Nicotine & Tobacco Research, 2020, 2280–2282
doi:10.1093/ntr/ntaa141
Commentary
Received May 22, 2020; Editorial Decision July 23, 2020; Accepted July 28, 2020

Commentary

Changing the Language of How We Measure and Report Smoking Status: Implications for Reducing Stigma, Restoring Dignity, and Improving the Precision of Scientific Communication

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Accurate classification of smoking status has long been regarded as an essential prerequisite for advancing tobacco-related epidemiologic, treatment, and policy research. However, the descriptors we commonly use to classify people who smoke may inadvertently perpetuate harmful, stigmatizing beliefs and negative stereotypes. In recognizing the power of words to either perpetuate or reduce stigma, Dr. Nora Volkow—Director of the National Institute on Drug Abuse—recently highlighted the role of stigma in addiction,[1] and the movement encouraging the use of person-first language and eliminating the use of slang and idioms when describing addiction and the people whom it affects.[2,3]

In this commentary, we make an appeal for researchers and clinicians to use person-first language (eg, "people who smoke") rather than commonly used labels (eg, "smokers") in written (eg, in scholarly reports) and verbal communication (eg, clinical case presentations) to promote greater respect and convey dignity for people who smoke. We assert that the use of precise and bias-free language to describe people who smoke has the potential to reduce smoking-related stigma and may enhance the precision of scientific communication.

Promoting Bias-Free Language to Reduce Stigma and Convey Respect for Persons

Smoking-related stigma (ie, the devaluation of a person based on their smoking behavior) is a widespread and clinically important issue.[4] Smoking-related stigma is distinct from knowledge about the risks of smoking and is robustly associated with poorer mental health outcomes (eg, higher anxiety, depressive symptoms),[5] a longer delay between experiencing symptoms and seeking medical care,[6] and concealing or misreporting one's smoking behavior from health care clinicians.[7] In clinical care and research contexts, the labeling of a person as a "smoker" can prompt feelings of shame, blame, and guilt by defining a person based on their smoking behavior.[8]

Person-first language has been promoted by several journal editorial boards[3] and US federal agencies[2] to reduce bias and convey appropriate respect and dignity for persons by first explicitly recognizing the described individual's personhood. Although the use of person-first language is one of several linguistic tools to reduce bias (the use of *identity-first* language has also been used in other contexts to reduce bias),[9] we assert that using person-first language is a more appropriate way to describe people who smoke rather than using various iterations of the label "smoker." We encourage tobacco researchers and clinicians to adopt the use of bias-free language in scientific reports and other written and verbal communication as a viable contribution to reducing the stigma experienced by people who smoke. There is historical precedent for using person-first language to reduce stigma in health-related research such as using the term "person with an alcohol use disorder" instead of "alcoholic" or "adults with an addiction" rather than "substance abusers."[2,3] Additionally, the shift from using the term "AIDS patients" to "Persons Living with HIV/AIDS" in the field of HIV/AIDS research changed public discourse and contributed to reducing HIV-related stigma.[10]

The labels "current smoker," "former smoker," and "never smoker" are commonly used in tobacco research and clinical care to categorize and describe people, often based on answers to

standardized questions such as those included in the U.S. National Health Interview Survey: "Have you ever smoked at least 100 cigarettes in your entire life?" and (if participants answered in the affirmative) "Do you smoke every day, some days, or not at all?"[11] According to coding guidelines, a person who answered "no" to the first question is categorized as a "never smoker," whereas people who answered "yes" are classified as a "current every day smoker," "current some day smoker," or "former smoker" depending on their answer to the follow-up question, respectively. This approach is efficient and consistent with decades of tobacco research. However, we encourage researchers to describe their categorical data by using person-first language (eg, "people who never smoked," "people who smoke every day," "people who smoke some days," "people who formerly smoked") rather than various iterations of the label "smoker," which equates people with their smoking behavior. Similarly, we encourage researchers and clinicians to use standardized questions that target the smoking behavior (eg, "have you smoked, even a puff, in the past 30 days?") and refrain from tobacco use questions that require adoption of a smoking identity (eg, "are you a current smoker?"), which is a recommendation to reduce stigma when taking a routine smoking history.[12]

In Goffman's seminal work on stigma, stigma is defined as a "mark" that designates a person as socially devalued based on a particular characteristic.[13] From this perspective, the example of using the label of "former smoker" (to describe someone who has once smoked more than 100 cigarettes in their lifetime but has quit) permanently "marks" an individual by their past smoking behavior regardless of how long ago the person quit smoking.

The Use of Bias-Free Language to Improve the Precision and Tone of Scientific Communication in Tobacco Research

Another tenet of bias-free language is to understand and respect the language that people use to describe themselves, and research has demonstrated substantial heterogeneity in the degree to which people who smoke consider themselves "smokers."[14,15] In our work with individuals diagnosed with cancer, we often find that patients who have recently quit smoking and those who smoke only a few cigarettes on some days do not consider themselves to be "current smokers." Furthermore, in one study of people who quit smoking within the previous year, the majority of participants identified as a "nonsmoker."[16] These observations are consistent with other findings in tobacco research broadly and have prompted research efforts to better understand groups that are labeled "admitters" and "deniers" based on whether their reported smoking behavior aligns with their agreement of defining themselves as a "smoker" and/or biochemical verification.[14] It is important to understand whether people conceal or misreport their smoking behavior,[7] but we encourage researchers to do so without the use of labels such as "admitters" and "deniers,"[14] which can imply that individuals are volitionally misreporting their smoking status. Instead, more descriptive terms such as "discordant responding" may be more suitable to promote bias-free language. Likewise, the terms "hardcore" or "recalcitrant" are used to describe people who are unable to quit smoking and likely will continue to smoke.[17,18] However, these labels imply that a person holds an active dedication to continue to smoke or has an uncooperative attitude, which does not capture the complex biological, psychological, social, and environmental factors involved in tobacco dependence. We encourage researchers to use more descriptive terms and language that is consistent with their measurement approach (eg, behavioral, diagnostic), which would entail judiciously using labels such as "smoker" only when it is essential to the scope of the research question (eg, assessing smoking identity as a predictor of motivation for cessation).

The labels "current smoker," "former smoker," and "never smoker" often assess underlying continuous variables (eg, duration of smoking abstinence, number of cigarettes smoken in the past 30 days), and we encourage researchers and clinicians to consider measuring, reporting, and analyzing continuously measured smoking-related variables rather than categories whenever appropriate. We also recognize that there are circumstances when reporting and analyzing smoking behavior categorically is appropriate (eg, reporting point prevalence cessation outcomes in clinical trials). However, measuring, reporting, and analyzing continuously measured smoking-related variables can increase precision, improve statistical power, and reduce confounding when conducting analyses. For instance, asking persons who previously smoked when they had their last cigarette provides clinically relevant information about duration of cessation not adequately captured by the "former smoker" categorization. Reporting smoking behavior using continuous variables also allows for tobacco researchers and clinicians to capture the substantial intragroup heterogeneity in patterns of smoking behavior among people categorized as "current smokers" or "former smokers." For example, the excess lung cancer risk associated with smoking can be reduced with longer duration of smoking abstinence.[19] Similarly, it is important to quantify duration of smoking abstinence when identifying individuals eligible for lung cancer screening and smoking relapse prevention clinical trials. Measuring and reporting smoking-related characteristics with continuous variables is also aligned with a chronic disease model of smoking in that it conveys that tobacco dependence is an ongoing disease state rather than a stable categorical classification. Finally, making this change may decrease stigma by conveying smoking-related constructs on a continuous scale (which displays people together on the same continuum of a particular variable) rather than by grouping participants into distinct categories (which may accentuate or exacerbate divides between people who currently, formerly, and never smoked).

Conclusion

Smoking-related stigma can have profound consequences for people's health and health care engagement outcomes, and the use of bias-free language may be a viable and meaningful contribution toward reducing stigma. Although the categorization of smoking behavior can sometimes be helpful in clinical practice (eg, using an electronic medical record system to generate referrals for smoking cessation), we advocate for discretion in the use of categorical labels when describing smoking behavior and people who smoke. The language used within our written and verbal communication should convey the utmost respect and dignity for the persons who participated in research and are in clinical care, and this language can also inform public perception of tobacco dependence. Careful consideration is needed to reevaluate whether the well-established terminology of labels such as "smoker" is hindering the precision of our communication and inadvertently perpetuating smoking-related stigma, which can have profound negative consequences for health-related outcomes and engagement with clinical care. We as the authors of this commentary acknowledge the difficulty of this change. In full transparency, we have used language in our prior publications that we now discourage, and even in our recent and concerted effort

to reduce the use of the use of the term "smoker" in our writing, one instance of this label was ultimately present in the final publication.[20] Despite this difficulty (as well as the concerns about lengthier sentences and related constraints on manuscript word count), we urge researchers and clinicians to strive toward making changes to established patterns of language use in order to restore dignity and acknowledge the humanity of the people we describe.

There is growing recognition that an unintended consequence of effective tobacco control population health policies that denormalize smoking has been an increase in smoking-related stigma,[21] resulting in a call for multilevel interventions that reduce the stigma associated with tobacco-related diseases.[22] Promoting bias-free, person-first language is a step in the right direction. Our hope is that this commentary will spark a meaningful dialogue about stigma in the field of tobacco research with the ultimate goal of promoting the careful consideration and intentional use of language that conveys respect and dignity for the people described, increases the benevolence of clinical care, and perhaps increases the precision of our scientific communication.

Supplementary Material

A Contributorship Form detailing each author's specific involvement with this content, as well as any supplementary data, are available online at https://academic.oup.com/ntr.

Funding

This work was supported in part by grants from the National Cancer Institute (T32CA009461; P30CA008748). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Declaration of Interests

None declared.

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