

FYI: Breast Cancer - The Use of Mobile Technology to Deliver Accurate and Relevant Cancer Education

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Background:

We have previously demonstrated that breast cancer is the most searched cancer term on the Internet. However, online medical information is often unreliable, irrelevant or in a form that makes it inaccessible to the majority of people.

As breast cancer treatment options advance and prophylactic treatments become available, the question of how best to inform consent and empower individual patients of varying literacy, to make considered decisions is increasingly important.

We aimed to identify the most frequently searched breast cancer questions and answer them in a way that would be accessible to individuals of all literacy levels. In conjunction with the National Adult Literacy Agency, we developed a freely available app to present this information in a user-friendly format.

Methods:

Data mining software was utilised to identify the fifty most searched for terms regarding breast cancer in a three-month period (April-June 2014 inclusive). Terms were collated and then extrapolated into questions. Spurious associations, including commercial links, were excluded. The questions were then comprehensively answered and reviewed by a literacy specialist. All content was assessed by the National Adult Literacy Agency to ensure maximum accessibility. Information was also accompanied by diagrams and recorded as audio files for patients with limited literacy. Simple definitions of essential medical terminology were provided, along with tools to help modify personal risk e.g. BMI tracker.

Results and Conclusions:

This free app (FYI: Breast Cancer) has been downloaded in over 30 countries worldwide with an average user rating of 4.5/5. Given its success it is intended to expand this approach to include other cancers and chronic conditions.

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