

# Tobacco Use Among Women in Germany: A Brief Historiography

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## Abstract

Cigarette smoking has nearly a four-hundred-year-long history in Germany. Although anti-tobacco initiatives have occurred for almost as many years, significant steps to curtail smoking did not occur in Germany until the early part of the 20<sup>th</sup> century. During the era of National Socialism, efforts to ban and control smoking increased, especially among women. Subsequent to World War II, smoking declined among Germans, but increased dramatically during the 1950s, even surpassing pre-war levels. This paper details some of the past and current trends in smoking and smoking policy in Germany, focusing especially on women and women's health status.

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## Introduction

The negative consequences of tobacco use, especially as related to active and passive smoking, are well documented and constitute an evolving global health concern (Brenner & Fleischle, 1994). Restrictions on smoking in workplaces, public buildings, transportation systems, and other enclosed areas have become common in the United States and some other developed countries (Rigotti & Pashos, 1991). In the post-World War II Germany, however, protection of nonsmokers through government regulation has been less common (Brenner & Fleischle, 1994). In 1985 the German Ministry of Work, Health and Social Policy was assigned the task of overseeing development of measures to protect nonsmokers from the dangers of passive smoke. Despite the charge, governmental authorities and social institutions have been slow to respond in the intervening years (Apel, Klein, McDermott & Westhoff, 1997).

### Smoking Prevalence in Germany

#### Adults

Since the 1950s, rates of smoking have been higher in Germany than in the United States, with some authorities describing the situation as a virtual smoking epidemic (Brenner, 1993). Overall, smoking among German adults is about average for the countries of the European Union (Pötschke-Langer, 1997). As in most European Union countries, more men than women smoke – the differences ranging by country on the order of 3 to 15 percentage points. In the 35-54 age group, more than 50% of German men and about 30% of German women were smokers during the period of 1970-74 (Pötschke-Langer, 1997). A 1987 survey by the Ministry of Youth, Family and Health examined six birth cohorts between 1911 and 1970 to assess historical smoker prevalence by sex and level of education. Among men, smoking prevalence during the 1970s reached more than 70% in the 1941-

1950 birth cohort (Brenner, 1993). Between ages 20 and 40 years, the consumption of cigarettes by Germans is especially high. Hoffmeister, Mensink and Stolzenberg (1994) portray recent patterns of smoking among German adults. In 1988, among 25 to 29 year-olds, 49.8% of men and 47.1% of women smoked. Simultaneously, in the 30 to 39 year-old cohort, 53.5% of men and 37.3% of women smoked. By 1990, rates showed somewhat of a decline except among women in the 30 to 39 year-old group, for whom they increased to 40.7%. Figures from the *Statistisches Bundesamt* (1994) indicate that 35.1% of males and 20.6% of females smoked. A more recent source cites the prevalence of adult German smokers aged 35 to 54 years to be 40% for men and 33% for women (Pötschke-Langer, 1997). According to World Health Organization (1997a) statistics for Germany, 36.8% of males and 21.5% of females aged 15 and over are smokers, ranking Germany 61<sup>st</sup> and 35<sup>th</sup> respectively among reporting nations (Table 1). Overall, as shown in Table 2, Germany ranks 16<sup>th</sup> in per capita consumption of cigarettes (World Health Organization, 1997b).

#### Youth

A 1993-94 cross-national survey of 24 countries showed that German 13-year-olds smoked more than their age peers in the other countries examined (Pötschke-Langer, 1997). In the 14-19 age group, smoking declined prior to WW-II. After the war, smoking increased so that between 1975 and 1979, almost 50% of boys and 41% of girls 14-19 smoked (Pötschke-Langer, 1997). A slow decline in smoking prevalence in this age group occurred in the 1980s.

Nicolaidis-Bouman, Wald, Forey and Lee (1993) reported that 78% of youth between the ages 14 and 19 were nonsmokers. Another publication reports comparable figures – 26% and 22% smoking rates for males and females respectively among 14- to 19-year-olds (Pötschke-Langer, 1997). If these data are accurate, the observed increase in prevalence around

the age of 20 not only is substantially different from the pattern in the United States, where smoking initiation is now considered to be a "pediatric disease" (American Public Health Association, 1995), but also suggestive of a need for preventive programs in Germany well into adolescence (Weiland, Stolpe & Keil, 1994).

**Table 1. Smoking Prevalence Comparison by Gender (Age 15+) in Selected Countries**

MEN	Percentage of Smokers	Overall Rank
South Korea	68.2	1
Russia	67.0	2
Dominican Republic	66.3	4
Austria	42.0	38
Denmark	37.0	60
Germany	36.8	61
Netherlands	36.0	63
Belgium	31.0	72
Ireland	29.0	75
United Kingdom	28.0	77
Finland	27.0	80
WOMEN	Percentage of Smokers	Overall Rank
Denmark	37.0	1
Russia	30.0	5
Netherlands	29.0	7
Ireland	28.0	10
Austria	27.0	14
United Kingdom	26.0	18
Germany	21.5	35
Belgium	19.0	40
Finland	19.0	40
Dominican Republic	13.6	52
South Korea	6.7	69

Source: World Health Organization, 1997a

**Table 2. Annual Per Capita Cigarette Consumption and Rank Among Selected Countries**

Poland	3620	1
Greece	3590	2
Hungary	3260	3
Japan	3240	4
South Korea	3010	5
United States	2670	11
Ireland	2420	15
Germany	2360	16
Belgium	2310	17

Source: World Health Organization, 1997b

### The Anti-Tobacco Movement in Germany: 1904-1944

According to Proctor (1997) anti-tobacco sentiments, including those against the smoking, chewing, and snorting of tobacco, began in Germany long before the 20<sup>th</sup> century. Although the cultivation of tobacco in Germany was widespread by the 17<sup>th</sup> century, following its introduction by English and Dutch soldiers during the Thirty Years War (1618-1648), opposition to its cultivation and use was already underway. Some, but not all concerns, were related to health. The archbishop of Cologne, for instance, in 1649 indicated that "tobacco corrupted the youth and caused fires" (Proctor, 1997, p.439).

#### *Epidemiology and Social Policy*

The first anti-tobacco organization of modern times in Germany was the short-lived *Der Deutscher Tabakgegnerverein zum Schutze für Nichtraucher* (The German Association Against Tobacco for the Protection of Nonsmokers), established in 1904 (Proctor, 1997). The most durable of the subsequent anti-tobacco groups was the *Bund Deutscher Tabakgegner* in Dresden, Germany's major center of tobacco manufacturing. This Dresden group distinguished itself by being anti-alcohol as well as anti-tobacco, thus capturing some of the same spirit of temperance that blossomed in the United States at about the same time. During World War I (1914-1918) cigarette rations were provided to soldiers on both sides of the conflict, fostering the social acceptance of smoking in Europe as well as in the United States.

The impact of tobacco use on women first received notoriety in the 1920s. Louis Lewin, pharmacy professor at the University of Berlin, argued that

smoking over stimulated women's reproductive organs, reducing their ability to bear children. Women were asked to cultivate: "a different flame: the fire that warms the hearth and home" (Lewin, cited in Proctor, 1997).

In his 1924 book, *Die rauchende Frau*, Viennese gynecologist Robert Hofstätter attributed numerous female maladies to smoking -- menstrual cramps, uterine atrophy, and ovarian dysfunction. In an argument reminiscent of 21<sup>st</sup> century anti-tobacco rhetoric, Hofstätter (1924) called for the conversion of tobacco fields into venues for the cultivation of food.

By 1927, tobacco bans were called for on passenger trains, streetcars, and public waiting rooms. Administrators of Germany's health insurance industry were encouraged to publicize the health hazards associated with tobacco.

Lung cancer rates began climbing in Germany around the beginning of the 20<sup>th</sup> century. At first, smoking was not identified as the principal culprit. Instead, the disease was presumed to be a result of pneumonia epidemics, engine exhaust, road tar, and industrial and other waste particulates of all sorts and varieties (Proctor, 1997). However, in 1929, Dresden physician Fritz Lickint statistically linked lung cancer and cigarettes. Lickint is also believed to be the first person to coin the term "passive smoking" in reference to the inhalation of others' cigarette smoke (Proctor, 1997). Lickint went on to become one of Germany's most celebrated proponents of the anti-smoking message.

Tobacco came to be assigned responsibility for a number of health blemishes, real or imagined, in Germany society. In the rhetoric of the 1930s, tobacco was projected as a substance causing "impotence in men and frigidity in women" (Proctor, 1997, p.441). Tobacco was proclaimed as an epidemic and a plague, sometimes labeled as -- "dry drunkenness" and "lung masturbation" (Proctor, 1997, p.441). By 1933, the year that Adolf Hitler became chancellor of Germany, the National Socialists required elementary schools to discuss tobacco's dangers, and government warning pamphlets were published to support this directive. In 1938, smoking was banned among uniformed police, soldiers on the streets, all persons in public under age 18, and anyone in air-raid shelters, or on buses or trains (except those that were equipped with special smoking quarters). In the same year, Reich Marshal Hermann Göring, head of the *Luftwaffe* (German Air Corps) banned smoking by troops in barracks, on marches, and on the streets, an action that was applauded by the Editors of the *Journal of the American Medical Association* (Editors of JAMA, 1939).

In a key 1939 paper, Franz Hermann Müller, a scientist at Cologne's Bürgerhospital, presented a survey-based retrospective case-control study, with findings corroborated by the University of Cologne's pathology institute and other regional institutes, that further established an association between cigarette

smoking and lung cancer. Although somewhat primitive by modern investigative standards, Müller categorized patients with lung cancer as being "extremely heavy smokers," "very heavy smokers," "heavy smokers," "moderate smokers," or "nonsmokers" (Proctor, 1997, p.453). Müller's data showed that lung cancer victims were more than 6 times as likely to have been "extremely heavy smokers." Even stronger evidence of the relationship between smoking and lung cancer would be provided four years later by other German medical scientists. *The Institute for Tobacco Hazards Research*

In 1941, the government of Germany's Third Reich established the *Wissenschaftliches Institut zur Erforschung der Tabakgefahren* (Institute for Tobacco Hazards Research) at the University of Jena. Jena became the new center of anti-tobacco activism in Germany for the remainder of the era of National Socialism. The sentiments against tobacco in Germany were nearly fanatical, even by today's U.S. standards of "tobacco wars" and litigation against tobacco manufacturers and distributors. The outcry about tobacco in 1940s Germany was totally consistent with the social policies of the Nazi Party, however, with some proclaiming that "tobacco was an addictive drug, weakening the ability of leaders to serve their nation" (Proctor, 1997, p.463), and caused problems of "female fertility" (Proctor, 1997, p.463). Despite the anti-tobacco activism, smoking among Germans increased 18% between 1933 and 1941 (Borgers, 1995; Smith, Strobele & Egger, 1995). In 1943, two researchers at the Institute of the University of Jena, Eberhard Schairer and Erich Schöniger, exceeded even Müller's achievements with respect to the association between smoking and lung cancer. They estimated that heavy smokers could ingest as much as 4 kilograms of tar over a lifetime (Proctor, 1997, p.468). A relationship between smoking and risk of other forms of cancer also began to be documented by Schairer and Schöniger. Increasingly, smoking also was being associated with heart disease (Kittel, 1944). In 1944, Franz Buchner, a Freiburg pathologist, expressed the view that cigarettes should be considered "a coronary poison of the first order" (Proctor, 1997, p.448). Authorities even attributed some German soldiers' deaths of heart failure on the eastern front during World War II to smoking and nicotine ingestion (Proctor, 1996; 1997).

*Die deutsche Frau raucht nicht!*

A famous Nazi slogan decreed: *The German woman does not smoke!* (Lemieux, 1999; Proctor, 1997, p.470). Indeed, child-bearing and politics had major interactive roles in the Germany of the 1930s and 1940s. The opposition of the National Socialists to smoking resulted in a series of social policies related to women and tobacco, especially if the women were in their child-bearing years. Boehncke (1937) wrote that women who smoked were "less marriageable," given that they tended to age prematurely (p.6). Propagandist Werner Hüttig, a member of the Office of

Racial Policy of the *Nationalsozialistische Deutsche Arbeiterpartei* [NSDAP] (National Socialist German Workers Party), reminded the public that nicotine had been isolated in the breast milk of smoking mothers, and influential German physician Martin Stämmeler argued that tobacco use by pregnant women was a factor in the rising incidence of stillbirth and miscarriage (Proctor, 1997). An article by Bernhard (1943) in one of Germany's leading gynecology journals reported that women who smoked 3 or more cigarettes per day were nearly 10 times as likely to be childless as nonsmoking women. Others argued that smoking was related to risk of spontaneous abortion, an abhorrent prospect given the Nazis' emphasis on healthy babies and a high birth rate (Bluhm, 1936). Efforts to dissuade women, especially young women, from smoking were made with much greater conviction than were those to discourage men and boys. Anti-smoking messages sometimes cited the sanctity, delicacy, or fragility of the female body (Proctor, 1997, p.470). Proctor (1996; 1997) points out several additional means by which smoking among German women was banned or discouraged beginning in the late 1930s and early 1940s:

- During the war years, coupons to obtain tobacco rations were denied to pregnant women, women under age 25, and women over the age of 55.
- Restaurants and cafés were forbidden to sell cigarettes to female customers.
- Persons under the age of 18 were barred from smoking in public.
- Young female ticket takers were taken off of trains to prevent their exposure to smoke in the so-called "smoking cars" that existed.
- Use of the term *Damen-Zigarette* was banned along with the use of images of women in advertisements for cigarettes.
- Health-directive slogans and messages became commonplace: "The primary duty of females [is] to bear and care for children." "Your body belongs to the nation." "You have the duty to be healthy." and "Food is not a private matter."
- Advertisers could not show smokers behind the wheel of automobiles, since smoking had been associated with fires and automobile accidents.
- Taxes on tobacco products were increased to 80%-85% of retail prices.

## The Post-World War II Era and Cigarette Consumption

### *The Temporary Decline of Smoking in Germany*

By the end of the second world war, just 12.7% of German soldiers were nonsmokers (Proctor, 1996). The poverty that followed the conclusion of the war decreased consumption, and pre-war levels were not again reached until the middle of the 1950s.

There are several ironies about the war and post-war eras with respect to cigarette consumption in Germany and the victorious allied nations. For example, many Nazi leaders were vehemently opposed to smoking. Hitler himself was the most vociferous, and was joined by other European fascist leaders (e.g., Mussolini in Italy and Franco in Spain) in this regard. [As an aside, Hitler also disdained alcohol and preferred vegetarianism over meat consumption]. In contrast, allied leaders Roosevelt, Churchill, and Stalin not only all smoked, but some of their most lasting images include their posing respectively with cigarette and holder, cigar, and pipe. In the post-war era, cigarette consumption rose in the United States and increased markedly in France, while dropping by 1950 to about half its pre-war level in Germany. With the defeat of Nazi Germany by the allied forces in World War II, the anti-tobacco movement in Germany collapsed. Not only was Hitler dead, but so too were many of the other nonsmoking proponents. Moreover, the Institute at the University of Jena was disbanded. Nevertheless, consumption declined, providing evidence that conquest in war impacted smoking more than did Nazi propaganda.

### *The Emergence of A Cigarette Black Market*

Although a cigarette black market existed in Germany even during the later years of the war, it intensified greatly at the conclusion of the war. In 1948 alone, it is estimated that 300 to 400 million cigarettes were smuggled into Germany. Given that 70% of the cost of a "legal" cigarette then went for taxes, about 25 million of the new Deutsche Mark were lost per month (Hess, undated).

In addition to their use as a consumptive good in post-war Germany, cigarettes also had exchange value, and thus, became a second form of currency. The practical value of the cigarette in this regard was especially important since Germans feared two things related to their main currency: (1) *inflation*, an event that still haunted them from the years following World War I when it destroyed savings in banks and turned salaries into inadequate means of living; and (2) *currency reform*, that could mean devaluation (a fear that proved to be real). Since cigarettes were plentiful among American GIs in post-war occupation of Germany, young German women sought their company, at least in part, to have access to the tobacco commodity (Hess, undated).

## Tobacco Policy, the Era of National Socialism, and Cancer in Women

In his book, *The Nazi War on Cancer*, Proctor (1999a) postulates that certain tobacco policies established during the era of the Third Reich were, to no small extent, responsible for the lower rates of cancer (especially breast and lung cancer) seen in women during the subsequent decades. For example, over the 38-year period from 1952 to 1990, age-adjusted cancer mortality rates for German women declined by about

17%. In contrast, age-adjusted male cancer mortality increased by approximately 20% (Proctor, 1999a).

In a separate work, Proctor (1996) argues that “the strength of the Nazi anti-smoking effort and the sophistication of Nazi era tobacco science” did not attract much attention for many years because of its connectedness to the more pervasive and indefensible Nazi social policies. “That does not mean,” writes Proctor (1996) “however, that anti-smoking movements are inherently fascist; it means simply that scientific memories are often clouded by the celebrations of the victors and that the political history of science is occasionally less pleasant than we would wish” (p.1454).

Some authorities might counter that such episodes as the post-war poverty experienced in Germany, as well as the accompanying diets that were lower than normal in fat consumption during and after the war, perhaps had as much to do with the observed decreases in cancer as any Nazi era social policies. Nevertheless, the possible role of social policies that can simultaneously be described as “monstrous” and “prosaic” in affecting the observed rates of some cancers in German women makes for provocative public health discussions (Proctor, 1997; 1999b).

The post-war decline in German cigarette consumption subsided by the 1950s. As indicated earlier, the rates began climbing toward their current levels, and public health initiatives against smoking in Germany, until the late 1990s, were unremarkable. One may be able to argue plausibly that anti-smoking endeavors in Germany during the past 50 years have been few due to the lingering association with authoritarian efforts in schools, workplaces, public transport systems, other venues, and with respect to special populations (i.e., women) during the time of the National Socialists.

### **Germany, the New Century and Smoking Policy**

In present day Germany, nonsmoking is chiefly a voluntary behavior in public settings. For the most part, nonsmoking sections do not exist in restaurants, and smoke-free rooms in hotels are rare. An experimental program to limit smoking in buildings at the University of Cologne (Apel, et al., 1997) has enjoyed mixed success (Klaus Klein, personal communication, December 2000). The effects of policy change require long-term follow-up and sanctions against those persons who fail to comply. Anti-tobacco messages need to be diverse enough to gain the attention of both smokers *and* nonsmokers. In Germany, there may currently be a reluctance on the part of nonsmokers (and smokers) to help enforce nonsmoking policies. There is little social pressure for this kind of enforcement in Germany. The introduction of public health messages that support the promotion of “clean air” environments may be accepted over time.

Cigarettes are readily obtained by anyone possessing money to cover the cost of the purchase. Vending machines selling packs of cigarettes for 6 Deutsche Mark (about \$2.80 in December 2000 currency exchange terms) exist throughout the country in public buildings, hotels, bars and restaurants, and on city streets. Most vending machines are unsupervised and can be accessed by even young children. Removal of these machines to discourage sales could be a substantial influence on future smoking reduction efforts.

The impact of other forces, including news stories and other health promotion activities cannot be overlooked when interpreting smoking prevalence and attitudes. In their workplace study in southern Germany, Brenner and Fleischle (1994) found that placement of restrictions on smoking significantly reduced cigarette consumption by active smokers, and thus, had a potentially favorable impact on nonsmokers' health as well. Brenner and Mielck (1992) suggested that workplace smoking bans would be particularly helpful to women who wish to quit smoking. Since German women who work outside of the home still have primary responsibility for tasks such as housework and child-rearing, it is believed that these traditional domestic activities result in their having less opportunity than their male counterparts to “compensate” for workplace smoking bans. In another study of German workers, Brenner, Born, Novak and Wanek (1997) presented data that showed that workplace smoking bans would be favorably accepted, and that acceptance even increased following implementation. Such policy change may be especially important, not only in Germany, but also in countries where smoking prevalence is higher than in the United States.

Social norms are slow to change. Brenner(1993) argues that no major fight against cigarette smoking has been made recently in Germany. The progress against smoking that has been made in the United States since the middle 1960s, and especially since the litigation against tobacco manufacturers in the 1990s, provides a guidepost for Germany and other European nations that desire to alter population health risks through anti-tobacco campaigns.

About 70,000 persons died in Germany from smoking attributed diseases in 1995 (though some estimates are as high as 110,000), and it is projected that future smoking attributed deaths will decrease for men but increase for women (Pötschke-Langer, 1997). In Germany, as in most industrialized countries, cardiovascular disease, for which smoking is a major risk factor, is the primary cause of death among men, and is evolving into a more common cause of death among women in older age groups (Hoffmeister, et al., 1994). German trend data indicate a tendency for less smoking among men across various age groups, but an increased propensity among women to smoke (Hoffmeister, et al., 1994). Post-World War II estimates of smoking prevalence among Germans have

been based primarily on surveys performed in the former West Germany. The scarcity of data on the level of smoking among German adolescents, combined with the confounding impact of reunification on establishing normative data across the entire country for all age groups, are challenges for German public health researchers (Franceschi & Naett, 1995). Increased public health efforts are needed to combat smoking attributable disease in Germany (Apel, et al., 1997; Brenner, 1993; Hoffmeister, et al., 1994), as well as policy change and other actions that favorably impact the social acceptance and preference of nonsmoking.

### Conclusion

Because of two world wars, a cold war, and a country divided for more than 40 years, Germany's traditions related to cigarette smoking and other forms of tobacco use may be more complex than those in the United States and some other nations. Authoritarian mechanisms implemented 60 years ago to control tobacco use, especially among women, produced mixed results. These strategies may have led to lower cancer rates among women than in men. However, one of the legacies from the era of National Socialism also may have been a backlash against such forms of social control. Gradually, institutionalized public health and other programmatic attempts to control smoking may produce decreases similar to those that have taken place in the United States.

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