Male 47.4% Female 1.4%
Philippines	2003 (Age 18+) ¹⁶ Male 56.3% Female 12.1%	2009 (Age 15+) ⁴¹ Male 47.6% Female 9.0%

* age range varies as indicated

Sources: 1,16,23,32,33,34

While traditional norms that discourage female smoking should be monitored because they may change, it is relevant and perhaps unexpected that some research has found them remarkably resilient in Asian populations, even where public discourse challenges stereotypes and inequalities. One example emerged in attitudes and responses to second-

hand smoking among recent Asian immigrants to the United States of America.²⁹ Moreover, a large study of couples married over the past 40 years in socialist Viet Nam (which explicitly promotes gender equality) found norms virtually intact over time. Although nearly all women worked, they did most of the housework, and only 49% (of women) thought both spouses should contribute equally. Men in younger cohorts were likelier than older ones to make most major household decisions, a situation endorsed by 69% of men and 61% of women.³⁵ Such research is important to test assumptions about trends, attitudes and beliefs, but needs to be undertaken regularly.

The need for policies and programmes sensitive to gender and equity

A gender equality framework offers an appropriate model to bolster existing tobacco control interventions. This would involve an analysis of the ways biological, social, economic and cultural factors influence health risks and lead to different needs for men, women, boys and girls in specific settings. Such an approach implies that interventions directed solely at individuals are unlikely to yield results where structures and environments constrain or determine exposure and behaviours. It also implies that both tobacco control policies and social change addressing gender inequalities can be instrumental in preventing or reducing tobacco use among males and females.³

There is nothing natural or inevitable about male tobacco uptake. While the key WHO FCTC measures are crucial for reducing and preventing tobacco use, the persistence of harmful masculine norms will retard their impact. Clever tobacco counter-advertising that addresses typically masculine concerns has already been used to focus on male potency and fertility. Another tack is to raise awareness among women and men of the deadly effects of traditional norms, an approach used in HIV behavioural change programmes.³⁶ One approach tried in Canada found opportunities to utilize changing concepts of masculinity, such as the involved, nurturing father, to encourage men to support quitting (by both partners) during pregnancy.³⁷ A pilot project in Viet Nam helped women to identify messages that encouraged husbands to smoke only outside the home; the more successful ones invoked cultural expectations of responsibilities to the family, which are stronger motivators than the husband's own health.³⁸

Because societies differ, counter-advertising should be informed by an understanding of the self-concept of female smokers in each setting. For example, Barbeau et al. state that:

[Anti-smoking messages] that reinforce women's value in their traditional roles (wives, mothers, caregivers) may well not appeal to a demographic that prefers to see itself as independent and a little rebellious.^{17:119}

The authors also remind the tobacco control community that efforts are needed to “stem growing class based disparities”.^{17:118} Increasingly, as noted above, gender is interacting with social class to produce greater segmentation in relation to tobacco use and its dire impacts.

Gender-sensitive approaches for females are needed for prevention and cessation. Women and girls – of different ages and backgrounds – should be part of programming and research, and benefit from these.³⁹ Women's groups should see tobacco as a women's health and equity issue. Health activists should challenge the myth of smoking and women's liberation by portraying the enslavement of addiction and manipulation by the tobacco industry. It is essential that traditional expectations for females never be cited to discourage smoking; health and other costs are the compelling reasons for both men and women to shun tobacco. Gender awareness and life skills such as empathy and communication help young women recognize the negative consequences of gender norms for both sexes, and thus become adept at resisting pressures to use tobacco if these arise. Data on female social and economic disadvantage is widely available and should be used to highlight the opportunity costs of using tobacco, which in some societies can affect the access of girls and women to health, nutrition and education. Where women lack autonomy to avoid second-hand smoke, gender analysis should highlight the impact of power differentials on health.

By addressing gender-specific needs within local cultural contexts – as countries are enjoined to do in the WHO FCTC’s Guiding Principles – it may be possible to accelerate the impact of WHO FCTC mechanisms such as tobacco pricing, restrictions on marketing, smoke-free policies, cessation support and provision of accurate information. Gender analysis is conducted by the tobacco industry to support its powerful marketing. It is time to bring the gender dimensions of both male and female tobacco use to the fore in order to reduce the catastrophic effects of the epidemic, which fall most heavily on populations that are the most disadvantaged.

REFERENCES

1. World Health Organization. WHO report on the global tobacco epidemic, 2009: Implementing smoke-free environments. Geneva, 2009 (<http://www.who.int/tobacco/mpower/2009/en/index.html>, accessed 20 March 2011).
2. Esson K, Leeder SR. The Millennium Development Goals and tobacco control. Geneva, World Health Organization, 2004 (http://www.who.int/tobacco/publications/mdg_final_for_web.pdf, accessed 20 March 2011).
3. World Health Organization. Gender, women and the tobacco epidemic. Geneva, 2010 http://www.who.int/tobacco/publications/gender/women_tob_epidemic/en/index.html, accessed 20 March 2011).
4. World Health Organization. Gender mainstreaming for health managers: a practical approach. Geneva, Department of Gender, Women and Health, World Health Organization, 2011 (http://www.who.int/gender/documents/health_managers_guide/en/, accessed 2 August 2011)
5. World Health Organization. WHO framework convention on tobacco control. Geneva, 2004 (<http://www.who.int/fctc/en/>, accessed 20 March 2011).
6. Sinha DN. India Global School Personnel Survey (GSPS) 2006. Delhi, WHO Regional Office for South-East Asia, 2006 (http://www.searo.who.int/LinkFiles/GSPS_Report-India.pdf, accessed 20 March 2011).
7. GATS: Global Adult Tobacco Survey: Bangladesh. Fact sheet, summary report, Bangladesh 2009. Geneva, World Health Organization, 2009. http://www.who.int/tobacco/surveillance/summary_regional_gats_bangladesh_report_2009.pdf, accessed 20 March 2011).
8. GATS: Global Adult Tobacco Survey: Thailand. Fact sheet. Geneva, World Health Organization, 2009 (http://www.who.int/tobacco/surveillance/thailand_gats_fact_Sheet_2009.pdf, accessed 20 March 2011).
9. Andreeva TI, Krasovsky KS, Semenova DS. Correlates of smoking initiation among young adults in Ukraine: a cross-sectional study. BMC Public Health, 2007, 7:106. doi:10.1186/1471-2458-7-106.
10. Warren CW et al. Global youth tobacco surveillance, 2000–2007. MMWR Surveillance Summary, 2008, 57(1):1-28. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5701a1.htm>, accessed 5 August 2011)
11. World Health Organization. WHO report on the global tobacco epidemic, 2008: the MPOWER package. Geneva, 2008 (http://www.who.int/tobacco/mpower/mpower_report_full_2008.pdf, accessed 20 March 2011).
12. United States Surgeon General. The health consequences of smoking: a report of the Surgeon General. Rockville, MD, US Department of Health and Human Services, 2004:534.
13. Shafey O et al. The tobacco atlas. Atlanta, GE, American Cancer Society, 2009.
14. Efroymson et al. Hungry for tobacco: an analysis of the economic impact of tobacco consumption on the poor in Bangladesh. Tobacco Control, 2001, 10(3):212–217.
15. GATS – Global Adult Tobacco Survey: Egypt. Fact sheet, men and tobacco use. Geneva, World Health Organization, 2009 (http://www.who.int/tobacco/surveillance/fact_sheet_of_gats_egypt_men_and_tobacco_use_2009.pdf, accessed 20 March 2011).
16. GATS: Global Adult Tobacco Survey: Philippines. Philippines country report. Geneva, World Health Organization, 2009 (http://www.who.int/tobacco/surveillance/2009_gats_report_philippines.pdf, accessed 20 March 2011).
17. Barbeau EM, Leavy-Sperounis A, Balbach ED. Smoking, social class, and gender: what can public health learn from the tobacco industry about disparities in smoking? Tobacco Control, 2004, 13:115–120. doi: 10.1136/tc.2003.006098.

18. Ministry of Health, Republic of Indonesia. The tobacco source book: data to support a national tobacco control strategy. Jakarta, Ministry of Health, 2004.
19. Hesketh T et al. Smoking, cessation and expenditure in low income Chinese: cross sectional survey. *BMC Public Health*, 2007, 7:29. doi:10.1186/1471-2458-7-29.
20. Verma RK, Mahendra VS. Construction of masculinity in India: a gender and sexual health perspective. *Journal of Family Welfare*, 2004, 50:71-78.
21. Courtenay WH. Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Social Science & Medicine*, 2000, 50:1385-1401.
22. Morrow M, Barraclough S. Tobacco control and gender in Southeast Asia. Part I: Malaysia and the Philippines. *Health Promotion International*, 2003, 18(3):255-264.
23. Morrow M, Barraclough S. Tobacco control and gender in Southeast Asia. Part II: Singapore and Vietnam. *Health Promotion International*, 2003, 18(4):373-380.
24. Morrow M et al. Smoking and young women in Vietnam: the influence of normative gender roles. *Social Science & Medicine*, 2002, 55(4):681-690.
25. Kaufman NJ, Nichter M. The marketing of tobacco to women: global perspectives. In: Samet J, Yoon SY, eds. *Women and the tobacco epidemic: challenges for the 21st century*. Geneva, World Health Organization, 2001:69-98.
26. Nichter M et al. Reading culture from tobacco advertisements in Indonesia. *Tobacco Control*, 2008. doi:10.1136/tc.2008.025809.
27. British American Tobacco Malaysia. Annual report 2003. Petaling Jaya, 2004.
28. Ng N, Weinehall L, Ohman A. 'If I don't smoke, I'm not a real man' — Indonesian teenage boys' views about smoking. *Health Education Research*, 2007, 22(6):794–804.
29. Brugge et al. Development of targeted message concepts for recent Asian immigrants about secondhand smoke. *Journal of Health Communication*, 2002, 7(1):25-37.
30. Ernster V et al. Women and tobacco: moving from policy to action. *Bulletin of the World Health Organization*, 2000, 78(7):891-901.
31. Aghi M et al. Initiation and maintenance of tobacco use. In: Samet J, Yoon SY, eds. *Women and the tobacco epidemic: challenges for the 21st century*. Geneva, World Health Organization, 2001:49-68.
32. Yang GH et al. Findings of the 1996 National Prevalence Survey. *Journal of the American Medical Association*, 1999, 282(13):1247-1253.
33. WHO Regional Office for South East Asia. Regional tobacco surveillance system country files: India, no date. (http://www.searo.who.int/LinkFiles/Regional_Tobacco_Surveillance_System_Country_Profiles_india.pdf, accessed 20 March 2011).
34. Mackay J, Eriksen M, Shafey O. The tobacco atlas. Brighton, American Cancer Society, 2006.
35. Knodel J et al. Gender roles in the family: change and stability in Vietnam. Ann Arbor, Population Studies Center, University of Michigan, 2004.
36. Grieg A, Kimmel M, Lang J. Men, masculinities and development: broadening our work towards gender equality. *Gender in Development Monograph Series*, No. 10. New York, United Nations Development Programme, 2000.
37. Bottorff J et al. Men's construction of smoking in the context of women's tobacco reduction during pregnancy and postpartum. *Social Science & Medicine*, 2006, 62:3096–3108.

38. Thu NL, Minh NT. Creating smokefree homes: developing effective messages and strategies for women to persuade husbands to stop smoking inside the house (Final report for Southeast Asia Tobacco Control Alliance (SEATCA)). Bangkok, Southeast Asia Tobacco Control Alliance, 2006.
39. Greaves L, Jategaonkar N, Sanchez S, eds. Turning a new leaf: women, tobacco, and the future. Vancouver, British Columbia Centre of Excellence for Women's Health, 2006.
40. Öberg M et al. Worldwide burden of disease from exposure to second-hand smoke: a retrospective analysis of data from 192 countries. *The Lancet*, Vol. 377, Issue 9760: 139-146.
41. World Health Organization. WHO report on the global tobacco epidemic, 2009: Warning about the dangers of tobacco. Geneva, 2011 (http://www.who.int/tobacco/global_report/2011/en/index.html, accessed 3 August 2011).