

# EPOSA FACT

## Variability of pain and mental health in older adults with osteoarthritis

### Pain variability and mental health

Pain is a key symptom of osteoarthritis (OA) and has been linked to poor mental health. Pain fluctuates over time within individuals, but only few studies have considered day-to-day fluctuations of joint pain in relation to affective symptoms in older persons with OA.

In EPOSA, we investigated the relationship of pain severity as well as within-person pain variability with anxiety and depressive symptoms in older adults with OA.



...a 2% and 11% increase in anxiety symptoms in 65-74-year-olds and 75-85-year-olds, respectively

**A 10-unit increase in pain severity corresponded to...**

...a 4% and 7% increase in total affective symptoms in 65-74-year-olds and 75-85-year-olds, respectively

...a 6% increase in depressive symptoms in the total group

**A 1-unit increase in pain variability was associated with...**

...a 4% increase and 13% decrease in total affective symptoms in 65-74-year olds and 75-85-year-olds, respectively

...a 2% increase and 10% decrease in depressive symptoms in 65-74-year-olds and 75-85-year-olds, respectively

...a 7% increase and 15% decrease in anxiety symptoms in 65-74-year-olds and 75-85-year-olds, respectively

### Perspective

Our study showed that more severe and stable joint pain levels were associated with anxiety and depressive symptoms in older persons with OA. In particular, the findings reflect the mutually reinforcing effect of pain and affective symptoms in the older age group. These findings emphasize the importance of measuring pain in OA at multiple time points, because joint pain fluctuations may be an indicator for the presence of affective symptoms.