

Effectiveness of music listening to reduce incidence and severity of delirium in adults in critical care: A narrative review of literature

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INTRODUCTION

- Delirium is a neurocognitive disorder common in critical care settings, with a **prevalence of 33%**¹.
- Delirium in critically ill patients is associated with **increased mortality, longer hospital stays², cognitive impairment, and post-traumatic stress disorder³**.
- Delirium is **multifactorial⁴**, with several risk factors that can be targeted by **nurse-led interventions** (Figure 1). As effective pharmacological treatments are lacking⁵, **non-pharmacological interventions like music listening require investigation**.

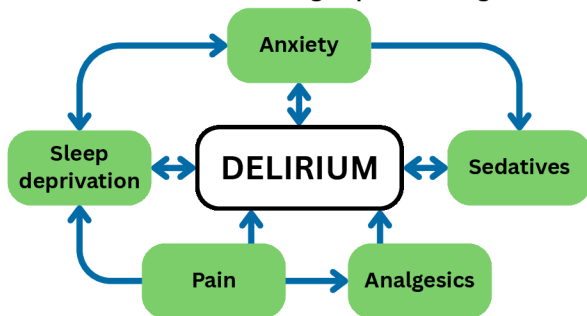


Figure 1: Concept diagram of delirium development

- Aim: To investigate the effectiveness of music listening as an intervention to reduce incidence and severity of delirium in adults in critical care.**

METHODS

- Four databases** were searched in November 2023 and searches were updated in February 2025.
- Searches were guided by the **PICO framework** (Figure 2).
- CASP RCT checklist** was used for quality appraisal⁶.

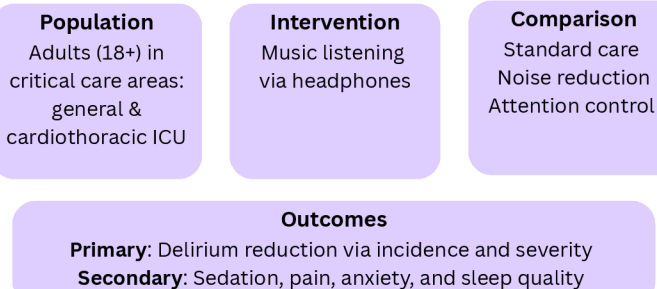


Figure 2: PICO framework

RESULTS

- Five RCTs of low to moderate quality** met the inclusion criteria (Figure 3).
- The effect of music listening on delirium remains unclear** due to methodological limitations, such as low study quality and small sample sizes.
- Table 1 details key **study characteristics** to guide **future trials and practice implementation**.

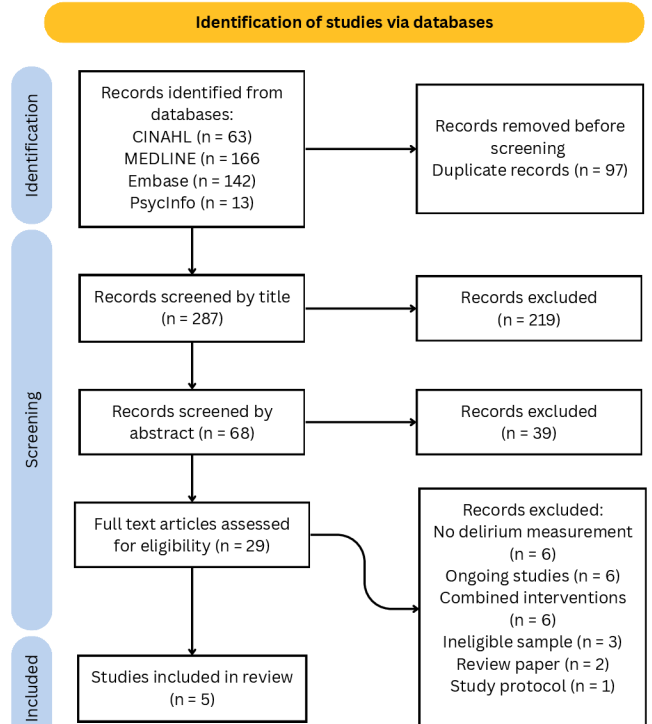


Figure 3: PRISMA flow diagram

Table 1: Study characteristics

Measurement tools	Music intervention	Music delivery
- Delirium incidence - CAM-ICU⁷, ICDSC⁸ - Delirium severity - CAM-ICU-7⁹	- Relaxing classical music (n = 4) - Personalised music playlist (n = 1) - Tempo regulated (60-80bpm) (n = 2)	30-60 minutes twice a day (n = 4) 30 minutes at night only (n = 1)

DISCUSSION

- Lower-quality studies linked music listening to reduced delirium severity and incidence ($p < 0.05$)^{10,11}**. However, the **effect size is unclear** and it is not possible to determine if this is a clinically relevant finding.
- Higher-quality studies found no statistically significant effect of music on delirium ($p > 0.05$)^{12,13}**. However, this may be due to insufficient statistical power and does not rule out a clinically meaningful effect.
- This pattern continues within secondary outcomes (e.g., pain and anxiety), where **positive effects were limited to lower-quality studies¹³**.
- Limitations of this narrative review:** Potential selection bias (single reviewer), constrained scope (undergraduate dissertation), and exclusion of grey literature.

CONCLUSIONS & IMPLICATIONS FOR PRACTICE

Music listening shows **potential to reduce delirium**, with **no adverse effects found** and it was found to be **generally acceptable** to critically ill patients.

Larger, methodologically robust trials are required to determine **clinical effectiveness** before widespread implementation.

Nurses should consider integrating music into **delirium care bundles** as a **person-centred** approach to potentially **improve patient outcomes**.