

The Changing Public Image of Smoking in the United States: 1964–2014

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Abstract

Tobacco use behaviors in the U.S. have changed significantly over the past century. After a steep increase in cigarette use rates over the first half of the 20th century, adult smoking prevalence rates started declining from their peak reached in 1964. Improved understanding of the health risks of smoking has been aided by the U.S. Surgeon General's Reports, issued on a nearly annual basis starting in 1964. Among the many forces driving down smoking prevalence were the recognition of tobacco use as an addiction and cause of cancer, along with concerns about the ill effects of breathing secondhand smoke. These factors contributed to the declining social acceptance of smoking, especially with the advent of legal restrictions on smoking in public spaces, mass media counter-marketing campaigns, and higher taxes on cigarettes. This article reviews some of the forces that have helped change the public image of smoking, focusing on the 50 years since the 1964 Surgeon General's Report on smoking and health. *Cancer Epidemiol Biomarkers Prev*; 23(1); 32–36. ©2014 AACR.

Introduction

The United States over the past century has seen a dramatic shift in attitudes toward tobacco, which, in turn, has influenced the increase and decrease of cigarette consumption and smoking-related cancer deaths (1–4). This article reviews some of the various forces that have helped change the public image of smoking, with a particular focus on the 50 years since the 1964 Surgeon General's Report on smoking and health.

Tobacco Use and Marketing before 1964

Cigarette smoking grew rapidly in America in the early part of the 20th century, following the invention of automatic cigarette rolling machines and the increase of advertising and promotion on an unprecedented scale (4). Cigarette use grew despite opposition from temperance advocates and religious leaders concerned that smoking would lead to alcohol abuse and narcotic drugs, especially among youth (1, 4). During the first half of the century, however, neither the public nor most physicians recognized a significant health threat from smoking, even

though the increase of lung cancer prompted epidemiologic research beginning as early as the 1920s (1, 4). With the end of Prohibition (in 1933) and the decline of the temperance movement, advertising in the 1930s and 1940s was defined by campaigns, which often included explicit health claims, such as "They don't get your wind" (Camel, 1935), "gentle on my throat" (Lucky Strike, 1937), "play safe with your throat" (Philip Morris, 1941), and "Fresh as mountain air" (Old Gold, 1946; refs. 4, 5). Smokers of Camels were even encouraged to smoke a cigarette between every course of a Thanksgiving meal—as an "aid to digestion." Except for a brief period around the Great Depression, per capita cigarette consumption increased steadily until 1953 (1, 4, 5), by which time 47% of American adults were smoking cigarettes (58% of males and 36% of females), and half of all physicians (6).

In the early 1950s, evidence implicating smoking as a cause of lung cancer began to appear more frequently in medical journals and the popular press (1, 4). Cigarette sales declined in 1953 and the first part of 1954, but quickly rebounded as manufacturers rushed to introduce and market "filtered" cigarettes to allay health concerns. The emergence of the filter tip cigarette was a direct response to the publicity given to evidence linking smoking and cancer, and consumers reacted by shifting over to the new designs (4, 7). In 1952, filtered cigarettes accounted for less than 2% of sales; by 1957 this had grown to 40% and would surpass 60% by 1966 (7, 8). The advertised benefits of filters were illusory, however, given that smokers of filtered brands often inhaled as much or more tar, nicotine, and noxious gases as smokers of unfiltered cigarettes (9–11). Filters were not really even filters in any meaningful sense, because there was no such thing as "clean smoke." The industry had recognized this as early as the 1930s, but smokers were led to believe they were safer (4).

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By 1957, the evidence implicating smoking as a causative factor in lung cancer had been established to a high degree of scientific certainty, leading to the first official statement from the US Public Health Service (USPHS) implicating smoking as a cause of lung cancer (12, 13). The tobacco industry also took notice of the emerging evidence, but instead of acknowledging what they knew to be true, hired a public relations firm (in December 1953) to implement a massive campaign to challenge the evidence (1, 4, 14). Medical doctors and academic scholars were hired to defend the industry's claim that the evidence was "merely statistical" or based only on "animal evidence" (1, 4, 14). The public relations campaign—which would extend for over 40 years—was designed with the goal of reassuring the public, especially current smokers, that the question of whether smoking caused harm was an "open controversy" (1, 4, 14).

Tobacco Use and Marketing after 1964

The 1964 report of the Surgeon General's Advisory Committee marks the beginning of a significant shift in public attitudes about smoking (1, 2, 4). Declining adult per capita cigarette consumption after 1964 followed increasing public appreciation of the dangers of tobacco use, accompanied by increasing efforts to regulate the use, sale, and advertising of tobacco products (15, 16). In the United States, in 1965 approximately 42% of adults were current smokers (52% of men and 34% of women; ref. 17). By contrast, in 2011 less than 20% of adults were current smokers, with significant variations from state to state (18). Also, a major defining characteristic of smoking prevalence today is socioeconomic status, with higher smoking rates found among the poor and less educated and also among individuals with mental health and substance abuse diagnoses (19). Adult per capita consumption has declined by about 70% since 1963, the year before the Surgeon General's Report (20). Total per capita consumption continued to increase until 1975, however, due in part to a significant increase in youth smoking (20).

Since 1964, there has also been a dramatic shift in the public's knowledge and attitudes about smoking (2). In the mid-1960s it was still common to see doctors, athletes, and radio, movie and TV celebrities smoking or advertising different cigarette brands, and cigarette companies were major sponsors of popular shows on all three television networks (21). The Federal Trade Commission (FTC) in 1967 commented on how it was "impossible for Americans of almost any age to avoid cigarette advertising" (8), which is hardly surprising given the levels of money involved. In 2010, the U.S. Surgeon General reported that from 1940 into 2005, an estimated \$250 billion was spent in the United States on cigarette advertising (adjusted for inflation, in 2006 dollars; ref. 22).

The Modern Era of Tobacco Control

The 1964 Surgeon General's Report received widespread media coverage and prompted a decline in ciga-

rette sales in the first two months following its release (8). In 1966, the first cautionary label appeared on cigarette packs, stating that cigarette smoking "may be hazardous to your health" (8, 15). The warnings were updated in 1970 and again in 1985, although their effectiveness has been the subject of much scientific debate (8, 15, 23–25). In 1967, antismoking advertisements began to air on television as part of a Federal Communications Commission Fairness Doctrine ruling requiring broadcasters to run an antismoking advertisement for every cigarette ad aired (15, 16). Compliance with this ruling was incomplete, as cigarette ads ran in a ratio of about 4 to 1 compared with antismoking ads. Despite this inequality, smoking rates dropped dramatically during this period (16). Cigarette ads were banned from television and radio in 1971, which also put an end to Fairness Doctrine advertisements (15, 16).

The public perception of smoking about this time began to shift, making smoking a less acceptable social practice. A poll conducted in 1966 found only 40% of Americans recognizing smoking as a major cause of cancer, whereas 27% said it was a minor cause and one third said the science was not yet able to tell (2). In 2001, Gallup re-asked this same question and found 71% of Americans naming smoking as a major cause of cancer, with 11% saying it was a minor cause and 16% unsure (26).

Public attitudes about the cigarette smoke of others have also changed over the past 50 years. In the 1960s and even into the 1970s and 1980s, smoking was permitted nearly everywhere: smokers could light up at work, in hospitals, in school buildings, in bars, in restaurants, and even on buses, trains, and planes (1, 4). Evidence about the health consequences of secondhand smoke strengthened in the 1970s and 1980s, and policies limiting where people could use cigarettes became more common (1, 4, 27). By 2012, 30 states and hundreds of individual communities in the United States had adopted comprehensive laws prohibiting smoking in workplaces, restaurants, and bars (28). The shift in public attitudes is reflected in Gallup polls from 2001 to 2011, in which the percentage of Americans favoring a ban on smoking in all public places increased from 39% to 59% (29). Cigarette use has become more inconvenient, which has further helped to reduce smoking (30–32).

The 1988 Surgeon General's Report helped to further stigmatize tobacco use. The report examined why people persist in smoking despite recognition of its harms, and concluded that smoking was not just a "habit" but was in fact addictive in ways similar to the dependency-creating powers of heroin, cocaine, and other drugs of abuse (33). In 1980, only 37% of smokers had labeled smoking an addiction, but by 2002 that had increased to 74% (23, 26).

Increasingly, research has demonstrated that the interventions that have the greatest impact on reducing tobacco use are those that alter the social contexts and incentives for using tobacco (15, 34, 35). Research has shown that the most potent demand-reducing influences on tobacco use have been interventions that impact virtually

all smokers repeatedly, such as higher taxes on tobacco products, comprehensive advertising bans, graphic pack warnings, mass media campaigns, and smoke-free policies (15, 34, 35). Despite promises of the efficacy of different stop smoking treatments, there is not much evidence that any of these therapies have dramatically reduced rates of tobacco use because too few smokers use them when they try to quit (36).

The Tobacco Industry's Response

As public health efforts to discourage tobacco use evolved over the past half century, so too did the industry's efforts to counter such efforts to protect their financial interests (1, 4, 14–16, 27). Publicity surrounding the 1964 Surgeon General's Report provided yet another opportunity for cigarette companies to compete for smokers, more and more of whom were becoming concerned about the dangers of smoking. To do so, the companies capitalized on the acknowledged link between tar inhalation and cancer by engineering and marketing cigarettes with lower machine-measured tar yields, even though they recognized that these would not necessarily deliver less tar and therefore less disease (37). Cigarette manufacturers recognized that low tar cigarettes were not a real solution to the smoking and health problem, because "low tars" did not in fact deliver any less tar into the lungs of smokers (9–11). Unfortunately, many smokers switched to low tar cigarettes believing them to be safer (4, 37–40). The evidence today is that smoking "low tar" cigarettes can be even more dangerous—as smokers tend to smoke such cigarettes more intensively—drawing the smoke more deeply into the lungs, for example (41). Filters also reduce the particle size of smoke, allowing it to be more deeply inhaled (42).

In the years following the release of the 1964 Surgeon General's Report, the tobacco industry also stepped up its public relations campaign aimed at reassuring the public, especially smokers, that there was no real link between smoking and disease (14). The success of this campaign is described in the 1981 Federal Trade Commission report, which found millions of Americans still poorly informed about the serious health risks of smoking (23).

The 1998 Master Settlement Agreement (MSA) between the cigarette companies and various state attorneys general also had a nontrivial impact on the tobacco industry (1, 14, 43). The MSA settled state lawsuits against the industry for smoking-related costs in the states' Medicaid systems, scheduling the states to receive billions of dollars while also increasing the price of cigarettes (43). The MSA also required the release of previously secret internal company records, revealing much of what they had known about smoking–disease links and effectively ending the industry's false controversy campaign (1, 4, 14). In 1999, the US Department of Justice (DOJ) filed its own suit against the tobacco industry for violating the Racketeer Influenced and Corrupt Organizations (RICO) Act. In

August 2006, U.S. District Judge Gladys Kessler concluded that the tobacco companies "conspired to violate the substantive provisions of RICO" and in fact "violated those substantive provisions" (44).

In October 2000, Philip Morris on its website acknowledged "an overwhelming medical and scientific consensus that cigarette smoking causes lung cancer, heart disease, emphysema and other serious disease in smokers" (45). Today, all of the major tobacco companies have websites acknowledging that smoking is a cause of disease and that smoking is addictive. Yet none of these companies has ever admitted that millions of people have died as a result of smoking their products or that addiction to nicotine can cause death. No company has admitted ever marketing to children, or lying to the public, or forming a conspiracy to deny the hazards of smoking, or that the cigarettes that they sell today are as deadly as those sold a century ago (4). In court, the companies continue to challenge allegations about nicotine addiction and smoking causing illness. The tobacco companies have not yet accepted responsibility for their past illegal acts, and still today oppose remedial actions such as corrective statements (as ordered by the Court in the DOJ case) and policies that would discourage smoking, notably graphic health warnings, responsible retailing standards, and higher cigarette taxes earmarked for cancer research. The companies have also not made good on their repeated promises to stop producing cigarettes, should they ever be shown to be causing bodily harm (45, 46).

Implications for the Future

The tobacco industry is continuing to evolve and adapt to new regulations on tobacco products, a declining domestic cigarette market, and growing international cigarette business (25). Perhaps the most interesting recent development has been the rapid growth of electronic cigarettes. What started out as a novelty sold primarily on the Internet has quickly grown into a billion dollar a year enterprise pushing cigarette makers to enlarge their offerings (47). In 2008, RJ Reynolds (now Reynolds American, Inc.) acquired the Conwood Smokeless Tobacco Company and gave that entity a new name: the American Snuff Company. In 2009, Reynolds launched Camel Snus, a pouch-like device for sucking in the mouth, and the following year introduced Camel dissolvable tobacco orbs and sticks. Reynolds has also acquired the rights to market Zonnice nicotine replacement products and purchased Nicovum AB, a Swedish company making oral nicotine replacement therapies. And in 2013, Reynolds began test marketing a new electronic cigarette ("Vuse") complete with the company's first television ads since the 1970s.

Meanwhile Lorillard, makers of Newport cigarettes, in 2012 acquired Blu Electronic Cigarettes, a leading manufacturer of cigarettes designed to be "vaped" rather than "smoked." And Philip Morris has entered this territory. The company in 2003 changed its name to Altria, and in

2009 acquired the US Smokeless Tobacco Company. Shortly thereafter, Altria began marketing Marlboro Snus along with other smokeless products such as Skoal and Copenhagen in the United States, while devoting an increasing share of resources to its business overseas. And in 2013, Phillip Morris announced that it, too, would introduce its own electronic cigarette, the "Mark Ten."

Although some predictions have cigarette consumption dropping to near trivial levels in the United States over the next half century, the trend in other parts of the world is less encouraging (25). Cigarette consumption is increasing in many low- and middle-income countries as cigarette manufacturers have shifted much of their marketing, promotion, and production into these emerging economies. Smoking remains the leading cause of preventable illness and premature death in most parts of the world, killing approximately 6 million people every year (48). Especially in developing nations, cigarette use is still perceived as a rite of passage into adulthood and an ordinary and noncontroversial behavior for adults, especially males (49).

The global effort to reduce the burden of tobacco use has been aided by the Framework Convention on Tobacco Control (FCTC), the first global health treaty, negotiated under the auspices of the World Health Organization (50). The FCTC has been ratified by more than 170 countries, though the United States has yet to join in. Ratification of the treaty obligates countries to implement a comprehensive set of policies, including higher taxes, effective health warning labels, and smoke-free policies (50). The tobacco industry continues to work against efforts by governments to adopt policies that will effectively limit cigarette marketing and protect public health (51).

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It is more critical than ever that the medical and public health community adopt evidence-based guidelines to ensure that governments implement the kinds of policies and programs that will be effective in reducing tobacco use. Interventions to reduce tobacco use will need to evolve in the future to reflect shifting public attitudes and innovations by the industry to adjust to a changing regulatory environment. Increasing attention should also be given to more imaginative "endgame" strategies that envision a world entirely free of tobacco (4, 46, 52). Cigarette smoking as we have known it had a historical beginning, and at some point will hopefully come to an end.

Disclosure of Potential Conflicts of Interest

K.M. Cummings and R.N. Proctor have served in the past and continue to serve as paid expert witnesses for plaintiffs in litigation against the tobacco industry.

Authors' Contributions

Conception and design: K.M. Cummings, R.N. Proctor
Development of methodology: K.M. Cummings, R.N. Proctor
Acquisition of data (provided animals, acquired and managed patients, provided facilities, etc.): K.M. Cummings, R.N. Proctor
Analysis and interpretation of data (e.g., statistical analysis, biostatistics, computational analysis): K.M. Cummings, R.N. Proctor
Writing, review, and/or revision of the manuscript: K.M. Cummings, R.N. Proctor
Administrative, technical, or material support (i.e., reporting or organizing data, constructing databases): K.M. Cummings

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