

Falls in People with MS; Causes, Attributions and Intervention Needs

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Background

Multiple Sclerosis is a chronic disease with a high falls incidence of greater than 50% (Gunn et al, 2013)¹. Many factors such as poor balance, lower limb weakness and impaired cognition have been shown to be associated with falls but there are currently very few treatments to prevent or reduce falls for people with MS. In order to develop appropriate interventions, information on the causes, context and consequences of falls for people with MS is needed. The International MS Falls Prevention Research Network (IMSFPN) recommends involving all key stakeholders in developing a falls prevention intervention for MS and highlights the importance of obtaining the views and opinions of potential service users i.e. PwMS who have experienced a fall².

Aim

The objective of this analysis is to determine the context of falls among people with MS, their level of concern about falling and their participation level in falls prevention intervention programmes.

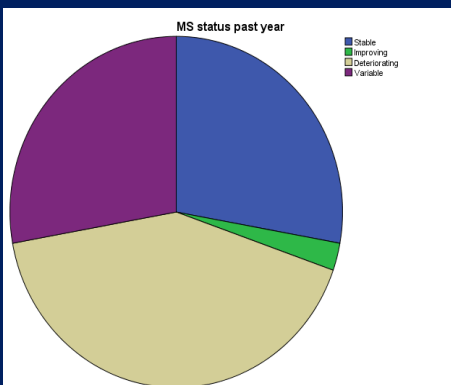


Figure 1. MS status past year

Methods

This is a quantitative study using a face to face or telephone survey. The survey collects information on demographics and history of MS, concerns about falling, account of most recent fall and opinions on falls prevention programmes. Participants are community dwelling people with MS who are able to ambulate 10 metres and have experienced a fall in the past 3 months. Participants were recruited through the neurology clinic in a large tertiary hospital and through patient organisations and support groups.

Results

Mean age of participants (N=79) was 53.9 (SD 10.2) and 77% were female. Mean disease duration was 15.4 (SD 8.9) yrs. 42% of the group (N=33) felt their MS had deteriorated over the past year while 28% felt their condition was stable (figure 1). In relation to their general health, 71% rated it as good or excellent. When asked about their most recent fall, 42% stated it occurred inside the home (figure 2) and 48% reported it was during a mobility activity.

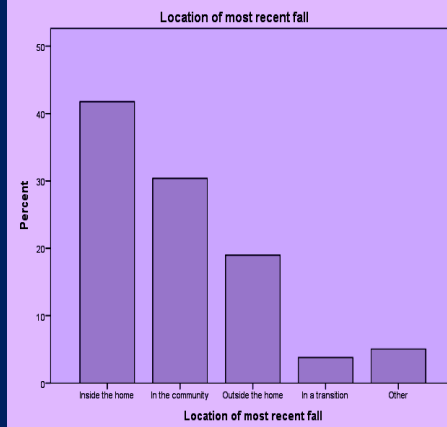


Figure 2. Location of fall

Results

Leg weakness was the most commonly cited cause of falling (30%) followed by distraction (20%) and poor balance (15%). 67% of participants were somewhat worried or very worried about falling (figure 3) but only 37% had reported a previous fall to a health care professional. Despite the high concern about falling and high occurrence rate only 8% of the group had participated in a previous falls prevention intervention.

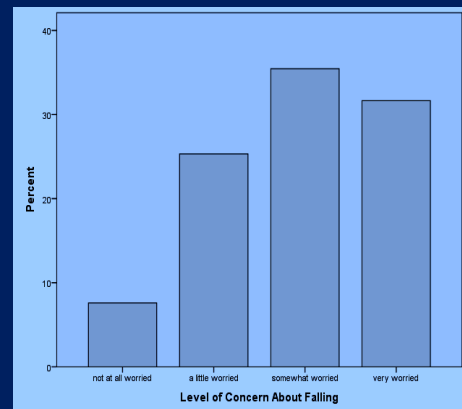


Figure 3. Concern about falling

Conclusion

Preliminary results from this study confirm previous research findings that show most falls for people with MS occur within the home during mobility activities. Fear of falling tends to be high in this population and the majority have not received falls prevention interventions. Further analysis will look at any links between memory/concentration (using the Blessed test) and self-reported balance impairment and incidence of falls.

References:

- Gunn, H. J., Newell, P., Haas, B., Marsden, J. F. and Freeman, J. A. (2013) 'Identification of Risk Factors for Falls in Multiple Sclerosis: A Systematic Review and Meta-Analysis', *Physical Therapy*, 93(4), 504-513.
- Finlayson, M., Cattaneo, D., Cameron, M., Coote, S., Matsuda, P.N., Peterson, E., Sosnoff, J.J. (2014) 'Applying the RE-AIM Framework to Inform the Development of a Multiple Sclerosis Falls Prevention Intervention', *Int J of MS Care*, 16: 192-197.