TITLE: Mobilization of Adult Inpatients in Hospitals or Long-Term/Chronic Care Facilities: Benefits and Harms, Safety, and Guidelines

DATE: 25 February 2014

RESEARCH QUESTIONS

1. What are the benefits and harms associated with mobilization of adult inpatients in hospitals or long-term/chronic care facilities?

2. What are the safety issues surrounding mobilization of adult inpatients in hospitals or long-term/chronic care facilities?

3. What are the evidence-based guidelines associated with mobilization of adult inpatients in hospitals or long-term/chronic care facilities?

KEY MESSAGE

Two systematic reviews, one randomized controlled trial, and five non-randomized studies were identified regarding benefits and harms associated with mobilization of adult inpatients in hospitals or long-term/chronic care facilities.

METHODS

A focused search (with main concepts appearing in title or as a major subject heading) was conducted on key resources including MEDLINE, PubMed, The Cochrane Library (2014, Issue 2), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No methodological filters were applied to limit retrieval by publication type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2009 and February 11, 2014. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

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RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

Two systematic reviews, one randomized controlled trial, and five non-randomized studies were identified regarding benefits and harms associated with mobilization of adult inpatients in hospitals or long-term/chronic care facilities. No relevant health technology assessments or evidence-based guidelines were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

Four studies\(^1,4,6,7\) investigated mobilization strategies for elderly inpatients. One systematic review\(^1\) examined the effectiveness of early physical rehabilitation programs for geriatric patients who were hospitalized. Patients who were involved in either multidisciplinary or exercise programs were less likely to be discharged from hospital to a nursing home than were geriatric inpatients who received usual care. One non-randomized study\(^4\) evaluated the frequency and duration of mobilization of older patients in acute care by nurses. Standing and transferring were the most commonly observed mobilization events. Patients who were unable to move themselves were mobilized less frequently than patients who had mobility, and most instances were initiated by patients, not by the nursing staff. One non-randomized study\(^6\) assessed the effects of a strength training program for nursing home residents with impaired mobility. After eight weeks, mobility and muscle strength in the limbs had improved. Other quality of life measures did not change. In another study,\(^7\) lower extremity strength training was added to the mobilization protocol for elderly hospitalized adults to determine the effect on falls. One assisted fall was recorded in the intervention group.

Four studies\(^2,3,5,8\) investigated mobilization strategies for adult inpatients. One systematic review\(^2\) examined the effectiveness of early mobilization of critically ill patients in the intensive care unit (ICU). Few studies were identified for inclusion in the review; however, those that were indicated that early mobilization and physical therapy were safe and could have an impact on functional outcomes. One randomized controlled trial\(^3\) compared the effect of an early mobilization protocol with standard physical therapy on respiratory and peripheral muscles of inpatients. There were significant changes in inspiratory and peripheral muscle strength in the early mobilization group. There were no significant differences between groups in length of ICU stay or length of hospital stay. One non-randomized study\(^5\) evaluated the mobility practices of one ICU during a 24 hour period. Observed mobilization activities included in-bed exercises, sitting over the side or out of bed, standing, and walking. Few adverse events were recorded. In one non-randomized study,\(^6\) early rehabilitation (including chair sitting, tilting, and walking) was provided to patients who were in the ICU for seven or more days and were mechanically ventilated for at least two days. Chair sitting was the most frequently reported intervention and was associated with a significant decline and heart rate and respiratory rate. The authors concluded that early intervention was safe and feasible for patients in the ICU.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses


Randomized Controlled Trials


Non-Randomized Studies


Guidelines and Recommendations
No literature identified.

PREPARED BY:
Canadian Agency for Drugs and Technologies in Health
Tel: 1-866-898-8439
www.cadth.ca
APPENDIX – FURTHER INFORMATION:

Review Articles


Additional References


