

## Introduction

- Nurses are well-positioned to deliver complex interventions (CI) to manage anxiety related to cardiac catheterization (ARCC).
- Education and Music as components of a CI might decrease anxiety levels, BP, HR, and chest pain. However, such CI is yet to be developed.

## Aim

- To develop a CI to reduce anxiety in patients undergoing unscheduled cardiac catheterization (CC).

## Methodology

- Sidani & Braden's (2011) methodological framework was used
- A concept analysis (Walker&Avant, 2019) of ARCC was conducted to understand the problem and determine therapeutic targets of the CI.
- Target: lack of knowledge. The educational component elements were retrieved from a previously validated educational guide (Maciel et al., 2016).
- Target: manifestations of apprehension/tension. The musical component elements were mapped in a scoping review (Batista et al., 2022).

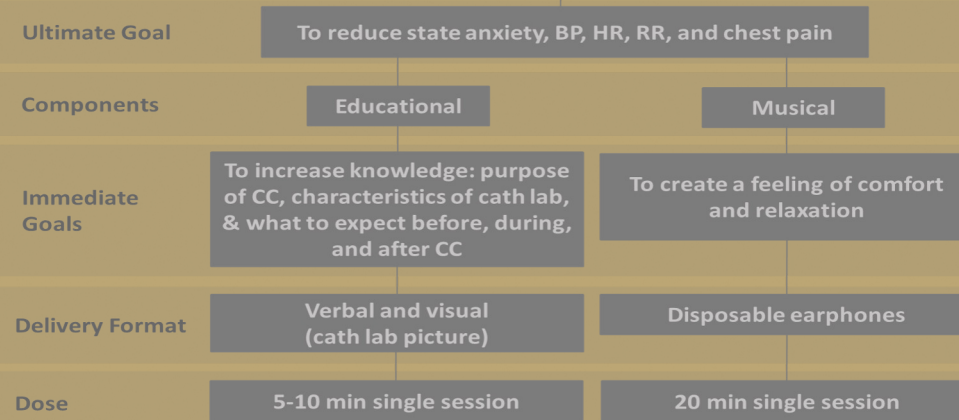
# Development of a Complex Intervention to Reduce Anxiety in Individuals Undergoing Unscheduled Cardiac Catheterization

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Figure 1: The Education and Music Intervention to Reduce Anxiety (EMIRA)



BP: Blood pressure; CC: cardiac catheterization; HR: Heart rate; RR: Respiratory rate

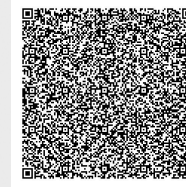
## Results

- Educational component: four active ingredients, consistent with the NIC intervention Teaching: Procedure/Treatment (5618). It is delivered verbally and visually in a single 5-minute session.
- Music component: consists of a genreless music piece. Activities are consistent with the NIC intervention Music Therapy (4400) and delivered through earphones in a 20-minute session.

## Conclusion and Implication

- EMIRA is a unique CI developed to reduce ARCC.
- Future studies should evaluate the acceptability, feasibility, efficacy /effectiveness of this CI.

## References



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