

Fear of movement and pain catastrophizing at baseline predict change in disability one year after a pain management program – a cohort study

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Background

- Chronic non-malignant pain is common and difficult to treat.
- Psychological factors including fear of movement (FoM) and pain catastrophizing are predictive of long term disability (figure 1).

Figure 1

The fear-avoidance model (Vlaeyen, Linton, 2000)



Aim

- To investigate whether FoM and pain catastrophizing at baseline predicted change in disability one year after participation in a group-based pain management program

Method

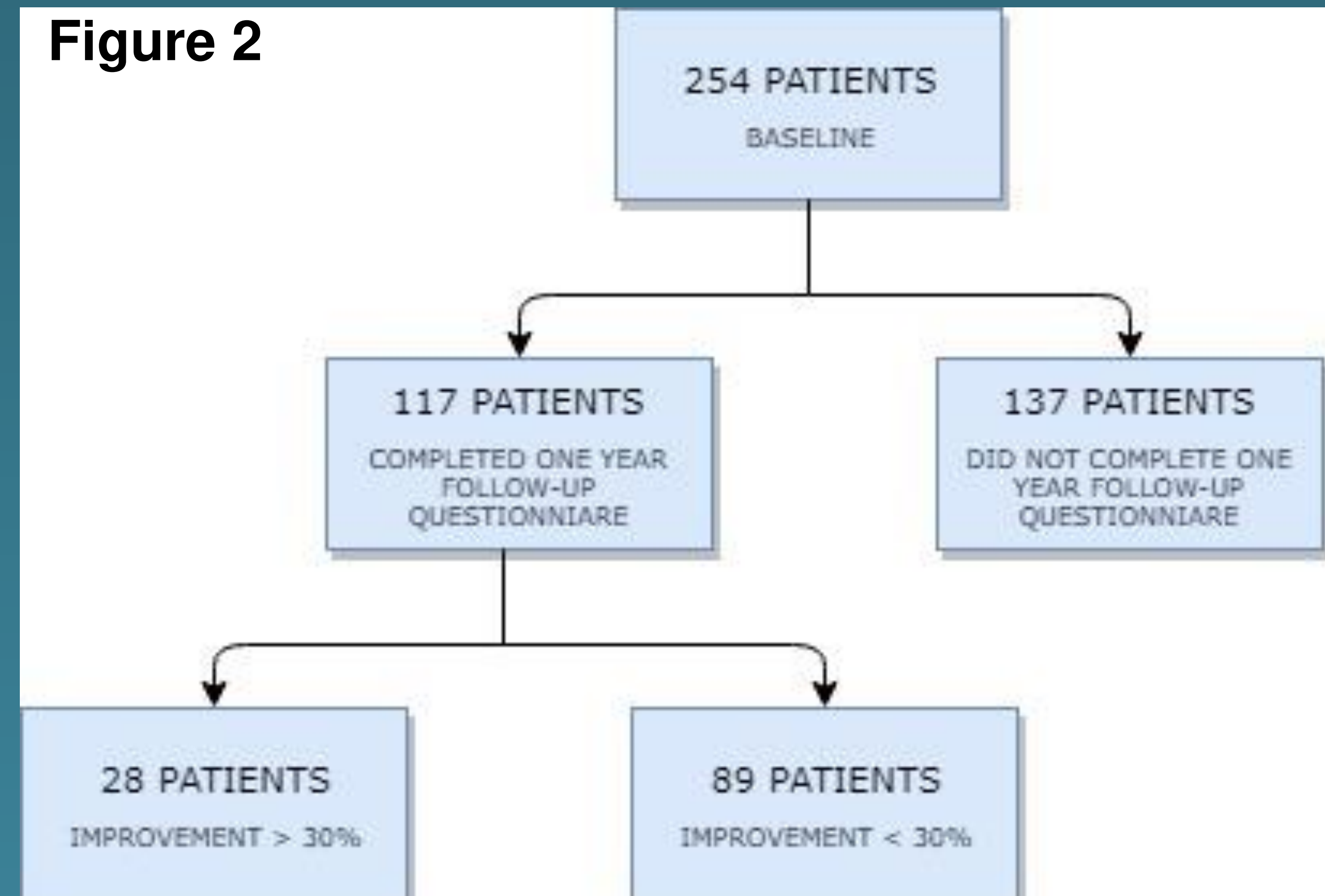
- 254 chronic pain patients completed Pain Data questionnaires at baseline
- and 117 patients completed Pain Data questionnaires one year after an out-patient group based pain management program at a Multidisciplinary Pain Center in Odense, Denmark (figure 2) regarding
 - fear of Movement (Tampa Scale of Kinesiophobia, TSK)
 - pain catastrophizing (Pain Catastrophizing Scale, PCS)
 - disability (Pain Disability Index, PDI)

Patients were classified as:

- high TSK: threshold > 38
- high PCS: threshold > 30
- decrease in disability > 30% improvement
- no decrease in disability < 30% improvement

- Logistic regression models were used to investigate if a high TSK (>38), and a high PCS (>30) at baseline were associated with decrease/no decrease in disability one year after treatment.

Figure 2



Results

- High levels of both TSK and PCS at baseline were associated with no decrease in disability compared with low TSK and low PCS (OR: 3.91, 95%CI: 10.3-14.90)
- Patients with high levels of TSK and PCS at baseline have a 4 fold higher risk of no decrease in disability
- FoM and pain catastrophizing assessed individually did not predict a clinically significant change in disability.

CONCLUSIONS

- **Patients who had high levels of both FoM and pain catastrophizing at baseline had almost four times as high a risk of not reporting clinically relevant change in disability one year after treatment, compared to the group with combined low levels of FoM and pain catastrophizing at baseline.**
- Routine screening of psychological factors such as FoM and pain catastrophizing may be relevant to assess which patients are likely NOT to benefit from an out-patient based pain management program.