

A 10-year study of predictors for employment status in people with multiple sclerosis

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Conclusions

- In this cohort of people with MS, age, perceived physical impact of MS, full-time work, frequency of social/lifestyle activities and energy level significantly predicted employment status after 10 years.
- The predictive value of frequency of social/lifestyle activities for long-term employment in MS has not previously been reported and highlights the importance of taking people with MS whole living situation into consideration when studying working life.

Introduction

Working life is important to people with MS (PwMS) contributing to sense of identity, financial security and an arena for social interaction. Still, early retirement is common and not working is associated with decreased quality of life.

There is a growing understanding of factors associated with employment status, but long-term studies enabling predictions over time are rare.

Aim

To identify predictors for employment status after 10 years in a cohort of PwMS

Methods

This study was based on a 10-year follow-up of a cohort of PwMS. Eligible for inclusion were those from the 10-year follow-up who were in in working age.

Baseline data were collected through interviews, questionnaires and tests, and were used as independent variables:

- personal factors: age, education level, sense of coherence, perceived physical and psychological impact of MS
- body functions: cognitive function, energy level, mood, fine hand use
- activity and participation: walking ability, frequency of social/lifestyle-activities, employment status

Data on employment status 10 years after baseline was used as the dependent variable. Regression analysis was used to analyze the predictive value of the independent variables on employment status 10 years after baseline.

Results

A total of 116 PwMS were included in the study (table 1). In the cohort 42% were working full-time at baseline and 28% part-time. At the 10-year follow-up, 28% were working full-time and 23% part-time.

Table 1. Characteristics at baseline.

Participant characteristics at baseline	
Participants, n	116
Female, n (%)	78 (67)
Age, mean years (SD)	41 (9)
MS-disability, n (%)*	
EDSS 0-3.5	81 (70)
EDSS 4-5.5	18 (16)
EDSS 6-6.5	6 (5)
EDSS 7-9.5	11 (9)
MS duration , mean years (SD)	12 (9)

Young age, low perceived physical impact of MS, full-time work, high frequency of social/lifestyle activities and low energy level at baseline significantly predicted full- or part-time work at the 10-year follow-up (table 2). Low perceived physical impact of MS at baseline significantly predicted full-time work.

Table 2. Final multivariate model of predictors for full- and part-time work (FPW) vs no work (NW), and of predictors for full-time work (FW) vs part-time work and no work (PNW), using backward elimination of independent variables with p-value >0.20.

Independent variables	FPW vs NW		FW vs PNW	
	OR (95% CI)	p-value	OR (95% CI)	p-value
Personal factors				
Age	0.85 (0.76-0.94)	0.002	1.04 (0.97-1.12)	0.28
Education level	2.02 (1.00-4.06)	0.05	2.02 (1.00-4.06)	0.05
Perceived physical impact of MS	0.95 (0.92-0.99)	0.02	0.95 (0.92-0.99)	0.02
Body function				
Energy level	2.03 (1.08-3.84)	0.03	0.65 (0.38-1.10)	0.11
Fine hand use	0.92 (0.82-1.03)	0.16	0.92 (0.82-1.03)	0.16
Activity and participation				
Social/lifestyle activities	1.33 (1.13-1.56)	0.001	1.07 (0.90-1.26)	0.46
Full-time work	29.89 (4.05-220.6)	0.001	1.47 (0.26-8.26)	0.66
Part-time work	5.56 (0.97-31.95)	0.05	0.15 (0.02-1.26)	0.08

Analyses of changes over 10 years in this cohort are ongoing, with focus on employment status, as are data collection and analysis of interviews with persons with MS concerning experiences of work-related changes due to MS.

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