

The Effects of Media-based Education in Primary Care Clinics on Health Literacy among Inner City Populations

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Hypothesis

Media-based health education in primary care clinic waiting rooms improves health literacy among patients.

Background

There is a paucity of high-quality studies looking at the effectiveness of health education and promotion through the use of media in outpatient clinics. Patients often have several periods of down-time during visits to their clinic such as during check-in, waiting to be roomed, waiting for their provider, waiting to be checked out, waiting for medications at the pharmacy. Each of these periods of down-time could be utilized for health education through the use of videos, slide shows, commercials on hand-held video screens or installed TVs on walls in waiting areas. It is unclear if media-based health education is effective for our HH Whittier Clinic patients or how much health outcomes can be improved through these forms. This analysis looks at the ability of our underserved, diverse patient population to learn health information from a media-based source.

Application to Family Medicine

- Many diseases are preventable
- Health illiteracy affects health outcomes
- Family physicians provide preventive and primary care and can make a huge impact on health by changing patient behaviors.
- There is often not enough time during clinic visits for primary care providers to provide in-depth health education

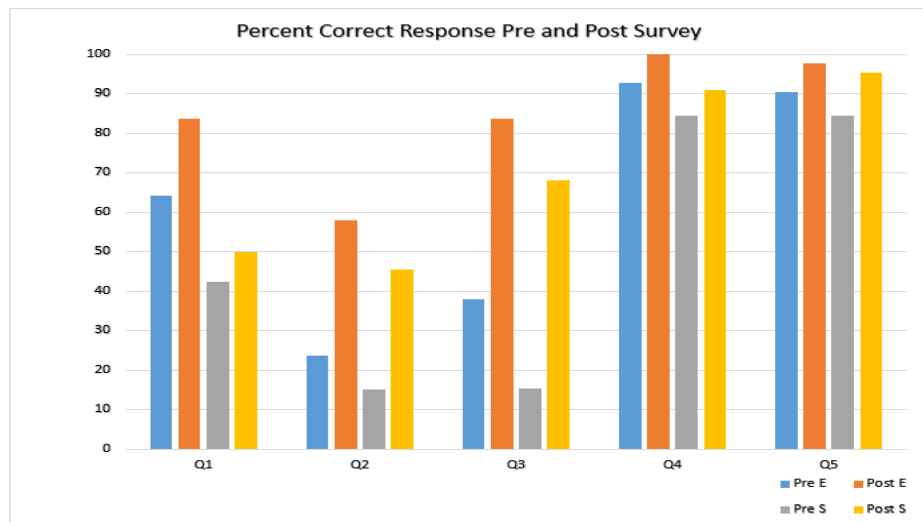
Materials

- 2 questionnaires/surveys (English-version and Spanish-version)
- 2 American Cancer Society health education videos (English and Spanish versions)
- iPad
- HH Whittier Clinic patients

Methods

Four Hennepin Healthcare Whittier clinic resident providers found an American Cancer Society health education video in both English and Spanish versions. They then developed two surveys with 6 and 7 questions, respectively, to be administered to HH Whittier clinic patients during their continuity clinics over 2 months. The 2 surveys assessed the patient's pre- and post-level of knowledge about decreasing their cancer risk through health behaviors after watching the American Cancer Society video. The four providers then worked with their medical assistants to administer "Survey #1" and then have the patient immediately take "Survey #2" after "Survey #1". Patients took both surveys either in English or Spanish depending on their patient's preferred language. "Survey #1" assessed baseline knowledge regarding the providers' chosen topic of cancer prevention and also asked for the patient's opinion on the importance of health. "Survey #2" started with a 4-minute video, asked the patient if they watched the entire video, continued with repeating questions to assess increase of health knowledge after watching the video, with the final question asking the participant if "watching a video [impacted] the way [they] feel about making healthy eating and exercise a part of [their] lifestyle".

Results



Discussion:

There was an overall improvement in number of correct questions from Survey #1 to Survey #2 in both English and Spanish-speaking populations, which suggests that patient health literacy improves, in the short-term, from media-based education in our primary care clinic waiting room. Noticeably, there was an average score increase of 22% and 20% in English and Spanish, respectively. Interestingly, pre-survey responses revealed 20-30% of our sample population believes there is no association between an unhealthy lifestyle and cancer risk as well as large majority not knowing what amount of daily exercise in children is appropriate. Furthermore, there was a prominent cultural factor demonstrating that 76.9% of the Spanish-speaking population at our clinic initially believed no amount of alcohol is safe, with a reduction to 18.2% on the post-survey.

Recommendations:

- Findings will inspire further research with our patient population (and other underserved, diverse patient populations)
- Expand media-based learning through the installation of media aids
- Continue to further evaluate the most appropriate and effective media aids at improving health outcomes
- Assess the need for an active participatory component by patients to make significant health impacts.
- Further research could look at its impact on D5 (diabetes) scores, alcohol and drug cessation, STIs, teen pregnancy, etc.

References

<https://www.ncbi.nlm.nih.gov/pubmed/27439519>;
[\[12703393\]](#); [\[8924304\]](#); [\[10268817\]](#); [\[27117952\]](#); [\[22988947\]](#);
[\[20628922\]](#); [\[18544663\]](#); [\[7843520\]](#)

American Cancer Society Health Education Videos:
<https://www.youtube.com/watch?v=xVVlyCNvldM> (Spanish)
<https://www.youtube.com/watch?v=R7-FqapmbFg> (English)