This Just In... reports are a quick summary of new health marketing and communication research and trends. These brief “nuggets” spotlight new findings with communication practice implications for CDC and its public health partners.

Brought to you by the Marketing and Communication Strategy Branch in the Division of Health Communication and Marketing, National Center for Health Marketing, Centers for Disease Control and Prevention (CDC).

Most frequented breast cancer websites need updating in order to motivate women toward healthy preventative breast cancer behaviors.

Research objective: Communication researchers have documented the impact of key strategies on the success of motivating individuals to modify health-related behaviors. Having well-designed websites is not enough to motivate users to make healthy decisions. For this reason, the main goal of this research was to examine the use of behavioral change theory components present on breast cancer websites which inform about the potential for users to take protective steps against breast cancer. As a secondary goal, this study also documented breast cancer website’s use of design components.

Methods: This study was conducted in three stages. In the first stage, formal searches were performed to identify the most commonly frequented breast cancer websites. Using exclusion criteria, 157 websites were retained for analysis. In the second stage, a coding scheme was applied to assess basic tenets and design qualities (i.e., usability, interactivity). The third stage applied a coding scheme to assess the use of elements from three behavior change theories: Theory of Planned Behavior, Extended Parallel Process Model, and Transtheoretical Model.

Findings: The findings revealed that many of the basic use and design tenets were employed by the most frequented 157 breast cancer websites. For example, 100% of the websites listed their source, had homepages that downloaded within three seconds, worked both on the Mozilla “Firefox” browser and on Internet Explorer, used color well to enhance their website, and had a left-aligned layout. However, some basic use and design tenets were not well represented—only one website posted a hit rate; over 56% of websites did not include a date of last revision, contact information on every page, the webmaster’s name, copyright restrictions, a help section, a site map, or consistent navigation throughout the website. The majority of the websites fared well with regards to their use of basic tenet and design principles.

The majority of websites did not fare well when evaluated for their use of behavioral change theory components or other motivational variables. Only one category was represented by over 80% of websites (use of statistics) and only six categories were included in over 50% of the websites (creating awareness about early detection or prevention, creating awareness for types of treatment, providing negative consequences for taking steps in a direction against healthy breast cancer behavior, providing positive consequences for taking steps in a direction toward healthy breast cancer behavior, informing users of breast cancer research findings). If the website listed an author, which occurred in 53.5% of the websites, it displayed characteristics that conveyed trust and credibility. The three theories were useful in demonstrating the lack of strategic behavior change motivators present on the most frequented breast cancer websites. The only theoretical components present on the majority of websites were consciousness raising, negative attitudes for taking steps away from preventative breast cancer actions, positive attitudes for taking steps toward preventative breast cancer actions, and threats.

Practice implications for health marketers and communication professionals:

These results indicated that changes are needed for the majority of breast cancer websites in order to motivate women toward healthy preventative breast cancer behaviors. Breast cancer websites can be improved by employing strategies from the three theories to encourage behavior change, especially if they use threats on their website. This may have implications for websites for other disease areas. Additionally, when targeting a general audience, breast cancer websites should also have sections that cater to individual needs based on ethnicity, literacy, language, age, or disability. Consider including messages on websites promoting prevention in addition to those that promote early detection on the most frequented breast cancer websites. These findings are also applicable to other health topic websites, and further attention and effort should be put into message strategy design so that these websites may reach people both cognitively and emotionally. As we learn more and more about effective design and content of websites, public health websites need to continually evolve with this knowledge.


For additional information, send comments and questions to MCSBHealthMktg@cdc.gov, or contact Lynn Sokler, Chief, MCSB, at LSokler@cdc.gov.