

ASSOCIATION BETWEEN EHR COMPATIBILITY AND NURSES' EMOTIONAL EXHAUSTION



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To reduce emotional exhaustion, better alignment between EHRs, nurses' preferred work style, improved fit between clinical practice and EHR design is recommended.



Introduction

- Clinician burnout is a growing concern internationally [1], and the prevalence is high among nurses [2].
- Electronic health records (EHR) are implemented to improve care efficiency, yet, unintended consequences can affect clinical practice [3].
- EHRs implemented on the basis of functionality without regard to usability [4] can lead to: 1) excessive workload, 2) administrative burden and 3) clinician burnout [1].
- EHR compatibility was the most important explanatory factor of nurses' satisfaction for EHR adoption and use in a study examining the 4 first adoption stages [5,6].

Aim of the study

- To examine the association between the compatibility of a stage 7 EHR used by nurses and nurses' emotional exhaustion.

Methods

- As part of a larger cross-sectional survey conducted in 2019, variables were selected for secondary analysis from an instrument measuring the EHR compatibility (9 items) [7], and a single-item from the Maslach Burnout Inventory measuring the emotional exhaustion dimension [8].
- EHR compatibility is a **multidimensional construct** defined as nurses' perception of the degree of congruence between the EHR and nurses' 1) **preferred work style**, 2) **existing clinical practice**, and 3) **values**.
- A linear regression model was used to explain emotional exhaustion with each of the three subdimensions of EHR compatibility (SAS software version 9.4).

Results

- After data cleaning, 62% of the questionnaires (n=191) were eligible for analysis.
- **Subdimension #1:** The higher the preferred work style compatibility score, the lower the emotional exhaustion score (-0.0704, p=0.0336).
- **Subdimension #2:** A significant positive relationship between the existing clinical practice compatibility score and the emotional exhaustion score highlight the need to better align work processes and the technology (0.2008, p=0.0026)
- **Subdimension #3:** No linear relationship was found between the compatibility of the EHR with nurses' values and emotional exhaustion (0.0154, p=0.4403). This suggests that an EHR compatible with nurses' values does not contribute to emotional exhaustion.

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