Potential Unintended Consequences of Tobacco-Control Policies on Mothers Who Smoke

A Review of the Literature

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Background: Secondhand smoke poses risks to children, particularly those from low socioeconomic backgrounds. Recently, there has been an increase in tobacco-control policies designed to reduce children's exposure to secondhand smoke, including interventions to change parental smoking behaviors. However, little attention has been paid to understanding potential unintended consequences of such initiatives on mothers who smoke. As such, the objectives of this paper are to explore the potential consequences of tobacco-control policies designed to reduce children's exposure to secondhand smoke on socially disadvantaged mothers who smoke and to provide recommendations for research, policy, and practice.

Evidence acquisition: A theory-guided, qualitative narrative review of the perceived discrimination, stigma, and stress and coping literature was conducted. MEDLINE and PsycINFO were searched to identify relevant articles from 1980 to October 2008 for review.

Evidence synthesis: There is evidence that strategies designed to reduce secondhand smoke have contributed to smoking stigmatization. However, there is little research on the consequences of these initiatives or how they affect low-income mothers who smoke. Stigmatization research suggests that such policies may have unanticipated outcomes for socially disadvantaged mothers who smoke, such as decreased mental health; increased use of cigarettes or alcohol; avoidance or delay in seeking medical care; and poorer treatment by healthcare professionals. Recommendations for researchers, practitioners, and policymakers are presented.

Conclusions: Further research is needed to understand how initiatives to reduce children's exposure to secondhand smoke, as well as broader tobacco-control initiatives, can be designed to minimize potential harm to mothers who smoke.

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Background

In the face of mounting evidence of the numerous risks posed by secondhand smoke (SHS),[1–6] there has been an increase in efforts designed to reduce this exposure, including the promotion of smoke-free legislation and media campaigns focusing on the harms that smokers cause others. Specific messages and initiatives have focused explicitly on reducing the effects of SHS on children. These include recommendations that healthcare providers assess parental smoking behavior and provide counseling during pediatric visits,[2,7,8] as well as interventions aimed at changing parental smoking behavior (including the measurement of biomarkers of nicotine exposure in children's saliva, urine, or hair).[9–14] The reduction of SHS exposure been aided by the larger strategy of "denormalization" of tobacco use—moving tobacco use from an acceptable practice to an abnormal practice, which is an explicit strategy of several North American tobacco-control organizations.[6,15–19]

Taken together, these types of tobacco-control efforts have been enormously successful in reducing children's exposure to SHS as well as reducing smoking among their parents. SHS exposure in homes with children has declined markedly since the early 1990s and a growing percentage of individuals now believe that children should not be exposed to cigarette smoke in the home.[20–22] Policies for smoke-free public places and home smoking restrictions also have contributed to declines in smoking. Nevertheless, there is an emerging concern that these types of tobacco-control policies have contributed to the stigmatization of smokers,[17,18,23,24] which may have detrimental consequences, particularly among socially disadvantaged populations who are disproportionately likely to be smokers and to lack home

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smoking restrictions[21,24–31] and who are at elevated risk of stigmatization due to poverty and other "marks of stigma" associated with poverty (e.g., mental illness, minority race or ethnicity).[18]

From a social–psychological perspective, stigmatization occurs when a person has an attribute that conveys a devalued social identity within a particular context.[32] Because smoking is strongly associated with socioeconomic status (SES), the social context of smoking is likely to be critical.[31] Smoking behavior may be unremarkable and common within a socially disadvantaged community where there is a high prevalence of smokers, but may be stigmatizing in other contexts (e.g., health care) where smoking is non-normative and perceived negatively.[33] It should be noted that the stigmatization of smoking is a relatively recent occurrence that contrasts with earlier periods in which smoking was socially acceptable.[34]

It is important to point out that the goal of denormalization is not stigmatization. Denormalization aims to make smoking behavior, rather than smokers, unacceptable.[16] Denormalization is also important as a means of countering the massive spending by tobacco companies to normalize and promote smoking. In addition, it is likely that factors other than tobacco-control policies contribute to the stigmatization of smokers, including the fact that smokers are now disproportionately likely to be members of other stigmatized categories. However, there is reason to believe that denormalization and tobacco-control strategies designed to reduce SHS exposure may unintentionally contribute to the stigmatization of smokers, resulting in potential negative consequences. For example, individuals perceived as posing peril to others are particularly vulnerable to stigmatization, and the idea of smokers posing danger to nonsmokers has been a central theme in discourses about SHS.[26] This paper explores these possibilities, examining the effects of two types of activities—(1) those designed to change parental smoking behavior, and (2) broader tobacco-control strategies aimed at reducing SHS exposure and denormalizing smoking—focusing on socially disadvantaged mothers who smoke, a group that is particularly vulnerable to adverse consequences. A literature review was conducted to address the following research questions:

Q1. Are smokers stigmatized?
Q2. Is stigmatization greater among mothers who are socially disadvantaged?
Q3. Do certain types of tobacco-control strategies contribute to the stigmatization of smokers?
Q4. Is stigmatization effective at reducing children's exposure to SHS (i.e., lead to quitting or home smoking bans)?
Q5. Are there potential unintended negative consequences of stigmatization on socially disadvantaged mothers who smoke?

Evidence Acquisition

A theory-guided search was conducted for relevant articles that directly or indirectly addressed the questions above. This was a qualitative narrative review. MEDLINE and PsycINFO were used to identify relevant articles from 1980 through October 2008. Additional articles were located through the bibliographies of the selected articles and from reviews on the topics of stigmatization and perceived discrimination.

Evidence Synthesis

Q1. Are Smokers Stigmatized?

Evidence of stigmatization comes from qualitative and quantitative studies examining: (1) smokers' perceptions of prejudice and bias by others (perceived stigmatization),[26,35–38] (2) observed stigmatization of smokers in employment, health care, personal relationships, and the media,[39–44] (3) negative attitudes about smokers held by nonsmokers,[26,34,38,45,46] and (4) negative attitudes about smokers held by smokers (internalized stigma).[26,36–38,45,47–51]

Q2. Are Socially Disadvantaged Mothers Who Smoke Particularly Vulnerable to Stigmatization?

Stigmatization and motherhood. No studies located directly compared stigma experienced by smoking mothers to smoking fathers. However, there is indirect evidence that stigmatization will be more likely for mothers who smoke, as compared to fathers. Mothers have been traditionally viewed as the "guardians of family health,"[48] are expected to place their children's concerns first,[52] and experience "mother blaming" by health professionals when they are seen as failing those duties.[52–55] Those beliefs are reflected in messages, such as the American Lung Association's tagline: "I Quit Smoking . . . because I Love My Baby."[56] Indeed, several qualitative studies suggest that mothers who smoke are likely to be seen as harming their children[51,52,57,58] and are also likely to internalize the smoking stigma.[36,47,48] Mothers are also more likely than fathers to take their children to pediatricians and healthcare providers, exposing the mothers to more opportunities for potential stigmatization.

Stigmatization and social class. Few studies examined the relationship between social class and stigmatization, and the results of these studies are mixed**.** A qualitative study of British smokers found greater perceived stigmatization and internalization of the smoking stigma among lower-SES smokers.[51] This is consistent with research showing that lower social classes are particularly vulnerable to stigmatization when they do not maintain "middle class" standards of health, and that groups already stigmatized are likely to be viewed as sources of harm.[59] However, one recent survey found

lower levels of stigmatization (internalization) among lower-SES smokers compared with high-SES smokers and among black and Latino smokers compared with whites,[26] and another found greater social denormalization of smoking among high-SES compared with low-SES smokers.[16]

A consideration of context may help to reconcile these disparate findings about the relationship between smoking stigmatization and social class. Specifically, socially disadvantaged mothers are likely to be aware of the stereotypes of smokers held by the professional classes and hence might feel stigmatized in those situations (e.g., at the doctor's office), but not perceive stigmatization in their own communities, where smoking is prevalent. This phenomenon of "stereotype threat," in which stereotypes are activated in particular contexts, has been widely documented in educational settings[60,61] although it has not been examined in health care. Evidence showing that healthcare providers hold negative stereotypes of lower-SES patients[62] also suggests the possibility, which remains unexamined, that providers may react more negatively and have lower expectations of socially disadvantaged mothers who smoke.

Q3. Do Certain Types of Tobacco-Control Strategies Contribute to the Stigmatization of Smokers?

No located studies examined the effects of parental interventions on stigmatization, and only one study looked specifically at the association between tobacco-control strategies and perceived stigma. In one study[26] (a survey of current and former smokers), stigmatization was positively associated with (1) fear that SHS harms children (a common message in tobacco-control communication) and (2) perceived anti-smoking norms. In a related vein, a survey of smokers found associations between social denormalization and noticing anti-smoking information, noticing warning labels, and living in areas with greater SHS restrictions.[16]

Q4. Is Stigmatization Effective at Changing Behaviors of Smokers, in Ways That Reduce Their Children's Exposure to SHS?

Initiatives to change maternal smoking behavior to reduce children's exposure to SHS have focused on (1) promoting quitting and (2) changing behaviors related to smoking around children (in the house, the car, and other enclosed spaces). Although research in this area is scant, there is emerging evidence that smokers who feel stigmatized may be more likely to quit. Analyses of several secondary datasets found lower smoking rates in states that had higher levels of negative attitudes toward smokers, even after controlling for the effects of state-level tobacco-control initiatives, and a greater willingness to quit smoking among smokers who perceived that they had been discriminated against based on their smoking status.[38] A longitudinal survey of smokers from Canada, the U.S., the United Kingdom, and Australia found that smokers who reported perceived disapproval of smoking were more motivated to quit, and that these baseline attitudes were associated with abstinence at follow-up,[16] and an unpublished study found an association between experiences of smoking stigmatization and willingness to quit smoking.[26] Likewise, an analysis of the Tobacco Use Supplement (TUS) administered from 1995 to 1999 found a negative association, at the state level, between social unacceptability of smoking and consumption of cigarettes.[63] These studies did not investigate whether the association between stigmatization/denormalization and smoking differed among low- and high-SES groups. No research examining the effect of stigmatization on implementing home smoking restrictions was located.

There is mixed evidence for the effectiveness of interventions directed at parents to reduce children's exposure to SHS; these interventions include a variety of behavioral counseling approaches, education, and feedback using urine or saliva cotinine biomarkers.[9–12] However, because intervention studies designed to decrease children's SHS exposure did not assess stigmatization, it is not possible to determine the relationship between stigmatization and effective behavior change. Moreover, these studies are more likely to show significant results when self-report rather than biochemical markers are used as outcome measures.[20] This suggests that some smokers may be providing socially desirable responses rather than truly changing their behavior, possibly as a strategy to avoid stigmatization.

Little is known about whether stigmatization is effective at changing smoking behavior for socially disadvantaged women, a group that has experienced less of a decline in rates of smoking and attitudes toward the acceptability of smoking at home.[30,31] One possibility is that socially disadvantaged women experience lower levels of stigma and social disapproval,[16] particularly in their daily lives, and hence are less motivated to quit. Another possibility is that stigmatization is less effective at changing smoking behaviors among socially disadvantaged mothers. It is possible that frequent exposure to discrimination may have built up defenses that render this group less responsive to stigmatization and that they have distanced themselves from the values of the settings within which they are stigmatized (e.g., health care).[61] Additionally, socially disadvantaged smokers are less likely than more advantaged smokers to possess the resources that will allow them to quit smoking or to enact home smoking restrictions in response to stigmatizations,[64] because of a lack (or perceived lack) of health insurance or inadequate coverage for smoking cessation services. Socially disadvantaged mothers (particularly those who are single

mothers) may have less leisure time, social support, and access to smoke-free environments in the home and workplace, as well as greater constraints endemic to low-paid jobs (e.g., where smoking breaks may be a sanctioned form of respite) and greater household responsibilities.[65] Because low-income women have higher levels of chronic stressors than their more advantaged counterparts, the additional stress associated with quit attempts may be more difficult to manage. This lack of resources is likely to increase the difficulty of quitting and maintaining a smoke-free home and may also contribute to feelings of low self-efficacy and control.[36,47,48,66] This group also may have fewer alternative means of pleasure and stress reduction with which to replace smoking.[67]

Q5. Are There Potential Unintended, Adverse Consequences of Stigmatization for Socially Disadvantaged Mothers Who Smoke?

Several qualitative studies have documented self-reported feelings of low self-worth and negative emotions (e.g., guilt, sadness) among mothers who are not able to successfully quit or protect their children from SHS, particularly in the face of messages from their health professionals about its harms.[36,47,48,66] No other studies directly examined potential negative consequences of smoking stigmatization in this group. The broader literature on perceived discrimination and stigmatization (reviewed below) suggests a number of possibilities that future studies could explore.

Poorer emotional and physical health. Research on a variety of social stigma (e.g., race/ethnicity, obesity, minority sexual orientation, AIDS, mental illness, chronic bowel disease) has shown that stigmatization and experiences of discrimination are sources of chronic stress, resulting in damage to the immune system, inflammatory disorders, cardiovascular disease, mental health disorders (e.g., depression, anxiety, psychological distress), cognitive impairment, and negative impact on health-related quality of life.[68–72] Future studies should assess the extent to which perceived stigmatization related to one's smoking status results in similar outcomes.

Impression management. Impression management is an important way in which stigmatized individuals protect or salvage a "spoiled" identity.[73] Hence, mothers may lie to health professionals about their own smoking and the extent to which their children are exposed to tobacco smoke. Mothers also may engage in "accounting," in which they provide a rationale or "account" of their behavior.[36,47,48] One accounting style involves "stories of acceptability" in which individuals accept responsibility for their behavior but deny that it is wrong or minimize its harm. For instance, mothers may explain how the benefits of smoking (being calm and relaxed) outweigh the risks of SHS exposure for their children. Another accounting style involves "denial of agency," in which the act is acknowledged as wrong but full responsibility is denied. Mothers may discuss how their addiction prevents them from being able to quit or may shift responsibility to others, such as health professionals, who failed to offer adequate quitting assistance. Currently, there is no research on how these accounting styles affect smoking-related behavior. However, it may be the case that certain strategies, such as those involving "denial of agency," may undermine feelings of self-efficacy—a robust predictor of successful behavior change.[74,75]

Avoidance of stigmatizing situations. One way of coping with stigma is to avoid stigmatizing situations.[61] Expectations and experiences of social stigma have been associated with delaying or failing to obtain needed mental and physical health care, among individuals from a variety of groups, including people with HIV/AIDS, the overweight, racial/ethnic minorities, and smokers,[35,76–80] suggesting that mothers who smoke may avoid contact with their healthcare providers. Findings from one qualitative study also suggest that smokers may lie to their providers about their smoking, to avoid being judged negatively.[81]

Food and substance use. Individuals may use food, alcohol, and cigarettes to cope with stigmatization. Several studies have found a relationship between racial/ethnic prejudice and use of cigarettes[82–86] and alcohol.[87,88] Among the overweight, stigmatization is associated with higher BMI and has been shown to result in overeating as a coping response.[89,90] Overweight women who endorsed negative weight-based stereotypes were also more likely to engage in binge eating and to be less successful at weight loss.[90] Taken together, these studies suggest that unhealthy behaviors—including smoking—may be a consequence of stigmatization.

Strengthening of identification as smokers. Another under-explored issue is whether stigmatization may increase individuals' identification as smokers. Research has shown how members of groups devalued in the larger society may maintain their group self-esteem by strengthening the identity with their own group.[91] The confluence of several factors—the association between smoking and social class, the relegation of smokers to separate spaces, feelings of stigmatization, and deliberate attempts by the tobacco industry to reinforce an "us versus them" distinction between smokers and nonsmokers—may have the unfortunate result of strengthening members' identification as smokers.

Impaired self-regulation. Numerous studies have shown that, for members of stigmatized groups, situations that trigger expectations or concerns that one will be stigmatized impair performance[92] and diminish self-regulatory processes.[93] This suggests that stigmati-

zation may lower regulation processes needed to make changes in one's health behavior, including, but not limited to, smoking.

Non-adherence. Stigmatization has been associated with non-adherence to treatment,[72,94–97] which may be a function of impaired regulation skills or may be due to lower levels of trust in the patient–provider relationship.

Bias by healthcare professionals. A great deal of research has shown that bias by healthcare providers (based on race/ethnicity, gender, age, and other patient characteristics) can negatively affect quality and processes of care, including interpersonal communication, clinical judgments and decisions, and patient utilization of and adherence to treatment.[98,99] Although very few of these studies have examined bias against smokers,[35,42,43,76] the same psychological processes are likely to apply, putting smokers at risk for lower quality care.

Recommendations for Research, Policy, and Practice

Further Research and Discussion on Smoking Stigmatization and Its Consequences

There were numerous gaps in the literature related to four of the five research questions. Although a great deal of research documents stigmatization of smokers (Q1), little research addressed: whether socially disadvantaged mothers who smoke are particularly vulnerable to stigmatization (Q2); whether certain types of tobacco-control strategies (i.e., interventions to reduce parental smoking behavior, denormalization, policies related to SHS) contribute to the stigmatization of smokers (Q3); whether stigmatization is effective at changing parental smoking behaviors (Q4); and the potential unintended, adverse consequences of stigmatization on socially disadvantaged mothers who smoke (Q5).

Research in this area would also benefit from clarification and measurement of stigma. Stigmatization can be construed in terms of perceived experiences of stigma, which may involve everyday encounters in which smokers feel as if they are treated disrespectfully; major incidents involving discrimination (e.g., in housing or the workplace)[86]; objective measures of stigmatization; negative attitudes and stereotypes held by nonsmokers; and the internalization of those negative attitudes by smokers. To this end, researchers might turn to standard inventories developed to study stigmatization among other populations.[86,100] The use of standard inventories that have assessed other forms of stigmatization would also allow for the comparison of the magnitude and consequences of stigmatization of smokers with other, more widely studied forms of stigmatization (e.g., AIDS, race/ethnicity, mental illness). This type of comparison is critical to understanding the extent to which smokers are, in fact, stigmatized; how this stigmatization may vary across subgroups; and whether the prevalence and consequences of such stigmatization constitutes a public health problem on a par with discrimination based on race or mental illness.

It is also important to distinguish stigmatization from denormalization. Whereas the goal of denormalization is to depict smoking as a negative behavior, stigmatization involves a highly visceral form of social control, in which the stigmatized are devalued, discriminated against, and viewed as "blemished" and different than "normals."[101] Although few would argue with the goals of denormalization, it is less clear whether tobacco-control initiatives can be justified, based on a benefits–harm analysis, if they are shown to contribute to stigmatization of smokers (however unintentional). This debate is not merely theoretic, because there is evidence that anti-smoking messages may be more effective when they elicit negative emotions and when they depict the danger of SHS—qualities likely to be associated with stigmatization.[102] Nonetheless, from an ethical perspective, it is suggested that efforts be made to develop nonstigmatizing tobacco-control interventions.

Develop and Identify Tobacco-Control Initiatives That Avoid Stigmatizing Mothers Who Smoke

First, it is important that tobacco-control initiatives do not single out mothers, but instead focus on "parents" who smoke. It is also critical that tobacco-control initiatives avoid depicting socially disadvantaged mothers who smoke as a source of harm to their children (a message frame that has been used to stigmatize mothers who engage in a variety of behaviors deemed unhealthy for children),[103,104] but instead depict them as individuals who are important in their own right and worthy of the health benefits that quitting smoking would bring.

One strategy for developing nonstigmatizing messages is to utilize "challenge" versus "stigma" formats.[44] In the case of SHS, a stigma format contains messages that depict the person (i.e., the smoking mother) rather than the health condition (smoking status) as the problem; activates feelings of threat, shame, disgust, and blame toward the smoker; and promotes social exclusion and avoidance of the person with the health condition. In contrast, a challenge format would: focus on the health concerns of SHS; promote social inclusion, optimism, and hope; and rally the community to support one another to find solutions. For example, a message utilizing a challenge format might depict a community event honoring parents who have successfully quit smoking, or feature children talking about how proud they are that their parents have quit. Indeed, qualitative studies of poor mothers and pregnant women have found that they are concerned about SHS and are motivated to quit by their "moral identity"

as mothers and the welfare of their children.[105,106] Communication initiatives might build on theses positive aspirations, rather than reinforcing the negative aspects of the mothers' present smoking behaviors.

Provide Better Support to Help Socially Disadvantaged Smokers Quit

The literature suggests that denormalization and stigmatization are, in fact, associated with quitting-related behaviors, although it is unclear whether this association varies by social class and race. For socially disadvantaged mothers who smoke to translate feelings of stigma into productive rather than deleterious responses, it is critical to provide the type of support that improves the likelihood of successful cessation, such as quit aids and accessible counseling, with special attention to the barriers low-income individuals face in accessing care (time, transportation, child care).[8] It is also important that programs help address the "bind" voiced by poor mothers, who feel guilt over their children's exposure to SHS but who view smoking as an important tool for coping with difficult circumstances (including the stresses of parenting).[36,47,48,107] This might include helping mothers find alternative coping strategies. Additionally, interventions conducted at the policy, community, and individual level could also help parents reduce a broad range of environmental toxins and irritants in the home.[108,109]

Help Healthcare Providers Become Aware of and Overcome Their Own Biases Against Mothers Who Smoke

A key piece of helping mothers quit is improving their encounters with healthcare providers. To this end, it is important to help providers become aware of and overcome their own biases.[98,110]

Bias against mothers who smoke may be particularly difficult to overcome because it may be perceived as legitimate and deserved, given the very real risks that SHS poses to children. Moreover, a preventive orientation in healthcare practice and policy that emphasizes individual lifestyle changes may also increase the likelihood that smokers who cannot successfully modify their behavior will be stigmatized.[111–114] For these reasons, it is particularly important that guidelines and initiatives aimed at providers include the aims of: (1) sensitizing providers to the stigma of tobacco use, and (2) mitigating tendencies to "blame" smokers by increasing awareness of the factors that promote smoking and make quitting difficult (e.g., environmental factors, addiction).

There is growing evidence that specific alterable factors can reduce the likelihood of conscious and unconscious biases influencing healthcare providers' judgments, decision making, and the way in which they communicate with patients.[110] A key step is to make providers aware of their biases and to enhance internal motivation to reduce this bias. To accomplish this, it will be necessary to raise awareness about the potential stigmatization that mothers who smoke may feel when reminded of the harm they are doing to their children, and to educate providers about the deleterious consequences of stigmatization, including how stigmatization may be counterproductive to building an effective patient–provider relationship and potentially inhibit the goal of reducing SHS exposure. Another component involves building empathy: helping providers "put themselves in the shoes" of the mother who smokes and to understand, from her perspective, the particular barriers she faces in her struggle to protect her child from SHS. It is also important to help providers improve their partnership-building skills, particularly with patients who might evoke strong negative emotional reactions in them. These strategies are likely to be welcomed by pediatricians and other healthcare providers who report low levels of effectiveness and training in smoking cessation counseling.[115]

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