Leveraging Registry Data To Improve Patient-Clinician Communication About Total Hip Arthroplasty: The Case Of ‘Patients Like Me’ Information Tool

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BACKGROUND

Arthroplasty registries are an invaluable source of knowledge about benefits and risks of operations, but they are rarely used to facilitate communication between patients and surgeons and to support decision-making.

OBJECTIVE

To develop an information tool based on registry data that makes the experience of previous patients with total hip arthroplasty (THA) meaningful and specific to prospective patients and their surgeons.

MATERIALS and METHODS

- ‘Patients like me’ is a tool built on the knowledge gathered from the **Geneva Arthroplasty Registry** about patients undergoing THA since 1996.
- A sample of patients was surveyed about benefits and harms of people living with an operated hip.
- **Fifteen outcomes** of interest were identified and grouped into five main domains: **pain relief, activity improvement, complications, revision surgery, need for contralateral hip replacement.**
- Classification algorithms were developed using **Conditional Inference Tree** (CIT) analysis to identify trajectories of relevant outcomes and patients’ clusters at 1, 5 and 10 years postoperatively. Cohort is described in Table 1.
- An **information leaflet** with infographics and a **digital visualisation** tool were produced, and pre-tested with patients.

RESULTS

Type and number of predictors changed markedly across the three time points (1, 5 and 10 years). For example, the outcome measuring patients’ ability to put on shoes:

- ➢ At one year, patient clusters were generated based on preoperative self-rated health (SRH), WOMAC function score, body-mass index, and the number of comorbidities.
- ➢ By year ten, only SRH and SF12 physical interference were significant predictors.

Outcomes profiles varied by clusters. For example, the outcome measuring night pain one year after operation:

- ➢ 79.4% of patients with good to excellent SRH and less than moderate night pain before THA reported no night pain (profile 2 - Figure 1).
- ➢ 49.8% of patients with fair/poor SHR before operation, reported no night pain (profile 4 - Figure 1).

N = 6836 Primary THAs included	
Men (%)	2950 (43.15)
Women (%)	3886 (56.85)
Age, mean (SD)	68.96 (±12.17)
BMI, mean (SD)	26.99 (±4.93)
Primary OA (%)	5610 (82.07)
Secondary OA (%)	1226 (17.93)

Table 1: Cohort description

CONCLUSIONS

- “Patients like me” uses a novel approach to making registry data accessible, understandable, and useful to those undergoing THA.
- The tool has received positive feedback from both patients and surgeons.

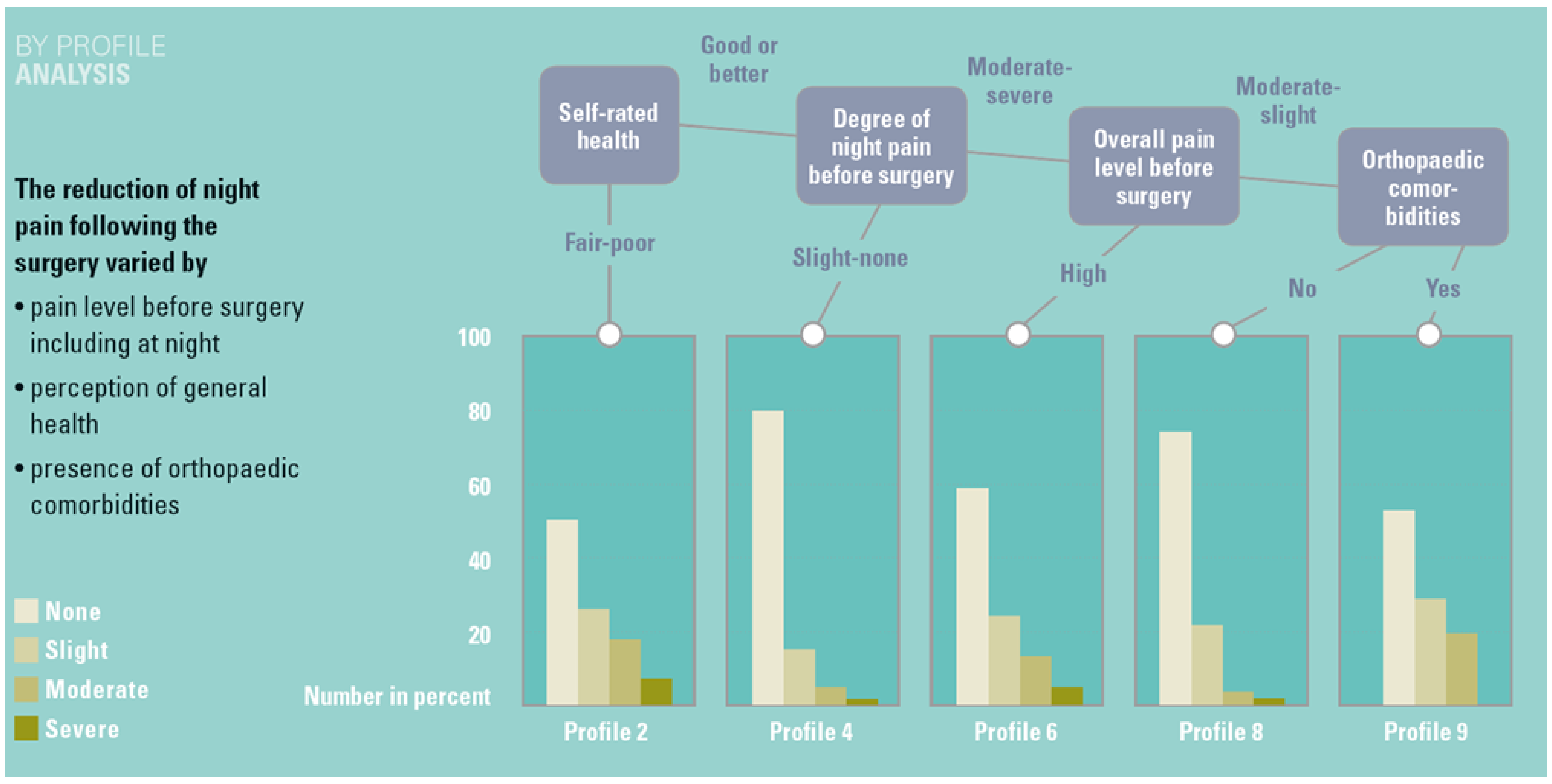

Figure 1: Conditional inference Tree for night pain at year 1

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