

Preventing Pneumonia Through Early Mobilization of Critically Ill Adults

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BACKGROUND & RATIONALE

Background: Pneumonia is the most prevalent secondary condition acquired in the hospital. There is a need to determine if early mobilization will prevent patients from developing pneumonia.

Purpose: To find relevant data to answer the PICO question and determine if the use of early mobilization can significantly reduce the likelihood of critically ill patients developing pneumonia.

PICO QUESTION

For critically ill adults, does out of bed activity reduce the likelihood of developing pneumonia?

REVIEW PROCESS



SEARCH PROCESS

Databases Searched

- PUBMED, CINAHL, Clinical Key, OVID, Cochrane Library

Search Strategy

- [("critically ill") AND ("ICU" OR "intensive care unit")] AND ("out of bed" OR mobil*) AND "pneumonia"

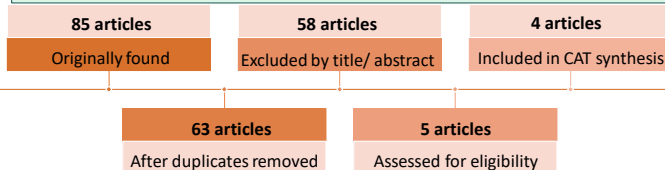
Inclusion Criteria

- Adults (18+), pneumonia, ICU

Exclusion Criteria

- Literature Reviews, 10 years or older

RESULTS

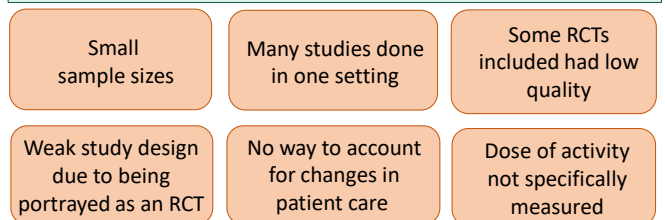


MAIN FINDINGS

Article	Outcome Measures	Results
Level 1		
Wang et al. (2020) Quality score: 85%	• Ventilator-associated pneumonia rate	++
Zang et al. (2019) Quality score: 88%	• Incidence of pneumonia	++
Level 3		
Chaiwong et al. (2019) Quality score: 78%	• Length of ICU/hospital stay of individuals with pneumonia	++
Clark et al. (2013) Quality score: 88%	• Frequency of patients acquiring pneumonia prior to and after early mobility program	++

++ = Statistically significant ? = No effect
+ = Nonsignificant positive effect - = Negative outcome

LIMITATIONS



CLINICAL BOTTOM LINES

There is strong evidence that OOB* activity decreases the risk of critically ill adults acquiring pneumonia.

There is moderate evidence that OOB activity shortens the length of ICU & hospital stays for those with pneumonia.

Evidence suggests that OOB activity is an effective intervention for preventing pneumonia.



RECOMMENDATIONS AND IMPLICATIONS

Strong evidence suggests that participation in meaningful OOB activities during occupational therapy treatment sessions can prevent pneumonia.

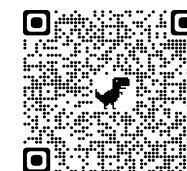
More research is needed to measure and determine the amount and type of OOB activity needed to prevent pneumonia.

*OOB = Out of bed

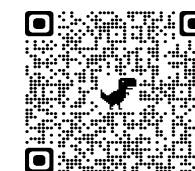
PRISMA



HANDOUT



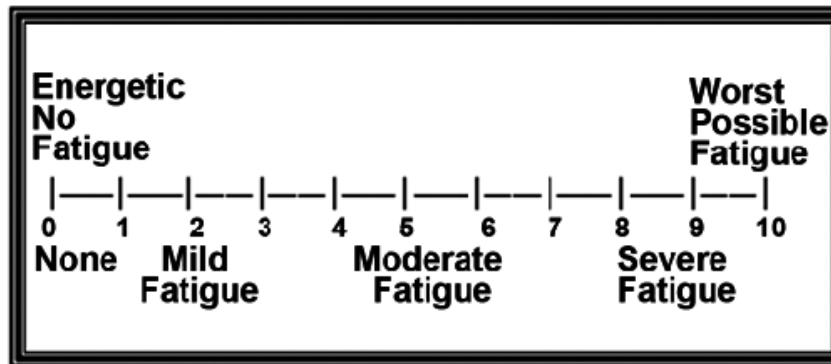
REFERENCES



Weekly OOB Activity Log

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Date							
Type of Out of Bed Activity							
Time Activity Initiated							
Time Activity Ended							
Fatigue Level (1-10)							
Additional comments							
Initials of Healthcare Professional							

*outcomes measured by client's weekly fatigue level



Retrieved from: https://www.researchgate.net/figure/Numerical-fatigue-rating-scale-provided-to-subjects-with-multiple-sclerosis-on-a-separate_fig2_46037687