Why can't we find what we want on the web?

Tieman JJ
Flinders University, South Australia

Introduction

Health information for health consumers and for health professionals is now readily available on the Internet. For palliative care, online resources can inform patients and their families, as well as supporting health professionals providing care to these patients. However, for resources delivered through the web, there can be specific barriers that relate to the nature of the medium as well as to the characteristics and circumstances of intended and actual users.

In 2005, Eysenbach outlined a summary model of the conceptual barriers that may influence the accessibility of web-based information. It acknowledges the role of user characteristics as well as accessibility barriers relating to physical accessibility, "findability", design and usability, and readability.

Research Aim

To determine whether barriers exist that could affect the translation of web-based palliative care information.



Methods

A mixed methods approach was used to investigate barriers to accessibility within Eysenbach's model. The following studies were completed:

Study 1: Population sample on attitudes to, and use of, health information available on the Internet

Study 2: Web metric analysis and analysis of searches bringing consumers to the CareSearch website

Study 3: Feedback study on palliative care professionals' attitudes to online information resources

Study 4: Pre–post study on confidence in online learning using a cohort of post graduate palliative care students

Study 5: Readability analysis of online Australian palliative care information

Ethics for the individual studies was sought and granted from Flinders University's Social and Behavioural Research Ethics Committee and from the University of Wollongong's Research Ethics Committee.

Main Findings

Lack of access to internet

Study 1 showed that there is a continuing digital divide. Up to 30% of the community do not have access to the Internet and so cannot seek and retrieve online health information. Older people, those with lower incomes and those not working were less likely to have access.



Differences in interest

Twenty percent of Study 1 respondents reported that the Internet was very useful in making decisions about health while 30% saw it as not at all useful. Similarly, while 29% saw the Internet as very important, 25% did not.

Individual variability in skills

Study 1 also showed that self perceived confidence and competence in using online health information sources varied across the population. Older people, those with less education and those not working were less likely to be confident using this medium.

Different entry points

Only 20% of visits to a palliative care website came from search engine referral. The majority resulted from saved links, referrals from other sites or entry of the web address. Study 2 also showed that the searches used by consumers frequently took them to web resources that were not relevant to palliative care or not designed for consumers.

Use may improve attitudes

The online students who participated in Study 3 became more confident in the use of online resources over time.

Awareness-Use gap

Study 4 showed that even when palliative care professionals were aware of an online palliative care resource up to a quarter of them chose not to use it. Lack of time was the most frequent reason given for not using the resource.

Easy to use

Participants in Study 3 and in Study 4 highlighted the importance of resources that were fit for purpose and intuitive to use.

Readability issues persist

Readability of Australian palliative care literature produced for health consumers, and offered through the web, is beyond the reading skills of the general community.



Implications

These five studies identify a number of issues that could act as a barrier for individuals or specific groups using the web as a source of health and palliative care information. Collectively, the findings remind us that "putting something on the web" does not necessarily translate into resources that can be found, accessed, understood and used.



Service providers and decision makers need to understand their intended audiences in terms of access, capacity and interest in the Internet environment. They need to develop resources and implementation approaches that will facilitate the use of the provided information.

By identifying barriers, it is possible to look to strategies that can ameliorate or eliminate these barriers in the design and development of online health information resources.

The dynamic nature of the online environment will continue to challenge our understanding of the effects of new platforms on the provision and transmission of web based palliative care information.

Conclusion

The Internet provides unprecedented avenues to access and distribute health information. How ever, this does not necessarily mean that everyone will benefit equally.

Differences in user characteristics, the ease with which information can be found on the web, the usability of the platform and the readability of content can all create barriers to the transmission and subsequent use of palliative care information.

For more information email
Jennifer.Tieman@flinders.edu.au



Acknowledgements

This research was undertaken as part of the requirements for a doctor of philosophy at Flinders University.
This work could not have been completed without the involvement of the Australian Knowledge Network in palliative care (CareSearch) project.
CareSearch is funded by the Australian Government's Department of Health and Ageing.