Comparing Diabetes Search Engines: HON vs Google

Shane Reti[ab], Michael Tierney[b], Henry Feldman[b], Celia Boyer[c], Charles Safran[b]

[a]*Department of General Practice and Primary Health Care, University of Auckland, New Zealand*
[b]*Division of Clinical Informatics, Harvard Medical School, Boston, MA, USA*
[c]*Health on the Net Foundation, Geneva, Switzerland*

Abstract

Google search engine is one of the tools most used by consumers searching for health information on the world wide web. Several studies have examined the quality of information returned from Google and other public domain search engines, but none have compared a single disease focused search engine delivering certified content, and the rules clinicians apply to decide on website quality. We compare a general Google search engine with a customized Health on The Net (HON) search engine specifically designed to pre-filter HON certified websites for diabetes content. Across three stratified groups including primary care practitioners, informaticians, and diabetologists, we address quality as a response to the question " Which of these websites are you most likely to recommend to your patients ?". We then assess the rules clinicians apply to website decision making. Our in-progress pilot study suggests a preference for HON certified websites, with the dominant selection rules being 1. An absence of blogs or personal experiences, and 2. Pre-existing familiarity with the website. This poster will compare search results for Google and HON, and the selection rules clinicians apply across primary care practitioners, informaticians, and diabetologists.

Keywords:

Internet search engine, Diabetes, Google, Health On The Net (HON)

Methods

We created a customized diabetes search engine, pre-filtered for Health On The Net (HON) certified websites containing diabetes content. In a Google search engine and the created HON search engine, we entered the words "Cinnamon Diabetes". This phrase was chosen because behavioural diabetes change may be more influenced by public domain information at the intersection of alternative and conservative medicine. The top 5 mutually exclusive websites from each search engine were identified and printed in hardcopy colour complete with URL. Five participants from each of three groups, primary care practitioners, informaticians and diabetologists, were then convenience sampled and asked to rank the 10 websites. Participants were first advised that the study was a comparison of two search engines, and that the search engine term was "Cinnamon Diabetes". They then randomly laid out the laminated websites and arranged them in order based on how they would recommend them to patients. No other information was given. Participants were then asked to grade each website on a scale from 100 to 1, 100 representing the most likely to recommend. Finally, each participant was asked what rules they applied in ranking the websites. The data analysis will present descriptive statistics using averaging, regression modeling, and Friedman's non-parametric analysis of variance. Website selection rules will be assessed qualitatively and compared across physicians, informaticians and diabetologists.

Results

This study is currently in progress, however our initial data suggests HON selected websites are generally preferred to Google selected websites. The main website selection criteria are 1) An absence of blogs or personal experiences, and 2) Pre-existing familiarity with the website. Other selection rules include disadvantages of too much technical information, and benefits to research based references but not hyperlinks to other websites. Comparisons between the study groups will follow.

Conclusion

We anticipate making commentary on the quality of certified health information web sites. We will also comment on website recommendation differences between physicians, informaticians and diabetologists

Address for correspondence

Dr Shane Reti, 1330 Beacon Street, Brookline, MA 02446
E-mail: sreti@bidmc.harvard.edu