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Early Mobilization in the Intensive Care Unit (ICU): A Systematic Review

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Presented in Partial Fulfillment of the Master of Science in Occupational Therapy Degree at Thomas Jefferson University

Learning Objectives:

At the conclusion of the session, the learner will be able to:

- 1. Explain early mobilization techniques in the Intensive Care Unit (ICU)
- 2. Identify the role of occupational therapy in the ICU
- 3. Discuss the implications of early mobilization interventions for adults in the ICU

Clinical Question:

What are the effects of early mobilization on ADL performance for adults in the ICU?

Methods:

Searched CINAHL, PubMed and Scopus databases, along with the Journal of Critical Care

- Search terms:
 - o P: intensive care unit, ICU, critical care, critical* ill, medical* complex, medical* unstable, medical* fragile
 - o I: early mobili*, early ambula*, rehab*, therap*, exercis*, occupational therap*, OT, bed mobili*
 - o C: none
 - O: ADL function*, ADL prep*, ADL, activit* of daily living, ADL performance, ADL independen*, functional independen*, functional task*, functional, self-care

Critiqued using Evaluation of Quality of an Intervention Study (Law & MacDermid, 2014)

- Records identified through database search (n=550)
- Additional records identified through other sources (n=29)
- Records included in systematic review (n=14)

Results:

The following primary themes emerged after reviewing the evidence of early mobilization in ICU settings:

- Self-Care Performance (n=10)
 - 4/10 articles demonstrated statistical significance; 9/10 articles demonstrated clinical significance
 - o Moderate evidence to support the use of early mobilization to improve self-care performance
- Length of Stay (n=7)
 - o 1/7 articles demonstrated statistical significance; 4/7 articles demonstrated clinical significance
 - Limited evidence to support the use of early mobilization to decrease length of stay
- Location of Discharge (n=5)
 - o 3/5 articles demonstrated clinical significance
 - o Limited evidence to support the use of early mobilization to improve location of discharge
- Functional Mobility (n=8)
 - o 3/8 articles demonstrated statistical significance; 8/8 articles demonstrated clinical significance
 - o Moderate evidence to support the use of early mobilization to improve functional mobility

Secondary themes include:

- Implementation of a Progressive Intervention (n=5)
 - Progressive early mobilization protocol: intensity of mobilization increased as patient functioning increased
 - o Mobilization included: AROM, bed mobility, transfers, ambulation
- Safety and Feasibility (n=5)
 - o 5/5 articles demonstrated that early mobilization is both safe and feasible in the ICU

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