

The Effect of Early Post-Operative Outpatient Physiotherapy on Outcomes Following Lower Limb Arthroplasty: A Systematic Review and Meta-Analysis

Northern Health

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INTRODUCTION

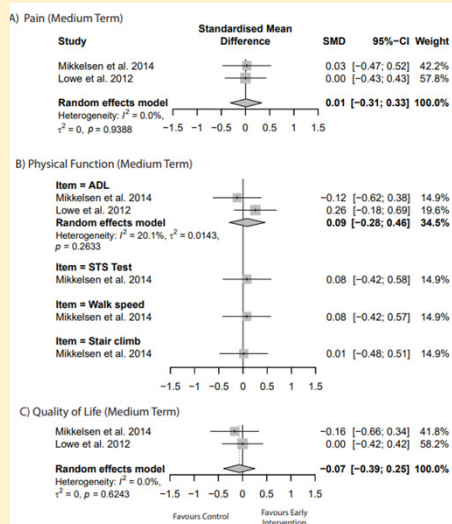
- Osteoarthritis is the leading cause of disability.¹
- Hip and knee arthroplasty has risen 198% from 1994 – 2014.²
- Joint stiffness, pain and impairments post-surgery can occur in some people.³
- The optimal timing of outpatient physiotherapy remains unclear.

OBJECTIVE

To determine if early compared to delayed outpatient physiotherapy improves pain, physical function and quality of life (QoL) after lower limb arthroplasty.

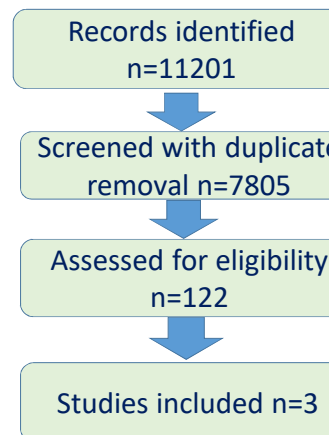
RESULTS

No significant differences between early and delayed physiotherapy in short, medium or long term.



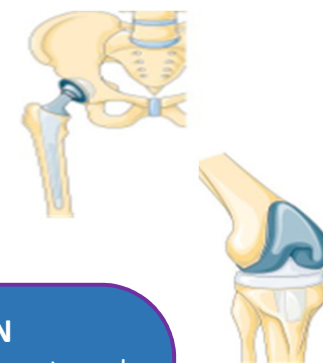
METHODS

- Systematic Review & Meta-analysis conducted under PRISMA guidelines
- Databases: MEDLINE, Embase, CINAHL, Cochrane, PsycINFO
- Data pooled using random-effects model
- Risk of bias assessment using Physiotherapy Evidence Database scale
- GRADE approach applied to evaluate certainty of evidence



Early physiotherapy commenced 1-2 weeks

Delayed physiotherapy commenced 4-6 weeks



Outcomes grouped based on follow-up time

Short Term
3 months

Medium Term
3-6 months

Long Term
>6 months

DISCUSSION

- Early outpatient physiotherapy was not superior to delayed.
- Patients in high-risk subgroups such as high body mass index, poor pre-op function, malnutrition, diabetes and smoking may benefit from early targeted intervention.⁴

CONCLUSION

Low-quality evidence suggests early outpatient physiotherapy offers no benefit over delayed. Albeit small cohort size n=3 RCTs.

Further research to assess the effect of early physiotherapy on priority populations, or those at risk of poor recovery.

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