

# Smokeless Tobacco and Public Health: Professional Ethics, Popular Communication, and Harm Reduction

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This distributable version of the slides has been edited slightly from the version used in that seminar, including collapsing multiple slides into one and changing text, to make certain points easier to understand when read without the accompanying oral presentation.

Most people in our society know:

- Smokeless tobacco (ST) is quite unhealthy.
- ST use has been shown to cause substantial risk for oral cancer.
- Switching from cigarettes to ST is not really a good idea.

...but, as we should all know:

Most people know a lot of things that just ain't so.

~~Most~~ *Few* people in our society ~~know~~ *realize*:

~~= Smokeless tobacco (ST) is quite unhealthy.~~

*ST causes very small/undetectable risk of life-threatening disease.*

*Risk from ST is in the order of 1% of that from cigarettes.*

~~= ST use has been shown to cause substantial risk for oral cancer.~~

*The evidence is ambiguous about ST-oral cancer link.*

*The causal association is either very small or null.*

~~= Switching from cigarettes to ST is not really a good idea.~~

*Switching is a very (very!) good idea.*

What? No major health consequences?

First the focus was on oral cancer (OC)

Biologically plausible that ST use would cause OC.

Only one substantial study (Winn, 1981) supported the claim.

Based largely on those two points, IARC (1985) and the U.S. Surgeon General's Report (1986) declared it so

## Oral Cancer risk, cont.

mid-1980s "expert" reports

Maybe there was enough evidence then to cause someone to say "I believe this is the case".

There was certainly not enough to declare it proven.

## Oral Cancer risk, cont.

A substantial majority of the evidence has come out since U.S. SG report

Overwhelming support for conclusion that OC risk from ST is very small (or zero)

Winn still cited widely as if it were the definitive word (e.g., a paper I helped review just this week),

Despite being an unreplicated outlier (and being an odd population, and archaic product, and extreme exposure).

## More focus on pancreatic cancer (PC) lately

As mentioned in my last talk,

one of the two studies that is usually cited to show there is an association really did not show there is an association

The other is pretty sketchy too.

## Some focus on CVD

Again, a few studies show measurable association; most do not.

This is worthy of more study.

In short, the current evidence says:

OC risk is below detectable levels,

as is risk from any other particular cancer or all-site cancers.

CVD might be elevated enough to matter, though this is purely speculative given current evidence.

## It would be nice to know the actual risks from ST use

(not high, but presumably non-zero)

But we are never going to learn it from business-as-usual epidemiology

- dichotomies instead of measurement
- ratchet effect (tendency to never change certain beliefs despite evidence)
- publication bias *in situ*
- traditional publication bias
- etc.

This topic is a great example of everything that is wrong with current health science methods.

Someone who is not familiar with the research has almost no chance to learn the truth about ST

Our research (see Phillips, Wang, and Guenzel 2004) has confirmed what we pretty much already knew:

-Almost all available popular information (including from ostensibly authoritative sources) grossly overstates the risk.

-Most everyone "knows" the falsehoods from the start of the talk.

-This is not accidental; it is clearly a concerted effort to mislead

The lack of evidence -- a lack of *truth* -- does not seem to deter anti-ST advocates

Favorite tactics include:

Guilt by association.

-claiming risks are comparable to those of smoking  
(via direct comparisons or innuendo)

-using the collective "tobacco" (e.g., paper I recently reviewed)

(or even worse, occasionally "nicotine")

October 25, 2005

Vital Signs

## **Fertility: Nicotine Changes Sperm, and Not for the Better**

By ERIC NAGOURNEY

Men who smoke are less likely to make a woman pregnant than nonsmokers, and the more they smoke the worse the study finds.

Researchers from the State University at Buffalo School of Medicine say that male smokers experience changes in fertilization more difficult. The study was presented last week at a conference of the American Society of Reproductive Medicine.

But the lack of evidence -- a lack of *truth* -- does not seem to deter anti-ST advocates, continued

Favorite tactics:

Guilt by association.

- claiming risks are comparable to those of smoking
- using the collective "tobacco" (e.g., paper I recently reviewed)

Lies

- bald, unapologetic, blatantly false  
("ST increases OC risk by a factor of 50")
- or worse: those that are literally true  
("not a safe alternative")  
("smoking, alcohol, and ST account for 75% of OC")
  - note that the estimate for smoking+alcohol is 75%, so obviously, smoking+alcohol+anything also causes 75%

Top of Form

SEARCH

OP-ED COLUMNIST

## **Smoke Gets in Our Eyes**

Top of Form

By [BOB HERBERT](#)

Published: October 31, 2005

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**Most members of the administration are more artful than Scooter Libby when they send out the smoke that is designed to hide the truth on important matters. They dissemble and give themselves wiggle room,** like Dick Cheney when he said, truthfully but deceptively on "Meet the Press," that he didn't know Joseph Wilson. The vice president didn't know him personally, but he sure knew what was going on.

**The art of Bush-speak is to achieve the effect of a lie without actually getting caught in a lie.** That's what administration officials did when they deliberately fostered the impression that Saddam Hussein had ties to Al Qaeda and thus was involved in the Sept. 11 attacks. This is an insidious way of governing, and the opposite of what the United States should be about.

But the lack of evidence -- a lack of *truth* -- does not seem to deter anti-ST advocate, continued

Favorite tactics:

Guilt by association.

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Lies

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Telling people they if they use ST, they might as well switch to smoking

("you might as well smoke")

(people actually believe that they would increase their OC risk if they switched from cigarettes to ST)

Widespread, rampant, unquestionable ethical violation  
(even if harm reduction were not even an issue)

Even when it is "for their own good",  
it is ***per se unethical*** for health authorities to intentionally mislead people about health risks with the intent of manipulating their behavior

Intentionally misleading people to manipulate them,  
violates what is probably the second most important rule from  
codes of health ethics.

(behind only physically forcing people to take certain actions)

Down that slope lie the worst historical horrors, the canonical case  
studies in health ethics.

## Widespread, rampant, unquestionable ethical violation

But, harm reduction is an issue.

Lies about ST are killing people

(i.e., on top of everything else, it does *not* serve their own good)

## Harm Reduction

Basic notion: get people to do a less risky/harmful version of something if they are not going to quit entirely

Standard examples are methadone therapy and condoms

Seatbelts is really the best example

Clearly, ST has potential as a harm reduction strategy to reduce smoking

## ST as harm reduction strategy

Switching from smoking to ST:

- eliminates almost all the risk (no serious doubt about this)
- provides nicotine  
(as do pharmaceutical products)

Also,

- includes some of the same rituals and other sensory feedback as cigarettes
- is available from the same points-of-sale as cigarettes
- has demonstrated consumer acceptance

"Smoking is the leading preventable cause of death" (in rich countries)

Said so often that people ignore that it is nonsense.

-not just because the death rate from smoking is systematically overstated;

(that is a different story)

-or because death without reference to time/age is a meaningless unit

(we know what they mean)

"Smoking is the leading preventable cause of death" (in rich countries)

Nonsense.

If "preventable" = "one of these days, we ought to be able to figure out a way to prevent that if we keep working at it",

then a few things (e.g., genetic aging, cancer cell growth, blood vessel deterioration) edge out smoking

If "preventable" = we actually have a way to prevent it,

then the adjective does not seem to apply to smoking.

Smoking preventable? Not without some new tactics.

After dramatic reduction in smoking rates (in North America, mostly in the 1960s and 1970s), plateau

despite massive efforts and increasingly draconian regulations  
(in Canada, U.S., etc.).

Only one country has definitively met the U.N. "Health People" goal of <20% of the adult population smoking.

And why should we be surprised people don't quit? Nicotine is a has some good and appealing properties.

It is not for everyone, but some get...

- substantial mood elevation
- focusing stimulant / performance enhancement
- relief from psychological pathologies

Obviously it has downsides:

- Possible* independent risk factor for CVD
- Running-to-stand-still effect

(perhaps if we accepted that there are benefits, we could put some effort into reducing the downsides, rather than focusing only on abolition)

And why should we be surprised people don't quit? Nicotine is a has some good and appealing properties. (cont)

Some people say they "can't" quit

economics lesson:

when "can't" is used to refer to something that is obviously physically possible, it is just one of the many words for "the benefits to me are not worth the costs to me"

Instead of demanding that people who want the benefits pay those costs (which many will not choose to do),

why do we not figure out another way to get them?

Smoking policy and resistance to ST-based harm reduction represents everything the public hates about public health

(though they do not even know the truth about the risks)

People not persuaded to quit smoking?

-yell at them

-tell them what they already know, over and over

-make them so annoyed that they ignore all public health messages and avoid physicians

-(pretend we are making great progress)

Smoking policy and resistance to ST harm reduction represents everything the public hates about public health

People are making tradeoffs different than the ones we would?  
(i.e., choosing to use nicotine, even at some health cost)

- make it clear to them that we think we know better
- infantilize their preferences

People might make different choices than we say they should if they knew the truth? (e.g., if they knew ST was not very harmful)

- lie to them (for their own good, of course)

Smoking policy and resistance to ST harm reduction represents everything the public hates about public health

Thanks to public faces like this (and nutrition, exercise, etc.), a lot of people think public health people are puritanical busybodies,

no different from those who would tell people what they can't do in their bedrooms, or that any drug use will ruin their lives.

In this case, it is difficult to dispute the claim.

## So what are legitimate public health actions on ST?

Convey the message that nicotine seems to be bad during pregnancy and lactation if the evidence continues to support that.

Continue to try to prevent children from using it.

(most agree this is justified for alcohol – which is probably good for you in small doses when you are older, as well as driving, playing with guns, sex with people older than oneself, and other behaviors that we find perfectly acceptable for adults)

Say that it is quite possibly a bit bad for your health.

## So what are legitimate public health actions on ST?

But, when saying that it is quite possibly a bit bad for your health:

recognize that we are not even sure of that,  
and we are sure it is not very bad.

(i.e., keep the message within the bounds of actual evidence)

but, then:

*Actively* point out that it is much better than smoking.

it is unethical to lie to people or to try to decide for them what tradeoffs they should make

but there are, arguably, also affirmative obligations

## Harm Reduction is our best underutilized hope against smoking

People like their nicotine and are not quitting.

More starting than stopping (worldwide)

Smoking is not looking so preventable.

Certain anti-tobacco advocates seem to be doing everything they can to keep it that way.

(another economics tip: buy stock in whatever cigarette companies are doing well in emerging Asian market)

## Harm Reduction is our best underutilized hope against smoking

Which is the one country below 20% smoking prevalence?

Sweden.

- impressively low levels of smoking-related diseases (including OC)

- by far, the highest rate of ST use

- ST use went up as smoking went down

## Harm Reduction is our best hope against smoking

Evidence:

Sweden,  
one trial,

and most compellingly (another economics lesson)...

## Harm Reduction is our best hope against smoking

Evidence:

Sweden,  
one trial,

and most compellingly (another economics lesson)...

People are not complete morons.  
(that includes smokers)

Tell people that something is a *lot* cheaper  
(i.e., lower health costs),

and (for many) almost as good,

and they will change their choices.

## Quick comment on barriers to switching to ST

Getting honest information

Social aspects of smoking

Aesthetics of ST use

Not clear why blowing smoke all over the place is preferable to discrete spitting,

but there are modern ST products that do not require spitting

## Quick comment on "gateway" and get-through-the-day dual use

After realizing that they cannot honestly claim that ST creates much direct health effect,

a few anti-ST advocates have pursued these claims.

Indeed, ST use would be harmful if it caused smoking.

But see above point that people are not morons.

Best way to avoid switching to smoking or dual use is to make sure people know the comparative risk

## Conclusions

Current public health message about ST violates the strongest negative ("thou shall not"-type) rights/obligations in modern health ethics.

Also violates what is arguably an affirmative obligation: to actively provide health-beneficial truth.

Nicotine use will not go away.

ST offers the best hope of making nicotine use not terribly deadly.

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