

Exercise and lifestyle physical activity for people with MS: putting recommendations into practice

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Introduction

Research shows that physical activity and structured exercise can improve symptom management, mood, physical function, and overall well-being for people with MS. The document *Exercise and Lifestyle Physical Activity Recommendations for People with Multiple Sclerosis Throughout the Disease Course* (Kalb et al., 2020) provides guidance for clinicians on promoting activity and exercise, including recommendations on dosage, type and frequency of activity based on EDSS levels.

People with MS are generally less active than the healthy population. Neuro Heroes offers online exercise sessions with a physio to help increase physical activity, improve strength, fitness, coordination, and stability in sitting and standing. Our combined rehabilitation and exercise training approach aims to optimise and enhance overall function and quality of life.



Methods

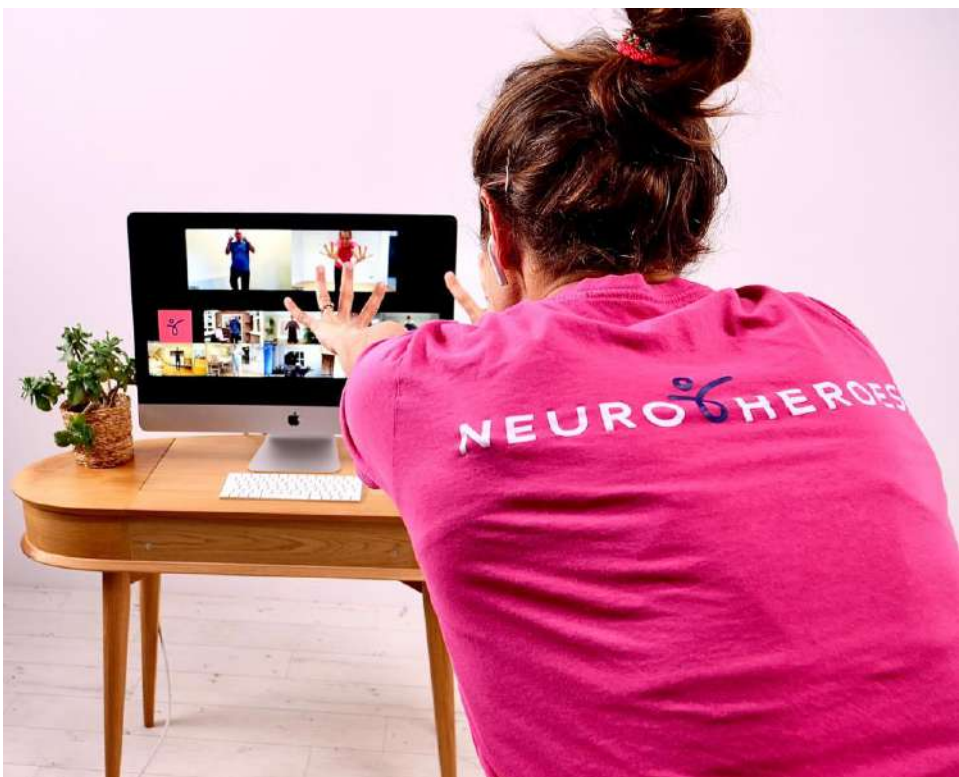
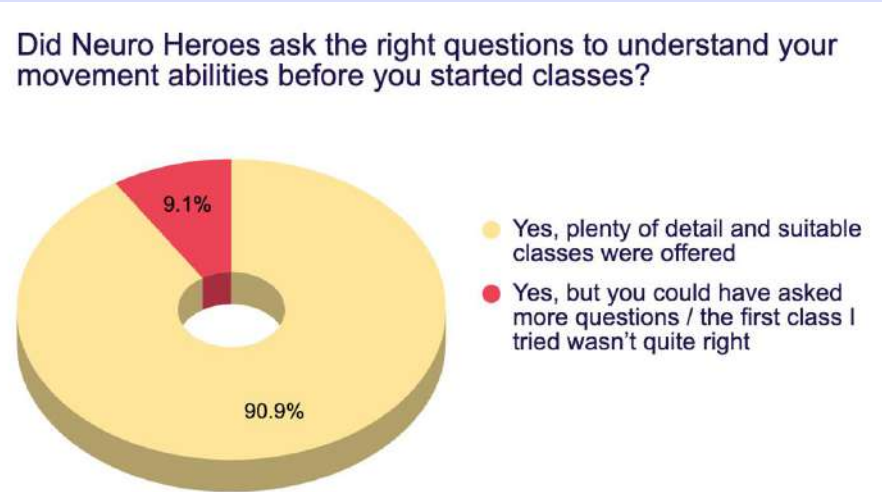
Neuro Heroes conducted an audit of their MS exercise service to ensure it aligns with the consensus document guidelines. This audit involved an internal review and a questionnaire completed by 22 clients, ranging from EDSS level 0-8. The audit assessed client information, class content, exercise intensity, and barriers and facilitators to determine whether the service follows best practices and exercise recommendations across the EDSS scale.

Outcomes

The service review highlighted that Neuro Heroes offers options for people to be active at different levels of ability at a time when many doubt their ability to be active with MS. Facilitators to activity are well met with online provision, run by dynamic experts. Neuro Heroes routinely asks about individual activity levels and caters well to changing needs, but could offer more information on exercise to our MS community. The different types of exercise recommended at each EDSS level are met by some classes more than others and some areas of content need to be added to class plans to support people to work aerobically and in standing where appropriate.

Information gathering and giving

The Neuro Heroes initial online assessment form appears to be thorough enough to gather appropriate information on people and their functional level of movement to be able to group them into sessions of a suitable level. 18% of respondents felt they could have been given more information about why it's important to be active with MS, either before or during classes.



Type and intensity of exercise

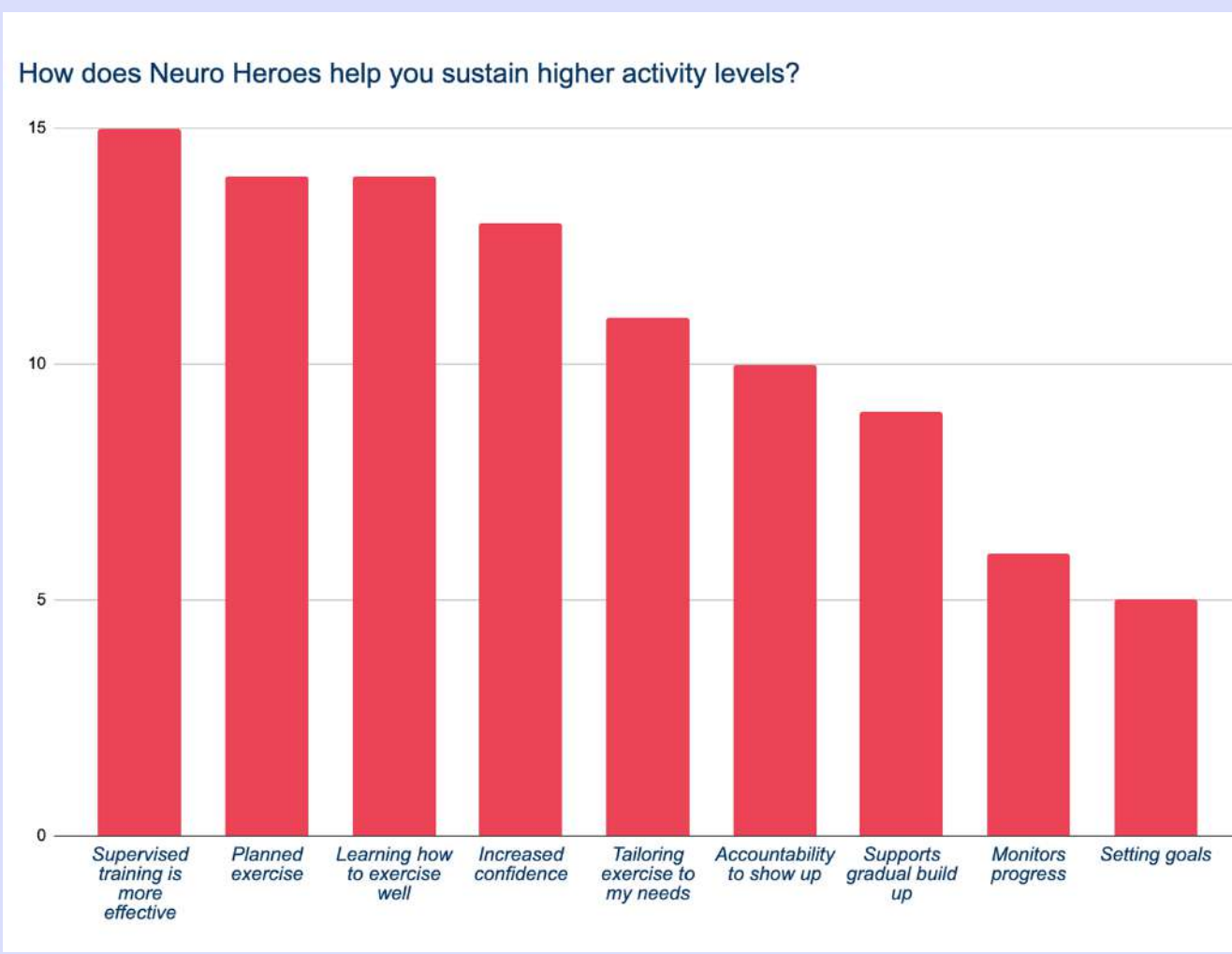
The consensus guidelines set minimum exercise targets for people with MS across five EDSS levels, recommending aerobic exercise at >70% of aerobic capacity or 70% effort for EDSS 0-8. In a Neuro Heroes class, 7 participants reported working at 40-60% of their capacity for the majority of the class, 11 at 60-80%, and 3 at over 80%, while only one worked below 40%.

Guidelines recommend that people with MS do aerobic, resistance and flexibility training as well as working on postural control, balance, agility, breathing and coordination. This word cloud denotes the type of activity clients feel they achieve most in a Neuro Heroes class.



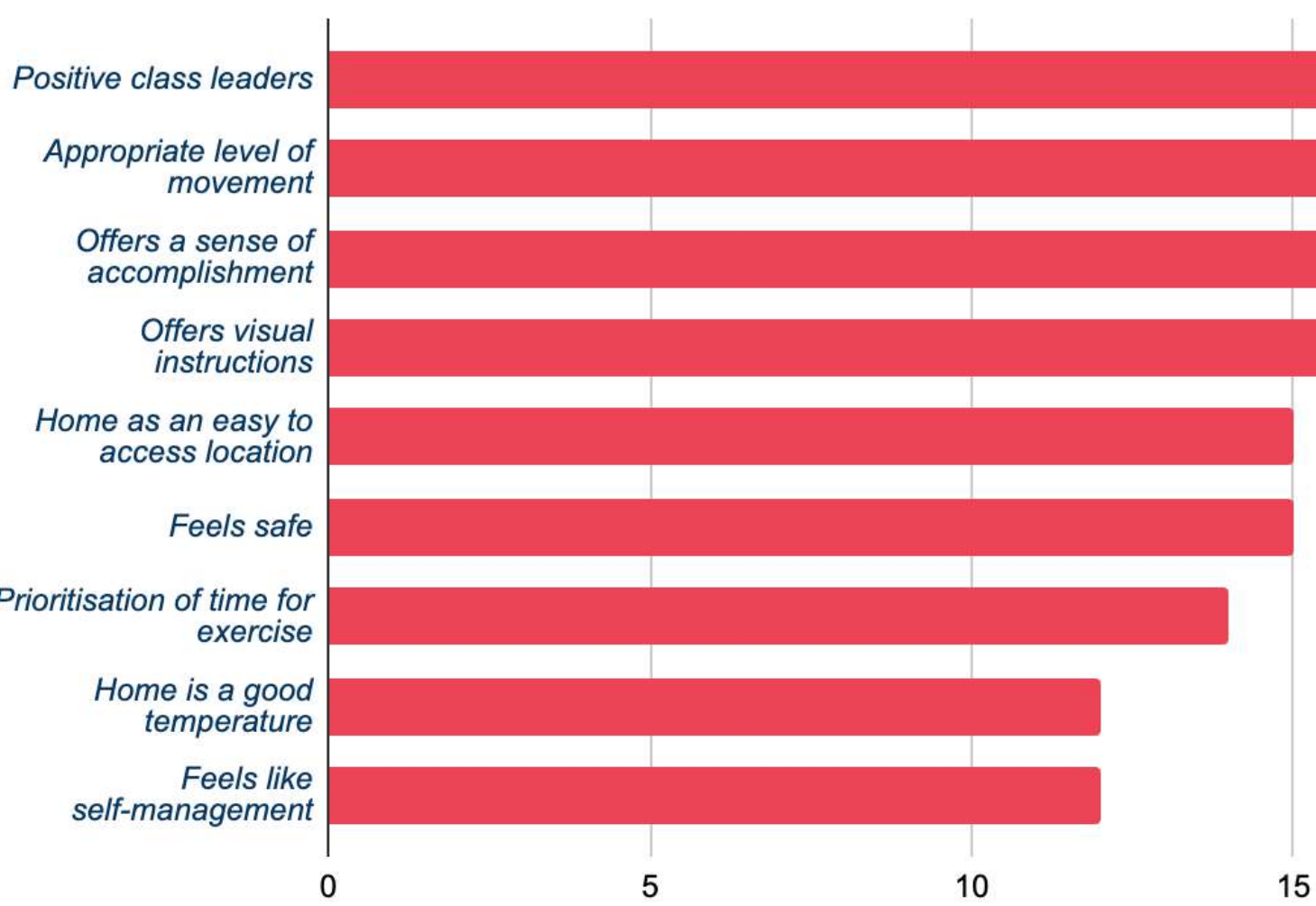
How does Neuro Heroes promote sustainable activity levels?

The most common reason people reported was feeling that supervised training is more effective than exercising alone, closely followed by having



exercise planned into the week and learning how best to exercise with MS. Specialist support and all other options given are stated as key messages promoted by the guidelines throughout the EDSS. Fewer clients reported Neuro Heroes helping them to monitor progress and set goals.

Does Neuro Heroes offer any facilitators to activity and exercise?



Top facilitators to activity from Neuro Heroes

Conclusions

- Neuro Heroes asks about exercise habits per guidelines but could provide more information on exercise benefits and outcomes.
- Leg strengthening, standing, and walking exercises were less common than other types of activities in classes, though 27% attended seated classes.
- 59% of clients work at over 60% of their capacity, but few focus on aerobic exercise in Neuro Heroes sessions.
- While comparing guidelines to diverse clients is challenging, Neuro Heroes helps build confidence and offers MS-specific exercise tailored to individual needs, and gives support to people to build up activity levels.

References

- Kalb R, Brown TR, Coote S, Costello K, Dalgas U, Garmon E, Giesser B, Halper J, Karpatkin H, Keller J, Ng AV, Pilutti LA, Rohrig A, Van Asch P, Zackowski K, Motl RW. Exercise and lifestyle physical activity recommendations for people with multiple sclerosis throughout the disease course. *Mult Scler*. 2020 Oct;26(12):1459-1469
- Kinnett-Hopkins D, Adamson B, Rougeau K, et al. People with MS are less physically active than healthy controls but as active as those with other chronic diseases: An updated meta-analysis. *Mult Scler Relat Disord* 2017; 13: 38-43

