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## **ABSTRACT**

### **Multiple Sclerosis multidisciplinary care: a national survey and lessons for the global community**

**Objective:** To frame the current care for people with MS (PwMS) in Belgium and identify benefits, needs and future perspectives of MS specialist nurses (MSN) and MS multidisciplinary teams (MDT's).

**Methods:** A survey for PwMS (BELSIMS, n=916) questioned MS- and healthcare parameters, and their view on care. For MS Nurses (n=22) and neurologists (NEUROMS, n=62) employment, education, job-content, care organization and perspectives were inquired. Univariate statistics were performed.

**Results:** The PwMS cohort reported a mean age of 46±12.7, a mean patient determined disease step of 2.5±2.05 with mainly relapsing remitting MS (60,8%). The majority of PwMS have access to an MDT (65.3%) (mainly composed by a nurse, psychologist, physiotherapist and social worker) or MSN (60.4%). Centers with an MSN report a higher prescription rate for disease modifying treatments ( $p=.015$ ) and symptomatic treatments for spasticity ( $P=.042$ ) and gait problems ( $P=.035$ ). PwMS with MDT's reported a higher rate of bladder-dysfunction treatment ( $p=.047$ ). PwMS less often reported a need for care improvement when there is an MDT available ( $p<.001$ ). Also, PwMS followed by an MDT or MSN were more likely to have work-related support ( $p=.018$ ,  $p=.002$ ) and have legally required driver's license adjustments (both,

$P < .001$ ). Above that, PwMS who have access to an MSN were more likely to be employed ( $p = .004$ ). Funding for MS nurses is largely available from hospital or associative budgets. Finally, 69% and 75% neurologists working without an MSN or MDT state a need of such support and prefer MDT's to be organized at a hospital network level (61%).

**Conclusion:** MSN or MDT availability may increase MS care quality. Further research is necessary to standardize and implement support. Seen the multiple MS care disparities, national reimbursement for MSN and MDT's is warranted.

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