

Tobacco Harm Reduction Part 2: Can Cigars And Pipes Be A Form Of Tobacco Harm Reduction?

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Introduction:

The overwhelming majority of evidence shows that pipe or cigar smokers who do not inhale the smoke are at far lower risk for tobacco related death than cigarette smokers or pipe and cigar smokers who inhale. Moreover, the less tobacco smoked per day the lower the risk of tobacco related death. Recreational cigar and pipe smokers who do not inhale and who do not smoke daily are at low risk for tobacco related death. However, cigar and pipe smokers who inhale the smoke are at just as great a risk for tobacco related death as cigarette smokers who inhale the smoke, if not more so

Personal Story:

I broke the back of a heavy-duty nicotine addiction October 21, 2008. I had been smoking for 35 years and I smoked 25 hand-rolled unfiltered Bugler cigarettes per day. I managed to quit by using a variant of the Sinclair Method--I took Chantix to block the effects of the nicotine and I smoked on the Chantix for 40 days and charted my cigarettes every single day. At the end of 40 days I was down to 2 cigarettes a day and I had lost interest in smoking them so I quit. A part of the deal with myself for quitting was that after I was off the cigarettes I could have up to one cigar per week.

It is much easier for me to smoke cigars recreationally and not get addicted than it would be with cigarettes. I have been very successful with controlled cigar smoking and I decided to look up the risks and share them with you. If you don't inhale your cigars your risks are much lower than those of a cigarette smoker. And if you limit yourself and do not smoke daily you are at little risk at all. If you want to change your nicotine use for the better, then cigar or pipe smoking might be a workable option for you. However, if you find yourself inhaling or smoking addictively you might want to opt for a different solution.

The Research:

Best et al (1967) conducted a Canadian cohort study of 78,000 males and 14,000 females with a six year follow up. The results of this study are summarized in Tables 1 and 2. This study showed that Canadian pipe or cigar smokers were at far less risk of tobacco related death than were cigarette smokers. This study also showed that for cigarette smokers, the less smoked the less risk.

	mortality ratio	percentage elevation of death rate compared to non-smokers
Never smoked	1.00 (ref)	0%
Cigarettes only	1.54	54%
Cigarettes plus cigars	1.22	22%
Cigarettes plus pipes	1.26	26%
Cigarettes plus pipes and cigars	1.13	13%
Cigars only	1.06	6%
Pipes only	1.05	5%
Cigars plus pipes	0.98	-2%

Cigarettes ever smoked per day	Overall mortality	Coronary heart disease	Lung Cancer	Bronchitis and emphysema
Less than 10	43%	55%	900%	506%
10-20	55%	58%	1541%	897%
More than 20	63%	78%	1631%	938%

Cohort studies conducted in the United States and Great Britain also showed that pipe or cigar smoking carried far less risk than cigarette smoking. These American, Canadian, and British studies are summarized in Table 3.

researchers	country	year of publication	number of subjects	duration
Best et al	Canada	1967	92,000 (cohort)	6 years
Doll & Peto	UK	1976	34,440 (cohort)	20 years
Hammond & Horn	US	1958	187,783 (cohort)	44 months
Rogot & Murray	US	1980	248,046 (cohort)	16 years
Hammond & Seidman	US	1980	358,422 (males - cohort)	5 years

Hammond and Seidman (1980) obtained the results shown in Table 4:

	All cancers	Lung	Esophagus	Buccal, pharynx, and larynx	Bladder	Pancreas
Never smoked regularly	1.00	1.00	1.00	1.00	1.00	1.00
pipe/cigar only	1.18	1.51	3.20	5.09	1.58	1.88
cigarette smoking	1.79	8.53	3.96	6.52	2.55	2.14

However, studies conducted in Germany, Switzerland, and Sweden showed a far different result. In studies conducted in these countries pipe and cigar smokers were just as likely to suffer

tobacco related death or contract lung cancer as were cigarette smokers. Carstensen et al (1987) postulates that this is due to the fact that pipe and cigar smokers in these countries generally inhale the smoke, whereas pipe and cigar smokers in Canada, Great Britain, and the US generally do not inhale it. It is possible that different brands of tobacco in different countries may influence inhaling behavior. Table 5 summarizes the Swiss and Swedish studies.

researchers	country	year of publication	number of subjects	duration
Cederlof et al	Sweden	1975	55,000 (cohort)	10 years
Carstensen et al	Sweden	1987	25 129 (cohort)	16 years
Dambar & Larsson	Sweden	1986	579 (case-control)	none
Abelin and Gsell	Switz.	1967	642 (case-control)	none

In the Carstensen et al (1987) study, 32% of the subjects reported being cigarette smokers, 27% reported being pipe smokers, and 5% reported being cigar smokers. Carstensen cites data from another study to the effect that 85% of Swedish pipe smokers are inhalers and 82% of Swedish cigarette smokers are inhalers. It is unknown how many Swedish cigar smokers inhale.

Table 6 summarizes Carstensen's results:

	cigarette only	pipe only	cigar only
Cancer of trachea, bronchus and lung	7.4	7.2	7.6
Cancer of oral cavity and larynx	2.9	1.4	0.6
Cancer of oesophagus	3.7	3.6	6.5
Cancer of liver and biliary passages	3.0	1.7	7.2
Cancer of pancreas	3.3	2.8	1.0
Cancer of bladder	4.2	4.0	1.9
Ischaemic heart disease	1.48	1.39	1.16
Aortic aneurysm (non-syphilitic)	2.1	2.1	5.1
Bronchitis and emphysema	3.3	3.6	1.3
Peptic ulcer	2.0	2.8	4.0
Cirrhosis of liver	1.8	0.7	2.7
Suicide, accidents and violence	1.7	0.9	2.5
All causes	1.45	1.29	1.39

Carstensen's report that 85% of Swedish pipe smokers are inhalers and 82% of Swedish cigarette smokers are inhalers is in sharp contrast to the smoking patterns found in the UK by Doll and Hill (1964a). Doll and Hill report that 76% of current British cigarette smokers are inhalers whereas a mere 7% of current pipe or cigar smokers are inhalers. This strongly supports the hypothesis that the difference in mortality rates is due to inhaling or not inhaling. Doll and Hill also report that the death rate goes up in proportion to the number of cigarettes smoked. The Doll and Hill data is summarized in Table 7.

	mortality ratio	percentage elevation of death rate compared to non-smokers
nonsmokers	1.0 (ref)	0%
pipe or cigar only	1.18	18%
1-14 cigarettes/day	1.55	55%
15-24 cigarettes/day	1.93	93%
25+ cigarettes/day	2.71	171 %

In a retrospective case-control study, Abelin and Gsell (1967) found that Swiss cigar and pipe smokers had higher rates of lung cancer than did American, British, or Canadian cigar and pipe smokers. However these rates were higher than cigarette smokers only for very heavy pipe or cigar smokers. In normal pipe and cigar smokers the rates were lower than for cigarette smokers. Abelin and Gsell defined heavy pipe and cigar smokers as follows: "Heavy smokers in this case were men who smoked at least eight pipesful of tobacco per day or five Stumpfen per day or four cigars, Brissago, or Toscani per day or corresponding combinations of these during some prolonged period of their lifetime." Abelin and Gsell's data is summarized in Table 8:

tobacco product	risk relative to cigarette smokers	risk relative to non-smokers
Stumpfen	0.401	3.4
Pipe	0.540	4.6
Brissago, Toscani, cigar	1.117	9.5
Light cigar/pipe smoking	0.045	0.4
Heavy cigar/pipe smoking	1.735	14.7

Abelin and Gsell were not able to definitively answer as to whether inhalation of pipes or cigars was the determining factor in this higher rate of lung cancer since they used only deceased smokers for their cases. Interestingly when they interviewed the control smokers, they found that rates of inhalation were low. Since case-control studies are inherently far more vulnerable to accidental sampling bias than cohort studies, a cohort study would help to clarify this discrepancy in the Swiss data.

Note that it appears as though the risk for light cigar and pipe smokers is smaller than for non-smokers! The truth is that this number is not significant because of the small sample size.

Dambar and Larsson (1986) report that the risk of lung cancer in Swedish ex-pipe smokers decreases more slowly than in Swedish ex-cigarette smokers. This suggests that the inhalation of pipe smoke might be more dangerous than the inhalation of cigarette smoke, perhaps due to more tar or other substances present in pipe smoke.

Wynder and Stellman's 1977 six year retrospective study of 3,716 US cancer patients with 18,000 US controls found a far lower risk of oral or lung cancers among pipe or cigar smokers than among cigarette smokers. This study also suggests that filtered cigarettes may be just as likely to lead to cancer as unfiltered cigarettes. Anecdotal evidence from many smokers tells us

that when smokers switch to low nicotine cigarettes they simply increase the number of cigarettes smoked in order to maintain the accustomed dose of nicotine. As we see from Table 9, very few American cigar or pipe smokers inhale, whereas the vast majority of American cigarette smokers inhale.

	cigarette	cigar	pipe
non-inhalers	7%	74%	80%
all inhalers	93%	26%	20%
deep inhalers	58%	3%	2%

Shapiro et al (2000) report that non-inhalers of cigars had far less risk of cancers than did inhalers and that those smoking 1 to 2 cigars a day had far less risk than those smoking 3 or more cigars per day. Unfortunately this study classified those who did not smoke daily as "never smokers" so we have no data for these occasional smokers to compare.

	Lung	Oral cavity/pharynx	Larynx	Esophagus	Pancreas	Bladder
never smoked	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
1-2 cigars/day	1.3	0	6.0	1.8	0.6	0
>= 3 cigars/day	7.8	7.6	15.0	1.9	1.6	1.9
non-inhaler	3.3	3.2	4.2	1.6	0.9	0.5
inhaler	11.3	6.5	39.0	1.0	2.7	3.6

If we compare the lung cancer mortality ratio for cigar inhalers from Shapiro et al (Table 10) with the lung cancer mortality ratio for cigarette smokers from Hammond and Seidman (Table 4), we see that the cigar inhalers fare even worse than the cigarette smokers with a mortality ratio of 11.5 as opposed to 8.53. It should come as no surprise to anyone who has smoked both cigars and cigarettes that inhaling cigar smoke is more deadly than inhaling cigarette smoke.

CONCLUSION

The evidence shows that smoking cigars or pipes can be a viable harm reduction alternative to cigarette smoking providing that one does not inhale. There is also much anecdotal evidence among smokers to the effect that it is easier to control cigar or pipe smoking compared to cigarette smoking.

Occasional smoking of pipes or cigars is better than compulsive and continuous addictive smoking. The less tobacco consumed, the lower the risk. Not inhaling and smoking less greatly reduces the risk of tobacco related mortality.

Finally, if you find it too difficult to limit your cigar or pipe smoking, or if you find it too difficult to keep from inhaling, please seek a different harm reduction strategy to help you reduce your risks from smoking or to quit for good.

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