evidence-based parenting program into existing home-visiting services as they related to the psychological safety of mothers with SUDs. The process resulted in direct changes to procedures for the anticipated program integration and study.

4276

Validation of Ototoxicity Prediction Model for Patients with Head and Neck Cancer

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OBJECTIVES/GOALS: To validate the previously developed ototoxicity prediction model for objective (i.e., audiometric-defined) hearing loss from cisplatin-based and radiation treatments in a new cohort of head and neck cancer patients treated from 2018 to 2019. METHODS/STUDY POPULATION: This study will use a cohort of 106 patients undergoing treatment for head and neck cancers at a single institution to temporally validate a model for post-treatment ototoxicity. We are interested in understanding if this model will be able to predict ototoxic risk (calibration) and if this model can differentiate high- and low-risk patients (discrimination). Observed and predicted values for audiometric hearing loss will be calculated and then compared using a calibration curve available in SAS v9.4, while the c-index (area under the receiver-operator curve) will be used to assess discrimination. The implementation of this model will be assessed in a clinical setting. RESULTS/ANTICIPATED RESULTS: The validation cohort is generally similar in age (61 years) and sex-mix (23% female) to the original cohort. However, there seems to be a different case-mix the types of treatments with more patients receiving cisplatin overall (59% vs. 43%), but fewer getting induction and high-dose cisplatin (1% vs. 13%). The original model showed good calibration and fair discrimination in the validation cohort with and area under the curve of 0.700. This concordance statistic suggests possibly-useful discrimination and the calibration curve suggests the model is well-calibrated. DISCUSSION/SIGNIFICANCE OF IMPACT: This project can improve clinical treatment paradigms, enhance patient education, and reduce healthcare costs. Our model allows oncologists to weigh the risks of hearing loss with the benefits of treatment on an individualized level *before* treatment, facilitating informed treatment decision-making.

4397

Virtual Reality Meditation for Acute Post-Operative Pain of Inpatient Adults: Preliminary Results

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OBJECTIVES/GOALS: This study's goal is to examine the feasibility and acceptability of using VRM to impact the APP of adults in the inpatient setting. Aims include examining the: 1) feasibility of VRM for APP management; 2) acceptability of using VRM for APP management; and 3) experience of VRM for APP management. METHODS/STUDY POPULATION: To comprehensively examine participants' experience of using VRM for APP, this study will employ a convergent mixed-methods design in which living kidney donors (N = 45) will be recruited to serially use VRM during their hospital stay. Feasibility and acceptability will be evaluated using descriptive and inferential statistics evaluating patient-reported outcome (PRO) measures taken pre-, post- and 1-hour post-VRM, PRO measures extracted from the participant's electronic health record and data on VRM use. Semi-structured interviews will allow formulation of inferences based on participants' experience of VRM for APP management and their insights on content, deployment, and clinical use of VRM. RESULTS/ANTICIPATED RESULTS: This in-process study expects: 1) an adequate sample of participants undergoing living kidney donor surgery who agree to enroll with retention of >90% of participants (Aim 1); 2) participants to report VRM as an acceptable and suitable treatment, feel "present" and interested in the VR environment, and feel comfortable using VRM in the hospital (Aim 2); and 3) to provide insight into participants' experience of VRM for APP, understanding of extended VRM use for APP analgesia, examination of key variables affecting participants' experience of VRM for APP and feedback about VRM procedures and protocol to inform future VRM use for APP management (Aim 3). DISCUSSION/SIGNIFICANCE OF IMPACT: Results of the proposed study will inform future clinical testing and deployment of VRM, guide future use of VRM as an adjunct for inpatient APP management, and provide insight into inpatients' experience of VRM for APP analgesia.

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