Readability of online health information for patients with pancreatic cancer
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Online information on pancreatic cancer overestimates the reading ability of the overall population and lacks accurate information about alternative therapy, according to a study published online by JAMA Surgery.

The degree to which patients are empowered by written educational materials depends on the text's readability level and the accuracy of the information provided. A patient's health literacy or ability to comprehend written health information can impact clinical outcomes. Reading materials are rarely written at the recommended sixth-grade reading level. Tara S. Kent, M.D., of Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, and colleagues compared the readability and accuracy of patient-oriented online resources for pancreatic cancer by treatment method and website affiliation. The researchers conducted an online search of 50 websites discussing 5 pancreatic cancer treatment methods (alternative therapy, chemotherapy, clinical trials, radiation therapy, and surgery). The website's affiliation was identified. Readability was measured by 9 standardized tests, and accuracy was assessed by an expert panel.

The researchers found that within the sample, the median readability level of all website categories was higher than recommended, requiring at least 13 years of education to be comprehended (only 58 percent of the adult U.S. population has attained this level of education). "These data indicate that online information on pancreatic cancer is geared to more educated groups. The general population and vulnerable groups with particularly low health literacy will likely struggle to understand this information."

The authors also found appreciable differences among website affiliations and among websites discussing treatment methods. Websites discussing surgery were easier to read than those discussing radiotherapy and clinical trials.

Websites of nonprofit organizations were easier to read than media and academic websites. Nonprofit, academic, and government websites had the highest accuracy, particularly websites relating to clinical trials and radiotherapy. Alternative therapy websites exhibited the lowest accuracy scores. Websites with higher accuracy were more difficult to read than websites with lower accuracy. "This illustrates one of the challenges incurred in the creation of accurate, yet understandable online information about a complex disease and its treatment options."

"In the absence of an Internet librarian, health care professionals should acknowledge that online information on aggressive diseases such as pancreatic cancer could be misleading and potentially harmful, and, thus, they should assume an active role in the evaluation and recommendation of online resources, selecting readable and accurate online resources for their patients, as an instrument to empower patients in the shared decision-making process," the authors write.

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