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# Securing the Health of Disadvantaged Women:

A Critical Investigation of Tobacco-Control Policy Effects on Women Worldwide

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# Introduction

The global response to the tobacco crisis among disadvantaged women has been slow. Efforts to reduce the public health consequences of smoking have focused primarily on the removal of a single agent—tobacco—with little regard to broader social consequences and context. For example, tobacco accounts for 2.8% of the average household total expenditures in poor countries like Bangladesh<sup>1</sup> and 15% of total household expenditures among the lowest-income groups in Indonesia.<sup>2</sup> In many low- and middle-income countries, smoking is a male-dominated behavior, with low smoking rates among women. In these countries, diversion of income toward tobacco by male smokers in households contributes to malnutrition and other undesirable impacts on children.<sup>3</sup> Manufacturing of tobacco is often undertaken by low-income women in places like South East Asia and Brazil where transdermal exposure may cause green tobacco sickness.<sup>4</sup>

Women in low-income countries are more likely to care for partners suffering from tobaccorelated illnesses.<sup>1</sup> Rates of secondhand smoke exposure are high among women and children in low-income households,<sup>5,6</sup> service and manual labor workplaces,<sup>6</sup> and in low and lower middle income countries such as Cambodia, China, the Philippines, and Viet Nam, where smoking rates among men are extremely high.<sup>7,8</sup> Further, with changes in social norms and increased female autonomy as potential contributors, tobacco use is increasing among women in low- and middle-income countries.<sup>9</sup> Directly or indirectly, tobacco adversely affects almost every aspect of the lives of disadvantaged women and girls. This growing epidemic will ultimately increase lung cancer, other tobacco-related illnesses, secondhand smoke exposure, malnutrition, family economic disadvantage, and care-giving burden, as well as threaten food security among disadvantaged women and girls.

Through the Framework Convention on Tobacco Control (FCTC), the WHO recently called for the global implementation of evidence-based tobacco policies,<sup>9</sup> which can potentially

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reduce the global tobacco epidemic. However, in order to promote policies and programs that help low-SES women lead healthier lives, it is critical to examine the full spectrum of the effects of evidence-based policies and programs on the health and wellbeing of underprivileged women and girls.

In 2004, the Tobacco Research Network on Disparities (TReND), co-funded by the National Cancer Institute and the American Legacy Foundation, launched the Low Socioeconomic Status Women and Girls Project (tobaccodisparities.org). This project analyzes the effects of tobacco policies on low-SES women and girls. This aim was addressed through a meeting of experts in 2005, a special journal issue published in 2006,<sup>10</sup> and reports published in 2008 (cancercontrol.cancer.gov/tcrb/ses\_women-girls\_project/index.html). Phase I of the project concluded that low-SES women were less likely to have smoke-free homes<sup>5,6</sup> than more advantaged women, and worksite bans were not associated with quit attempts among low-SES women.<sup>5</sup> Further, studies showed that gender and power dynamics play a key role in the enforcement of policies.<sup>11,12</sup> For example, in a study of randomly selected bars covered by smoke-free workplace laws, female bartenders were more likely to be exposed to tobacco smoke than their male counterparts.<sup>12</sup> Collectively, the studies showed that not all policies result in the intended effects, and there is a need to continue to examine the consequences of policies on populations with high rates of smoking, low rates of quitting, and at increased risk for tobacco-related diseases.

Theoretically, there are several reasons why unintended consequences may occur. One is that policies disrupt highly complex systems, in which reactions are not always predictable. Another reason is that psychological reactance (as in the case of educational campaigns or warning labels on alcohol or cigarettes) may produce the opposite (boomerang) effect from what is intended.<sup>13</sup> Those addicted to nicotine may change brands or consumption patterns in order to restore intake levels altered by tobacco control policies: Evidence indicates that young adults smoke higher-tar cigarettes in response to a cigarette tax hike.<sup>14</sup>

Although some might conclude from the foregoing examples that unintended policy consequences are inevitable,<sup>15</sup> other research is more hopeful. Theory-based modeling of potential side effects of policy interventions in order to forestall unwanted outcomes may help reduce such unintended consequences.<sup>16</sup> Similarly, other scholars advocate for simulation modeling and complex systems thinking to avoid unwanted policy repercussions.<sup>17,18</sup> Smoke-free workplace policies have negative unintended consequences including exposure to secondhand smoke for people entering and leaving work; policy improvements to ameliorate such problems have been implemented, such as extending no-smoking zones to 25 feet or more from building entrances.<sup>19</sup>

In a variety of health policy domains, research has documented unintended consequences, especially for individuals with fewer resources. For example, restructuring Medicare drug benefit policies for fiscal efficiency increased emergency room visits and worsened physiological symptoms, especially for patients from neighborhoods characterized by low SES.<sup>20</sup> In the realm of tobacco control, because regional smoke-free policies tend to be enacted earlier in higher SES communities, geographic and economic disparities in tobacco-control deployment constitute yet another way in which low-SES workers are exposed to greater amounts of secondhand smoke.<sup>21</sup>

Restrictive marketing and promotion laws in the interest of health may inspire ever more creative workarounds by affected industries; one study<sup>22</sup> identified ways in which the tobacco industry reached out to youth in spite of laws designed to prevent them from doing so. Congruent with an analysis of internal tobacco industry documents in this supplement,<sup>23</sup>

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another study<sup>24</sup> showed how activists negotiating with the tobacco industry over warning labels inadvertently enhanced industry legitimacy.

These and other studies that examine how policies inadvertently cause harm and facilitate other healthful conditions or behaviors prompted the development of the second phase of the Low Socioeconomic Status Women and Girls Project—Unintended Consequences of Tobacco Policies on Low Socioeconomic Status Women and Girls. In 2007, TReND issued a global call for abstracts. Over 40 abstracts were submitted; papers meeting the guidelines were internally reviewed then peer-reviewed, and nine<sup>23,25–32</sup> are being published in this supplement to the *American Journal of Preventive Medicine*.

The guest editors required that all papers directly address: (1) a population of women and/or girls that clearly can be identified as being of low SES (typically but not always measured by such indicators as relative income, education, and occupational levels); (2) inclusion of an assessment of tobacco-control policy (such as tax increases; smoking restrictions in the home, car, or workplace; advertising restrictions); and (3) unanticipated results of tobacco-control policies. This journal supplement challenged authors to note unanticipated results from policies that could be either positive/helpful for low-SES females or negative/harmful for them, across a variety of domains. In addition to the nine peer-reviewed papers, the supplement also features three commentaries, authored by Cheryl Healton, Donna Vallone, and Julie Cartwright; Hilary Graham; and Gloria Eldridge and Karen Cropsey.

### Summary of Papers

The nine papers in this supplement include literature reviews, and qualitative, mixed-methods, and quantitative analyses of data collected in the U.S. and China. The Greaves and Hemsing<sup>25</sup> review suggests that low-income women living in high-density areas may have limited access to safe outdoor spaces or face child care issues if they have to go outside to smoke; that policies can contribute to the stigmatization of mothers who smoke, leading to women not seeking smoking-cessation assistance; that women in service jobs are less likely to be protected by smoke-free policies because of a lack of enforcement or unequal distribution of policies; that smoking can increase in homes as a result of workplace and public policies; and that "smoking breaks" increase camaraderie among smokers. Similarly, Burgess et al.<sup>26</sup> suggest that low-SES groups are more likely to experience and internalize stigmatization compared to more-advantaged groups, and programs that are designed to reduce secondhand smoke exposure among children may stigmatize mothers as "bad mothers" and result in other unintended coping responses.

Several qualitative and mixed-methods studies captured helpful and harmful unintended effects of policies. Moore and colleagues<sup>29</sup> found that women who smoked outside smoke-free bars in California felt unsafe on the streets and had to deal with negative public perceptions and threats to safety in the rough neighborhoods in which some of these bars are located. Similar to Greaves and Hemsing,<sup>25</sup> Moore et al.<sup>29</sup> found that female patrons felt that smoking outside the bar provided an opportunity for social networking and solidarity. Yao et al.<sup>32</sup> examined the effects of workplace policies on pregnant women in Chengdu, China and found that smoke-free policies at work or on public transit displaced men's smoking to home environments, increasing low-income women's exposure to secondhand smoke. These women also reported that their husbands were subject to greater pressure at work because of these policies and this pressure affected family harmony. Balbach and Campbell<sup>23</sup> suggest that not acknowledging the economic effects of increased excise taxes on poor smokers could create an opportunity for the tobacco industry to form partnerships with groups representing low-income women. Working through the Tobacco Institute Labor Management Committee, the tobacco industry was successful at getting the Coalition of Labor Union Women to take a position on the

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unfairness of excise taxes in exchange for financial incentives. Balbach and Campbell suggest that advocates and others need to be mindful of the opportunities policy proposals present to the tobacco industry.

Quantitative studies in this supplement focused on the harmful effects of smoke-free home and work policies, voucher, and tax policies. Fang and Rizzo<sup>27</sup> found that women who did not have a regular job and were less educated were more likely to start smoking during the time period when China began issuing inexpensive vouchers for the purchase of cigarettes. These vouchers were implemented from 1960 to 1980 as a means to control tobacco consumption and allow the Chinese government to use scarce resources on the daily necessities instead of cigarettes. Tong and colleagues<sup>30</sup> reported that although Chinese and Korean-American women in California reported similar rates of smoke-free homes and work policies, lower-educated women were considerably more likely to be exposed to secondhand smoke than higher-educated women. These differences may be due to lack of control over the enforcement of policies and the empowerment of women in the home environment.

Hospitals in the U.S. have smoke-free environments that can affect the behaviors of mothers following birth. Paul and colleagues<sup>31</sup> found that newborns of mothers who smoked had shorter mean length of stay than nonsmoking mothers. The more women smoked, the shorter the length of stay for newborns in Pennsylvania hospitals. Sarna et al.<sup>28</sup> found that nurses who did not smoke were more likely to miss breaks than nurses who were smokers. However, smoking status was not associated with missed breaks when comparing educational status; lower-educated nurses (LPNs) were more likely than more-educated nurses (RNs) to miss a break irrespective of smoking status.

#### Directions for Securing the Health and Wellbeing of Disadvantaged Women

The devastating social and economic consequences of tobacco call for immediate global and concerted efforts to secure the health and well-being of disadvantaged women and girls. The results from these studies suggest that there are both harmful and beneficial effects of tobacco policies on low-SES women and girls. Stigmatization of mothers, lack of enforcement and ability to negotiate smoking policy in the home or at work, the neglect of tobacco researchers and advocates to carefully consider the needs of low-SES women and groups representing these women, safety issues, and the perception that work and public policies "shift" smoking to homes were consistent themes in one or more papers. In addition, several papers found one positive effect-work breaks and smoking outside resulted in increased camaraderie and solidarity. These studies collectively send a strong message that we need to move beyond the traditional narrow focus of examining how tobacco policies affect smoking, quitting, and secondhand smoke exposure. Studies confirm that passing policies alone is an important but not sufficient step. There is an urgent need to develop broader frameworks that are gender sensitive,<sup>11</sup> recognize the complexity and interactions of societal systems, and move us toward greater progress in reducing inequities in tobacco use, exposure, and the consequences experienced by low-SES women and girls.

Recognition of the complexity of the problem prompts us to take advantage of extraordinary opportunities in the coming years. In countries that have ratified the Framework Convention on Tobacco Control, a socio-gender–sensitive agenda obligates us to examine positive and negative consequences of increases in taxes, clean indoor air laws, youth access laws, warning labels, marketing and production restrictions, prevention of illicit sales and trade, and voluntary home policies on disadvantaged women and girls. An even broader agenda prompts us to examine tobacco policy interactions with social policies such as the Children's Health Insurance Program in the U.S. The Children's Health Insurance Program Reauthorization Act of 2009, which expands health and dental coverage to 4 million uninsured low-income children

and pregnant women,<sup>33</sup> provides not only the opportunity to evaluate the intended and unintended consequences of the \$0.62 tax increase on disadvantaged women, but more importantly, allows us to examine the interactive effects of insurance coverage and tobacco policies on the health and well-being of disadvantaged women and girls. The 2009 Lilly Ledbetter Fair Pay Act that addresses pay equity and discriminatory action by employers for each discriminatory pay check,<sup>34</sup> also presents an extraordinary opportunity to redress how pay equity helps or harms the health outcomes and social circumstances of disadvantaged women and girls. These and examples from other countries are numerous—careful and thoughtful socio-gender–specific agenda setting is necessary so that the different needs of disadvantaged women and the pros and cons of policies be considered at all stages of policy and program development in legislative or voluntary systems.

As the studies in this supplement suggest, the formulation of gender- and SES-sensitive policy must occur across social, political, economic, healthcare, housing, education, justice, food security, agriculture, commerce, and other systems whose policies—and their interactions with tobacco policies—influence the health and well-being of disadvantaged women. Personal, political, and fiscal commitment and innovation are needed to improve health and health equity across the life course of women and girls. Research innovation and bold practical solutions, and the will and resilience of individuals from all socioeconomic classes are also necessary.

Developing practical solutions will require policymakers to hold meaningful discussions with low-SES women and organizations that represent them on complimentary programs that alleviate any detrimental effects. More than ever, research on policy repercussions, especially among disadvantaged women, is needed in order to build the collective skills and capacity to implement and promote appropriate policies and complimentary programs that secure the health and well-being of the families around the globe.

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