The Behavioral Risk Factor Surveillance System

Peter A. Guarnero

University of New Mexico
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The Centers for Disease Control and Prevention has for more than two decades provided the states with the ability to monitor the health behaviors of American adults through the use of a cross-sectional telephone survey entitled the Behavioral Risk Factor Surveillance System (BRFSS) (1). The BRFSS is described as “a state-based system of health surveys that generates information about health risk behaviors, clinical preventative practices, and health care access and use primarily related to chronic disease and injury” (2). In addition, the information generated by the BRFSS is used by various organizations such as the American Heart Association to develop health initiatives (1).

The Centers for Disease Control and Prevention provides a comprehensive online guide for the use of the BRFSS (3). The guide indicates that the individual states’ departments of health are responsible for conducting the survey with the Centers for Disease Control and Prevention providing statistical and technological assistance (3). The CDC’s Behavioral Surveillance Branch provides each state with a list of telephone numbers that will serve as the sampling frame (3). States in collaboration with the CDC select the questions and the optional modules that each state believes is important to understanding the health risks of its citizens (2, 3). The Operational and User’s Guide provides specific steps telephone surveyors can use to, for instance, deal with persons who may refuse to participate. Surveyors are instructed to analyze the situation and distinguish between an outright refusal and calling at an inopportune time. It provides a series of techniques that the surveyors can use to engage a potential participant (3). Reviewing the various techniques utilized to engage the potential participant gives one the impression that surveyors will make multiple efforts to get a subject to participate in the BRFSS survey. They are directed to retain control over engaging the person to participate in the survey. It is not evident from the guide when the surveyor is supposed to “let it go.”

The Operational and User’s Guide stipulates that potential surveyors are to be trained in the issues that surround confidentiality. The surveyors are given specific guidelines that will ensure the
confidentiality of the data that is being collected. Everyone, including the phone monitors, is bound by a confidentiality agreement (3). The guide is indeed comprehensive and attempts to deal with every type of situation the surveyors may encounter.

Funding the survey can create a difficult situation for the individual states. Aside from federal monies, individual BRFSS state coordinators are encouraged to seek funds from their state legislature and local health promotion organizations (3). States that wish to add their own set of questions are encouraged to plan ahead to avoid cost overruns. They must also adhere to the BRFSS question layout; otherwise the data will be discarded (3).

The BRFSS questionnaire is available in English and Spanish. The English version consists of 22 sections and 17 optional modules. The questionnaire is scripted, providing the surveyors with specific guidelines when talking with the potential survey participant. The questions target specific factors that will provide information about an individual’s lifestyle. Among these are health status, healthy days, health care access, tobacco use, and drinking and driving (4). In addition, it is possible for individual states to add questions that target specific behaviors of interest to the individual states’ departments of health. Also, the questionnaire contains optional modules that focus on such health issues as childhood asthma prevalence, diabetes, visual impairment and access to eye care, home environment, reactions to race, sexual violence, and intimate partner violence (4). The individual states may choose any or none of the optional modules.

Several researchers have addressed the validity and reliability of the BRFSS (5, 6). Nelson et al. (5) found that most of the measures used in the BRFSS were moderately to highly valid and reliable. Comparing two health surveys, the researchers found that BRFSS was correlated with the National Health Interview Survey (6). In 2004, the CDC convened an expert panel to provide recommendations for enhancing the validity and reliability of the BRFSS (7). Among the panel’s recommendations were investigating the feasibility of mailing the survey to participants and documenting the response rate.
Another recommendation suggested assessing the sociocultural aspects of contacting Spanish-speaking participants. This last recommendation is of great importance, given the fear of Spanish-speaking participants that demographic information could be shared with the Department of Homeland Security’s Immigration Services. A review of the questionnaire does not reveal questions that target immigrant status; however, many Latinos fear divulging any personal information that could adversely affect their home and employment.

METHODS

The author conducted a literature search on August 30th, 31st, and September 1st, 2007, using the MeSH Database in PubMed in order to ascertain the extent to which the BRFSS has been used in the conduct of research. Appendix A provides all search strategies that were used to find pertinent citations. Using the MeSH Database, the author identified and searched MeSH term “Behavioral Risk Factor Surveillance System” in PubMed. This search strategy resulted in sixty three (63) citations. The query was further limited by using “published in the last 3 years” and “Humans.” The use of these limiting terms resulted in 39 citations. These 39 references were reviewed to ascertain the patterns summarized below.

The literature search revealed that the BRFSS has been used to look at smoking among young adults (8), alcohol consumption (9), smoking cessation (10), and obesity (11). The studies were usually secondary analyses of population-based survey data. The survey data provide a “picture” of the health status of U.S. citizens. The hope is that this picture will have a positive effect on the development of health policy at the local, state, and federal levels.
References


Another search was conducted using the MeSH terms “New Mexico” and “Behavioral Risk Factor Surveillance System” which resulted in no citations being available. The strategy was reversed by entering “Behavioral Risk Factor Surveillance System” first and “New Mexico” second in the hope some citations would be available. However, no citations were found in the query.

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