

## **Application of the Health Belief Model to Hearing Healthcare. PI: Gabrielle Saunders**

**Objectives:** It is well documented that the hearing aid penetration rate has remained around 25% since 1984 (Kochkin, 2009) despite vast technological advances in the intervening 25 years. Hearing aid research has attempted to understand this but with little success. The Health Belief Model (HBM) offers a possible explanation. The HBM (Rosenstock, 1966) was developed in order to understand individual differences in decisions to practice a health behavior. Studies have shown that, to varying degrees, the HBM predicts health-related behaviors, such as prenatal care visits (Zweig, LeFevre and Kruse, 1988), breast cancer self-examination (Champion, 1987), continued enrollment in diabetes-related pharmaceutical services (Pinto et al., 2006) and Hepatitis B vaccination (Lin and Ball, 1997). The HBM consists of five constructs each of which are interrelated and influence patient-decision making regarding uptake of health behaviors. These constructs include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and perceived efficacy. Finally, an individual must encounter a 'Cue to action' which is a cue that prompts an individual to take action. This could be internal, such as symptoms of a health problem, or external, such as media communications, interpersonal communications or information from healthcare providers.

To our knowledge the HBM has not been used to explain hearing aid uptake, nor is there a questionnaire that examines these constructs with regard to uptake of hearing healthcare. In this study we propose to develop the content of a questionnaire that will assess the five HBM constructs.

**Plan:** During the initial phase of this research plan, questionnaire items will be developed by experts (the research team). This initial questionnaire version will then be given to audiologists and laypersons that will provide feedback regarding these items. Those items considered to be ambiguous, complex to interpret or repetitive will be eliminated. The remainder will comprise the Health Belief Model – Hearing Aid (HBM-HA) questionnaire which will then be completed by study participants.

**Methods:** 150 participants will complete the questionnaire. Factor analysis and reliability analysis will then be used to extract subscales and to determine the internal reliability of the questionnaire.

**Findings to Date:** None, data collection is in process.

**Relevance to the VA's Mission:** Hearing impairment is a common condition afflicting Veterans due to causes including exposure to loud sounds and the aging process. However, many people who would potentially benefit from amplification or other types of hearing rehabilitation choose not to utilize these options. An improved understanding of the factors that influence a person's decision to utilize such services would allow healthcare professionals to better address and overcome the concerns of hearing-impaired individuals and their families. This would potentially lead to an improved penetration rate for hearing rehabilitation services, and thus improve the communication abilities and quality of life of our many hearing-impaired Veterans.