Variation in employment status among people with MS in the United States, United Kingdom and Germany

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INTRODUCTION

• Physical and cognitive impairments lead to high rates of unemployment in MS
• The rate of unemployment for those with MS varies by age and country¹
• Variability in unemployment rates across countries may reflect differences in health systems, levels of support and social policies regarding employment accommodations

OBJECTIVE

• To compare employment rates among people with MS living in three countries with different health systems

METHODS

• We included working age participants (18 - 62 years) from 3 registries:
  - North American Research Committee on Multiple Sclerosis (NARCOMS) Registry
  - UK MS Register (UK-MS)
  - German MS Register (GMSR)
• A minimal dataset was developed for data captured across the registries.
• Retrospective data harmonization followed the Maelstrom guidelines
• Harmonization of the following covariates and employment outcomes was conducted:
  - Demographics (age, gender)
  - Disability status was measured using the:
    - Patient Determined Disease Steps² (PDDS) in NARCOMS (PDDS 0-1: mild, PDDS 2-4: moderate, or PDDS 5-8: severe)
    - MS Impact Scale³ (MSIS) in UK-MS
    - Expanded Disability Status Scale⁴ (EDSS) in GMSR (EDSS 0-2.5: mild, EDSS 3-5.5: moderate, or EDSS ≥ 6: severe)
• Employment Outcomes
  - Employed (full-time or part-time) vs not working
  - Differences in employment were summarized overall, by demographics and disability status for each registry, and compared using chi square tests

RESULTS

• Overall employment rates were statistically significantly higher for GMSR (66.8%) compared to the UK-MS (48.1%) and NARCOMS (42.7%, p<0.001)

Table 1. Characteristics of Participants by Registry

<table>
<thead>
<tr>
<th></th>
<th>NARCOMS (n=5436)</th>
<th>UK-MS (n=10529)</th>
<th>GMSR (n=15046)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female, n (%)</td>
<td>4514 (83.0)</td>
<td>7830 (74.4)</td>
<td>10809 (71.8)</td>
</tr>
<tr>
<td>Age, mean (SD)</td>
<td>52.5 (7.9)</td>
<td>50 (9.7)</td>
<td>44 (10.5)</td>
</tr>
<tr>
<td>Disability Status, n (%)</td>
<td></td>
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</tr>
<tr>
<td>Mild</td>
<td>2459 (45.5)</td>
<td>1495 (14.7)</td>
<td>10483 (69.7)</td>
</tr>
<tr>
<td>Moderate</td>
<td>1432 (26.5)</td>
<td>4651 (45.8)</td>
<td>3821 (25.4)</td>
</tr>
<tr>
<td>Severe</td>
<td>1517 (28.1)</td>
<td>4000 (39.4)</td>
<td>740 (4.9)</td>
</tr>
</tbody>
</table>

• Employment rates of participants varied across countries
• GMSR had higher rates of employment overall, and stratified by gender and age
• Employment rates by disability status were less consistent across the registries, potentially due to using different measures to assess disability level

CONCLUSION

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• GMSR had higher rates of employment overall, and stratified by gender and age
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REFERENCES


DISCLOSURES

Amber Salter: Nothing to disclose
Alexander Stahmann: Nothing to disclose
Jeff Rodgers: Nothing to disclose
Janina Schrader: Nothing to disclose
Richard Nicholas: Biogen: honoraria for speaking, advisory boards.
BioGen, Novartis and Roche participating in clinical research.
Ruth Ann Marrie receives research funding from CIHR, the National MS Society, the MS Society of Canada, the MS Scientific Research Foundation, Research Manitoba, the Consortium of MS Centers, Crohn’s and Colitis Canada and the Waugh Family Chair in Multiple Sclerosis.
Rod Middleton: Nothing to disclose

ACKNOWLEDGEMENT

GMSR is a project of the German MS Society. It is supported by the German MS Society’s Trust and the MS Society itself. In 2018, Merck and Novartis supported the Register’s development with grants.

The UK MS Register is funded by the MS Society and operated and managed by Swansea University Medical School

NARCOMS is a project of the Consortium of Multiple Sclerosis Centers (CMSC).