

Reducing Socioeconomic Disparities in Tobacco-Related Health Outcomes

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Introduction

Tobacco use is the leading cause of preventable death in the United States, with tobacco-use being correlated with 480,000 deaths in 2016, making up 18.1% of total U.S. deaths that year¹. This is nearly one in five deaths in the United States. January 2017 marks the 53th anniversary of the first surgeon general's report on smoking and health. The surgeon general's report inspired the first efforts by governments, nongovernmental organizations, and the private sector to reduce the toll of cigarette smoking through reduced initiation and increased cessation of the use of tobacco products². Since 1964 when the surgeon general's report was published, tobacco control has reduced the number of expected premature deaths by an estimated 8 million, supporting the idea that tobacco control indeed reduces death rates.

Although tobacco control represents an important public health achievement, tobacco use is still, today, the leading cause of both preventable death and cancer death for both men and women in the United States³. Furthermore, the burden of smoking disproportionately affects the lower, working class, as smoking rates are much higher in low-

income families, employees in working class jobs, and of low education attainment. This disparity is a result of many environmental, socioeconomic, and psychological associations with being a lower-class citizen, a few of which reasons that will be discussed throughout this review. By evaluating effective political methods of reducing initiation and increasing cessation of smoking, particularly among the lower class, we can continue to reduce the effect of smoking on the nation's death toll and decrease the disparity of the burden of tobacco on the lower class. Additionally, by investigating the moderators of this higher prevalence of smoking behaviors in the lower class, we can begin to reduce this disparity and improve health outcomes for this group. Doing so would contribute to our nation's ever-present goal of improving overall health and well-being, and reduce the economic burden of tobacco-related illness on a grand scale.

Background and Literature Review

Effects of Smoking and Second- Hand Smoke on Risk of Lung Cancer Mortality

To understand fully the health implications of the disproportionate affects of smoking on the lower class, it is important to evaluate the impact that smoking has on health. Smoking cigarettes increases the risk of developing lung cancer, and dying from lung cancer, fifteen to thirty-fold. While the risk of developing and/or dying from lung cancer goes up the more years a person smokes, and the more cigarettes smoked each day, even smoking a few cigarettes a day or smoking occasionally increases the risk of lung cancer³. Not only though does cigarette smoking affect the health of the

person smoking, but also those near or around the person smoking. Those experiencing “second-hand smoke,” are put at an increased risk of developing lung cancer as well. In the United States, two out of five adults and children who don’t smoke are exposed to second-hand smoke, and about 7,300 people who had never smoked die from lung cancer due to second-hand smoke every year ³. This strongly affects those in the households of occasional to heavy smokers. Therefore, if smoking is indeed more prevalent in the households of lower-class families, these smokers and their families are put at greater risk of developing lung cancer, mortality by lung cancer, and a multitude of tobacco-related illnesses including asthma, coronary heart disease, and COPD⁵.

How Smoking Disproportionately Affects the Lower Class

In order to begin the endeavor of resolving the social disparities in tobacco use, it is important to understand which factors lead to this higher prevalence of tobacco use behaviors among the lower class, so we can begin to solve these independent issues. A recent analysis from the 2013 National Health Interview Survey found that the prevalence of smoking was highest among the people of the following groups: working-class employees, low education level attainment, and low income. Each of these indicators of socioeconomic status was positively and independently associated with smoking prevalence. Notably, these findings reported that successful attempts at quitting smoking were significantly more common in people who had the most socioeconomic resources⁶. These findings have major implications for the health outcomes of these groups because,

as we discussed previously, smoking greatly increases the risk for lung cancer, lung cancer mortality, and a spectrum of tobacco-related illnesses for both the person smoking and the people in their households. If the lower class, on average, is more likely to smoke and smoke more frequently, they are placed at higher risk for these consequences. These disparities in the prevalence of smoking reflect the larger structural forces that shape their everyday lives that contribute to their use of tobacco products. A profound example is the data reported from the Alameda County Study, which demonstrated that smoking behavior is associated with low-income factors such as unemployment, lack of social support, living in unsafe communities and neighborhoods, and having needs such as food and medical care unmet ⁶. Additionally, data supports the notion that smoking is more commonly used as a stress coping mechanism for members of the lower-class, as economic pressures that result in an increased demand for caring for others in their family are at higher stakes among this group. Specifically, a study done by the University of Warwick discovered that among low-income women, smoking rates were significantly associated with having fewer resources and greater role responsibilities such as the pressure to work and deliver childcare ⁷. These data suggest that the increased smoking behavior among the lower class is caused by certain stressors that accompany their environments, and policy efforts aimed at reducing this disparity will need to address the issues underlying this behavior, such as unequal resources, work-place stressors, social isolation, food availability and access to medical care.

Policy Implications and Recommendations

Currently, most research on the topic of tobacco control has been geared towards reducing the purchasing and usage behavior of smokers through increased excise taxes on tobacco products, and more explicit warning labels cautioning the health risks associated with using the products on the packing of the product itself.

An examination of more than 100 international studies, conducted in 2012, articulates the empirical consensus that increases in tobacco taxes are a highly effective strategy for reducing tobacco use and its associated health consequences. This study included a significant data pool from low-income countries, confirming that a raise in tobacco product taxes decreases the number of people who decide to start smoking, increases the amount of people who decide to quit smoking, and overall improves the health of the population of which the tax affects ⁸.

An 8-cent decrease in the federal tax is estimated to induce up to 1 million people, age 12-25 years, to smoke, when without the tax decrease they would not. Hundreds of thousands of adults older than 25 years old would also start or continue to smoke as a result of the tax decrease. Conversely, an 8 to 16 cent tax increase would encourage from 1 to 2 million young persons and 800,000 to 1.5 million adults to quit smoking or deter them from starting. Thus, a tax increase could prevent hundreds of thousands of premature smoking-related deaths, while a tax decrease would contribute to the disease burden of tobacco. The federal cigarette excise tax is a powerful tool of public health policy. However, limited research has been conducted on how the increase of the federal excise tax

specifically affects members of the lower income groups. There is room for research in this area to further predict whether an increase will begin to close the gap in health disparities due to tobacco use across income groups.

Some research, however, has begun to take a look at how policy might address this disparity. One study conducted in 2017 confirmed the efficiency of graphic health warning labels on tobacco products on communicating health risks information among low SES groups. This study also found that reactions to the GHWs (graphic health warnings) were associated with nine-fold increase in the likelihood of cessation of smoking among low SES groups ⁹.

Conclusively, current research suggests that increasing the federal excise tax on cigarettes, and increasing the health warnings advertised on tobacco products, greatly reduces the amount of people buying cigarettes, and consequently reduces the number of people who smoke and harm others by second-hand smoke. Increased cessation of cigarette smoking reduces the risk of contracting lung cancer and many other smoking-related illnesses. However, there is much room for further research in addressing the framework of low SES lifestyle that contributes to the disparity in tobacco use. Suggestions supported by the American Public Health Association to eliminate disparities in tobacco-related health include surveillance research, which would assist in monitoring trends in tobacco-use and report data on smaller populations, as current surveillance policies do not focus on disparities.⁹ The APHA also suggests increased psychosocial research, to build on current knowledge of the context of specific

cultural variables that lead to disparities. By continuing to build on our knowledge of policy endeavors that effectively reduce the number of smoking on a national level, *and* close the gap of disproportionate affects on the lower class, we will continue to make great strides in reducing the burden tobacco has on the health outcomes on all of the citizens of our country.

Links of Interest

American Public Health Association:
<http://ajph.aphapublications.org/doi/full/10.2105/AJPH.94.2.211>

American Journal Of Public Health:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448233/>

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