

Introducing National Library of Medicine E-Health Tools to Communities

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Low literacy including health literacy and computer technology skills is among the reasons that minority communities may not be accessing health information online. Additionally, the amount of information available online can seem overwhelming and intimidating, which creates an even greater reluctance to utilize information electronically available through the National Library of Medicine (NLM) databases. Differences in literacy levels and socio-economic status also help perpetuate a "knowledge gap" and contribute to health disparities within minority communities.

The thesis behind the E-Health research project at North Carolina Central University (NCCU) was that with introductory training workers in schools, libraries and community health centers can lead information seekers to the more reliable, authoritative resources provided online by the NLM. Furthermore, these users can be the technology first-adopters who spread the practice and skills to the economically disadvantaged areas where many health disparities exist. Ultimately the team hopes to improve health in such areas in NC with a proven methodology for training and introducing the technology of digital libraries.

The study had 3 parts:

1. Develop and deliver training (e-Health project)
2. Collect data on intervention effectiveness (pre- and post-test; proficiency test)
3. Analyze and report results (outcomes-based research).

SAMPLE QUESTIONS: *e-Health Literacy (A)* In the last month, how often have you used the Internet to get health information for yourself or a loved one? *Dissemination (B)* How likely is it that you will recommend [NLM or MedlinePlus] to friends to search for health information online?

The research team is committed to continuing to provide and improve our NLM educational materials beyond the one-year study. Faculty in the School of Library and Information Sciences (SLIS) and the Public Health Education Department at NCCU plan to build on this research to face the challenges of improving healthcare in underserved areas of NC and to sustain dissemination of knowledge available through the NLM with additional grants and research. Through this poster presentation, the team also hopes to share a methodology and lessons learned on how to spread technology into a community of users. By disseminating information on and beyond campus, community organizations may continue to improve e-health literacy levels and ease-of-use with online technologies.

Intervention: Quantitative and Qualitative Data Analysis

Workshop pre-tests were collected from 102 participants. From the e-Health project, online post-tests and proficiency tests were collected from 20%. Increased use of NLM website and databases was substantiated in the data. Results of proficiency tests after one-to-three months indicated sustained knowledge (minimal proficiency average 66% on 4 different NLM databases).

About 650 undergraduate students were also introduced to NLM and workshop materials by health education course instructors --supporting technology diffusion. Results supported emphasized use of MedlinePlus. Five follow-up interviews with the instructors/disseminators provided qualitative data for informatics and educational design analysis.

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