

Validity testing of self-report questionnaires on physical activity for people with spinal cord injury

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Conclusion

The study suggests that the spinal cord injury (SCI) specific questionnaire Frågeformulär om fysisk aktivitet efter Ryggmärgsskada (F-FAR) is a promising method to capture PA level in persons with SCI. The generic and shorter self-report questionnaire, Swedish National Board of Health and Welfare physical activity questions (BHW PA questions) showed a non-significant correlation which indicates that a SCI-specific questionnaire is a more appropriate method.

Implications for clinical practice:

Raising awareness of the importance of PA and exercise in relation to health benefits is central in physiotherapeutic care. Easy-to-use methods for measuring levels of PA are needed. F-FAR could be used as a first step in that process.

Background

Engaging in physical activity (PA) has health related benefits whilst physical inactivity is correlated to increased risk for cardiovascular disease. The SCI-population is more sedentary than general population and also has a higher prevalence of cardiovascular disease. Identifying groups and individuals in need of interventions concerning PA demands valid methods as for example questionnaires on PA. At present there is no self-report questionnaire on PA that is validated on or used in clinical setting for the SCI-population

Methods

Cross-sectional study for assessing the criterion validity of F-FAR and the BHW PA questions compared with objective data from accelerometers.



Correlation between self-reported physical activity and accelerometer data

	Median (IQR)	Correlation (r)	p-value
Accelerometer, minutes in MVPA (n=18)	149 (200)	n/a	n/a
F-FAR, minutes in MVPA (n=18)	285 (443)	0.574*	0.013
BHW PA questions (n=17)	14 (5)	0.337	0.186

All results in Spearman's rho, MVPA=moderate to vigorous physical activity, n/a= not applicable, F-FAR=Frågeformulär om Fysisk Aktivitet efter Ryggmärgsskada, BHW PA questions=Swedish National Board of Health and Welfare physical activity questions, IQR=interquartile range, *= p<0.05

Results

- 18 participants with motor-complete paraplegia were included in the study, 13 men. Mean age 47 ± 14.5 years, weight 74 ± 14.2 kg, years since injury ranged from 2-46.
- It was found a statistically significant correlation between the F-FAR and accelerometer data ($r=0.574$, $p=0.013$).**



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