

IMPROVEMENTS IN DEPRESSION AND ANXIETY AFTER KNEE ARTHROPLASTY

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INTRODUCTION

Chronic Pain is known to be associated with depression and anxiety (DA) and is the predominant feature of advanced stage osteoarthritis of the knee.

The aim of this study was to

- assess the level of DA in a total knee arthroplasty (TKA) cohort.
- determine if DA improves after TKA.
- assess the effect of DA on TKA outcomes.



METHODS

Participants underwent primary TKA for osteoarthritis and consented to participation in a research database with baseline PROMS, including Oxford Knee Score, and EQ5D.

DA was self assessed with the EQ-5D, a self-reported, generic health measure with five severity levels scored from 1 (none) to 5 (extreme).

ANXIETY/DEPRESSION

- ☐ I am not anxious or depressed
- ☒ I am slightly anxious or depressed
- ☐ I am moderately anxious or depressed
- ☐ I am severely anxious or depressed
- ☐ I am extremely anxious or depressed

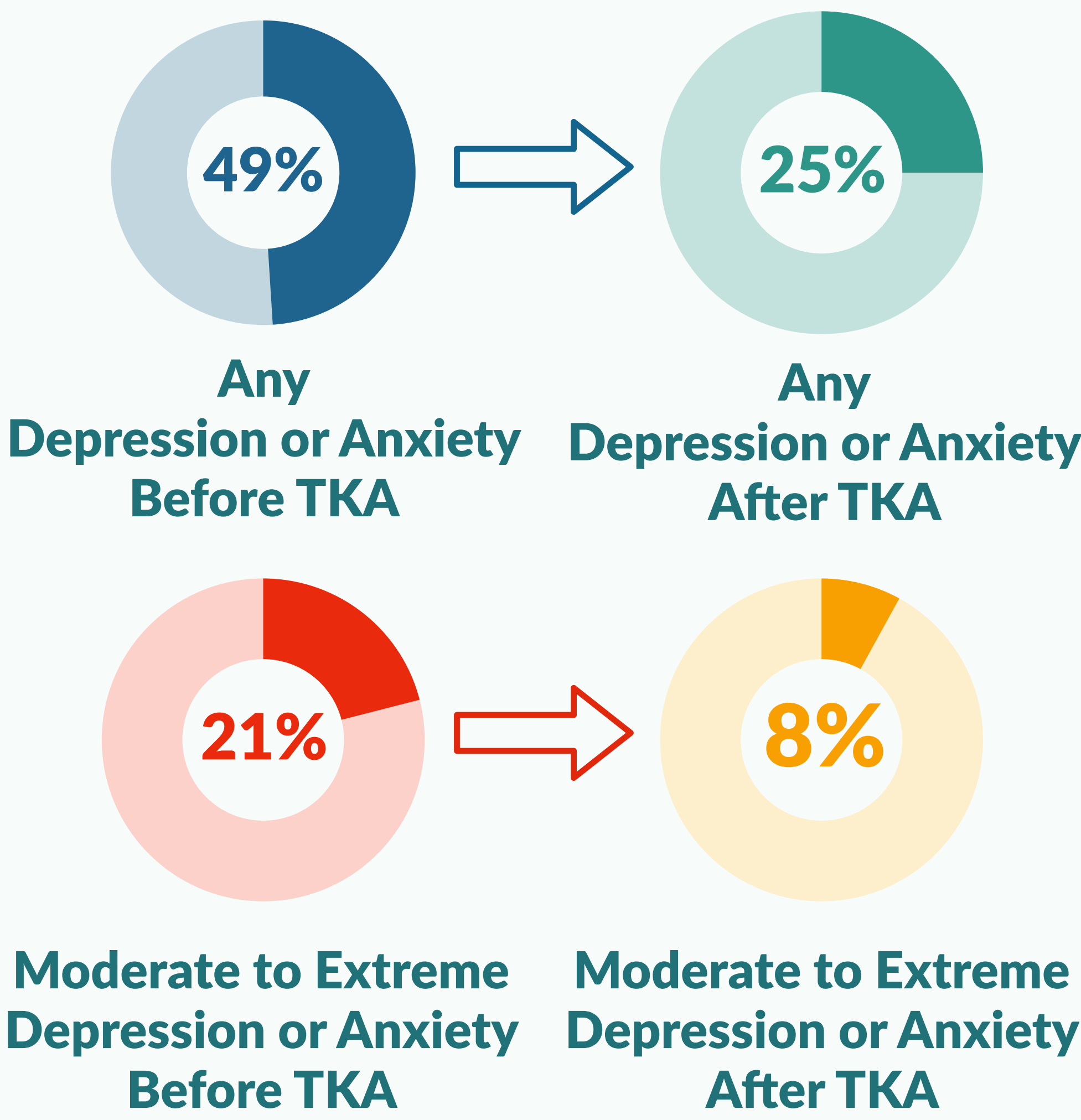
Participants repeated PROMS at 12 months after surgery with additional questions regarding satisfaction with surgery. Outcomes were compared across levels of baseline DA.

STUDY GROUP

- 2924 primary TKA participants
- Mean age 69 years
- 51% female
- 46% BMI 30 or more

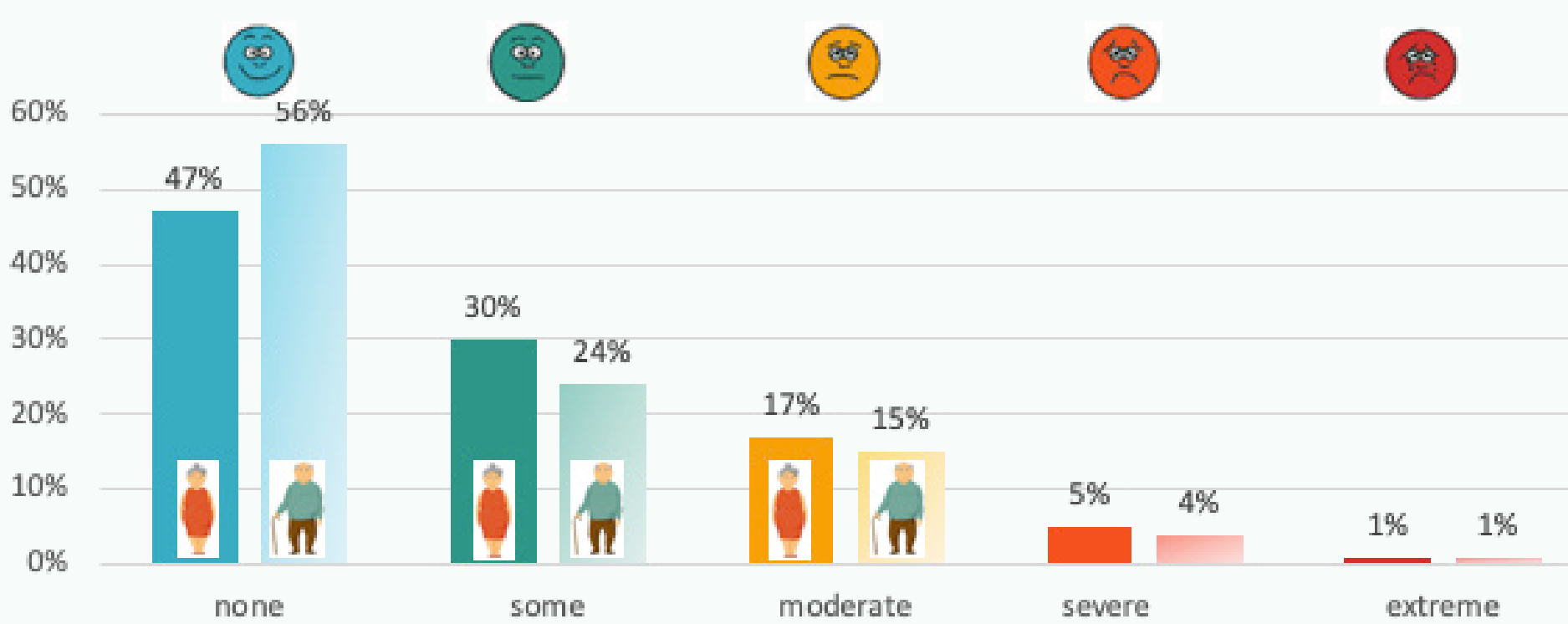


RESULTS



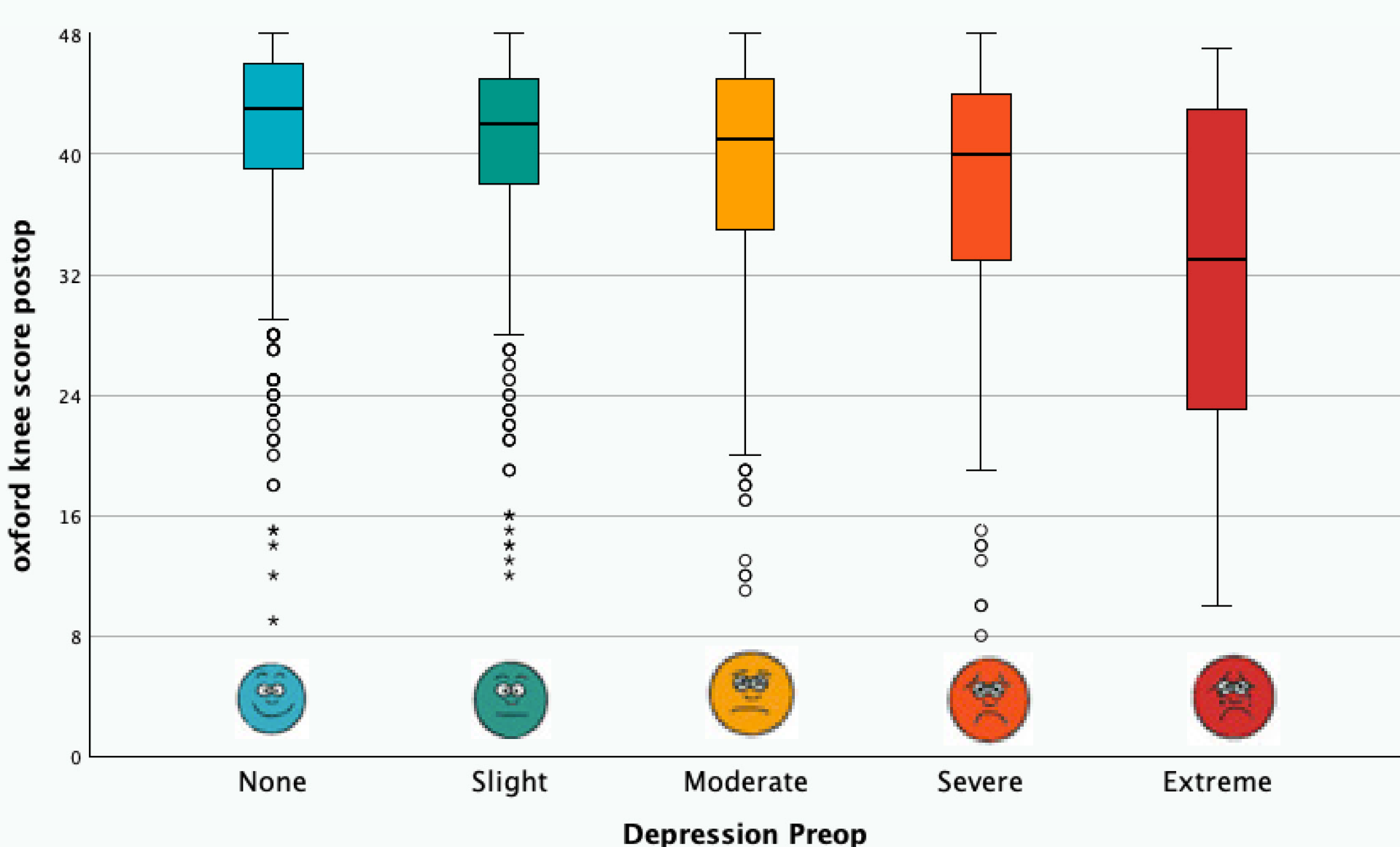
Depression and Anxiety by Gender

Females had higher rate of any DA than males (53% versus 44%, $p=0.001$), but rates of moderate to extreme DA were similar between genders (23% vs 20%, $p=0.104$).



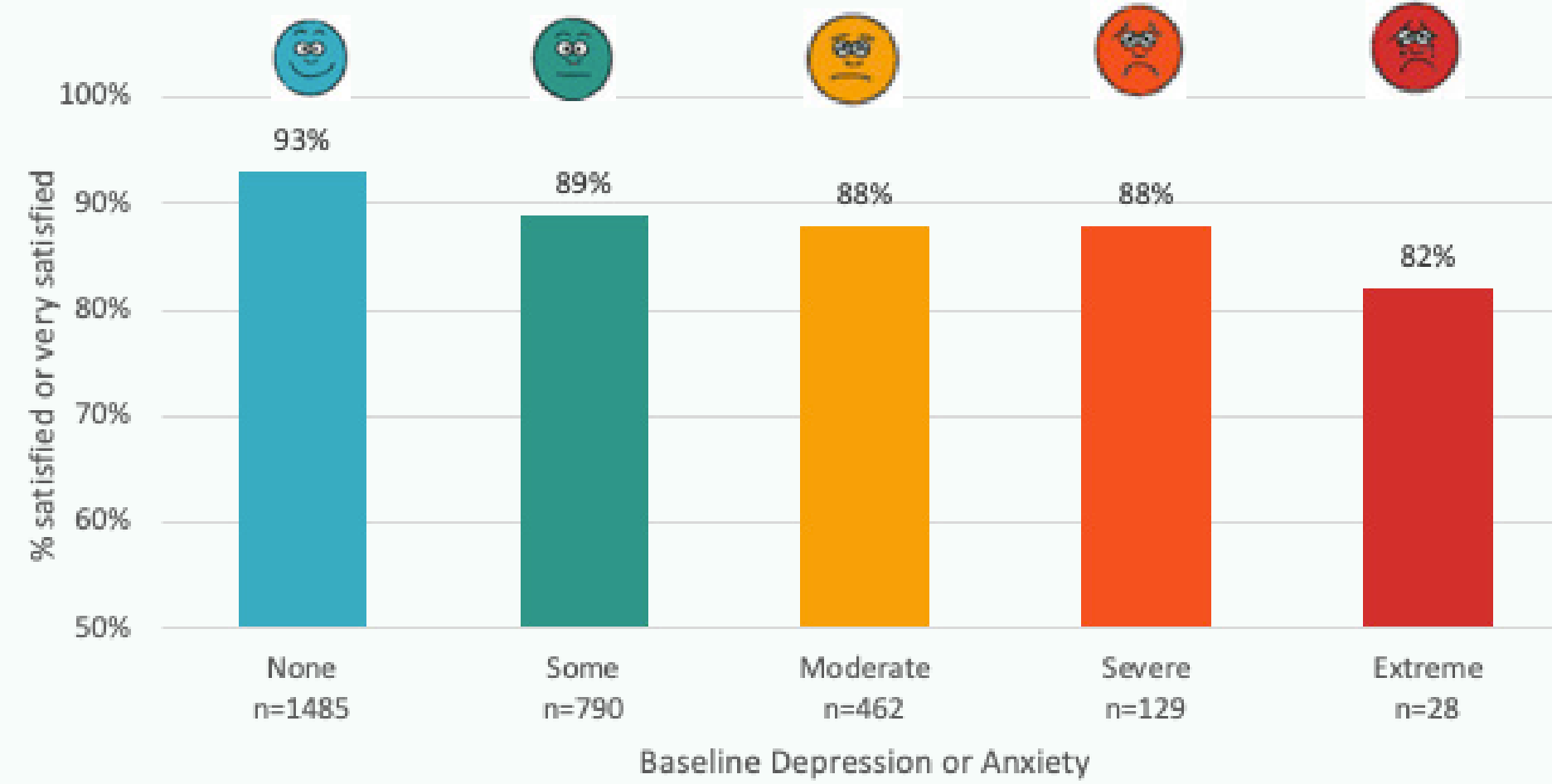
Oxford Knee Scores

- Oxford Knee Score was lower in those with worse depression at baseline ($p=0.001$) and 1 year ($p=0.001$).
- Those with worse depression had a greater change in Oxford ($p=0.001$).



Satisfaction

- The prevalence of satisfaction with surgery reduced with increasing baseline DA ($p=0.002$).

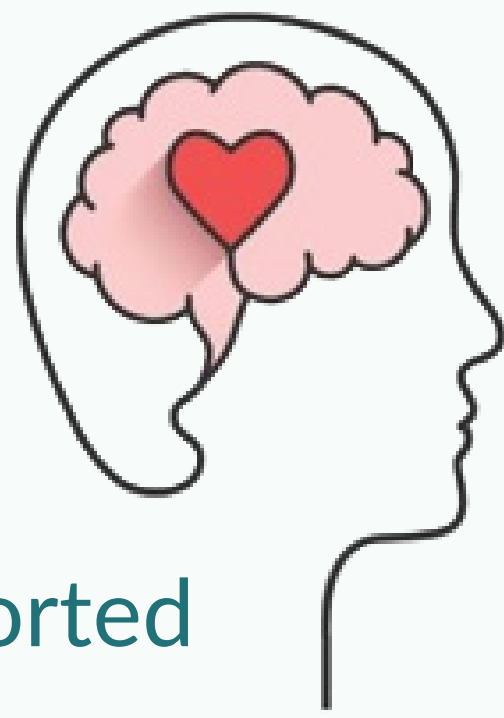


Change in Depression and Anxiety

- For those with any DA preoperatively, 60% reported none after TKA.
- Of those with moderate to severe DA before surgery, 77% reported none or slight after TKA.
- DA grade improved after TKA in 37%, was unchanged in 55% and worsened in 8%.
- For those reporting any depression, DA grade was improved after TKA in 75%, unchanged in 20% and worsened in 5%.
- For those reporting moderate or greater depression ($n=625$), DA grade was improved after TKA in 73%, unchanged in 13% and worsened in 4%.

CONCLUSION

- Self reported preoperative DA was disturbingly common, reported by half the TKA cohort.
- The prevalence of DA halved after TKA.
- In those with baseline moderate to extreme DA, 73% reported improvement in DA at 1 year.
- Those with DA had lower baseline and 1 yr Oxford score but experienced equivalent or greater improvement after TKA.
- Those with DA had lower rates of satisfaction with surgery.
- Improvement in depression or anxiety is a realistic expectation of knee arthroplasty.



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