Professional support is an important factor for the intention and execution of physical exercise among persons with multiple sclerosis – a qualitative metasynthesis.

Marie Ernst Christensen, John Brincks, Anette Schnieber & Dorthe Sørensen
VIA University College, Faculty of Health Science, Center for Research in Health Promotion and Rehabilitation, Aarhus, Denmark
Introduction

- Evidence suggest benefits of physical exercise (PE) on MS symptom management (Motl et al. 2008)
- Evidence propose that PwMS have lower commitment to participate in PE. compared to GP. (Motl et al. 2005, Hale et al. 2012)
- Explorative studies demonstrates that social and environmental barriers are important factors influencing participation in PE. (Mulligan et al. 2012)
- Other studies suggested that health professionals should listen to the needs desires, and capabilities of PwMS to ensure long-term adherence in PE. (Hale et al. 2012)
Aim

The aim is to systematically synthesize findings from qualitative articles regarding the factors that influence the intention to exercise and the execution of exercise among PwMS.
Methods

- Designed as a qualitative metasynthesis inspired by Sandelowski & Barroso (Sandelowski & Barroso, 2007).

- The procedures outlined by S&B included four stages:
  1. Comprehensive search
  2. Appraising reports of qualitative studies
  3. Classification of the studies
  4. Synthesis of the findings
Methods – design

- Inclusion criterias:
  - Published up to 2014
  - Publications reporting the lived experiences of adults with MS
  - Published in English, German or a Nordic Language
  - Peer-reviewed in academic journals
  - Presented analysis of qualitative data
Flow diagram of the search

- Articles identified in databases (n = 408)
  - Checked titles and abstracts
    - Included articles (n = 35)
    - Excluded articles including duplicates (n = 373)
  - Checked full text articles
    - Included articles (n = 17)
    - Excluded articles (n = 18)
  - Checked by author team
    - Included articles (n = 7)
    - Excluded articles (n = 10)
  - Reference search (n = 2)

Total qualitative articles (n = 9)
## Methods – search outcomes

<table>
<thead>
<tr>
<th>Author/Date/Country</th>
<th>Focus/aim of the study</th>
<th>Methodology</th>
<th>Participants</th>
<th>Data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borkoles et al. (2008) (UK)</td>
<td>To examine the lived experiences of people diagnosed with multiple sclerosis</td>
<td>Interpretative phenomenological analysis</td>
<td>7 active exercisers with MS</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>Dlogonski et al. (2012) (US)</td>
<td>To better understand the adoption and maintenance of physical activity from the perspective of women with multiple sclerosis</td>
<td>General inductive approach</td>
<td>11 women with MS</td>
<td>Two semi-structured interviews</td>
</tr>
<tr>
<td>Kasser (2009) (US)</td>
<td>To explore the meaning of exercise in the lives of PwMS, and to describe the motivational basis that contributed to their exercise involvement</td>
<td>General inductive approach</td>
<td>12 adults with MS</td>
<td>Individual interviews and observation of planned program activities</td>
</tr>
<tr>
<td>Kayes et al. (2011) (New Zealand)</td>
<td>To explore the barriers and facilitators to engagement in physical activity from the perspective of PwMS</td>
<td>Qualitative descriptive design, Grounded theory.</td>
<td>10 participants with MS</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>Learmonth et al. (2013) (Scotland, UK)</td>
<td>To explore the experiences and views of people moderately affected with MS following participation in a 12-week exercise programme.</td>
<td>General inductive approach</td>
<td>14 participants within two groups</td>
<td>Semi-structured focus group interviews</td>
</tr>
<tr>
<td>Mulligan et al. (2013) (New Zealand)</td>
<td>To outline the content and pragmatics of the Blue Prescription approach, to uncover what interactions are required to best deliver it, and to identify enhancements to the approach</td>
<td>General inductive approach</td>
<td>Participants with MS (n = 27) and physiotherapists (n = 2)</td>
<td>Individual interviews with PwMS, individual interviews with physiotherapists, clinical notes, and advisory group meeting notes</td>
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<tr>
<td>Plow et al. (2009) (US)</td>
<td>To identify facilitators and barriers to physical activity, and explore the utility of Social Cognitive Theory and Transactional Model of Stress and Coping in understanding behaviour among PwMS</td>
<td>Analytic induction</td>
<td>13 participants classified as physically active, sometimes active or inactive</td>
<td>Individual interviews</td>
</tr>
<tr>
<td>Smith et al. (2011) (New Zealand)</td>
<td>To describe the experiences of people with MS-related fatigue who engaged in community-based exercise activities in order to discover how fatigue influenced their exercise participation</td>
<td>Interpretive description approach to collect and analyse data. Data were analysed using an inductive thematic approach with multi-step verification strategies.</td>
<td>10 women with MS</td>
<td>Individual interviews</td>
</tr>
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<td>Smith et al. (2013) (New Zealand)</td>
<td>To investigate experiences of participating in a feasibility trial of a novel physiotherapy intervention (Blue Prescription)</td>
<td>General inductive approach</td>
<td>27 volunteers</td>
<td>Semi-structured individual interviews</td>
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</tbody>
</table>
Consolidated Criteria for Reporting Qualitative Research (COREQ)

<table>
<thead>
<tr>
<th>Study</th>
<th>Domain 1: research team and reflexivity</th>
<th>Domain 2: study design</th>
<th>Domain 3: analysis and findings</th>
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(Tong et al 2007)

VIA University College

MScPH, Marie Ernst Christensen
(MAEC@via.dk)

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Results (I)

- Social support
- Professional support
  - Exercise-supporting strategies
  - Exercise program
  - Exercise setting
  - Professional relationships
- Outcome expectations
  - Changes of symptoms
  - General well-being
  - Previous experiences
Results (II)

INTENTION

- Professional support
  - Exercise-supporting strategies
  - Exercise program
  - Exercise setting
  - Professional relationships
- Social support
- Outcome expectations
  - Changes of symptoms
  - General well-being
  - Previous experiences

EXECUTION

- Professional support
  - Exercise-supporting strategies
  - Exercise program
  - Exercise setting
  - Professional relationships
- Social support
- Outcome expectations
  - Changes of symptoms

Figure 1

Figure 2
Conclusions

- Social support, professional support, and outcome expectations were related to the intention to exercise, execution of exercise, or both.
- Our results revealed that health professionals influence both the part of the process in which PwMS enter the exercise setting, and the intention to exercise.
- We propose that a circularity from the execution of exercise back to the intention of exercise will form as experiences accumulate over time.
Thank you for listening