

OSU Center of Excellence in Regulatory Tobacco Science
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Abstract:

While the FDA has listed 93 harmful and potentially harmful constituents (HPHCs) in cigarettes and secondhand smoke (SHS), consumers have limited knowledge of HPHCs. Web-based communications are an important element in "eHealth", which encompasses the communication of health information through various media channels to improve consumers and patients' understanding and recall of health-related information. Yet, many web-based eHealth strategies may not achieve their stated goals due to the delivery of generic, one-way messages about disease risks. There is a gap in knowledge regarding the optimal balance of information to be conveyed to consumers that will efficiently inform, without cognitive overload, and avoid the implication of brand-specific comparisons by smokers. This proposal will develop a theory-based experimental protocol, informed by best practices in health communication and biomedical informatics to create a web-based delivery of HPHC information to current smokers. The objective of this application is to determine if tailored, interactive web-based content will improve consumer knowledge of a set of HPHCs. To accomplish this, we will recruit smokers and dual users (n=240) to be randomly assigned to view a study website with information regarding HPHCs, with a control condition, varying in the degree of tailored information and interactive features to examine the influence of these attributes on smoker's knowledge of HPHCs. Eye tracking technology will be used to capture detailed information about attention paid to elements of the study websites, and a think aloud protocol to capture barriers to website usability. We hypothesize that the tailored interactive web-content will significantly increase the knowledge of HPHCs among smokers, compared to generic educational information. As a result of the proposed research, we will provide an empirical data foundation for determining key web-design attributes in order to optimize consumer learning about HPHCs, while enhancing usability and minimizing consumer confusion. The longer term goal of this research is to identify optimal practices in e-health communications for improved consumer comprehension for behavioral decision making and policy decisions regarding the regulation of tobacco products.