

Psychosocial and Health Care Delivery Predictors of Costs following Total Joint Arthroplasty: A Systematic Review

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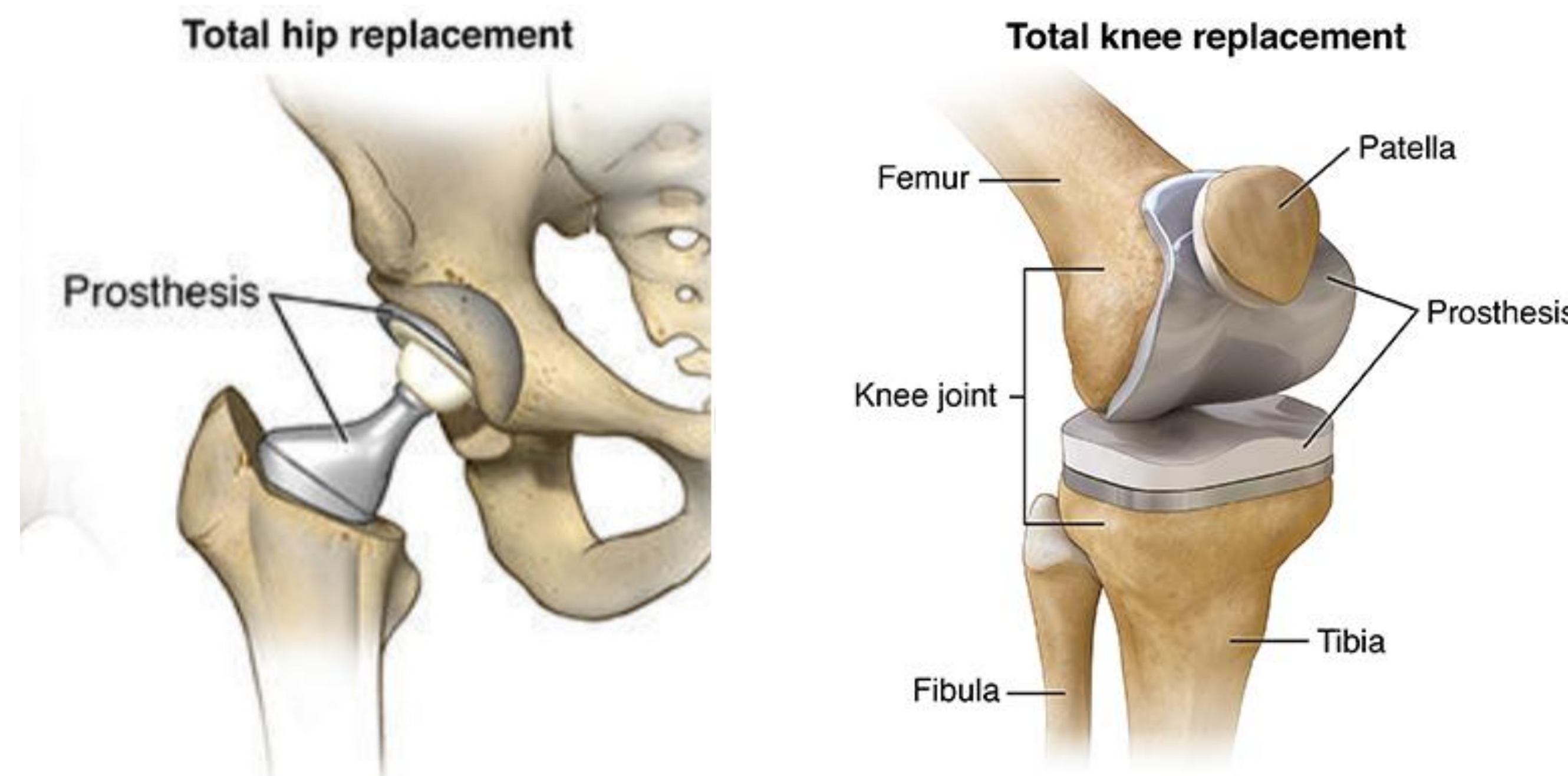
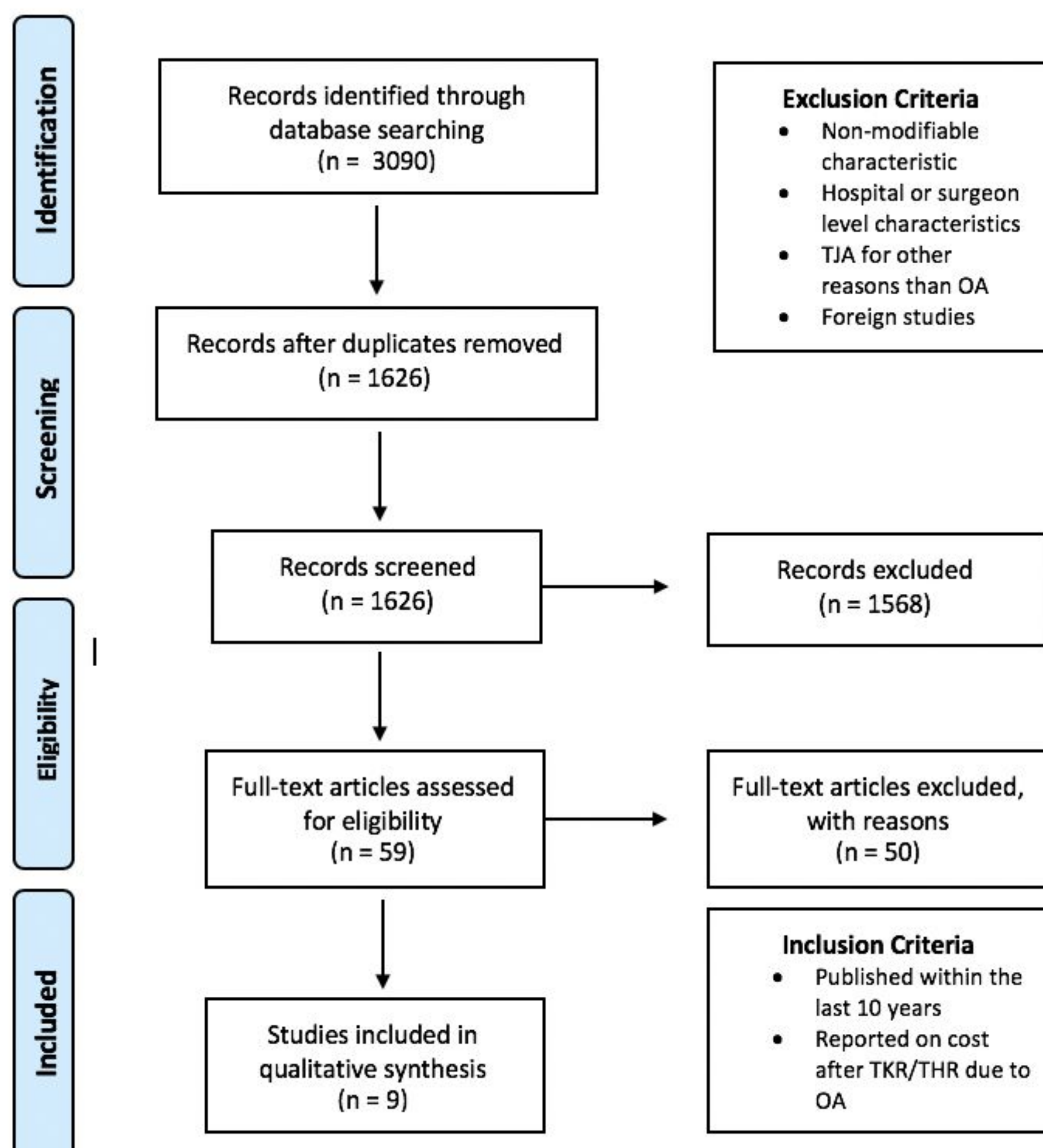
Background

- Total joint arthroplasty (TJA) is increasingly utilized in patients with end-stage osteoarthritis (OA) who do not respond to medical therapy.
- TJAs are a substantial cost to the US healthcare system and patients. Payers have begun to implement shared risk payment models for TJA, and health care systems are increasingly interested in potentially modifiable factors that influence TJA costs.
- To date, no study has synthesized the available knowledge regarding potentially modifiable psychosocial and health care delivery characteristics that predict post-surgical healthcare costs for TJA.

Purpose

To determine how potentially modifiable psychosocial factors and health care delivery characteristics predict post-surgical healthcare spending following TJA.

Methods



Conclusions

- Psychosocial factors including social support, anxiety, and depression were predictive of increased total costs after TJA.
- Health care delivery specific to rehabilitation, such as timing of ambulation, contributed to significant variability in overall costs after TJA.
- These findings may be valuable for creating evidence-based risk assessment guidelines for clinical decision-making and reforming health policy.



Results

- Higher scores on the depression and anxiety subscales DASS21 were significant predictors of TKA.
- Higher depression was associated with a longer LOS.

Psychosocial factors

Social support, anxiety, and depression were predictive of increased total costs after TJA.

Early rehabilitation

Health care delivery specific to rehabilitation contributed to significant variability in overall costs after TJA.

- Not ambulating on day of surgery correlated with a LOS \geq 2 days costing \$2900 more.
- Implementing a pathway involving early and accelerated rehabilitation resulted in a significantly shorter LOS.
- There was a significant mean difference of costs (\$956) in patients who had the TJRA pathway implemented in their second TJAs as opposed to their first.

Clinical Relevance

- Health care delivery characteristics and psychosocial factors are modifiable but often overlooked when designing post-operative treatment plans.
- Prospective identification of these factors may help reduce the risk of downstream costs and utilization in the immediate post-operative period.



Acknowledgements / References

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