

P122 Which psychosocial PROMIS measures are correlated to physical function in patients with knee osteoarthritis?

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Objective: Clinical approaches in physical therapy recognize psychosocial factors as barriers to improve function and pain. PROMIS measures identify psychosocial factors that may impair physical improvement. However, which PROMIS measures are useful in patients with knee osteoarthritis (OA) is unclear. This analysis examined the prevalence of PROMIS psychosocial domains in physical therapy patients with knee OA and their relationship with physical function (PF) and pain interference (PI).

Methods: De-identified patient records (n=506) for patients with a diagnosis of knee OA were analyzed (age: 57.1 ± 11.7 years, sex: 69.0% female, body mass index (BMI): 32.6 ± 8.6, PF t-score: (n=499) 39.1±7.0, PI t-score: (n=482) 60.6±7.3). The first PROMIS measure of each care episode was used. PROMIS PF and PI measures defined physical function and pain. Psychosocial measures included Anxiety (n=95), Depression (n=379), Self-efficacy of symptom management (SEsm) (n=207), Sleep Disturbance (SD) (n=225), and Ability to Participate in Social Roles (APSR) (n=113). The frequency of low scores on PROMIS psychosocial measures, PF, and PI was determined. Automatic Linear models (accuracy = r², importance) including covariates (age, sex, BMI) and combinations of PROMIS psychological measures were used to predict PF and PI.

Results: The prevalence of psychosocial symptoms (significant:>1 SD worse than 50/minor: within 1 SD worse than 50/cumulative prevalence) in patients attending physical therapy for knee OA was 43.0-78.8% (Depression:16.5/26.6/43.0%, Anxiety:12/52/64%, SD:19.7/27.6/47.4%, SEsm:17.3/61.5/78.8%, APSR:19.1/57.9/63.2%). Best subset of psychological measures for PF (n=113, r²=0.31, p<0.01) showed the following importance ratings: SEsm 0.52(p<0.01), SD 0.17 (p<0.01), Age 0.12(p=0.02) and BMI 0.12(p=0.02). Best subset of psychological measures for PI (n=115, r²=0.31, p<0.01) showed the following importance ratings: SEsm 0.49(p<0.01) and Depression 0.19(p=0.03). The APSR measure showed the strongest correlation with PF(0.70, p<0.01) and PI(0.77, p<0.01).

Conclusions: The high combined prevalence of minor and significant psychosocial symptoms (43.0% to 78.8%) in patients with knee OA supports using PROMIS measures as screening tools to measure and manage these concurrent symptoms. The importance of SEsm, SD and Depression may assist with prioritizing which measures to include. Prior research suggests incorporating cognitive-behavioral strategies in patients with psychosocial symptoms can maximize improvement.