

Apply Federal Research Rules on Deception to Misleading Health Information: An Example on Smokeless Tobacco and Cigarettes

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Two respected agencies of the U.S. Department of Health and Human Services (DHHS)—the Centers for Disease Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA)—have maintained websites which have erroneously reported that smokeless tobacco is not safer than cigarettes.^{1,2} This claim is not supported by science and acts unethically to mislead readers of these websites.³⁻¹⁰ Although others have examined ethical issues in health communication,¹¹⁻¹⁵ we think these scholars did not go far enough. We think that the explicit ethical standards embodied in current federal regulations for deception in research should be applied to judge deceptive or misleading information in health communication interventions.¹⁶ The term *deception* usually refers to intended acts of deception; regardless of intention, however, erroneous information can cause the recipient to be deceived about the true state of affairs. The misleading health information on smokeless tobacco fails to meet the government criteria against deception in research. First, the misleading information may have adverse effects on some individuals (e.g., those who switch to cigarettes or fail to switch from cigarettes because they think they are not more dangerous than smokeless). Second, individuals have a right to know about the dramatically different dangers of smokeless tobacco and cigarettes. Third, there are alternative communication strategies that could be employed to inform people of the risks of both products. And, finally, such misleading information would be unallowable because it is not linked to debriefing. This article reviews the misleading information on the governmental websites, shows how modern ethical rules against deception can be applied to health information, and argues that providing information about the comparative risks of cigarettes and smokeless tobacco is the least evasive and most ethical course of action.

DISINFORMATION

Up until June 2002, the CDC web page for the Surgeon General's Report (SGR) for Kids about Smoking asked the question: "Is smokeless tobacco safer than cigarettes?"—and answered, "NO WAY!"¹ As the result of our broaching

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the issue of deception with them, they revised the web page to ask, "Is smokeless tobacco safe?" and they answer, "NO WAY!" We will discuss issues related to the revised page below, but think it fair to note that for many months this prominent governmental source was offering inaccurate comparative information on smokeless tobacco and cigarettes.

The web page of SAMHSA's National Clearinghouse for Alcohol and Drug Information contains this passage in a section called, "Tips for Teens: the Truth about Tobacco":

Question: Isn't smokeless tobacco safer to use than cigarettes?

Answer: No. There is no safe form of tobacco. Smokeless tobacco can cause mouth, cheek, throat, and stomach cancer. Smokeless tobacco users are 50 times more likely to get oral cancer than non-users. Those smokeless tobacco users who don't develop some type of cancer are still likely to have signs of use, like stained teeth, bad breath, and mouth sores.²

Wherein lies the error or possible deception in asserting that smokeless tobacco and cigarettes are equally dangerous? First, there is no scientific doubt that smokeless tobacco is substantially safer than cigarettes.³⁻¹⁰ (The Institute of Medicine [IOM] report provides a thorough review, indicating that smokeless tobacco is safer than cigarettes, particularly as used in Sweden and North America, rather than as used in India.)³ Smokeless tobacco does not cause respiratory disease or lung cancer, meaning that there would be at least 60% fewer deaths from smokeless than from cigarettes.¹⁷ In fact, epidemiological analyses estimate that smokeless tobacco has only 2% of the risk of cigarettes.⁷ The account on the SAMHSA web page also employs a logical non sequitur. The question posed was, "Isn't smokeless safer?" and yet the question answered was, "Isn't it safe?"

Note also, SAMHSA doesn't compare the oral cancer effects of smokeless to cigarettes (which would address the "safer" question), but rather to the risks in non-users of tobacco. The predominant health risk linked to smokeless tobacco is oral cancer, but cigarettes seem to be even more strongly linked to oral cancer than is smokeless tobacco. Figures reported by Rodu show that cigarettes cause 2.28 times more oral cancer than does smokeless tobacco.⁸ In other words, smokers would achieve a significant 43% reduced risk of oral cancer by switching to smokeless.⁷ The only possible scientific source we know for the SAMHSA claim that smokeless tobacco users are 50 times more likely to get oral cancer than are non-users is from one

cell of the Winn et al. study of female users of a form of dry snuff, where this number applies only to those who have used the product for 50 years.¹⁸ The overall figure from this study is 4.2 times greater risk of oral cancer for white, female dry snuff users in rural North Carolina. A recent review of epidemiological research finds that moist snuff users have 1.1 times relative risk of oral cancer than non-smokers, while chewing tobacco users have 0.6 times relative risk, and, for general users of smokeless tobacco, the risk was 2.8 times relative risk of that for non-users.¹⁹ This review concludes: "The use of moist snuff and chewing tobacco imposes minimal risks for cancers of the oral cavity and other upper respiratory sites, with relative risks ranging from 0.6 to 1.7."¹⁹

The U.S. authorities are not alone in making misleading errors. The Government of Saskatchewan (Canada) is explicitly wrong in the assertion: "Smokeless (spit) tobacco is not safer than smoking. In fact, smokeless (spit) tobacco is just as dangerous to your health as cigarette smoking."²⁰

It is difficult to know whether these websites represent mistakes or conscious misrepresentations. The desire to do everything possible (including denying the truth and evading questions) to discourage the use of addictive smokeless tobacco could arise for several reasons. There is understandable reluctance to do anything that might encourage the use of addictive substances that carry health risks (i.e., are not safe). Moreover, there is widespread concern that smokeless could act as a stepping-stone or gateway product to use of the much more dangerous cigarette.²¹⁻²⁵ The IOM report on tobacco harm reduction, for example, indicates that one of the population-level risks of smokeless tobacco is "adolescent use of smokeless tobacco as a gateway to cigarette smoking."²³

But we do not think, as will be explained below, that such concerns justify disinformation or deception in health communication. Several scholars have reviewed ethical issues in health promotion.¹¹⁻¹⁵ Guttman in particular has called for the systematic consideration of ethical implications of all health campaigns.¹² Attempts to persuade can involve rhetorical maneuvering that, in the course of wordsmithing, can serve to mislead. Similarly, messages that appeal to fears or prejudices can be coercive.¹² There will always be a gray area between truthful persuasiveness and outright deception. But these smokeless tobacco messages clearly cross the line and actively mislead individuals.

It is critical to understand that this article focuses on the issues of deception and misleading information in health communication and health campaigns, not on other ethical issues in public health interven-

tions. Gostin has provided a valuable review of public health law, and we agree that there are circumstances in which the health needs of society should prevail over the needs and rights of the individual (e.g., required vaccinations, quarantines for certain infectious diseases, and so forth).²⁶ But these public health measures are not carried out deceptively—they are done in the service of evidence and principles that can be publicly assessed. These measures openly confront the abrogation of autonomy for the good of society. We propose that governmental ethics guidelines¹⁶ already in existence for human subjects research provide an appropriate system for assessing potentially misleading health messages.

ETHICAL REGULATIONS FOR DECEPTION IN RESEARCH SHOULD BE APPLIED TO PUBLIC HEALTH INFORMATION

Deception in public health messages should be as controlled as deception in human subjects research. *The Belmont Report*²⁷ was influential in the formation of federal regulations concerning informed consent.²⁸ Of the three ethical principles outlined as most relevant to research involving humans, autonomy (respect for persons) is arguably most relevant for our analysis. Specifically, the *Report* states:

An autonomous person is an individual capable of deliberation about personal goals and of acting under the direction of such deliberation. To respect autonomy is to give weight to autonomous persons' considered opinions and choices while refraining from obstructing their actions unless they are clearly detrimental to others. To show lack of respect for an autonomous agent is to repudiate that person's considered judgments, to deny an individual the freedom to act on those considered judgments, or to *withhold information necessary to make a considered judgment*, when there are no compelling reasons to do so.²⁷ [emphasis added]

Clearly, autonomy is the principle most violated by deceptive communications. Berg and colleagues note that deception is anathema to informed consent because it serves the aims of the researcher (or communicator in our case) while “demeaning human dignity.”²⁹

We do not think that well intended, paternalistic health communications should be exempted from ethical rules against deception. Title 45, Part 46, of the Code of Federal Regulations (Title 45 CFR Part 46), the current law governing human subjects research, lists specifically the types of research to which these rules do not apply: (a) educational research involving evaluation of accepted curricula, procedures, or tests; (b) research involving publicly available data or speci-

men sources where identification of subjects is impossible; (c) research designed to evaluate public services; and (d) taste and food quality evaluation, where the ingredients are generally recognized as safe.³⁰ Deception in health communication does not fall under any of these exemptions.

We think that federal rules concerning deception in research can and should be applied to health communication.¹⁶ Research is done, essentially, to answer questions to which the answers are unknown or uncertain. Similarly, public health institutions often use messages based on hypothesized, rather than proven, effects. In essence, health communication frequently represents a large-scale uncontrolled research study with a subject pool in the millions. The regulations do allow for suspension of informed consent (i.e., deception), provided four conditions are met: (1) the research involves no more than minimal risk; (2) the rights or welfare of subjects is not adversely affected; (3) the research can be done no other way; and (4) when debriefing can occur after the study.¹⁶ Disinformation in health communications on smokeless tobacco in comparison to cigarettes strikingly fails to meet any of these requirements.

Requirement 1: no more than minimal risk

Bok observed that deception often has effects beyond those initially intended,³¹ and Guttman has argued that even well intended messages can have inadvertent harms.¹² Title 45 CFR Part 46 puts forth a specific definition of minimal risk.³⁰ It states, “Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life. . . .”³⁰ That is, the risk of the activity is minimal if the subject is placed at the same level of risk whether or not they take part.

Although disinformation may keep some individuals from using smokeless tobacco, and it may also contribute to some individuals not smoking cigarettes, it presents significant risks to the children and adults already experimenting with or using cigarettes or smokeless. One of the most unfortunate consequences would be convincing adolescents or adults to smoke rather than use smokeless tobacco, since trustworthy authorities report them to be equally dangerous. In other words, individuals might be influenced to use cigarettes because they think they are not more dangerous than smokeless tobacco. This message represents greater than minimal risk—as in the absence of the message some consumers might not use cigarettes, but rather smokeless. The reality that most recruitment to tobacco use takes place before the age of 18 requires

communications that honestly describe the risks and decisions faced by young adults. Honest communication allows for more informed decision-making.²⁵

Requirement 2: no adverse effects on rights or welfare

The prior argument indicates that the welfare of some individuals may be adversely affected by deceptive health messages. Moreover, the deceptive information is a clear violation of an individual's right to honest information related to one's health. The right to health-related information (as opposed to ownership of one's own medical information, a separate right) is now recognized as an important human right to be respected by those in public health.^{32,33} Since information about effective reduced risk products can have dramatic effects on individual health risks, the individual has a right to this information.⁵

Some may argue that individual rights are outweighed by the potential benefit of the deception for public health. A product that reduced risk to the individual could harm public health overall, if more people use the less risky product. This argument can be seen in the IOM report, "Clearing the smoke."³ Kozlowski and colleagues have shown that at high levels of risk reduction (e.g., greater than 90%), increases in use that could result in net public health harm become practically impossible.³⁴ To justify violations of individual rights by deception, the public health harm from presenting the truth must be clear, not speculative or remote.³²

Requirement 3: no alternative

If the intent of the information is to prevent both smokeless tobacco use and cigarette smoking, deception is certainly not the only way to achieve these goals. Honest messages against smokeless and cigarettes, which could describe some risks from smokeless and much greater risks for cigarettes, may be no less effective than the deceptive message. It is unknown whether the disinformation is effective in discouraging either smokeless tobacco use or cigarette smoking, let alone whether it discourages both.

A quick browse through the CDC's website reveals two documents that outline effective tobacco control strategies: *Best Practices for Comprehensive Tobacco Control Programs*,³⁵ and *Program and Funding Guidelines for Comprehensive Local Tobacco Control Programs*.³⁶ These documents list seven strategies for effective tobacco control: (1) community programs; (2) school programs; (3) counter marketing; (4) cessation; (5) enforcement; (6) administration and management; and (7) surveillance and evaluation. The CDC recommends that these

factors be integrated into local programs to change social norms around tobacco, discourage youth use, encourage cessation, and enforce anti-tobacco laws. Under these strategies, disinformation is not a necessary means to achieve these ends. Undoubtedly, disinformation is not the only way to discourage cigarette and smokeless tobacco use. There are alternatives that may be more effective.

Requirement 4: debriefing possible

In clinical research, debriefing requires that subjects (a) be informed that they were deceived; (b) be told why deception was necessary; and (c) be told the true purpose of the study.¹⁶ Debriefing is likely not practical for most health communication interventions. Requiring debriefing may be an unrealistic, essentially impossible, rule for health communications via mass media. A case could be made that the requirement for debriefing be ignored on practicability grounds. We do not think, however, that this requirement should be made optional. Nonetheless, even if we disregard the requirement to debrief, the current messages still fail the deception test on the three other levels.

Professional integrity and credibility

Just as the right of personal autonomy is linked to the obligation to employ informed consent,⁵ the right to honest information is linked to the obligation to have professional integrity in providing information. Using disinformation when other means of persuasion are available not only violates the rights of the individual, it also harms the credibility of the organization producing the message. Callahan argues that those in health promotion should take a long-term view, using approaches that both achieve their aims and preserve credibility.¹³ He warns that, once the public becomes aware of deception, a backlash against health promotion could occur wherein even truthful messages would be rejected by the public.

Professional organizations have explicitly called for integrity and honesty. The American Public Health Association (APHA) holds that: "Human rights must not be sacrificed to achieve public health goals, except in extraordinary circumstances, in accordance with internationally recognized standards."³⁷ Similarly, the Health Education Code of Ethics (from the Society of Public Health Education) states that "... health educators must consider all issues and give priority to those that promote wellness and quality of living through principles of self-determination and freedom of choice for the individual."³⁸ [emphasis added] The Code of Conduct for Psychologists (from the American Psychological Association) states that, "Psycholo-

gists seek to promote integrity in the science, teaching, and practice of psychology. . . . In describing or reporting . . . research, or teaching, they do not make statements that are false, misleading, or deceptive. . . .”³⁹ Clearly, these organizations’ codes would not tolerate deception in health communications.

CONCLUSIONS

The Federal Trade Commission’s required warning on smokeless tobacco products and advertisements states, “This product is not a safe alternative to cigarettes.” This warning, thus, engages the issue of the relative dangers of these products. Consumers probably do have an interest in knowing if one tobacco product is less dangerous than another—even if they accept that no tobacco product is safe. The revised CDC web page avoids answering the comparative question, which previously had been the featured leading question of their site. We think that health communicators need to develop ways to answer the question, “Is smokeless tobacco safer than cigarettes?” For example, one might write, “Yes, smokeless is safer than cigarettes, but smokeless is not safe and there are a host of reasons to not use smokeless—especially if you have not used any tobacco products in the past.” (This and the examples below are broad suggestions for content—obviously, health communicators would face a number of important issues related to optimum wording, reading-level, information-processing, and age considerations.) Or perhaps it would be useful to answer, “Smokeless tobacco may cause disease, including oral cancer, but cigarettes cause oral cancer, lung cancer, chronic obstructive pulmonary disease, cardiovascular disease, fires, and expose others to secondhand smoke.” We are not aware of evidence that messages along these lines would be less effective in discouraging smokeless use overall than are the ones used above. Following are some questions and answers, which appear scientifically supportable, and are perhaps useful to also consider:

- Question: Is smokeless less addictive than cigarettes?
 Answer: No.
- Question: Is it hard to quit smokeless?
 Answer: Yes.
- Question: Does smokeless cause dental disease?
 Answer: Yes.
- Question: Is smokeless a safe alternative to cigarettes?
 Answer: No, particularly if you don’t smoke now. However, smokeless is much less risky to current smokers than is smoking.

We anticipate that some public health advocates and researchers will be distressed by our conclusions.

We suggest they direct their critiques to whether the four ethical research principles can and should be properly applied to public health communications;^{16,30} and whether our explanation of how the four principles should be applied to smokeless tobacco and cigarettes is appropriate.

Health communicators should observe the sound ethical principles that oppose deception. Federal research regulations should be applied to public health information. Public health needs can sometimes override individual needs and rights;²⁶ this should happen, though, only under well defined circumstances. Disinformation should not, however, be employed unless the standards for research ethics can be met. In practice, this will almost certainly mean that deception has no ethical place in the public health toolkit.¹⁶

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