Health Related Web Site Usage by Persons with Serious Mental Illness: Design and Use of a Health Literacy Survey Tool

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Health-Related Website Usage by Persons with Serious Mental Illness: Design and Use of a Health Literacy Survey Tool

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GOAL OF THE PROJECT
• Create health literacy survey website specifically for persons with serious mental illness (SMI) to empower them to better use online health resources about both their mental and physical health.

POPULATION AND RATIONALE
• SMI is a secure term for many disorder diagnoses, and the most widely used among persons with severe mental illness (SMI).
• Research indicates that SMI users recommended in existing research.
• Persons with SMI are often not able to make a “mental map” of a webpage and may not comprehend that additional material is available simply by scrolling or revising the page (Biel, 10).
• Specific web design accommodations for persons with SMI have not been generally applied to health information websites (Rotondi 13).
• Within the general US population, the health literacy rate is only 12% (US Department of Health & Human Services). Figures for persons with SMI are thought to be lower.

PROVIDING RESOURCES TO THIS POPULATION
• Persons with SMI are often not able to make a “mental map” of a webpage and may not comprehend that additional material is available simply by scrolling or revising the page (Biel, 10).
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1. THE SURVEY
• A literature review identified scholarly research on website design as well as validated health literacy evaluation tools for persons with SMI that formed the basis of the survey.
• A survey tool of 64 questions was developed using pre-existing, validated health literacy instruments, e.g., DISCERN (Rose, 02).
• Questions sought feedback on format, navigation, usability and credibility as well as content of each site.
• 20 health-related websites on topics of physical health issues experienced by persons with SMI (cardiovascular disease, obesity, diabetes and smoking) were chosen using simple searches through the Google search engine.
• Project team associates (n=5) tested the survey → questions were edited and refined → survey was loaded and reviewed by 120 SMI users.
• Data was downloaded and analyzed using Microsoft Excel and R, an open source statistical computing environment.

2. THE RESULTS
• Highest consistency obtained by Smokefree.gov followed by Wikipedia pages and government websites (i.e., Medline Plus).
• Few overall weighted scores of each site for all questions including content.

1. CONSISTENCY
• Consistency primarily measured formatting of each website (e.g., Does navigation remain clear whether viewed on a large or small screen?)
• Consistency of overall response including content questions tools for persons with SMI that formed the basis of the survey.

1. WEIGHTED SCORES
• Weighted scores measured overall response including content questions tools for persons with SMI that formed the basis of the survey.

DISCUSSION
• Survey was successful in identifying websites that we can use as a template for completion of the project goal.
• The websites that obtained highest consistency scores were government websites and Wikipedia, in which less bias may be present.
• Lowest consistency scores were found in some medical society sites as well as sites such as WebMD. We hypothesize that advertisements or the specific mission/voice of the society may be more biased.
• These results correlate well with patient, librarian and mental health professional views obtained through focus groups also conducted as a part of this project.

This survey demonstrated:
• The successful creation and use of a survey instrument designed to evaluate websites with the framework of best practice usage for persons with SMI.
• Reviewers consistency scoring matched formatting guidelines for SMI users recommended in existing research.
• Provided clear guidance as to initial design methodology for the next phase of this project – creation of a health literacy training website designed for persons with serious mental illness.

Read the poster abstract here
View the full poster here
Read more about the project here

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