

Knee Performance and Work Participation in Patients with Malignant Bone Tumors receiving Limb-Salvage Surgery with Knee Prosthesis: a Retrospective Single-Center Cohort Study

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Introduction

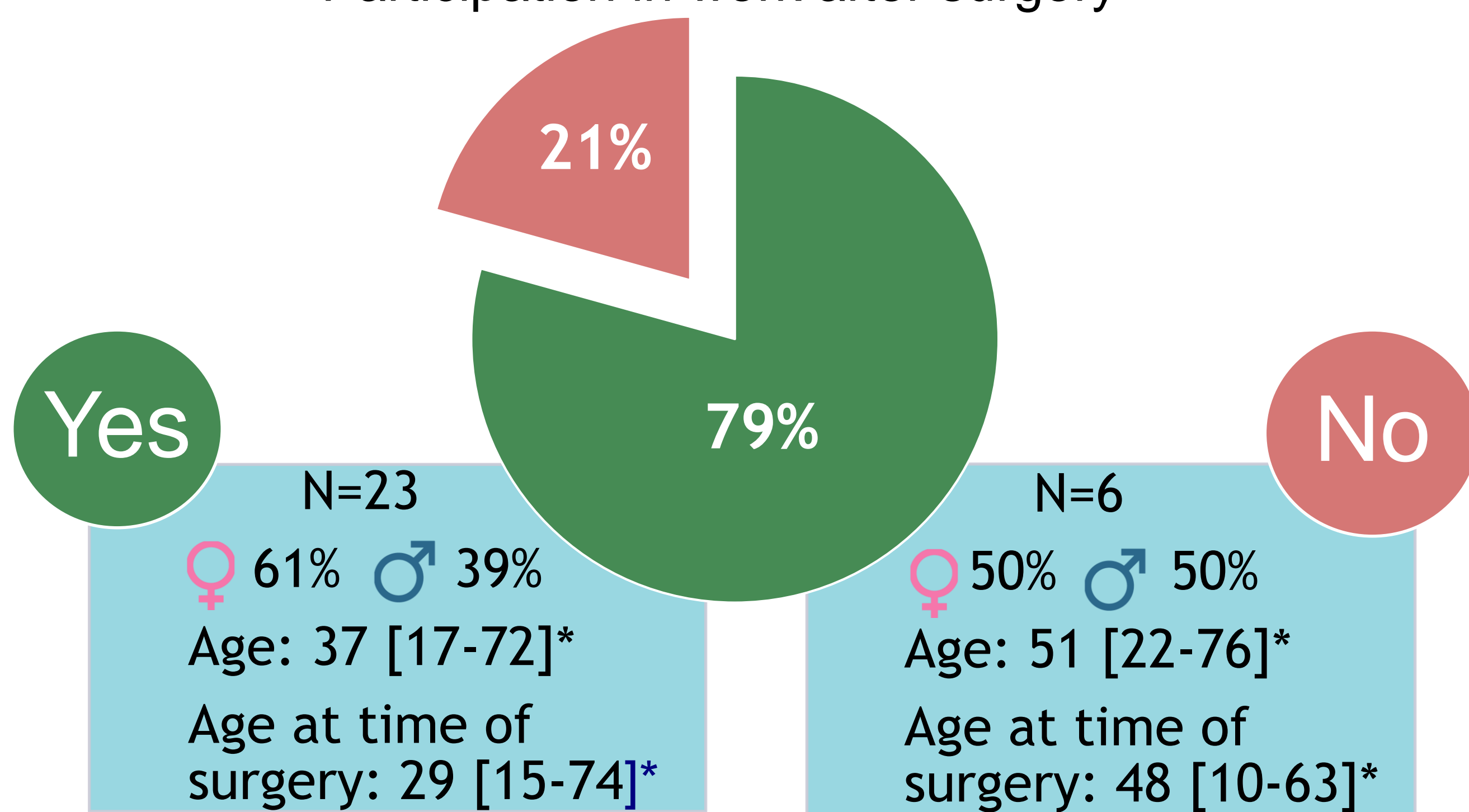
- No data are available on the ability to work after salvage surgery in patients with malignant bone tumors

Research Question

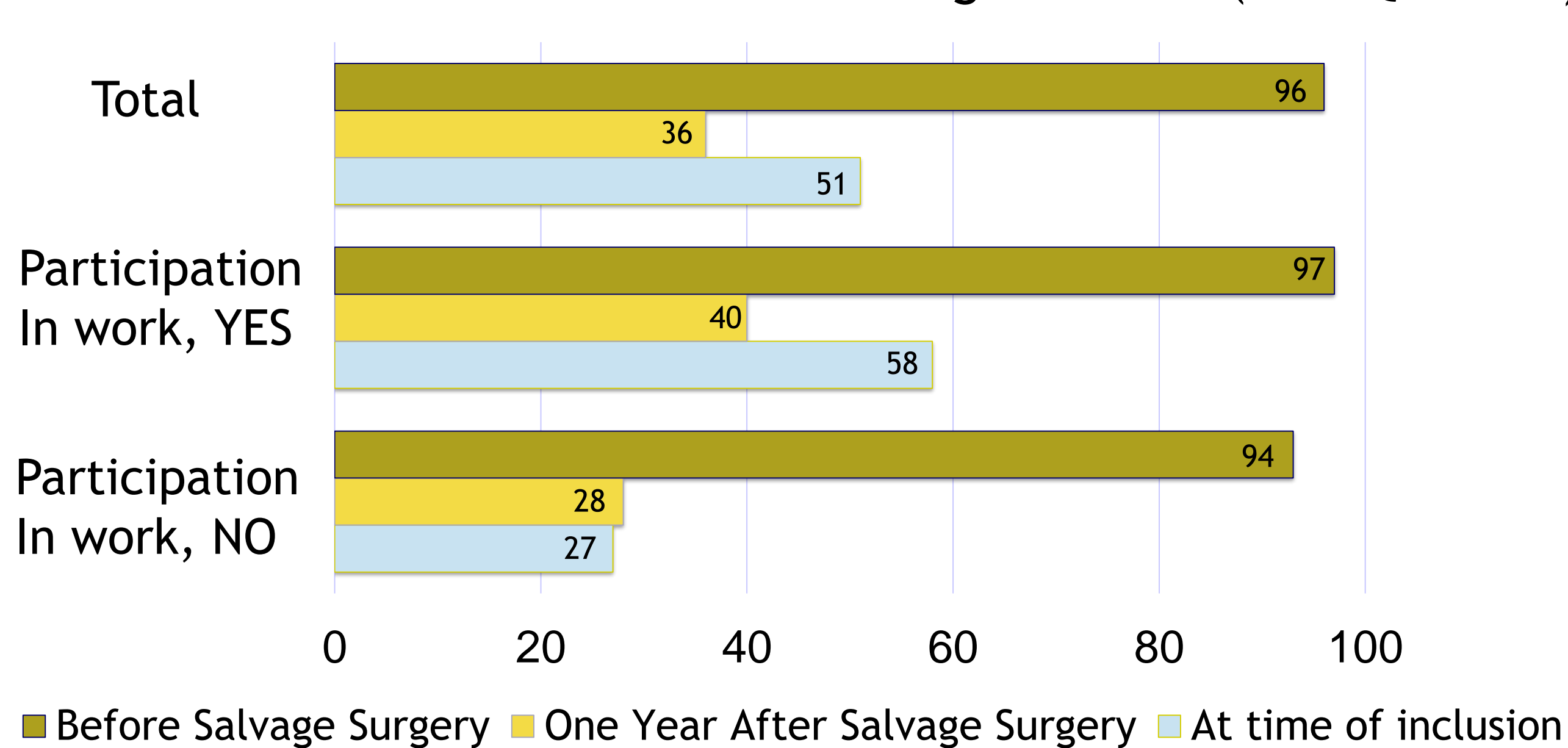
- What is the functional outcome?
- What are prognostic factors for work participation?

Results

N=29 participants
Participation in work after surgery



Performance of knee-straining activities (WORQ Scores)



Prognostic factors

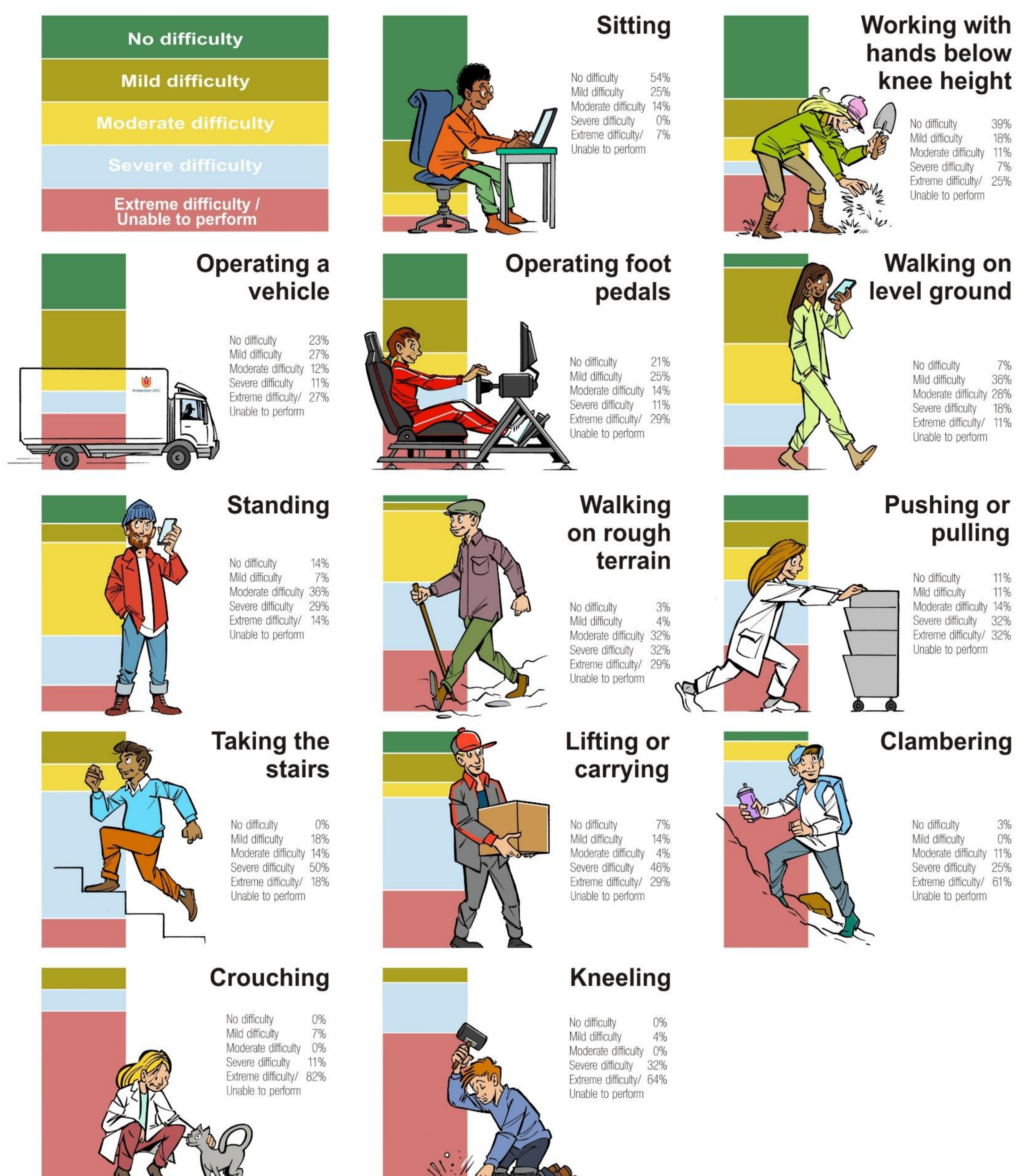
Univariate regression	OR	95% CI	p-value
Return to daily activities (TESS)	1.10	1.01 – 9.19	0.03
Presence of postoperative depression or anxiety-related symptoms (HADS)	0.94	0.85 – 1.04	0.24
Age at time of salvage surgery	0.95	0.90 – 1.00	0.04
Surgical intervention in the past year	0.11	0.01 – 0.79	0.03
Occurrence of complications	0.35	0.06 – 2.25	0.27
Education level	0.84	0.52 – 1.36	0.48

Conclusion

- The percentage of patients participating in work after limb-salvage surgery is 79%.
- Patients are dissatisfied with their knee performance one year after surgery.
- Knee performance improves over time, leading to average satisfaction.
- Age, recent surgery and return to daily activities are prognostic for work participation.
- Complications, education level, and anxiety-related symptoms do not affect work participation.

Methods

- Retrospective single-center cohort study
- Lower limb-salvage surgery with knee tumor prosthesis in the period 2000-2020
- Performance of knee-straining activities, using the Work Osteoarthritis or joint-Replacement Questionnaire (WORQ, 13 activities, score 0-100, ≤ 50 =dissatisfied, 51-70=not satisfied nor dissatisfied, ≥ 71 =satisfied)
- Work participation (yes/no)
- prognostic factors, using univariate and multivariate regression



Infographic, Percentage of patients experiencing no difficulty to extreme difficulty/unable to perform knee-straining activities one year after surgery

Want to know more?
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