

The Medical Journal of Australia • MJA

MEDIA RELEASE

KNEE REPLACEMENT: AGE LIMITS NOT RECOMMENDED

EMBARGOED UNTIL 12:01am Monday, 18 February 2019

TOTAL knee replacements are commonly performed but it has been unclear for whom surgery is most appropriate and how best to optimise a patient for surgery, according to the authors of a new narrative review of the evidence, published today in the *Medical Journal of Australia*.

Australia's rate of total knee arthroplasties (TKAs) was 242 per 100 000 population in 2016, according to the Australian Orthopaedic Association National Joint Replacement Registry, placing us above the OECD average of 126 per 100 000 population.

Led by Associate Professor Justine Naylor, Senior Principal Research Fellow at the Southwestern Sydney Local Health District, and the University of New South Wales, the narrative review authors found that evidence was limited for specific symptom thresholds, gender, and age of the "ideal" TKA patient.

"The minimum requirements for TKA are significant, prolonged symptoms with supporting clinical and radiological signs," Naylor and colleagues wrote. "Despite interest in screening tools, there is limited evidence for a specific symptom threshold that justifies surgery.

"Non-operative treatments including medications, exercise and weight loss are unlikely to reverse radiographic changes, but they may improve symptoms and delay the need for surgery.

"Although age and sex are associated with patient-reported outcomes and risk of revision, these factors cannot be used to restrict access to TKA, and age cut-offs are not recommended.

"Many patient factors such as mental health and obesity affect both the level of symptomatic improvement after surgery and risks of surgery, but none have been identified as contraindications for the procedure as significant health gains can still be achieved," they wrote.

Naylor and colleagues added that it would be reasonable practice to try to reduce obesity or improve mental health prior to surgery, however, there is, as yet, very little research available about how to manage obesity prior to TKA surgery, how to keep the weight off after the surgery, and improving mental health in readiness for surgery.

"These are questions of great significance to public health not just because of the consequences of these two conditions on outcomes, but because we are getting fatter as a nation and mental health issues are increasingly common."

Pre-operative optimisation, or "prehabilitation" of patients, "primarily focusing on exercises for the joint or limb has minimal effect on post-operative TKA outcomes", they found.

However, there was evidence that smoking cessation prior to surgery "may improve post-operative outcomes".

"If, after reasonable attempts at non-operative treatment, symptoms are sufficiently severe to justify the risks, a person is considered suitable for surgery," Naylor and colleagues concluded. "Optimisation to attenuate surgical risks should be attempted in all TKA candidates, although high level evidence is lacking for certain important factors."

Please remember to credit *The MJA*.

The *Medical Journal of Australia* is a publication of the Australian Medical Association.

The statements or opinions that are expressed in the MJA reflect the views of the authors and do not represent the official policy of the AMA or the MJA unless that is so stated.

CONTACTS: A/Prof Justine Naylor
Senior Principal Research Fellow
South Western Sydney Local Health District
Email: Justine.Naylor@health.nsw.gov.au

Dr Sam Adie
Orthopaedic surgeon

South Eastern Sydney Local Health District
Conjoint Senior Lecturer, University of NSW
Email: sam.adie@gmail.com

Isabelle Dubach
Communications
University of NSW
Email: i.dubach@unsw.edu.au