

Joint Awareness - Patient Reported Outcomes after Total Knee Replacement (TKR)

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Introduction • Methods • Results • Conclusion

Disclosure

- Our department is collaborating with Zimmer-Biomet in various research studies.
- No personal disclosure related to the present topic

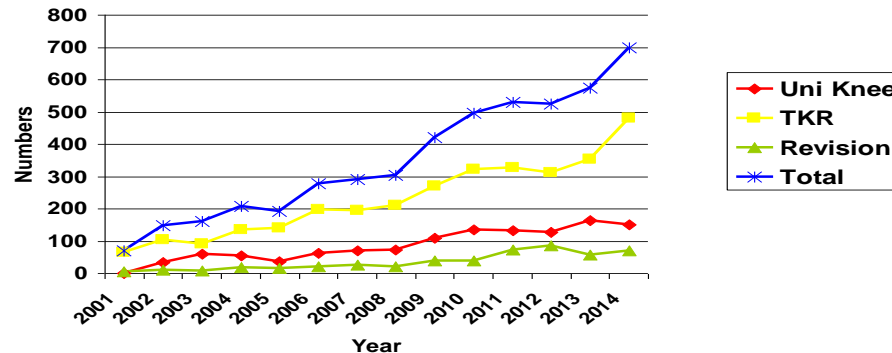


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- Vejle Hospital (265 beds - 2426 employed)
- Ortopaedic Department (34 / 24 beds - 216 employed)
- A big unit for Elective Joint Replacement Surgery



**Knee Replacement
Vejle Hospital 2001 - 2014**



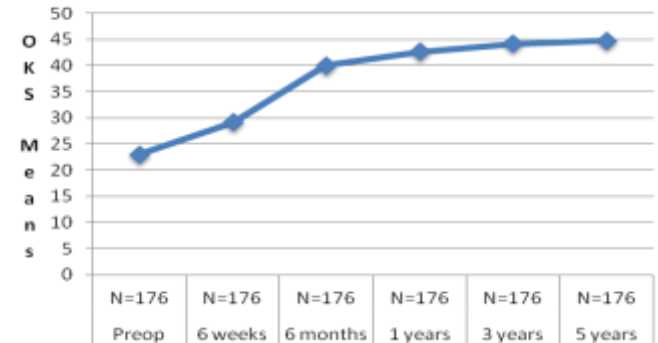
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How to measure patient satisfaction ? Qualitative or quantitative measurements ?

Traditionally – Oxford Knee Score (OKS)

- *For how long have you been able to walk before the pain from your knee becomes severe ?*
 - *no pain – 16-30 min – 5-15 min - around the house only – not at all severe on walking*
- *Have you been troubled by pain from your knee in bed at night ?*
 - *No nights – only 1-2 nights – some nights – most nights – every night*

OKS means over time



Introduction • Methods • Results • Conclusion

New assesment tool - The Forgotten Joint Score (FJS)

Joint Awareness:

- Any unintended perception of a joint
- Patient Related Outcome Measures (PROM)
- Low awareness – the ultimate goal

FJS:

- 12 Items
- Published in 2012

(H. Berenth, K. Giesinger, J. M. Giesinger, M.S.Kuster The "Forgotten Joint" as the Ultimate Goal in Joint Arthroplasty -Validation of a New Patient-Reported Outcome Measures. The Journal of Arthroplasty Vol. 27 No 3 2012)

More activity related PROM

Examples of questions:

1. *Are you aware of your artificial joint.....
when you are walking for more than 15 minutes?*

2. *Are you aware of your artificial joint.....
In bed at night?*

○ *never* ○ *almost never* ○ *seldom* ○ *sometimes* ○ *mostly....*



Introduction • Methods • Results • Conclusion

Aim:

To compare Oxford Knee Score (OKS) and Forgotten Joint Score (FJS) in the same patients 5 years after Total Knee Replacement



Introduction • **Methods** • Results • Conclusion

Study design: - 200 consecutive patients - 5 yr`s follow – up
- OKS and FJS Questionnaire send by mail to patients

OKS Questionnaire (Spring 2015)	FJS Questionnaire (Spring 2015)
<p>12 questions</p> <ul style="list-style-type: none">• Functional outcome• Pain, Stability• Daily living <p>Score: (4-0) 4 is best outcome (0-48) 48 point = 100 % satisfaction High score means well knee All questions to be answerd</p>	<p>12 questions</p> <ul style="list-style-type: none">• Functional outcome, pain, stability and daily living ...but additional• Activity and Sport <p>Score: (0-4) 0 is best outcome Low score means high satisfaction Not all questions to be answerd</p> <p>All responses are summed, divided by no of completed items – multiplied by 25 (0-100) finally score substracted from 100</p>

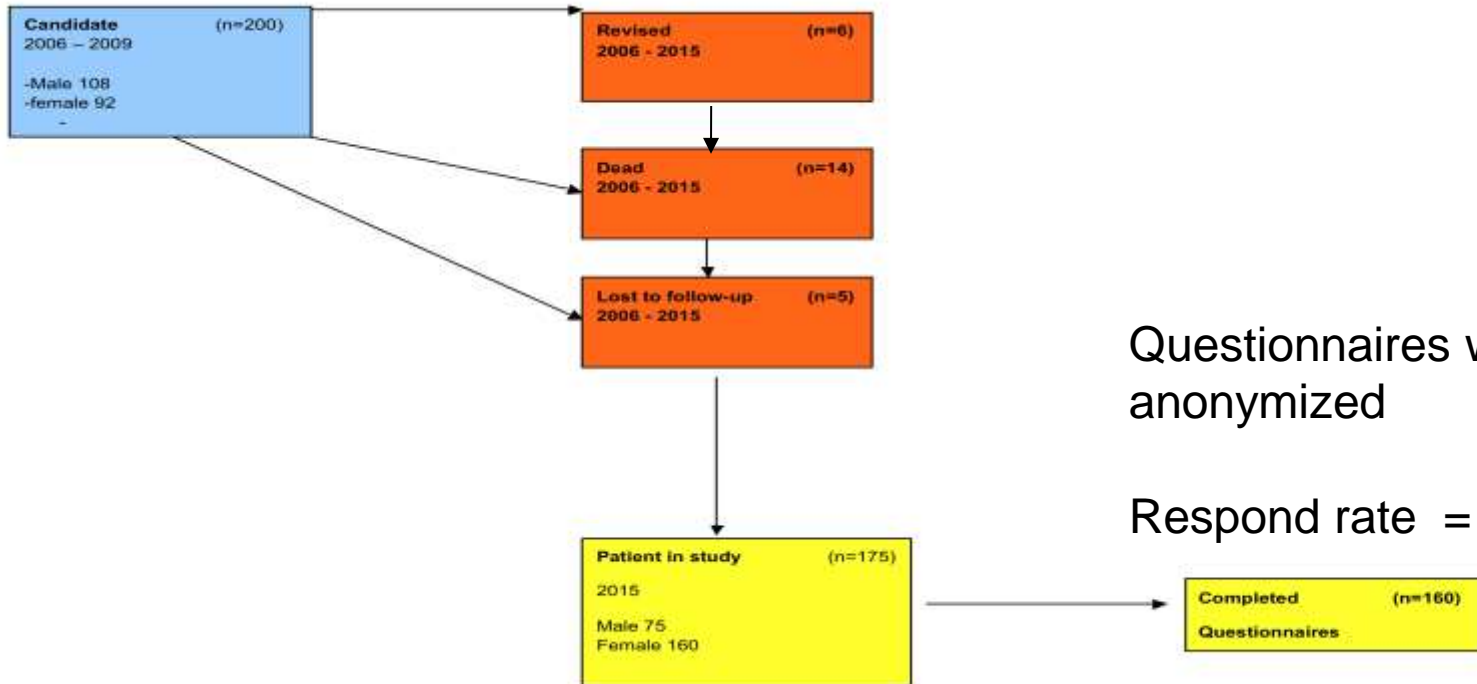
To compare OKS and FJS!

Need to convert the scores to a comparable 100 percent scale



Introduction • **Methods** • Results • Conclusion

Status October - 2015



Questionnaires were
anonymized

Respond rate = 91,4 %

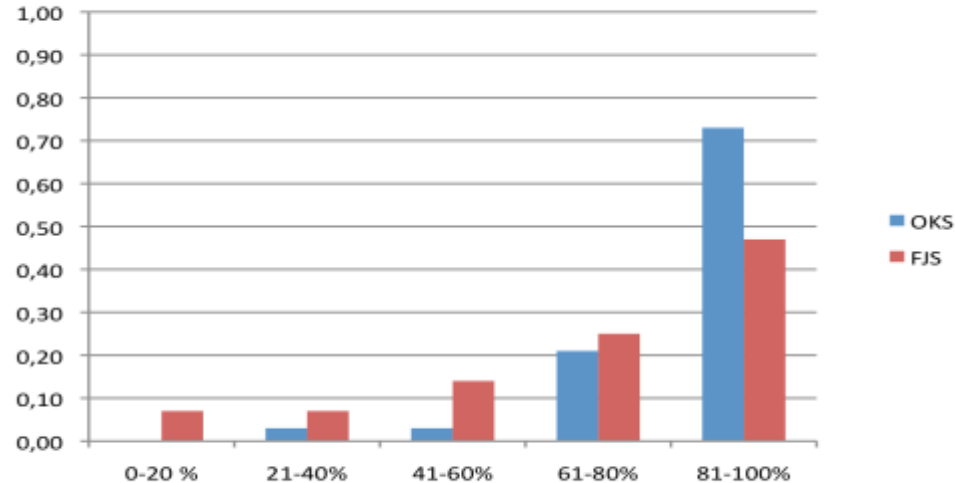
Overall satisfaction

	Oxford Knee Score (n=160)	Forgotten Joint Score (n=160)	P-value
Overall satisfaction	85,47 %	71,39 %	< 0,001



Satisfaction - subdivision

Fraction



Satisfaction



Introduction • Methods • **Results** • Conclusion

	Oxford Knee Score (n=160)	Forgotten Joint Score (n=160)	Both OKS and FJS
100 % satisfaction	21 patients	21 patients	15 patients

Remaining 6 pts

- 4 had FJS > 95 %
- 2 had FJS at 85 %



Introduction • Methods • **Results** • Conclusion

	Oxford Knee Score (n=160)	Forgotten Joint Score (n=160)	Both OKS and FJS
≥ 95 % satisfaction	51 patients (32 %)	36 patients (23 %)	29 patients (18 %)

- 22 patients have not reached 95 % in FJS
- Range 55 to 95 % satisfaction
- 5 patients have FJS scores below 80



Highest Satisfaction

OKS (n=160)		FJS (n=160)	
Questions	Number of patients with 100 % satisfaction	Questions	Number of patients with 100 % satisfaction
Personal Washing	140 = 87,5 %	Bath or Shower	116 = 72,5 %
Household Shopping	130 = 81,3 %	In bed at night	92 = 57,5 %
Knee give away	123 = 76,9 %	Sitting in a car	88 = 55,0 %



Lowest Satisfaction

OKS (n=160)		FJS (n=160)	
Questions	Number of patients with 100 % satisfaction	Questions	Number of patients with 100 % satisfaction
Kneeling, Using a dustpan	29 = 18,1 %	Standing up from low position	43 = 26,9 %
Knee Pain	81 = 50,6 %	Standing long period	46 = 28,8 %
Climbing stairs	97 = 60,6 %	Walk on uneven ground	54 = 33,8 %



Sport: A new question in FJS

Awareness performing favorite sport?	Number	Satisfaction %
Never	35	21,9
Almost never	29	18.1
Seldom	18	11.3
Sometimes	11	6,9
Mostly	6	3,8
Not relevant	61	38,1

51,3 %



Introduction ● Methods ● Results ● **Conclusion**

Perspectives:

- Patient expectations today
- Time calls for new PROM`s to measure outcome and satisfaction after TKR

Conclusions

1. Significant higher OKS compared to FJS.
2. FJS is a more sensitive tool to measure Patient Outcome compared to OKS
3. FJS has a different approach in terms of asking the patient.
4. The questions with the highest and lowest satisfaction cover similar areas in both questionnaires



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Conclusions:

- Better discriminatory power
- Less ceiling effect
- Appealing to patients with high performance
- Picks up subtle differences



Thank you for your attention

