GENDER-RESPONSIVE TOBACCO CONTROL: EVIDENCE AND OPTIONS FOR POLICIES AND PROGRAMMES

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Gender-Responsive Tobacco Control: Evidence and Options for Policies and Programmes

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Summary

Gender and Health

Gender is a social construct referring to the roles, behaviours, activities, attributes and opportunities that any society considers appropriate for women, men, girls, boys and people with non-binary identities. Gender interacts with, but is distinct from, biological sex.

Gender is an important determinant of health inequities in three interlinked domains: the intersection of gender and other social determinants of health; the impact of gender on health behaviours (protective or risky); and the gendered nature of health system responses. All three domains have relevance for tobacco control:

* tobacco exposure is distributed unequally across different sections of society, and gender interacts with social class, occupation, age, indigenous ethnicity, geographical location, to reproduce and reinforce levels of risk;
* tobacco exposure is linked to notions of masculinity and changing notions of femininity;
* health system responses (access to care; quality of care received; gender of care-givers) are influenced by gender.

Despite this, a large proportion of tobacco control research, and many tobacco control policies and programmes are gender-blind – thus missing a key determinant not only of risk, but of effective interventions.

Evidence of the impact of gender on tobacco use and associated health outcomes

Most smokers in the world are men, and rates of use of smokeless tobacco products are higher in men than women – thus morbidity and mortality rates due to tobacco are higher in men. Illness arising from exposure to second-hand smoke, however, is mainly suffered by women. In many societies tobacco use is strongly tied to constructions of gender – and can shift as norms and notions of gender change over time. These societal gender norms have been manipulated and exploited by the tobacco industry over many decades, and have been successfully used to position tobacco as being associated with positive notions of masculinity, as well as ideas of independence from restrictive gender norms and options for weight control among women and girls.

The efforts of the tobacco industry to capitalise on and exploit gender norms have remained largely unchallenged in tobacco control: tobacco research predominantly measures impact disaggregated by sex with no associated gender analysis; evaluation of interventions provides sex-disaggregated data but these are rarely analysed by gender; and design and delivery of policies and programmes remain mostly gender-unresponsive.

Strategic action areas and priority collaborations

Strategic options for gender-responsive tobacco control can be aligned both to a number of ongoing processes for rights-based action to achieve gender equality and promote health and wellbeing under the SDG Agenda, and allied to existing human rights frameworks -particularly to promote accountability. Partners for tobacco control are identified across a range of stakeholder groups predominantly working on gender - including UN agencies working with men, women, children and adolescents and marginalised populations, human rights agencies, civil society and non-governmental organisations, and the research community.

Priority actions are identified in five key areas, summarised below:

1) *Promote policy and programme formulation, implementation and evaluation that incorporates a gender-lens*

* Recognise that gender is a social construct that determines health outcomes in everyone. Gender-responsive policies and programmes can improve health for everyone.
* Strengthen capacity for gender analysis of policies, programmes and data for monitoring and evaluation.

2) *Implement, monitor and evaluate gender-responsive actions to reduce exposure*

* Increase price and levels of taxation to achieve the greatest population level impact
* Ensure tobacco education, information and cessation campaigns incorporate gender responsive messages
* Analyse the impact of tobacco advertising (across all media, promotion and sponsorship routes) by sex and gender

3) *Implement, monitor and evaluate gender-responsive actions to reduce supply*

* Promote a transition to sustainable livelihoods for all those involved in tobacco growing and production – including women and girls.
* Uphold and enhance bans on promotion and sales to minors, particularly in the face of industry tactics to exploit gender norms among young people

4) *Enable and support gender-responsive participatory processes*

* Ensure that policies and programmes for education and public awareness are developed with the participation of all affected communities and their representatives – men, women, adolescents, LGBT people, people in specific occupations, etc.
* Collaborate with gender equality and women's empowerment programmes to leverage mutual goals
* Mobilise political and civic leaders in gender equality in support of tobacco control
* Support adequate financial provision to women's empowerment and community-development programmes to incorporate tobacco control actions.

5) *Strengthen gender responsive health care services*

* Incorporate evidence on gender and tobacco control into plans for universal health coverage. Promote gender-responsive health systems that deliver quality care for everyone. * Strengthen health worker training to understand and respond to the impact of gender on health outcomes.
* Implement WHO recommendations for prevention and management of tobacco use and second-hand smoke exposure in pregnancy.
* Promote gender equality within health systems to ensure that the burden of care (clinical, social) is equally distributed and fairly remunerated.

INTRODUCTION

The purpose of this report is in response to a request from the Conference of Parties 7 (COP7) to review the relationship between gender and tobacco, and provide evidence for gender-responsive tobacco control. Globally more men than women use tobacco, and sex-disaggregated data on the burden of morbidity associated with tobacco use shows a significantly (three times) higher burden in men compared to women[1]. However, although comprehensive data exist to highlight sex-disaggregated differences in smoking and disease rates, the gendered-nature of tobacco use, associated ill-health and options for gender-responsive effective control policies are less well understood.

GENDER

Gender is a social construct, that interacts with, but is distinct from, biological sex. Gender refers to the roles, behaviours, activities, attributes and opportunities that any society considers appropriate for women and men, girls and boys and people with non-binary identities[2]. Gender also reflects the distribution of power within relationships – both individually and socially. Gender is a dynamic construct that changes over time, place and throughout the life-course. Gender is an important determinant of health inequities[3] – both acting alone, and through its interaction with other social determinants of health – such as education, economic position, location, ethnicity, disability, sexual orientation, etc.

Gender influences health outcomes associated with tobacco use in three inter-linked domains: (1) through its interaction with other social determinants of health, e.g. the interaction of social class, gender and tobacco use, or occupation, gender and tobacco use; (2) through its more direct impact on health behaviours, including gender norms influencing both tobacco use and health care-seeking behaviours; and (3) through health system responses which are gendered including through accessibility, affordability and quality of care received.

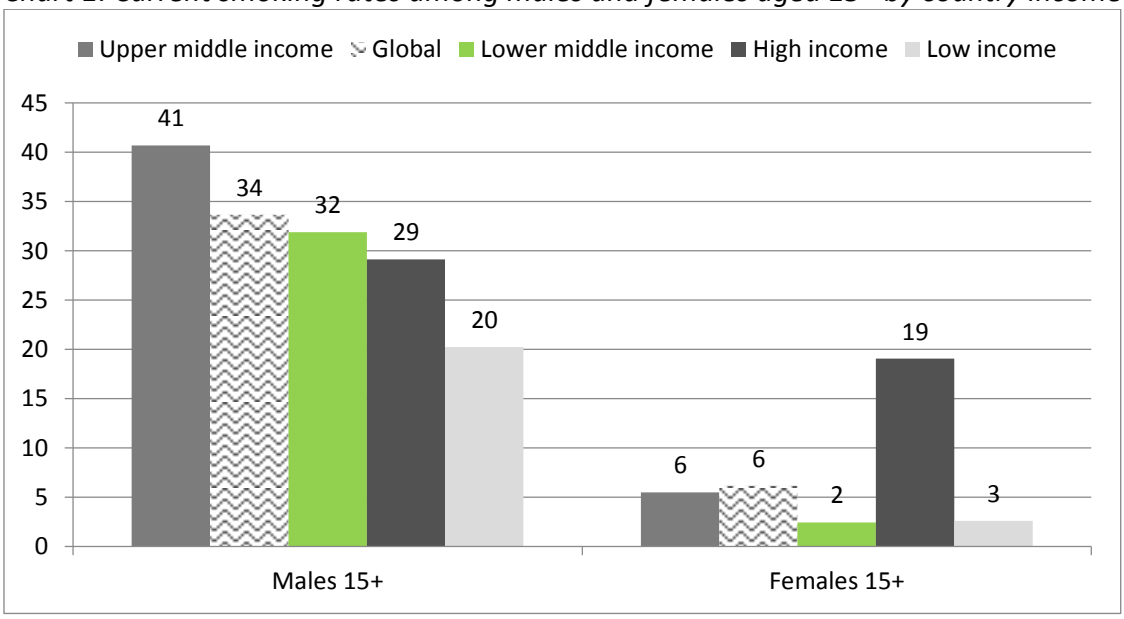
More evidence is available on sex-disaggregated differences in some health behaviours (tobacco use), and associated morbidity and mortality outcomes in men and women, than on other elements of the gender/health interaction. Moreover, gender is a complex construct, and measuring and attributing health behaviours and health outcomes to gender is methodologically challenging. Nonetheless, there are some trends that can be identified in the relationship between gender and tobacco, and these are explored below.

Sex-disaggregated evidence of tobacco use

Globally in 2016, around 34% of men and 6% of women aged 15+ smoke tobacco. Prevalence of smokeless tobacco use is 8% among men and 5% among women aged 15+. Among school-going children aged 13-15, 9% of boys and 4% of girls smoke cigarettes, while 5% of boys and 3% of girls use smokeless tobacco products[4].

Prevalence of tobacco use varies both between and within countries and Regions. Rates of current smoking among those aged 15+ years vary by country income group with - see Chart 1. Analysis of trends over the past 25 years has shown an overall decline in the prevalence of tobacco use across populations, but with marked heterogeneity – more countries have achieved significant decreases in prevalence of daily smoking have among men than women, and although smoking rates remain higher in men than women, more countries have seen minimal changes or increases in smoking among women compared to men over the past quarter century[5].

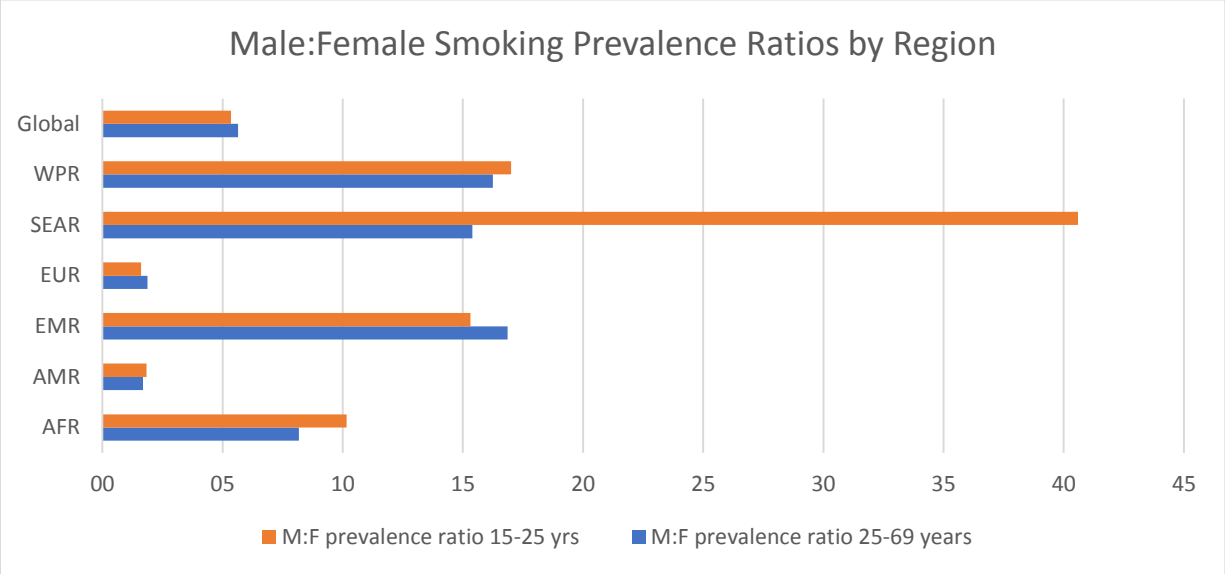
*Chart 1: Current smoking rates among males and females aged 15+ by country income group**



* Data from WHO global trends report, 2018[4]

Smoking prevalence ratios comparing smoking rates in men and women aged 15+ show Regional variation, with rates among men in EURO and AMRO 1.8 and 1.7 times higher (respectively) than rates in women, while in SEARO and WPRO men's smoking rates are approximately 15 times higher than those of women. A breakdown of smoking prevalence ratios (male to female rates) by Region is given in Chart 2, where numbers on the X-axis indicate the number of male smokers for every 1 female smoker.

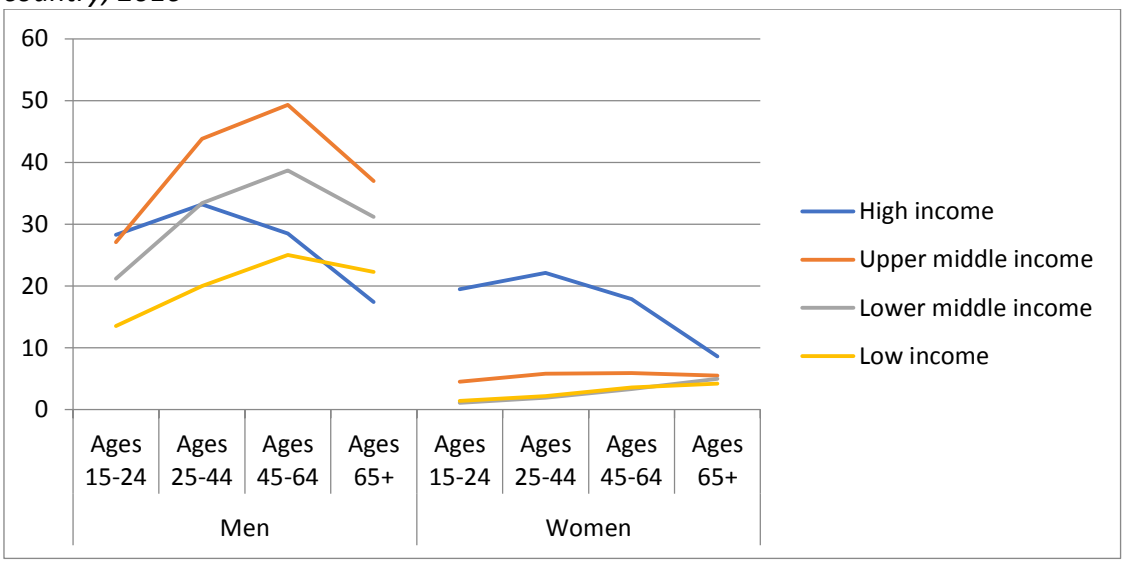
*Chart 2: Male to Female smoking prevalence ratios by WHO Region, age groups 15-24 years and 25-69 years**



* Data from WHO global trends report, 2018[4]

In all country income groups except high-income, the age pattern of smoking among men is lowest in the younger ages and rises to a peak in ages 45-64 before dropping sharply as mortality takes its toll on the oldest group. Among women, smoking rates show minimal variation by age, the stark exception being the high-income group of countries. The age pattern of smoking in high-income countries contrasts strongly with the other income groups, but shows no difference by sex : for both men and women, rates are high among the younger ages, peak in the 25-44 age group, then decline sharply in the ages 45 and older – see Chart 3.

Chart 3: Prevalence of current smoking (%) by age group, sex and World Bank income group of country, 2016



Data source: WHO global report on trends in prevalence of tobacco smoking 2000–2025, second edition

Among younger people globally, there is some evidence that the smoking prevalence ratio is marginally lower in the 15-24 year age group than in the older age groups – thus reflecting a smaller gender gap in the rates of young men and young women who smoke (see Chart 2). This varies by Region – and in the SEARO region, for example, there are more than 40 young men smoking for

every woman who smokes, a ratio much higher than the older age group (15 men: 1 woman), and possibly a reflection of the older age at which women in the Region take up smoking[4].

Rates of using smokeless tobacco (e.g. chewing tobacco, oral tobacco, spitting tobacco, dip, snus and snuff) are available for 2 out of every 3 countries and show that, on average, 8.4% of men aged 15+ and 4.6% of women use smokeless tobacco[44]. Sex-disaggregated prevalence use ratios vary by Region, and show a picture generally opposite to that of tobacco smoking: high income countries have a higher prevalence ratio of men compared to women (8:1), while in low-income, lower middle- and upper middle-income countries, the male to female prevalence ratio is between 1.7:1 and 1.9:1.

Caution should be applied to the interpretation of prevalence data: tobacco use is associated with social norms (see below), and social desirability bias may result in under-reporting of rates in women, particularly in social settings where women are not 'expected' to smoke.

Second-hand smoke (SHS) contributes to premature mortality and high rates of morbidity, and is particularly burdensome on women (including those who are not smokers). Almost two-thirds of deaths attributable to SHS are in females, and there is a significant link to heart disease, lung cancer and poor pregnancy outcomes related to SHS exposures[6]. Moreover, exposure to SHS contributes to poor neonatal health and risks of childhood illness including acute lower respiratory infections[7], asthma[8] and meningococcal infections[9].

The conceptual framework for analyzing these sex-disaggregated data (see above), highlights three domains where gender impacts on tobacco use and tobacco control. Each of these areas (gender and social determinants; gender and health behaviours; and gender and the health system response) is now analysed in turn.

(1) Tobacco use, gender and the social determinants of health

The relationship between gender, other social determinants of health and rates of tobacco use varies widely across and between populations, and across time periods. Recent analyses from select countries highlight the following findings which have implications for strategic and effective policy control options:

- ***Social class***: In higher income countries, smoking follows a "class gradient" with higher rates of smoking among people with lower socio-economic power[10]. This gradient has evolved over time in those settings where data have been collected for several decades. In Western Europe, for example, there has been a 50-year shift in tobacco smoking from men to women and from higher to lower social classes[11]. These effects are mediated by education level – with a positive association between low income, poor educational attainment, and smoking initiation[12]. In some European countries, the highest rates of smoking uptake are found among girls from disadvantaged social groups[13 37]. The impact of these social determinants and their relationship to gender has been exploited by the tobacco industry which has specifically targeted socially disadvantaged young women in some countries[14] - see below.

- ***Geographical location***: Urbanisation is linked to changes in risks of non-communicable diseases[15], including tobacco use. Data from population-based surveys in India[16], for example, find a higher prevalence of tobacco use among people with a lower socio-economic status, lower education and lower caste. However, higher socio-economic status, more education and higher caste are associated with higher relative changes over time (i.e.

increasing incidence of tobacco use) – this is particularly the case for men, but similarities in these patterns are observed in women too. Urbanization is associated with increased tobacco use among both men and women. A gendered analysis of these data hypothesizes that social norms (which mitigate against women smoking, but do not protect men in the same way) have led to delays in the age of smoking initiation among women. Women in urban areas who are generally more empowered, may be breaking "social taboos" and are more likely to smoke

- ***Age***: Trend data show that in some high income countries over the past twenty years more girls than boys have begun to smoke. For example, data from pan-European studies of 15-16 year olds[17] has shown a reversal of the smoking gender gap since the 1990s – with the highest uptake rates in disadvantaged girls (as noted above). In general, high rates of smoking among young people tend to be found in those countries with high rates across all age groups[5].

- ***Occupation:*** Gender intersects with occupation and tobacco in a number of ways – including the production of tobacco, risks of occupation-related exposure, and gendered differences in care and social care for those suffering from tobacco-related harms.

  *Tobacco productio*n: Labour markets in many parts of the world are gender-differentiated, and tobacco production is no exception. A study of women tobacco farmers in China (largest tobacco lead producer in the world), Tanzania and Kenya, found that women frequently received a lower daily wage than men, and were frequently unaware of the health effects of tobacco farming (on either themselves or the impact on pregnancy outcomes). However, on a positive note, for women in China, jobs in tobacco farming enabled women to make financial decisions and have bank accounts – the same was not found in Tanzania and Kenya[18].

  Tobacco exposure in the workplace: While older studies found that interventions to ban/restrict smoking in the workplace had differences in impact by sex[19], more recent analyses of workplace smoking bans (at national level) have not shown these differences. In Ireland, for example, where smoke-free workplace legislation was introduced nationally in 2004, a study among bar-workers (generally considered to be "at risk") found a reduction of tobacco smoking, with no differences between men and women[20].

  Care-work: Women comprise over two thirds of workers in the formal health care sector, but occupy only a minority of positions at leadership level[21]. Moreover, women make up the vast majority of those providing unpaid home-based health and social care – including for the long-term, chronic conditions arising from tobacco use (predominantly in men), and care for children who fall sick as a result of exposure to second hand smoke. Thus, the care-burden of tobacco ill-health can be described as falling predominantly on women.

Gender is likely to interact with other social determinants of health - such as being a member of a minority, marginalized or indigenous population, ethnicity, etc. - to influence tobacco use, tobacco exposure and associated access to health services. However, there is limited evidence on the interaction of gender with these other social determinants, and more research on these interactions is needed.

Tobacco use, gender and vulnerable populations

Aggregate rates of tobacco use may mask the vulnerabilities of people in some circumstances. Reviews of tobacco use highlight the following populations as having particular vulnerabilities in relation to tobacco and gender:

Transgender people: there is some evidence to indicate that transgender people may have higher rates of tobacco use than other populations[22]. Explanations for the higher rates include: the impact of stress, stigma and discrimination; community norms; and specific targeting by the tobacco industry[22].

Pregnant women: Given the current disparities in smoking prevalence ratios (see above), one of the major risks to the health of pregnant women in relation to tobacco comes from second-hand smoke from male partners/husbands. Studies from low- and middle-income countries highlight the high levels of exposure to second-hand smoke that pregnant women suffer[23] [24], and emphasize the adverse impact on both women's and neonates' health[25].

(2) Gender, tobacco and risk/health behaviours

Tobacco use

Data above has highlighted variations in sex-disaggregated rates of tobacco use, as well as identifying relationships between gender and other social determinants of health which drive differences in tobacco use. Moreover, population groups who are particularly vulnerable to tobacco use have been emphasised. Analysing these findings using a 'gender lens' finds that in many societies tobacco use is strongly tied to notions of gender – and patterns of tobacco use can shift as notions of gender change over time. In the United Kingdom, for example, age cohort studies on populations born in the 1930s, 1950s and 1970s found different relationships between masculinity/femininity and smoking prevalence in men and women from each of the cohorts, reflecting changing gender roles across wider society[26].

These (shifting) societal gender norms have been exploited by the tobacco companies over many decades, for example through campaigns which have targeted positive aspects of "strong masculinity"[27] and associated risk-taking[28]. In the 1950s advertising company Leo Burnett launched a marketing campaign linking cowboy imagery to Marlboro cigarettes on the grounds that a cowboy was "an almost universal symbol of admired masculinity"[29]. In the 1990s, the tobacco industry researched the changing norms of masculinity and used their findings to launch men's lifestyle magazines which encouraged tobacco use[30]. Such framing has not been limited to tobacco companies in industrialised countries. In China, for example, tobacco branding has been designed to assert positive notions of masculinity, modernity and fitness since at least the 1950s[31].

Box 1: Tobacco Industry and Gender

Tobacco Industry and Gender:

The tobacco industry has spent years seeking to understand market segmentation and how to promote the uptake and sustainability of different brands to different consumer groups. Much of this market research has focused on understanding the role that gender plays in tobacco use. Examples from the tobacco industry archives illustrate the attention industry has paid to understanding and exploiting gender norms. Given that these documents are from 20-30 years ago, it would be safe to assume that industry's approach to

understanding and responding to gender is likely to have become more sophisticated in the intervening decades.

(1) Report by advertising company M&C Saatchi to tobacco company, advising on package design: "Creativity: A very female value; it indicates that these people, although not necessarily artistic, enjoy creating things. All of this would indicate that Lambert & Butler consumers would be very heavily affected by advertising, pack design, PR and Sponsorship."
Salamander: Progress Report and Recommendations by M&C Saatchi Agency, 16 May 1995. URL: http://www.tobaccopapers.com/PDFs/0500-0599/0558.pdf

(2) A Brown and Williamson memo for an advertising campaign to target a new brand of cigarettes to American men contains the following advice: "Target: male America. 1. "Outdoorsman" – focus on blue-collar male(s) enjoying weekend or vacation outdoor activities (hunting, fishing). 2. "Exhilaration of freedom" – focus on young adult male(s) enjoying spontaneous thrill of at least temporary freedom without obligations. Th[is] secondary appeal is to a better educated, white-collar American male…for whom the idyllic escapist…pursuit ….[is] singularly male."
Title Young Adult Male Creative. Author Paul Wessel B&W; Document Date 1987; Bates Number 621709305/9309 Collection Brown & Williamson URL: http://legacy.library.ucsf.edu/tid/kff70f00

Among women, the tobacco industry has manipulated gender norms and promoted ideas that smoking represents independence, positive sexuality[32], a means of tackling restrictive gender norms[26] and an option for weight control[33]. Studies of aggregate measures of women's empowerment and tobacco use find a relationship between national measures of gender equality and proportion of smokers who are women (more gender equal societies have a higher proportion of smokers who are female)[34]. This reflects both the dynamic nature of gender, as well as the success of the tobacco industry in fostering the link between notions of women's empowerment, agency and the adoption of previously masculine norms of behaviour. In the 1920s cigarettes were first marketed to women as "torches of freedom", and industry continues to promote such constructs today. For example, by linking smoking to ideas of women's 'modernity' or gender-specific marketing which aims to encourage women to believe that cigarettes represent both enhanced femininity and rebellion[35]. This approach seems to work: studies have shown that women (e.g. in China) are aware of "women's cigarettes" and believe these are less harmful to health[36].

The uptake of tobacco smoking tends to occur first among young urbanised women. However, how tobacco use then diffuses through a population will depend on the overall socio-economic status of the country, with different rates of uptake/continuation by gender, social class, geographical location, education, etc. In other words, tobacco epidemics evolve over time – and will be influenced by the dynamic norms governing gender over time too[37].

The tobacco industry has not confined its efforts to promotion/exploitation of gender norms among women, but has also actively sought to change (enhance) its corporate image through sponsorship of women's civil groups and movements. Analysis of industry archives has shown that tobacco companies have been actively involved in funding women's rights organisations since the 1970s and have targeted funds at key issues such as campaigns against gender-based violence[38]

Health care seeking

Sex-disaggregated data on patterns of health-care seeking have generally shown that women have higher rates of health care utilisation compared to men – much of this is driven by women's use of sexual and reproductive health services[39] [40]. While gender norms have often been used to explain

these differences (for example, operating with the interpretation that masculinity shapes men to operate under a "better to die than cry" mantra[27]), the evidence for gendered differences in care seeking for morbidities associated with tobacco use is less clear. For example, a United Kingdom study of 11,000 patients with lung cancer found few differences by of care-seeking and consultation rates in the 24 months prior to diagnosis[41].

When health care requires out-of-pocket expenditures, however, there is evidence from a number of countries (including India, Nigeria, Tanzania and Colombia) that there is a female disadvantage in health care expenditure: women, particularly those from poor and female-headed households, or older women in rural areas, suffer a disadvantage in both affordability of care and higher probability of catastrophic health expenditures. It should be noted, however, that most of these studies have not specifically studied tobacco-related morbidities, but have been more general studies of health-care use.[42 43 44 45]

Gendered pathways of care

Once men and women suffering from some of the more common complications of tobacco use – e.g. cardiovascular disease – have accessed the health care system, there is evidence that they are likely to receive different levels of care dependent on their gender. In a randomised study of treatment for coronary heart disease in the United States of America, for example, women were asked fewer questions, received fewer examinations and had fewer diagnostic tests[46]. In some settings these gendered inequalities are exacerbated by other inequalities: women with cardiovascular disease and who were of "diverse race and ethnicity" were found to be less likely to receive evidence-based therapies, cardiac rehabilitation or life-style recommendations compared to men[47].

(3) Gender-responsive interventions for tobacco control

As we have seen, gender, either acting alone or through its intersection with other social/structural/political and economic determinants of health, is a key driver of tobacco-related morbidity and mortality. When gender is taken into account in the design of policies, programmes and interventions, is there evidence of a more beneficial impact compared to when gender is overlooked? The evidence base for the positive impact of gender-responsive interventions is small but carries important lessons for moving forward. Much of the evidence base reviewing gender-responsive interventions and associated policy implications is focused predominantly on women and girls[48], although a small number of papers in the peer-reviewed literature review the impact of addressing men and masculinities.

Reduction of demand for tobacco

1) *Prices and taxation*: Evidence from systematic reviews of the impact of price on cigarette smoking by young people suggests a mixed picture: in one review young men were more price-responsive than young women in terms of smoking uptake and price also had a greater impact on young men compared to young women on the quantity of cigarettes smoked[49].
   - Policy implication: price is likely to be effective in reducing smoking among young people, although evidence suggests that young men may be more likely to respond to price changes than young women.

2) *Non-price measures:*

(a) *Education, communication and public awareness:* A Cochrane systematic review of mass media interventions for reducing smoking among adults found some evidence that this approach can be effective in changing smoking behaviours, and found no differences in smoking cessation rates in men and women[50]. Likewise, a Cochrane review of schools-based

programmes for preventing smoking found no differences in effect among boys or girls, although programmes were found to have a significant effect overall[51]. Of note, none of the included studies measured interventions that incorporated a gender focus in their media campaigns or schools programmes, and the studies did not measure other gender-responsive indicators such as whether partners of smokers became more empowered to reduce household smoking exposure rates.

- Policy implication: gender-responsive mass media campaigns should be developed and evaluated for their impact on reducing smoking uptake, promoting smoking cessation, and measurements of exposure to second-hand smoke. Evaluations should include different age groups as well as other social stratifiers of risk.

In 2014 WHO and the Tianjin center for Disease Control and Prevention (China), initiated a small-scale pilot programme centred on empowering women to reduce exposure to second-hand smoke. Actions focused on awareness raising, health communication and engagement with schools, children and young people. Evaluation showed a 20% reduction in indoor-smoking after 3 months.
In Vietnam's Hai Duong Province, a women's empowerment programme led by the Women's Union and other community groups resulted in a reduction in (mainly men) smoking in the home.

- Policy implication: collaboration with women's empowerment groups to increase awareness and take action on smoking and second-hand smoke exposure may result in decreased indoor smoking in homes.

(b) *Packaging and labelling*:

Tobacco packaging has long used gendered notions of different types of packaging appealing to men and women. For example, tobacco brands aimed at women have been packaged in "feminine colours" (pink, purple, white and yellow) – which have been perceived by (female) consumers as "less harmful" and "smoother" than 'regular' brands[52]. Additionally, terms such as "slim", "mild" or "light" are associated with an under-estimation of health risks, and these cigarettes are more likely to be chosen by women[53].
Plain packaging for tobacco products has less appeal than branded packaging in low- and middle-income countries (LMIC) and in low-income settings in high income countries[54]. However, the evidence for gender playing a role in this intervention is minimal. Young women (aged 16-26 years) in Brazil rated branded packs (brand images include social status, glamour, slimness and femininity) as more appealing and had greater positive attributes compared to plain packs[55]. Data on the effect on young men from LMIC is absent.
Health warnings labels on tobacco packs (FCTC Article 11) have been adopted in almost 90% of countries[56], and in some settings are gender-specific. Research in Australia, for example, among current smokers and recent quitters found that package warnings about smoking in pregnancy were cited as an effective message to change behavior by 8% of respondents[57]. Beyond this, however, there is little evaluation of either the impact of gender-specific warnings on men and women, or the impact of gender-neutral warnings on men and women measured separately. However, concern has been raised that tobacco companies may place gender-specific warnings on products less frequently purchased by the targeted gender (e.g. warnings targeting women could be placed on packs more likely to be bought by men)[58]. Given the association between cigarette packaging, branding and labelling and gender, plain packaging is likely to make tobacco products less appealing, including to young people, irrespective of gender.

- Policy implication: gender-specific health warnings should be evaluated and mechanisms for effective implementation identified.

(c) *Tobacco cessation programmes in pregnancy*

WHO has undertaken extensive reviews of interventions to reduce tobacco exposure among women who smoke – focusing on the rights of women to be informed about the harms of tobacco use and second-hand smoke (SHS) exposure, and recommending that all interventions should be gender-sensitive, women-centred and non-stigmatising. Detailed recommendations from WHO for screening (identification during pregnancy), interventions (psychosocial and pharmacological), and protection from SHS are available[59] and provide the basis for comprehensive recommendations for antenatal care for a positive pregnancy experience[59] but do not yet appear to be incorporated into the WHO postnatal guidelines[60].

- Policy implication: Women-centred, gender-sensitive tobacco exposure questions should be a routine part of the antenatal and postnatal care programmes. Interventions should target smoking/exposure in the mother, father and at the household level.

Interventions focusing on the health risks of exposure to second hand smoke in pregnancy have included targeting pregnant women with behavioral interventions to increase their negotiation skills with husbands/partners and other household members who smoke (United States of America), or providing women with educational materials (China) plus counselling (China) or in-depth educational sessions as a component of pre-natal care (Iran). All these interventions had a positive impact in reducing pregnant women's exposure to SHS [61] [62]. However, few studies focused on the fathers themselves. One study in Australia found that expectant fathers offered counselling and nicotine patches had an increased quitting rate[57]. In-depth research (in Canada) among new fathers who smoked identified a number of principles for designing quitting programmes, including a focus on the 'masculine ideals' of strength, decisiveness, resilience and autonomy. These interventions have not yet been tested[63].

- Policy implications: Programmes aiming to reduce pregnant women's exposure to second hand smoke may work if they reach the fathers and emphasise positive aspects of masculinity rather than focusing on notions of blame/guilt. However, this needs to be balanced against the noted concern that such an approach can serve to entrench rather than transform gender norms[64].

Reduction of supply of tobacco

(a) *Alternative livelihood programme:* In India in 2017, the Ministry of Labour and Employment (with WHO) launched a 'Skill Development Training' Program for *bidi* rollers /dependents. The programme is aimed at providing alternative source of livelihood to *bidi* workers and their dependants and has so far reached almost half a million people.

- Policy implication: Multisectoral collaboration is required to promote alternative employment opportunities – which will be particularly beneficial for women who make up the majority of the tobacco production sector.

(b) *Restriction of young people's access*: Systematic reviews have shown that enforced controls on retailers can reduce the amount of tobacco products sold (illegally) to under-age young people. However, evidence for differences in impact according to sex/gender are lacking[65].

- Policy implication: restrictions in the selling of tobacco products to under-age children have a positive impact on sales irrespective of gender, and efforts should be stepped up to enforce controls in this area.

Targeting gender-specific populations

Transgender people: A systematic review of interventions targeting transgender people (along with lesbian, gay and bisexual people, LGBT) found limited evidence and few robust evaluations of specific interventions targeting people within these communities[22]. A similar lack of robust evidence was found from a scoping review of LGBT young people[66].

- Policy implication: targeted interventions for LGBT smokers need to be culturally tailored and based on community engagement. The effect of such interventions requires rigorous evaluation.

GUIDANCE FOR STRATEGIC ACTION

Almost 20 years after the WHO Kobe Declaration calling for a full integration of "gender-specific concerns and perspectives"[67] into tobacco control programmes and policies, there is still little evidence that gender-responsive action is underway[68]. Programmes and policies for tobacco control can range from gender-unequal (perpetuate gender inequalities) to gender transformative (addressing underlying inequalities and working to transform harmful gender roles, norms and relations)[69]. However, the public health approach to tobacco control has been described as 'gender-blind'[70].

Evidence of sex-disaggregated risk (of tobacco use and exposure) and morbidity/mortality outcomes when supported by gender analysis, highlights the impact that gender exerts across the three domains of the conceptual framework: influence and intersection with other social determinants; influence on behaviours (including using tobacco and health-care-seeking); and health system and health care responses. Gender is a key driver of tobacco-related health outcomes in everyone – men and women, boys and girls, and people with non-binary gender identities.

However, evidence for impact arising from gender-responsive interventions is less clear – predominantly because most interventions are not gender-responsive. While we have limited evidence on the differential impact of interventions on men and women (or boys and girls), very few of these studies have used a gender lens to explain sex-disaggregated differences. Additionally, few public health interventions for tobacco control incorporate gender into their design and delivery. This is in contrast to the tactics of industry which, as we have shown, have adopted, exploited and manipulated gender in their marketing and sales techniques for decades.

Strategic options for gender-responsive tobacco control, aligned to the WHO FCTC guidelines and Agenda 2030, are outlined below. Given the weaknesses of the current evidence base in relation to gender (rather than sex-disaggregation), in many cases the proposed options call for more rigorous evaluation of gender-responsive policies and programmes. Nonetheless, there are clear policy options that should be implemented to enhance gender-responsive tobacco control.

Policy and programme formulation, implementation and evaluation that incorporates a gender-lens

Action: Recognise that gender is a social construct that determines health outcomes in everyone in every society. Gender influences tobacco exposure and use, health care use and treatment pathways, as well as the design of health system responses. The tobacco control community should

develop and implement policies and programmes that are gender responsive and can improve the health of everyone – men, women, boys, girls and transgender people—in all their diversity.

Action: Strengthen the capacity of the tobacco control community (national, Regional, global) to move from sex- and age-disaggregated data to undertaking gender analysis of policies and programmes, including linking to data for monitoring and evaluation. Ensure that this includes data on gender-based inequalities in decision-making roles, and participation in the design, analysis, and use of data collection and research.

Gender-responsive actions to reduce exposure

Action: Increase the price and level of taxation according to WHO guidelines which will have the greatest population level impact.

Action: Integrate a gender perspective and promote positive gender norms and gender relations in tobacco cessation campaigns and programmes, and evaluate impact. For women this may include building on ideas of "Freedom from smoking rather than freedom to smoke." For men this may include notions of strength, decisiveness and family roles[71]. However, care should be taken that this does not promote negative stereotypes of shame and blame.

Action: Enforce bans on advertising across all media, promotion and sponsorship and analyse the impact of these policies by sex and gender, including the promotion of products like hookahs and smokeless tobacco.

Gender-responsive actions to reduce supply

Action: Promote a just transition to sustainable livelihoods, particularly for women and girls working in tobacco growing and production sectors through multisectoral collaboration with industry and trade, agriculture, etc. This should be done with the active participation of rural women and grass-roots groups working with women tobacco growers and workers.

Action: Uphold and enforce bans on promotions and sales to minors – particularly since industry tactics can exploit gender norms in order to enhance the appeal of tobacco to minors.

Gender-responsive participatory processes

Action: Ensure that policies and programmes for education and public awareness are developed with the participation of all affected communities and their representatives – men, women, adolescents, LGBT people, people in specific occupations, etc. Such programmes should recognise and respond to the intersection between gender and other drivers of inequality and social disadvantage.

Action: Ensure that gender equality and women's empowerment policies and programmes go hand in hand with enhanced tobacco control programmes on the understanding that at a macro level, women's empowerment and reductions in gender inequality have often been associated with an increase in women's smoking rates. Ensure that national tobacco control plans-- including those included in NCD policies – incorporate activities for coordination with ministries of gender/women's affairs and other stakeholders with expertise in gender and human rights.

Action: Mobilize leaders in gender equality, including parliamentarians, mayors and village leaders in support of national tobacco control legislation.

Action: Support adequate financial provision to women's empowerment and community-development programmes to incorporate tobacco control aims and actions, including reducing exposure to second-hand smoke. Ensure that civil society and other organisations are supported to reject partnerships with the tobacco industry that seek to exploit "corporate social responsibility", including through sponsorship of 'gender-based' issues such as women's groups and campaigns against gender-based violence.

Gender responsive health care services

Action: Ensure that evidence on tobacco and gender are incorporated into countries' plans for Universal Health Coverage. Promote gender-responsive health systems that are accessible, available and effective for all people, irrespective of gender or other markers of inequality, and that deliver quality services including advice on quitting and referral to quit support and medications. Identify and address gender-based differences in care access and care outcomes, and strengthen training for health workers to understand and respond to the impact of gender on health outcomes.

Action: Implement the WHO recommendations for prevention and management of tobacco use and second-hand smoke exposure in pregnancy – promoting interventions that are women-centred, gender-sensitive, and grounded in human rights, Ensure that these focus on expectant fathers as well as mothers, and incorporate positive aspects of masculinity rather than blame/shame tactics, so as to reduce exposure to second-hand smoke in the household.

Action: Promote gender equality within health systems to ensure that the burden of care (clinical, social) is equally distributed and fairly remunerated.

FRAMEWORK FOR COLLABORATION WITH PARTNERS

A rights-based approach

The WHO FCTC can gain momentum through policy coherence with the larger UN agenda on human rights, including in relation to gender equality. The WHO FCTC includes provision to evaluate States' compliance with obligations under the right to health (e.g. in the Convention on the rights of the Child (CRC), the International Covenant on Economic, Social and Cultural Rights (ICESR)), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)). Other human rights principles are of relevance too – including the right to participation of affected communities, legal support for affected populations and the right to non-discrimination. It has been argued that the reporting mechanisms of the human rights treaties can be used to "supplement the FCTC's…implementation and reporting mechanisms", and that a human rights approach could enable a broader coalition of stakeholders (civil society, gender rights advocates, employment rights specialists) to collaborate on tobacco control activities [72].

In relation to tobacco and women and girls specifically, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the WHO FCTC share the common goal of ensuring that women's human rights underpin tobacco control policies and can be used as "mutually reinforcing and complementary" mechanisms[72]– see Box 2.

Box 2: Using the Human Rights Framework for gender-responsive tobacco control: the example of CEDAW

The three principles of CEDAW-- notably equality and non-discrimination, participation and empowerment, and accountability and access to justice-- can be used as a roadmap for gender-responsive tobacco control policies at local, regional as well as national levels. Article 12 and the General Recommendation 24 on health outline the need for a life course approach, improved data on the wide diversity of women by gender identity, age, ethnicity, religious, economic, social and cultural status. These provisions also require State Parties to commit financial resources for women's health as a contribution to ensuring the human rights of all citizens .The CEDAW committee that oversees implementation of the treaty has emphasized that women's human rights must be implemented in private as well as public spheres (e.g. in cars and homes) and that protection is needed against "non-state" actors such as the tobacco industry. Also, the committee has called on governments to ban misleading advertising of "light" cigarettes as "healthy" as it violates women's rights to sound health information.

Opportunities offered in the SDG era

The 2030 Agenda for Sustainable Development has brought together social, environmental and economic development strands into a comprehensive and balanced framework. The Agenda both encourages and enables intersectoral collaboration to achieve the Goals and Targets – including SDG3 (health and wellbeing, including tobacco control) and SDG5 (gender equality). Indeed, the goals and targets are conceptualized as interdependent, meaning that collaboration is a prerequisite for the success of the Agenda. Moreover, the Agenda is universal (applicable to all countries and all populations), and has a commitment to "leave no-one behind" – meaning that tobacco control policies and programmes need to ensure that they reach everyone.

In the case of tobacco control which is gender-responsive, this means identifying those stakeholders whose activities and interests coincide with the aims of tobacco control - for example, those organisations concerned with the universal realization of health and wellbeing across the lifecourse, and those organisations advancing and advocating for gender equality in health and development. Stakeholders in areas for priority collaboration should include the following:

1. ***UN Agencies***: Promote gender-responsive tobacco control strategies in the policies, programmes and guidelines of relevant UN agencies – e.g. programmes working with women (UNWOMEN, UNFPA, ILO), men (UNFPA, UNDP, ILO), children (UNICEF), adolescents (UNFPA) and people in vulnerable circumstances (e.g. UNAIDS working with LGBT communities). Ensure that the NCD Interagency Task Force has gender expertise.

2. ***Human rights actors and agencies:*** Promote guidelines for gender-responsive tobacco control strategies in the reporting mechanisms of human rights bodies such as CEDAW, the CRC and ICESCR, and use a human rights-based approach to forge alliances with a larger body of concerned stakeholders.

3. ***Civil society organisations and non-governmental organisations***: Strengthen the tobacco control agenda within the policies and programmes of civil society organisations (CSOs), international non-governmental organisations (INGOs), and campaign groups. A review of 40 of the largest CSOs and INGOs working in global health found that the vast majority of them are still focused on an MDG-era agenda of maternal health, child health, sexual and

reproductive health – only two were working on tobacco control[21]. Collaboration with the networks of (frequently powerful) actors working in the areas of women's health, gender and health, sexual and reproductive health, universal health coverage, poverty reduction, economic empowerment, and financing for development, is likely to yield important benefits for expanding the agenda of tobacco control.

4. ***Research community:*** Collaboration with academia and other researchers to build capacity in gender analysis and gender responsive policy and programme design. While there are robust sex-disaggregated data available from most countries, there appears to be little in the way of gender analysis that is linked back to policy and programme implementation and evaluation. Strengthening gender analysis among tobacco control programme staff at country and Regional levels would unlock the potential for policies and programmes to become more gender responsive. Alongside this should be a review of gender-analysis in COP reporting so as to align with other gender-responsive monitoring and evaluation methodologies and human rights mechanisms.

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[1] GBD DALYs and HALE Collaborators, Murray CJ, Barber RM, et al. Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990-2013: quantifying the epidemiological transition. *Lancet* 2015; **386**(10009): 2145-91.

[2] WHO Fact Sheet on Gender, 2018 – forthcoming.

[3] Women and Gender Equity Knowledge Network, submitted by Sen G and Östlin P. Unequal, Unfair, Ineffective and Inefficient. Gender Inequity in Health: Why it exists and how we can change it. Final report to the WHO Commission on Social Determinants of Health; 2007. Accessible at: http://www.who.int/social_determinants/resources/csdh_media/wgekn_final_report_07.pdf?ua=1

[4] WHO global report on trends in prevalence of tobacco smoking 2000–2025, second edition. Geneva: World Health Organization; 2018.

[5] Reitsma, MB; Fullman, N; Ng, M; Salama, JS; Abajobir, A; Abate, KH ; and others Smoking prevalence and attributable disease burden in 195 countries and territories, 1990-2015: a systematic analysis from the Global Burden of Disease Study 2015 The Lancet 2017; 389:1885-1906

[6] Insitute for Health Metrics and Evaluation, Data on Disability Adjusted Life Years, 2016. Accessible at: https://vizhub.healthdata.org/gbd-compare/

[7] Sonego M, PEllegrin MC, Becker G, Lazzerini M. Risk factors for mortality from acute lower respiratory infections in children under five years of age in low and middle-income countries: a systematic review and meta-analysis of observational studies. PLOS One, 2015;10(1): 10.1371/journal.pone.0116380

[8] May SM, Wang Z, Pyle R, Ott N, Charoenlap S, et al. Effect of second hand smoke exposure (SHS) on asthma morbidity and healthcare utilization: systematic review and meta-analysis. Journal of Allergy and Clinical Immunology, Supp., 2015;135(2): DOI:10.1016/j.jaci.2014.12.1298

[9] Murray RI, Britton J, Leonardi-Bee J. Second hand smoke exposure and the risk of invasive meningococcal disease in children: systematic review and meta-analysis. BMC Public Health, 2012;10(12): **DOI:** 10.1186/1471-2458-12-1062

[10] Greaves L, Jategaonkar N. 2006. Tobacco policies and vulnerable girls and women: toward a framework for gender sensitive policy development. *Journal of Epidemiology & Community Health*. 60(Suppl II): ii57–ii65.

[11] Thun MJ. The evolving relationship of social class to tobacco smoking and lung cancer. *JNCI: Journal of the National Cancer Institute*, Volume 101, Issue 5, 4 March 2009, Pages 285–287, https://doi-org.libproxy.ucl.ac.uk/10.1093/jnci/djp005

[12] Voorhees CC, Schreiber GB, Schumann BC, *et al.* Early predictors of daily smoking in young women: the national heart, lung, and blood institute growth and health study. *Prev Med* 2002;34:616–24.

[13] Currie C, Gabhainn S N, Godeau E, *et al Inequalities in Young People's Health: HBSC International Report from the 2005/2006 Survey*. Copenhagen: WHO Europe, 2008.

[14] Barbeau EM, Leavy-Sperounis A, Blabach ED. Smoking, social class and gender: what can public health learn from the tobacco industry about disparities in smoking. *Tobacco Control*, 2004, Vol.13(2), p.115. http://dx.doi.org/10.1136/tc.2003.006098

[15] Ezzati M, Vander Hoorn S, Lawes CMM, Leach R, James WPT, Lopez AD, et al. Rethinking the "diseases of affluence" paradigm: global patterns of nutritional risks in relation to economic development. PLoS Med 2005;2:e133. doi:10.1371/journal.pmed.0020133 PMID:15916467.

[16] Bhan N, Srivastava S, Agrawal S, et al. Are socioeconomic disparities in tobacco consumption increasing
in India? A repeated crosssectional multilevel analysis. BMJ Open 2012;2:e001348. doi:10.1136/bmjopen-2012-001348

[17] Hibell B, Guttormsson U, Ahlstrom S, et al. The 2007 ESPAD report: substance use among students in 35 European countries.Stockholm: The Swedish Council for Information on Alcohol and Other Drugs, 2009.

[18] Hu T, Lee AH. Women in tobacco farming: Health, equality and empowerment. Study from the Center for International Tobacco Control, Public Health Institute. Accessible at: https://bit.ly/2mTo4qg

[19] Farrelly MC, Evans WN, Sfekas AES. The impact of workplace smoking bans: results from a national survey. Tobacco Control, 1999;8:272-277

[20] Mullally BJ, Greiner BA, Allwright S, Paul G, Perry IJ. The effect of the Irish smoke-free workplace legislation on smoking among bar workers. Eur J Public Health, 2009;19(2):206-211.

[21] Data from Annual Report of Global Health 50/50, 2018. Accessible at https://globalhealth5050.org/

[22] Lee JGL, Matthews AK, McCullen CA, Melvin CL. Promotion of tobacco use cessation for lesbian, gay, bisexual and transgender people: a systematic review. *American Journal of Preventive Medicine*, 2014:47(6);823-831.

[23] Bloch M, Althabe F, Onyamboko M, Kaseba-Sata C, Castilla EE, Freire S, Garces AL, Parida S, Goudar SS, Kadir MM, et al. Tobacco use and secondhand smoke exposure during pregnancy: an investigative survey of women in 9 developing nations. *Am J Public Health*. 2008;98:1833–40.

[24] Kadir MM, McClure EM, Goudar SS, Carces AL, Moore J, Onyamboko M, et al. Exposure of pregnant women to indoor air pollution: a study from nine low and middle income countries. *Acta Obstetrica et Gynecologica Scandinavica,* 2010:89(4):540-548.

[25] Leonardi-Bee J, Britton J, Venn A. Secondhand smoke and adverse fetal outcomes in nonsmoking pregnant women: a meta-analysis. *Pediatrics.* 2011;127:734–41.

[26] Hunt K, Hannah MK, West P. Contextualising smoking: masculinity, femininity and class differences in smoking in men and women from three grenerations in the west of Scotland. Health Education Research 2004;13(3):239-249.

[27] Courtenay W. 2000. Constructions of masculinity and their influence on men's wellbeing: a theory of gender and health. *Social Science & Medicine*. 50: 1385.

[28] Wilsnack RW, Wilsnack SC, Obot IS. Why study gender, alcohol and culture? pp 1-25. In Alcohol, Gender and Drinking Problems: Perspectives from Low and Middle Income Countries. World Health Organization, 2005.

[29] Burnett, Leo. 1955. Untitled. Philip Morris Collection. http://legacy.library.ucsf.edu/tid/brp93e00.

[30] Cortese DK, Ling PM. Enticing the new lad: masculinity as a product of consumption on tobacco industry-developed lifestyle magazines. *Men and Masculinities* 2011;14 (1):4-30.

[31] Kohrman M. Depoliticising tobacco's exceptionality: male sociality, death and memory-making among Chinese cigarette smokers. *The China Journal*, 2007;58:85-107

[32] Brandt, A.M. Recruiting women smokers: the engineering of consent. *Journal of the American Medical Women's Association*, 1996;51:63-66

[33] Amos A, Haglund M. 2000. From social taboo to "torch of freedom": the marketing of cigarettes to women. *Tobacco Control*. 9(1): 3-8.

[34] Hitchman, S., & Fong, G. Gender empowerment and female-to-male smoking prevalence ratios. *Bulletin of the World Health Organization,* 2011;*89*(3):195-202.

[35] Toll BA, Ling PM: The Virginia Slims identity crisis: an inside look at tobacco industry marketing to women. *Tob Control* 2005, 14(3):172–180.

36 Elton-Marshall T, Fong GT, Zanna MP, *et al* Beliefs about the relative harm of 'light' and 'low tar' cigarettes: findings from the International Tobacco Control (ITC) China Survey. *Tob Control* 2010;19(Suppl 2):i54–62.

[37] Amos A, Greaves L, Nichter M, Bloch M. Women and tobacco: a call for including gender in tobacco control, research, policy and practice. *Tobacco Control*, 2012;21:236-243.

[38] McDaniel PA, Malone RE and FAAN Creating the "Desired Mindset": Philip Morris's Efforts to Improve Its Corporate Image Among Women, Women & Health, 2009;49:5, 441-474, DOI: 10.1080/03630240903238800

[39] Redondo-Sendino Á, Guallar-Castillón P, Banegas JR, Rodríguez-Artalejo F. 2006. Gender differences in the utilization of health-care services among the older adult population of Spain. *BMC Public Health*. 6: 155.

[40] Dunlop DD, Manheim LM, Song J, Chang RW. 2002. Gender and Ethnic/Racial Disparities in Health Care Utilization Among Older Adults. *The Journals of Gerontology*. Series B. 57(4): S221–S233.

[41] Wang Y, Hunt K, Nazareth I, Freemantle N, Petersen I. 2013. Do men consult less than women? An analysis of routinely collected UK general practice data. *BMJ Open*. 3: e003320.

[42] Brinda, E. M., Rodriguez, A. A., & Enemark, U. Correlates of out-of-pocket and catastrophic health expenditures in Tanzania: Results from a national household survey. *Acta Veterinaria Scandinavica,* 2014;*14*(1), 5.

[43] Onah, M., Govender, V., & Molyneux, S Out-of-Pocket Payments, Health Care Access and Utilisation in South-Eastern Nigeria: A Gender Perspective. *PLoS ONE,* 2014;*9*(4), E93887.

[44]Amaya-Lara, J. Catastrophic expenditure due to out-of-pocket health payments and its determinants in Colombian households. *International Journal for Equity in Health,* 2016;*15*(1), N/a.

[45] Saikia, Moradhvaj, & Bora. (2016). Gender Difference in Health-Care Expenditure: Evidence from India Human Development Survey. *PloS One, 11*(7), E0158332.

[46] Arbera S, McKinlay J, Adams A, Marceau L, Link C, O'Donnell A. 2006. Patient characteristics and inequalities in doctors' diagnostic and management strategies relating to CHD: A video-simulation experiment. *Social Science & Medicine*. 62(1): 103–115.

[47] Shaw LJ, Pepine CJ, Xie J, Mehta PK, Morris AA, Dickert NW, et al.. Quality and Equitable Health Care Gaps for Women. Attributions to Sex Differences in Cardiovascular Medicine. *Journal of the American College of Cardiology.* 2017;70(3): 373–388.

[48] Morrow M, Barraclough S: Gender equity and tobacco control: bringing masculinity into focus. *Global Health Promot.* 2010, 17 (1 suppl): 21-28.

[49] Rice N, Godfrey C, Slack R, Sowden A, Worthy G. A systematic review of the effects of price on the smoking behaviour of young people. Public Health Research Consortium Report, available at: http://phrc.lshtm.ac.uk/papers/PHRC_A2-06_Final_Report.pdf

[50] Bala MM, Strzeszynski L, Topor-Madry R. Mass media interventions for smoking cessation in adults. *Cochrane Database of Systematic Reviews*. DOI: 10.1002/14651858.CD004704.pub4

[51] Cochrane Review: Schools-based prorgrammes for preventing smoking. Cochrane http://cochranelibrary-wiley.com/doi/10.1002/14651858.CD001293.pub3/full

[52] Doxey J, Hammond D. Deadly in pink: the impact of cigarette packaging among young women. Tobacco Control, 2011;20(5):353-360.

[53] Wilson N, Weerasekera D, Peace J, Edwards R, Thomson G, Devlin M. Misperceptions of "light" cigarettes abound: National survey data. BMC Public Health, 2009;9: 126.

[54] Hughes N, Arora M, Grills N. Perceptions and impact of plain packaging of tobacco products in low and middle income countries, middle to upper income countries and low-income settings in high-income countries: a systematic review of the literature. *BMJ Open* 2016;6:e010391. doi:10.1136/bmjopen-2015- 010391

[55] White CM, Hammond D, Thrasher J, Fong G. The potential impact of plain packaging of cigarette products among Brazilian young women: an experimental study. *BMC Public Health*201212:737 https://doi.org/10.1186/1471-2458-12-737

[56] World Health Organization. Global Progress Report on Implementation of the WHO Framework Convention on Tobacco Control, 2016., Geneva.

[57] Shanahan, P. and Elliott, D., 2009, Evaluation of the Effectiveness of the Graphic Health Warnings on Tobacco Product Packaging 2008 – Executive Summary, Australian Government Department of Health and Ageing, Canberra

[58] Maynard OM, Misak M, Munafo MR. Variation in health warning effectiveness on cigarette packs: a need for regulation? European Journal of Public Health, 2016;26(5):836-838.

[59] WHO recommendations on antenatal care for a positive pregnancy experience. I.World Health Organization, 2016

[60] World Health Organization. WHO recommendations on postnatal care of the mother and newborn. WHO, 2014.

[61] World Health Organization. WHO recommendations for the prevention and management of tobacco use and second-hand smoke exposure in pregnancy. WHO, 2013.

[62] Dherani M, Zehra S, Jackson C, Satyanaryana V, Huque R, Chandra P, Rahman A, Siddiqi K. Behaviour change interventions to reduce second-hand smoke exposure at home in pregnant women – a systematic review and intervention appraisal. *BMC Pregnancy and Childbirth*, 2017:17;38. https://doi.org/10.1186/s12884-017-1562-7

[63] Oliffe JL, Bortoff JL, Sarbit G. Supporting fathers' efforts to be smoke-free: programme principles. *Canadian Journal of Nursing Research*, 2012;44(3):64-82.

[64] Greaves L, Tungohan E: Engendering tobacco control: using an international public health treaty to reduce smoking and empower women. *Tob Control*. 2007, 16 (3): 148-150.

[65] Main C, Thomas S, Ogilvie D, Stirk L, Petticrew M, Whitehead M, Sowden A. Population tobacco control interventions and their effects on social inequalities in smoking: placing an equity lens on existing systematic reviews. BMC Public Health. 2008;8:6. doi: 10.1186/1471-2458-8-178.

[66] Baskerville NB, Dash D, Shuh A, Wong K, Abramowicz A, Yessis J, Kennedy RD. Tobacco use cessation interventions for lesbian, gay, bisexual, transgender and queer youth and young adults: A scoping review. *Preventive Medicine Reports*, 2017;6:53-62.

[67] World Health Organization, Tobacco Free Initiative, Women. Accessible at: http://www.who.int/tobacco/research/women/en/

[68] Bottorof JL, Haines-Shah R, Lelly MT, Oliffe JL, Torchalla I, Poole N, et al. Gender, smoking and tobacco reduction and cessation: a scoping review. *International Journal for Equity in Health*, 2014;13:114. https://doi.org/10.1186/s12939-014-0114-2

[69] Pederson A, Greaves L, Poole N. Gender-transformative health promotion for women: a framework for action. Health Promotion International 2014;30(1):140-150.

[70] Amos A, Greaves L, Nichter M, Bloch M. Women and tobacco: a call for including gender in tobacco control research, policy and practice. *Tobacco Control* 2012;21:236-243.

[71] Oliffe JL, Bottorff JL, Sarbit G: The right time, the right reasons: dads talk about reducing and quitting smoking. British Columbia, Canada: Institute for Healthy Living and Chronic Disease Prevention, University of British Columbia; 2010. Available at: www.facet.ubc.ca.,

[72] De Silva de Alwis R, Daynard R. Reconceptualising human rights to challenge tobacco. Michigan State Journal of International Law. 2009;17(2):292-354