Cost-effectiveness of treatments for non-osteoarthritic knee pain conditions

A systematic review

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Cost-effectiveness of treatments for non-osteoarthritic knee pain conditions: A systematic review

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AIM

Gather and appraise the cost-effectiveness of treatment approaches for non-osteoarthritic knee pain conditions.

BACKGROUND

Knee pain is common in adolescents and adults and is associated with an increased risk of developing knee osteoarthritis. Due to an increasing number of treatment approaches available and the global economic burden of knee pain, it is important to increase the knowledge of the cost-effectiveness of the different treatment options for knee pain conditions to enable informed resource utilization.

METHODS

A systematic review was conducted according to the PRISMA guidelines and registered on PROSPERO (CRD42016050683). The literature search was done in MEDLINE via PubMed, EMBASE, The Cochrane Library, and the National Health Service Economic Evaluation Database. Study selection was carried out by two independent reviewers and data were extracted using a customized extraction form. Study quality was assessed using the Consensus on Health Economic Criteria list.

RESULTS

Knee pain conditions included:

- Anterior cruciate ligament (ACL) injuries
- Menicus injuries
- Cartilage defects
- Patellofemoral Pain Syndrome

The surgical management included:

- ACL reconstruction
- Chrondrocyte implantation
- Meniscus scaffold procedure
- Meniscal allograft transplantation
- Partial meniscectomy
- Microfracture
- Different types of autografts and allografts

The non-surgical management included:

- Physical therapy
- Rehabilitation
- Exercise
- Counselling
- Bracing
- Advice

Figure 1: PRISMA flow chart.

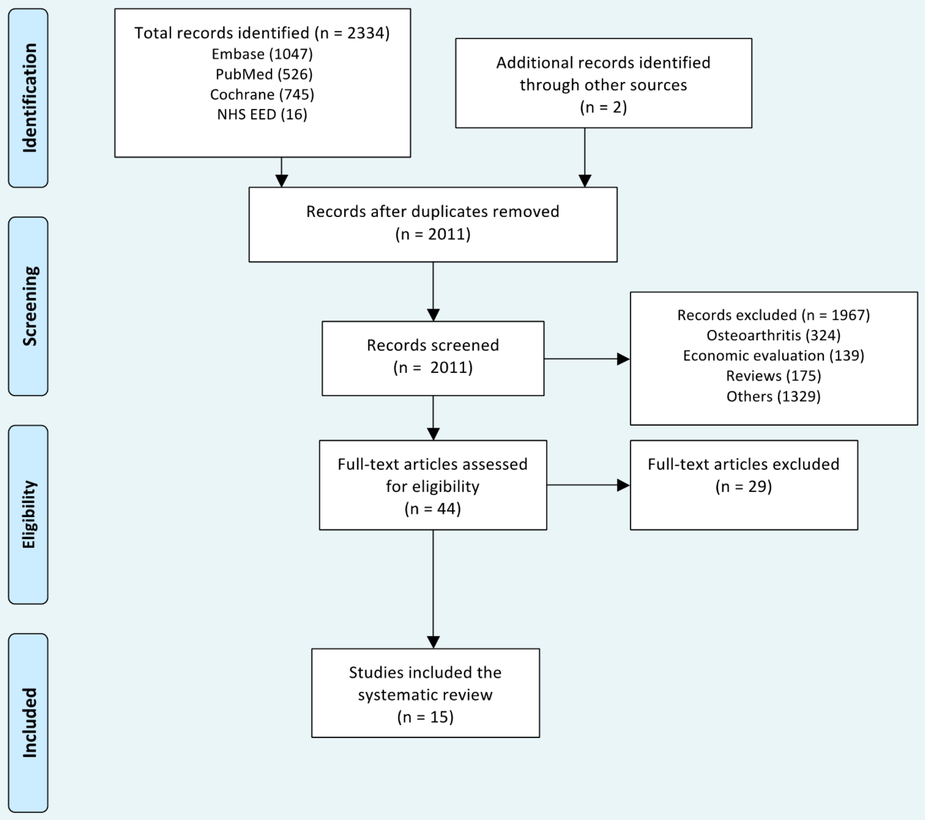
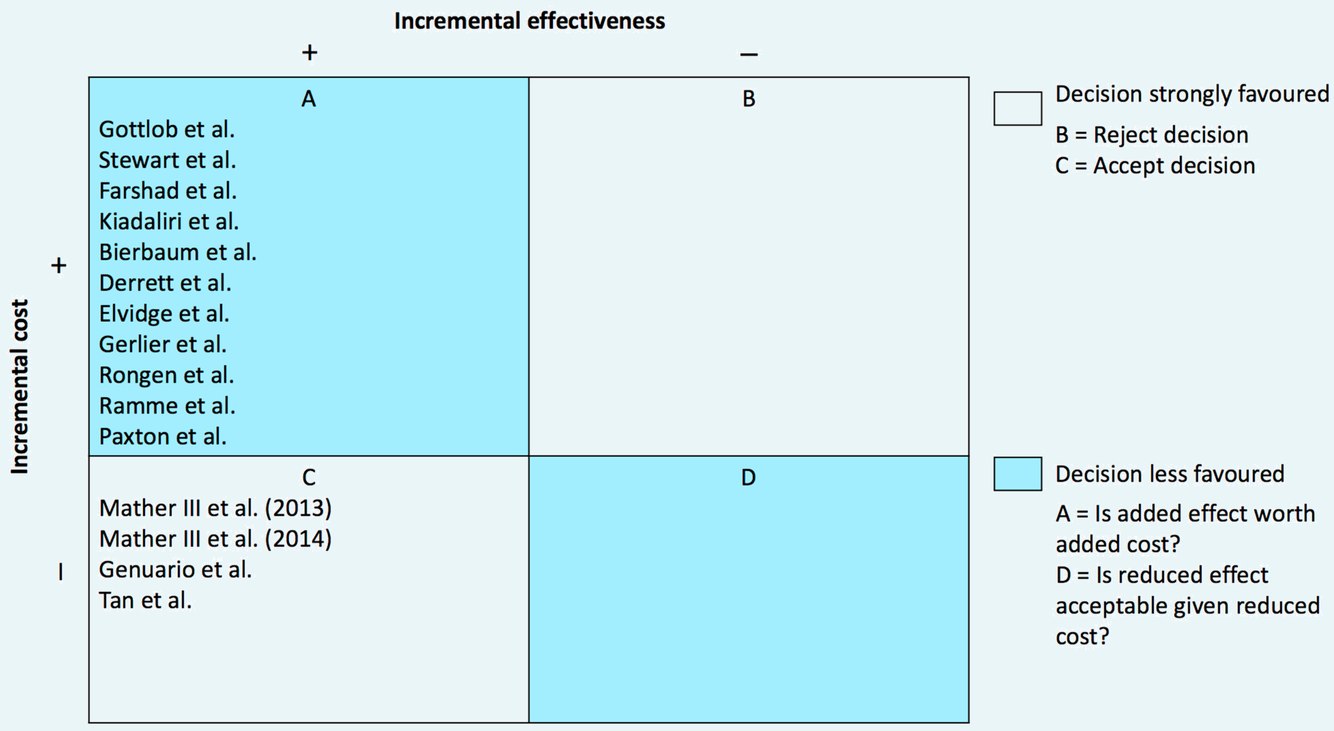


Figure 2: Permutation matrix for possible outcomes of economic evaluations for studies of interventions vs comparator.



CONCLUSIONS

There was insufficient evidence to give a firm overview of cost-effective interventions for non-osteoarthritic knee pain, but surgical treatment of acute ACL injury appeared cost-effective. There is very little data regarding the cost-effectiveness of non-surgical interventions for non-traumatic knee conditions.

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