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Project: *Co-designing a soundscape intervention for improving well-being in Intensive Care Unit (ICU) survivors*



Background.

Hospitalization in the Intensive Care Unit (ICU) can have a long-term physiological and psychological impact, affecting functional recovery and quality of life after ICU discharge. No established approaches exist for the alleviation of post-ICU sequelae. We aim to improve post-ICU patients' wellbeing and outcomes by informing practices and policies that address patient psychological, physical, and cognitive outcomes post-ICU.

We will partner with former ICU patients, clinicians, and music therapists to: (a) generate in-depth data on which well-being outcomes patients consider most significant post-ICU; (b) what are the patient-preferred elements and features of a soundscape intervention to improve well-being after ICU; c) use these data to co-design and evaluate a soundscape intervention for post-ICU.

We will follow a Participatory Action Research approach to collaborate with patients in planning, research, interpretation, and dissemination, in combination with controlled trial methodology. At phase 1, we will identify past ICU patients considering equity, diversity, and inclusion issues. Through focus group discussions, participants will identify a) priority wellbeing outcomes for post-ICU, b) preferred elements of soundscapes, c) recommendations for the intervention. At phase 2 we will conduct a preliminary evaluation of the co-designed intervention to explore acceptability and feasibility. At phase 3, we will test the effect of the co-designed intervention through a

single-blinded crossover RCT, with a stratified (gender/age/ethnicity) random sample of 60 post-ICU patients. Participants will be randomly allocated to either an intervention or a control group and then crossed over to the other group.

We anticipate producing novel data by clarifying patient perspectives on soundscape interventions and developing a patient co-designed innovative sound intervention for well-being after ICU. We will clarify the components, delivery approach and effect of this intervention and to draw conclusions for a larger RCT. We will employ integrated Knowledge Translation to maximize uptake and dissemination.