African-American patients had median VAS pain scores that were 16.7% higher, indicating greater pain, among those undergoing cervical decompression and fusion (P=0.047) as well as lumbar interbody fusion (P=0.0167). Black/African-American patients had median VAS pain scores that were 60% higher among those undergoing cervical/thoracic laminotomy (P=0.0005), lumbar laminotomy (P<0.0001), and arthrodesis for spinal deformity (P=0.0012) when compared to White patients undergoing the same procedure. Additionally, Black/African-American patients had lower median PROMIS mental scores among those undergoing cervical/thoracic laminotomy (P=0.0012), lumbar laminotomy (P=0.0195), and lumbar interbody fusion (P=0.0208). Black/African-American patients had lower median PROMIS physical scores among those undergoing cervical decompression and fusion (P=0.0028), cervical or thoracic laminotomy (P=0.0024), lumbar laminotomy (P=0.0001), lumbar interbody fusion (P=0.0100), and arthrodesis to correct long, spinal deformity (P=0.0261).

CONCLUSIONS: These findings suggest that racial disparities exist in patients' presentation for spine surgery. Likely causes include disparities in household income, characteristics of a patient's neighborhood, and a patient's access to health care. Our findings refute any notions or misconceptions held by both medical professionals and laypersons that Black/African-American patients are more immune to pain and impairment when compared to White patients.

FDA DEVICE/DRUG STATUS: This abstract does not discuss or include any applicable devices or drugs.

https://doi.org/10.1016/j.spinee.2021.05.276

P69. The influence of cognitive behavioral therapy on lumbar spine surgery outcomes: A systematic review and meta-analysis
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BACKGROUND CONTEXT: As more patients undergo lumbar spine surgery for chronic lower back pain, there is a need for novel interventions for those who do not respond to traditional rehabilitation techniques. Although behavioral and psychosocial interventions have demonstrated efficacy in postoperative rehabilitation, few studies have evaluated their impact on patients’ preoperative expectations and perception of their clinical improvements.

PURPOSE: This study aims to conduct a systematic review and meta-analysis of current randomized control trials (RCTs) to evaluate the influence of cognitive behavioral therapy (CBT) on patient reported outcomes (PROs) among lumbar spine surgery patients.

STUDY DESIGN/SETTING: Systematic review and meta-analysis.

PATIENT SAMPLE: A total of 241 articles screened by two independent reviewers.

OUTCOME MEASURES: Influence of cognitive behavioral therapy (CBT) on patient reported outcomes (PROs).

METHODS: Relevant studies for this systematic review were found using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). After consulting a medical library expert, the search was conducted in the following databases: PubMed/MEDLINE, Scopus, CINAHL, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, PsycINFO, and Google Scholar. A total of 366 citations were returned, of which 125 were duplicates, resulting in 241 articles screened by two independent reviewers. No restrictions were placed on the initial search in terms of language, date of publication, geography or age of participants. We ran searches using both controlled vocabulary (i.e., MeSH terms) and keywords in the title or abstract fields. Articles were excluded if they did not include lumbar spine surgery, if they were in a language other than English, if they were not RCTs, if they were study protocols, and if they were not full manuscripts.

RESULTS: After the 241 articles were screened, 29 full-text studies were assessed for eligibility. Ultimately, 11 studies were appropriate for analysis in the systematic review and meta-analysis. These 11 studies were conducted between 2003-2019 and yielded a total of 1,128 patients who underwent lumbar spine surgery. Seven studies evaluated lumbar fusion patients; three studies assessed patients undergoing lumbar disc surgery; and one study observed patients undergoing laminectomy. Only four of the studies utilized a CBT intervention preoperatively, while ten employed postoperative CBT interventions. Total CBT sessions ranged from three to 18 sessions. The most frequent outcomes observed were disability (82%, Oswestry Disability Index), pain (55%, Visual Analog Scale), quality of life (55%, European quality of life 5 dimensions, 55% Short Form-36), pain catastrophizing (45%, Pain Catastrophizing Scale), and kinesiophobia (45%, Tampa Scale of Kinesiophobia). Of the 11 studies, six had findings supporting CBT as a superior rehabilitation intervention when analyzing improvements in PROs.

CONCLUSIONS: This study addresses the influence of cognitive behavioral interventions on PROs among patients undergoing lumbar spine surgery. The majority of the reviewed studies observed CBT had better outcomes compared to postoperative rehabilitation control groups. Further research is needed to address appropriate assessments before undergoing CBT and to refine the ideal pre- and postoperative CBT frequencies, durations, and settings.

FDA DEVICE/DRUG STATUS: This abstract does not discuss or include any applicable devices or drugs.

https://doi.org/10.1016/j.spinee.2021.05.277

P70. Completion rates for PROMIS-PF compared with legacy PROMs
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BACKGROUND CONTEXT: Patient-Reported Outcomes Measurement Information System (PROMIS) utilizes computer adaptive testing (CAT) to accurately and efficiently assess patient improvement. Previous studies have highlighted the benefits of PROMIS over traditional “legacy” patient reported outcome measures (PROMs). However, literature comparing completion rates of PROMIS to those of legacy PROMs is scarce.

PURPOSE: To compare completion rates for PROMIS physical function (PF) with rates of legacy PROM completion following cervical spine procedures.

STUDY DESIGN/SETTING: Retrospective Cohort.

PATIENT SAMPLE: A total of 302 patients who underwent cervical spine procedures were included.

OUTCOME MEASURES: Perioperative characteristics including operative duration (from skin incision to closure), estimated blood loss (EBL), and postoperative length of stay were reported. Legacy PROMs such as Visual Analogue Scale (VAS) neck, VAS arm, neck disability index (NDI), and 12-Item Short-Form physical component summary (SF-12 PCS), as well as PROMIS-PF were included.

METHODS: A retrospective review was conducted of a prospectively maintained registry for cervical spine procedures from May 2015 to June 2020. Patients were excluded for procedures that were revisions or indicated for trauma, infection or malignancy. Patient demographics, preoperative medical conditions and spinal pathologies were collected. Perioperative characteristics including operative duration (from skin incision to closure), estimated blood loss (EBL), and postoperative length of stay were reported. Legacy PROMs such as Visual Analogue Scale (VAS) neck, VAS arm, neck disability index (NDI), and 12-Item Short-Form physical component summary (SF-12 PCS), as well as PROMIS-PF were administered at preoperative and postoperative (6-week, 12-week, 6-

Refer to onsite annual meeting presentations and postmeeting proceedings for possible referenced figures and tables. Authors are responsible for accurately reporting disclosure and FDA device/drug status at time of abstract submission.