Does comorbidity influence work-capacity in post-trauma patients?

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Background and aim

- Wide range of comorbidity in rehabilitation populations in CH ANQ (Nationaler Vergleichsbericht 2015 Muskuloskeletale Rehabilitation)
- Wide range of comorbidity in own rehabilitation unit
- Wide range of work capacity in own (FCE tested) rehabilitation population

=> ? Influence of (internal) comorbidity on work capacity in trauma patients
Hypothesis

- Mild positive effect of age on Comorbidity
- Mild negative effect of Comorbidity on Work capacity

Statistics:
- Deskriptive Statistics
- Linear regression models:
  - Dependent variable: Work capacity, explanatory variable: CIRS
  - Dependent variable: CIRS, explanatory variable: Age
Patients and measures

• 161 consecutive trauma patients referred to FCE testing

• German version of Modified Cumulative Illness Rating Scale (CIRS) (Salvi et al. 2008)

Results
Age Distribution

n=161, work accidents = 145

Age: 43.6 \([24.4; 51.3]\) yrs.
Sex: \(m=143, f=18\)
Latency: 7.7 \([6.0; 12.6]\) mo.
Patients

n=161, work accidents = 145

Age: 43.6 [24.4; 51.3] yrs.
Sex: m=143, f=18
Latency: 7.7 [6.0; 12.6] mo.
Results

CIRS

Range: 2-17
Mean: 5.36
Sd: 3.06
Descriptive Statistics
Age, work capacity
Descriptive Statistics
Comorbidity, work capacity
Descriptive Statistics
Age, Comorbidity,
Discussion and conclusion

⇒ Descriptive statistics:

• Age: 2 distinct groups?
• Work capacity:
  • Under representation in DOT category „seated“, „light“, „very heavy“
• Comorbidity:
  • Under representation of „seaker“ patients,
  • Bottom effect
  • FCE inclusion criterion

⇒ Linear regression models: not applicable – greater sample
Discussion and conclusion

Descriptive statistics

- Dependent variable: Work capacity, explanatory variable: CIRS (Age does not have any influence)
  p-value=0.0104, adj. R-squared=0.03452

- Dependent variable: CIRS, explanatory variable: Age
  p-value<0.001, adj. R-squared=0.1969
Discussion/Conclusion

• Comorbidity FCE: lower than in Swiss MSK rehabilitation population

• Comorbidity FCE < 17 points (bottom effect)

• Age FCE < general MSK rehabilitation in CH influences work load estimated by FCE testing

• Underrepresentation of
Thank you for your attention!