

# Sex, Gender, and Secondhand Smoke Policies

## Implications for Disadvantaged Women

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- Context:** Although implementation of secondhand smoke policies is increasing, little research has examined the unintended consequences of these policies for disadvantaged women.
- Evidence acquisition:** Macro-, meso-, and micro-level issues connected to secondhand smoke and women are considered to illustrate the range of ways in which sex, gender, and disadvantage affect women's exposure to secondhand smoke. A review of current literature, primarily published between 2000 and 2008, on sex- and gender-based issues related to secondhand smoke exposure and the effects of secondhand smoke policies for various subpopulations of women, including low-income girls and women, nonwhite minority women, and pregnant women, was conducted in 2008. These materials were critically analyzed using a sex and gender analysis, allowing for the drawing of inferences and reflections on the unintended effects of secondhand smoke policies on disadvantaged women.
- Evidence synthesis:** Smoke-free policies do not always have equal or even desired effects on low-income girls and women. Low-income women are more likely to be exposed to secondhand smoke, may have limited capacity to manage their exposure to secondhand smoke both at home and in the workplace, and may experience heightened stigmatization as a result of secondhand smoke policies.
- Conclusions:** Various sex- and gender-related factors, such as gendered roles, unequal power differences between men and women, child-caring roles, and unequal earning power, affect exposure and responses to secondhand smoke, women's capacity to control exposure, and their responses to protective policies. In sum, a much more nuanced gender- and diversity-sensitive framework is needed to develop research and tobacco control policies that address these issues.
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### Background

Exposure to secondhand smoke (SHS) increases the risk of lung cancer and ischemic heart disease among nonsmokers, and children exposed to SHS are at increased risk of bronchitis, asthma attacks, pneumonia, middle ear disease, sudden infant death syndrome, and a reduction in lung function.<sup>1</sup> Nonsmoking women who are exposed to SHS have a greater chance than men of developing respiratory diseases (particularly lung cancer).<sup>2–4</sup> A recent report indicates that SHS also increases the incidence of breast cancer in premenopausal women.<sup>5</sup> Exposure to SHS has been shown to increase the risk of pregnancy complications and to cause serious adverse fetal outcomes.<sup>6</sup>

Smoke-free and location restriction policies, implemented with the intention of reducing health inequalities associated with smoking, have decreased overall

exposure to SHS, but the gendered implications of SHS initiatives and policies for specific groups, such as low-SES women, may result in unintended and sometimes adverse consequences.<sup>7</sup> In the context of growing public support for laws prohibiting smoking in homes and cars when children are present, there has been little inquiry into how SHS-reduction policies affect women,<sup>8</sup> or even more broadly, men and women separately. The gendered implications of SHS initiatives and policies for subpopulations of women, such as those of lower SES, young women, or those of particular ethno-cultural or marginalized groups, have been largely undocumented. This paper examines how sex, gender, and disadvantage affect both women's exposure to SHS and the consequences of smoke-free and location restriction policies.

### Methods

A review of current literature, primarily published between 2000 and 2008, on sex- and gender-related issues linked to SHS exposure and the effects of SHS policies for various subpopulations of women, including low-income girls and

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women, nonwhite minority women, and pregnant women, was conducted. The literature reviewed was primarily from developed countries, including the U.S., Canada, Australia, and the UK. These materials were critically analyzed using a sex and gender analysis, allowing for the drawing of inferences and reflections on the unintended effects of SHS policies on disadvantaged women.

### Sex- and Gender-Based Analysis

Sex and gender affect women's and men's exposure to, and protection, from SHS. *Sex* refers to biological characteristics such as anatomy and physiology.<sup>9</sup> *Gender* refers to "the array of socially constructed roles and relationships, personality traits, attitudes, behaviors, values, relative power and influence that society ascribes to two sexes based on a differential basis."<sup>10</sup>

Sex and gender are fluid concepts that are influenced by cultural and temporal factors. Individuals and their health are affected by multiple factors including genetics, physiologic characteristics, physical characteristics, gender identity, gender relations, and institutional gender. Ideas about gender roles, sex, and norms intersect with diverse cultural definitions, traditions, expectations, and assumptions. Hence, developing more sophisticated understandings and measures of sex and gender in research and policy development is a key way to reflect this complexity.<sup>11</sup>

Sex- and gender-based analysis (SGBA) "systematically inquires about biological (sex-based) and sociocultural (gender-based) differences between women and men, boys and girls, without presuming the nature of any differences that may exist."<sup>12</sup> SGBA is a process that helps to improve understandings of sex and gender as determinants of health, of their interaction with other determinants, and the effectiveness of the design and implementation of sex- and gender-sensitive tobacco control policies and programs.<sup>9</sup> In this article, SGBA is used to examine how sex-, gender-, and (selected) diversity-related issues operate in the context of SHS policies. Specifically, SGBA is employed to enhance an understanding of the unintended consequences of SHS policies for girls and women who live on low incomes or are otherwise disadvantaged.

## Results

### Patterns of Exposure and Opportunities for Protection

Developing programs and policies that protect all women effectively from exposure to SHS requires an examination of macro-, meso-, and micro-level contexts, where smoke-free policies are enacted, experienced, and resisted. The macro level refers to broad social structural influences, including societal values; the meso level refers to social organizations such as work and religious and educational settings; and the micro level refers to the individual or interpersonal context.<sup>13</sup> At the macro level, broad smoke-free policies may not be considerate of the effects on low-income women and may contribute to further marginalization.<sup>14</sup> Women with low incomes may also have lower levels of social support; fewer health opportunities; and experience social isolation, stress, and powerlessness.

At the meso level, sex segregation in the workplace results in women and men engaged in different sectors of the economy and experiencing different patterns of exposure to both SHS and workplace tobacco control policies.<sup>15,16</sup> At the micro level, gendered roles, relationship patterns, and caring responsibilities influence women's experience of the family, household, and domestic spheres.<sup>17</sup> Yet, to date, broad SHS policies and programs often focus on the health of children, or, in the context of pregnancy, on the exposure of the fetus to SHS. These approaches may inhibit the benefits of smoke-free initiatives for women by reproducing traditional gender roles and de-legitimizing women's health in and of itself.<sup>18</sup> Although the effects of SHS on children is a serious concern, the expansion of policy development to focus on and foster women's health is necessary to address the issues of SHS exposure.

Macro-, meso- and micro-level issues interact and overlap within the context of women's lives. For example, because women experience lower SES more often than men, they suffer disproportionately from smoke-related health effects.<sup>19,20</sup> Among women of lower SES, a partner's smoking can increase household poverty and threaten the availability of food and other necessary resources.<sup>21</sup> Yet women may not have the necessary support or resources to implement smoke-free environments. Further, low-income women may be more vulnerable to smoking-related illnesses as they may be exposed to SHS and may be smokers themselves. Low-income women may use smoking to cope with lives of disadvantage, and may begin smoking at a young age.<sup>22</sup> These complex and intertwined issues result in equally complex responses to, and unintended consequences of, tobacco control policies. Nevertheless, given the current patterns of smoking, disadvantaged women have the most to gain from designing effective policies aimed at protection, prevention, and cessation.

### Macro-Level Issues

#### Tobacco control policies and gender

*Low-SES women experience fewer benefits from SHS policies.* Ernster<sup>23</sup> identifies SHS as an important health priority for women, because in many countries tobacco smoking often is still more prevalent among men. In Scotland, for example, three quarters of SHS-related deaths among nonsmokers occur in women.<sup>15</sup> Yet smoke-free policies do not affect all women equally. Low-income women may encounter relatively greater levels of smoke exposure, despite SHS policies. Findings from the U.S., Canada, the UK, and Australia indicate that smokers are more often living on a low income, with lower levels of education, and also demonstrate greater nicotine dependence.<sup>24</sup> A study by Levy et al.<sup>25</sup> examining the impact of restrictive smoking policies on women reports that, although smoking among medium-education women is inversely

related to the index of clean air laws, this relationship was not significant among low-education women. Moreover, workplace policies that restrict smoking may have differential effects on women and men, or minority smokers.<sup>16,26</sup> Therefore, an unintended consequence of SHS policy is that low-SES women may be more likely to be exposed to SHS, even in the presence of smoke-free policies.

**SHS policies may stigmatize low-income women.** Social policy can contribute to stigmatization through sending messages that “punish or segregate a designated group of individuals.”<sup>27</sup> The “denormalization” of tobacco may foster a social transformation that can involve the active stigmatization of smokers.<sup>28</sup> Although not an intended consequence, denormalization of tobacco makes smoking and smokers an identifiable minority, encourages the demarcation of smoking and smokers, and gives rise to efforts to utilize “stigma” and blame to reduce or prevent smoking. As Chapman and Freeman state,<sup>29</sup> “[denormalization] is used to encompass efforts challenging notions that smoking ought to be regarded as routine or normal, particularly in public settings.” This may be particularly deleterious for already marginalized subpopulations such as low-income women,<sup>21</sup> and can create social division and compensatory smoking after leaving a restricted area.<sup>30</sup>

The unintended consequences of SHS policy, in the context of the denormalization of tobacco, are that smokers may eventually be denied housing or find housing options limited, may be discriminated against in the workplace, or may avoid seeking health care because of shame associated with being a smoker.<sup>29</sup> Stigmatization can negatively affect the health and “life chances” of those who are stigmatized.<sup>31</sup>

But evidence continues to mount regarding the gender-specific effects of tobacco policies.<sup>7</sup> For example, UK-based focus groups with low-income mothers who smoke reveal that they often feel that they are being unfairly blamed by health professionals and their family and friends for causing harm to their children.<sup>32</sup> Stigma associated with smoking during pregnancy has prevented some expectant and new mothers from seeking cessation assistance,<sup>33</sup> and fostered a tendency for over-reporting quit rates in research studies for fear of judgment, resulting in policy and programming being informed by false knowledge.<sup>34</sup> Smoke-free policies are intended to improve inequalities in health by reducing smoking and smoke exposure, and do in fact produce this desired effect for many women and men. However, for low-SES women who already face discrimination on multiple levels, an unintended consequence of SHS policy is that the stigmas experienced through smoking will likely compound experiences of social isolation and marginalization and contribute to a poorer quality of health.

## Meso-Level Issues

### Workplace smoking restrictions

**Greater SHS exposure for low-SES and ethnic subpopulations of women.** Although workplace smoking restrictions appear to have a moderate effect in decreasing overall tobacco use,<sup>35</sup> they may not benefit all workers equally. People in routine and manual occupations are less likely to work in environments that restrict smoking.<sup>35</sup> In Europe, for example, although many countries have imposed smoke-free bans in public places, men are more likely to be employed than women, and women are more likely to work in the hospitality industry or in private homes, where they are more likely to be exposed to SHS.<sup>15</sup>

In a U.S.-based study, Moore and colleagues<sup>16</sup> found that bar workers, many of whom are women with lower SES, have the highest workplace exposure to SHS. Another U.S.-based study by Moore and colleagues<sup>36</sup> revealed that women who work in bars where laws are not enforced may have an increased exposure, because patrons congregate in these bars specifically because they can smoke. These findings provide further evidence that smoke-free legislation has not protected all workers equally from the effects of SHS, and the gender and class of workers in some situations and occupations affects compliance.<sup>16</sup>

Gender and ethnicity interact in some contexts. One U.S.-based study found that Hispanic women less frequently reported an official workplace smoking policy, compared to white and African-American women.<sup>37</sup> This may be partly explained by the ethno-racial stratification of occupations, given that Hispanic women in this study were less likely to work in professional and managerial positions, compared with African-American and white women. The effects of SHS are affected by differences in the implementation of smoke-free laws related to gender, race, and SES.

**Anticipatory and compensatory smoking.** Some research has found that smoke-free policies at work result in anticipatory smoking by both low-SES women and men.<sup>38</sup> To maintain nicotine levels, individuals may smoke heavily prior to entering restricted areas, such as the workplace, or smoke whenever they have the chance, resulting in enhanced smoke exposure during these times. Smoking may also be compensatory, because smokers may inhale more deeply and smoke more quickly due to the lack of time available during a smoke break.

However, low-income smokers in the study by Bancroft et al.<sup>38</sup> also expressed that workplace smoke breaks result in a certain camaraderie among smokers, where a sharing and greater consumption of cigarettes often occurs. Moore and co-authors in a U.S. study<sup>36</sup> revealed that for female bar patrons, although standing outside to smoke may be dangerous, it can also provide

solidarity with other smokers. However, for both smokers and nonsmokers who pass through or by smoking areas, this congregating of smokers also results in greater SHS exposure.<sup>39</sup>

Although no studies specifically examined the anticipatory smoking or increased smoke exposure for low-income women as a result of smoke-free policies, the reviewed studies suggest that SHS policies may have an uneven impact. Low-income women, who are more vulnerable to tobacco use, may increase their smoking during designated times and in designated spaces, in order to abide by smoke-free restrictions.

## Micro-Level Issues

### Home smoking restrictions

**Increased exposure in the home for low-SES women.** Smoking in the home is more common among low-income women and men,<sup>15</sup> and those on a low income are less likely to have smoke-free homes.<sup>40</sup> Shavers and colleagues<sup>37</sup> found that having a home smoking policy that completely banned smoking increased with distance above the poverty-level threshold. A U.S. study by Stamatakis et al.<sup>41</sup> revealed that women who were exposed to SHS in the home were more likely American Indian/Alaskan Native, less educated, and had lower levels of fruit and vegetable consumption (the authors suggest that unhealthy behaviors tend to group). As Nichter and colleagues<sup>42</sup> reveal, pregnant women living on a low income are often required to live with family members who smoke, and therefore these women often have little control over the home environment, or ability to control SHS, and may lack the social support necessary for quitting smoking. Despite increasing social pressures for smoke-free homes, women's ability to manage their smoke exposure within the home depends on intersecting experiences of gender roles, power, poverty, and ethnic and racial status.

Yet even smoke-free homes may not be entirely or permanently smoke-free. Often homes may be smoke-free temporarily, such as when occupied by a pregnant woman or an infant.<sup>43</sup> Robinson et al.<sup>14</sup> held focus groups with 54 mothers who smoked and lived in areas of social and economic disadvantage in the UK, and found that women who initially indicated that their homes were "nonsmoking" later revealed that they were practicing some form of smoking restriction, yet not entirely abstaining from smoking in the home. For example, all women indicated that they would never smoke in a child's bedroom, yet many of these women would continue to smoke in the bathroom, in the kitchen, or in their own bedroom.<sup>14</sup> Women would also restrict the times they smoked, for example by smoking in the home after children went to bed. In addition, women indicated that not smoking in the home did not prevent their children from being exposed, because the children would often follow and cling when their

mothers went outside for a cigarette.<sup>14</sup> Overall, these findings suggest that implementing a smoke-free policy in the home may not be a straightforward or viable option for many low-income women.

**Constraints associated with child care.** Although women as primary caregivers often receive pressure through SHS policies and health messaging to protect their children, at the same time they may have limited control over their home air space. One study found that poor, nonwhite women were less likely to smoke if they had children, compared to poor, white women who were more likely to smoke if they were living with small children.<sup>44</sup> The authors suggest that poor white women may have weaker social support systems than poor nonwhite women, and therefore less help in coping with stressors. Low-income mothers face severe social stresses relating to the realities of a restricted income, social isolation, and lack of social support.<sup>32,45</sup> They are also more likely to live in small housing units in unsafe neighborhoods with limited access to the outdoors.<sup>14</sup> Thus maintaining a smoke-free home often entails a choice between either taking children outside into a potentially unsafe environment or leaving the children alone while going outdoors to smoke.<sup>45</sup>

Focus groups with low-income mothers reveal the worry that, when they smoke, young children left inside or in another room could potentially harm themselves; the mothers perceived these dangers as a greater harm to their children than SHS exposure.<sup>14</sup> Therefore, some mothers felt smoking in the same room as their child was an act of caring rather than harm.<sup>14</sup> Women also expressed that there was an emotional cost to leaving their children to smoke, because they would have to force their children away to be able to leave to smoke.<sup>14</sup> As the authors indicate, the demands of having a cigarette as a means to relax or source of pleasure often compete with caring for one's children. A study by Robinson and Kirkcaldy<sup>32</sup> with low-income mothers who smoke found that even when women are exposed to health promotion messages that encourage smoke-free environments for the health of their children, women may minimize the negative health impacts as a means of coping with these messages, or as a "response to the need to smoke." Overall, these findings reveal that recommendations for a smoke-free home may not resonate with, or be nuanced enough, practical, or realistic for all low-SES mothers.

**Tobacco use in relationships.** It is also important to consider the impact of smoke-free policies for low-income women within interpersonal and intimate relationships, families, households, and in other private spaces. If one or both partners smoke, reduce, or quit smoking, it is important to consider how the couple interacts and how smoke-free policies may change their interaction. Three main tobacco-related interaction patterns in couples dealing with tobacco reduction



during pregnancy or postpartum identified by Bottorff and colleagues<sup>45</sup> illustrate this in the context of pregnancy and postpartum: (1) disengaged (couples allow one another individualized decision making); (2) conflictual (couples engage in shaming, monitoring, hostility); and (3) accommodating (couples work together and use open communication in discussing tobacco). It is suggested that smoke-free policies may affect some couples by increasing the “policing” of the other partner’s smoking behavior, or by enhancing physical and social separation from a partner who continues to smoke outside of the home.<sup>17,18,46</sup>

In many cases, the partner who may be monitoring tobacco use does not necessarily apply the same rules and expectation to his or her own smoking.<sup>46</sup> Again, these dynamics are illustrated during pregnancy. Focus groups with low-income pregnant women found that women often felt pressure from a partner to stop smoking, while the male partner continued to smoke.<sup>43</sup> Similarly, focus groups with low-income men with pregnant partners found that men who smoked had limited understanding of the harmful effects of SHS, often thinking that the fetus would be “insulated” from their smoking and that their pregnant partners were strong enough to handle the smoke exposure.<sup>30</sup> Men in the group, however, expressed more often that a woman’s smoking during pregnancy would be harmful, as would smoke exposure for a young infant. These men’s perceptions of the effects of SHS were sometimes used to rationalize their continued ability to smoke, while discouraging their pregnant partners from smoking. Within a social environment which encourages smoke-free homes, particularly for pregnant women, this double standard may create conflicts between partners, and hinder women’s ability to protect themselves from smoke exposure.

Another unintended consequence of smoke-free policies may, in some cases, be to inadvertently increase pressures, particularly on pregnant and postpartum women, placing women who smoke at higher risk for domestic conflicts when they are unable to quit. For example, case studies of tobacco-related dynamics during pregnancy and postpartum revealed that partners may use economic and verbal abuse, isolation, and children as strategies of power and control to influence women’s tobacco reduction.<sup>18</sup> A woman’s ability to quit during pregnancy and postpartum is therefore influenced by the tobacco-related routines she has with her partner, her degree of control over home air space, her stress level, and her overall sense of well-being. Despite the lack of overall research on micro-dynamics of interpersonal relationships, these examples point to a range of responses that may develop around tobacco use or exposure to SHS. Therefore, it is recommended that household dynamics and, specifically, the elements of power and control in relationships, be considered when designing sensitive tobacco reduction initiatives

such as smoke-free homes and cars, denormalization policies, social support, and cessation programs.<sup>18</sup>

## Discussion and Conclusion

To date, policies and initiatives aimed at reducing SHS and exposure to SHS have not consistently been designed with sex and gender issues in mind. Nor have their effects, both intended and unintended, been consistently examined or evaluated according to these dimensions. This article has addressed these issues for low-income women, framed in three contextual levels (macro-, meso-, and micro-), where examination of various dynamics and processes reveal varied unintended results. Evidence that smoke-free policies do not have even, equal, or always intended or desirable effects on low-income children and women is clearly emerging. Low-income and ethnic-minority women are more likely to be exposed to SHS, may have limited capacity to manage their exposure to SHS, and may experience heightened stigmatization as a result of SHS policies. Smoke-free policies in the workplace and in the home have been shown to be less effective for low-income and ethnic-minority women. In the workplace, gender relations, particularly in hospitality settings, shape and impede women’s capacity to limit smoke exposure. In addition, low-income women’s increased vulnerability to tobacco use means that they may engage in anticipatory smoking in response to restrictions. In the home, smoke-free policies may be ineffective or pose difficulties, because of economic and child-care responsibilities, interpersonal dynamics, and conflicts. Finally, smoke-free laws may not resonate for women for whom tobacco use is functional, providing a moment away from responsibility as well as stress relief, or providing solace in the context of disadvantage.

It is therefore important to aim for gender sensitivity in policies and programs designed to support women who often have limited resources to “live smoke free.”<sup>7</sup> Smoke-free bans need to be complemented by cessation programs, lest smoking be displaced to the home.<sup>47</sup> SHS restrictions have potential to be more effective for low-income women if supported by tailored smoking cessation initiatives for them and their partners, families, and friends. In particular, cessation and prevention efforts that focus on women’s health may be more effective than education campaigns aimed at the health of the fetus or child. Smoking cessation programs that include social- and child-support structures may also be necessary for low-income women.

Health education efforts about the effects of SHS need improvement, with both women and men, as illustrated by focus groups with pregnant women and their partners, who were not unanimously convinced of the health risks associated with passive smoking.<sup>32</sup> In addition, healthcare providers need to be trained to

acknowledge stigma and directly assist women who may be experiencing stigma and shame because they smoke. Finally, improved enforcement of smoke-free laws in bars and workplaces, particularly in areas of economic deprivation, may be necessary to offer a greater degree of protection from SHS, especially for low-income women who often work in these settings.

In sum, there is a need for a much more nuanced gender-sensitive framework for developing research and tobacco control policies.<sup>15,21</sup> This includes principles that encourage engagement with low-income girls and women; adopt a wider health and social justice approach to reduce inequity; and integrate or join together tobacco control policies with economic and social policies such as housing, child care, anti-violence, and social welfare.<sup>20</sup> These approaches need to reflect the social, economic, and psychological circumstances of low-SES girls and women, incorporating more qualitative evidence from the women for whom policies are intended. These processes will enhance the health of disadvantaged women, while increasing positive and decreasing negative consequences of SHS policies. Adopting these actions and approaches will create more “comprehensive” tobacco policies, addressing the needs of disadvantaged women in a more equitable manner.

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