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# A qualitative exploration of physiotherapists' perceptions about exercise and physical activity: reflections on the results from a Delphi Study

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## ABSTRACT

**Purpose:** This study explored physiotherapists' interpretation of exercise and physical activity, examined physiotherapists' views and opinions about the prioritised physical activity practices of people with multiple sclerosis and its implication for clinical practice.

**Method:** Fourteen physiotherapists (12 females, 2 males) with experience of working with people with multiple sclerosis in the community participated in three focus groups. Physiotherapists commented on the results of a previous Delphi study which highlighted the prioritised exercise and physical activity practices and reasons people with multiple sclerosis engage in exercise and physical activity. The focus groups were audio recorded and transcribed verbatim. Data were analysed using framework analysis.

**Results:** Four themes were developed from the analysis namely, Blurred terminologies, Influencing factors for the meaning of exercise and physical activity, When professional expertise meets experiential expertise and The resolve: resolving professional and experiential tensions.

**Conclusion:** Physiotherapists described exercise and physical activity as movement with a focus on the physiological attributes. Nonetheless they valued and use exercise and physical activity as strategies to manage the symptoms associated with multiple sclerosis. Physiotherapists are strategically placed in the community to initiate discussions, assess, and create opportunities to enhance the physical activity practices of people with multiple sclerosis. However, there is greater scope for the application of physical activity to be embedded in routine clinical practice in the management of multiple sclerosis in the community.

## ARTICLE HISTORY

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## KEYWORDS

Exercise; physical activity; multiple sclerosis; qualitative; priorities; physiotherapy

## ► IMPLICATIONS FOR REHABILITATION

- Physiotherapists should design flexible physical activity programmes which are meaningful, engaging and foster the necessary environment to sustain physical activity participation in people with multiple sclerosis.
- Health professionals should be aware of and understand the individuals' priorities as these are key drivers to engaging and sustaining physical activity in community dwelling people with multiple sclerosis.
- Physiotherapists should be aware of their own beliefs and theoretical principles that guide designs and treatment programmes as these might either enhance or restrict physical activity in people with multiple sclerosis.



## Introduction


Exercise and physical activity is beneficial for people with Multiple Sclerosis (MS). Key benefits include, improved muscle strength, fitness and quality of life [1,2]. However, people with MS report lower levels of physical activities [3,4]. As such, they are predisposed to the secondary complications associated with inactivity [5] in particular stroke, type 2 diabetes and cardiovascular disease [3]. It is therefore imperative to find ways to improve physical activity levels for people living with the condition and recognise it as a public health concern.

To date, attempts to improve physical activity levels in people with MS remain a challenge. Limited successes have been reported with interventions such as behavioural approaches [6–8],

the effects of which are short lived. This could be due to the variability of MS, or the type and duration of the behavioural change intervention [8]. Other studies have explored the barriers (e.g. lack of time and fatigue) [9,10] and facilitators (e.g. self-efficacy and perceived fitness) [10,11] to engagement in physical activity [9,10] in people with MS but there is still a lack of understanding about how this knowledge has translated into practice.

An area that remains underexplored in the literature is understanding the prioritisation and meaning of exercise and physical activity both from the perspective of people living with MS and health professionals. A recent Delphi study highlighted the prioritised exercise and physical activity practices of community

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dwelling people with MS [12]. It provided some evidence that people with MS conceptualise exercise and physical activity in ways that might not be fully appreciated or understood by healthcare professionals [12]. Further exploration of those findings also demonstrated that for people with MS, exercise and physical activity was beyond movement and integral to how they lived and coped with a variable progressive neurological condition [13]. These findings have clinical implications for health professionals such as physiotherapists who work with people with MS in the community.

Physiotherapy, the third most contacted healthcare profession by people with MS in the United Kingdom [14], plays an important role in improving health and wellbeing through the promotion of exercise and physical activity [15–17]. Indeed, exercise and physical activity remain one of the main strategies used by physiotherapists to manage the symptoms of MS. Clinical guidance within the UK recommends the use of exercise such as, moderate progressive resistance training, aerobic, balance and stretching exercises to improve mobility and or fatigue [18]. But less is known about the understanding and use of physical activity by physiotherapists in the management of MS in the community.

For purposes of this paper, physical activity has been defined as “any bodily movement produced by skeletal muscles that results in energy expenditure” [19, p.126] and would include domestic, occupational and sports related activities. Exercise on the other hand has been defined as “a subset of physical activity that is planned, structured and repetitive” [19, p.126] and aims to either improve or maintain physical fitness. Whilst it is known that physiotherapists value physical activity [20,21], have the expertise to deliver such intervention [22] and are strategically placed to facilitate discussions around physical activity [16,23] evidence from the wider literature suggests that physical activity promotion is not seamlessly embedded in physiotherapy practice [21,22].

Furthermore, little is known about the attitudes of physiotherapists with respect to the exercise and physical activity practices of people with MS in the community. Awareness of the attitudes of health professionals is important as inherent beliefs about physical activity could restrict its promotion [21]. Understanding these might aid the therapeutic collaborative relationship between people living with the condition and prescribers of exercise and physical activity. In addition, this understanding could provide the foundations necessary to develop and/or design physical activity programs which are meaningful and engaging and might foster the necessary environment to sustain physical activity participation in people with MS. The aims of this study were three-fold: To explore physiotherapists’ interpretation of exercise and physical activity; to examine physiotherapists’ views and opinions about the meanings and prioritised physical activity as reported by people with MS; and to discuss how these insights may potentially influence current physiotherapy practice.

## Method

### *Context and theoretical perspective*

This qualitative study forms part of a larger study which used a mixed methods approach to examine the exercise and physical activity priorities of people with MS [24]. The programme of research adopted three phases. The first, aimed to identify the exercise and physical activity practices and priorities of people with MS using a Delphi approach [12]. The second aimed to explore the meanings people with MS ascribed to exercise and physical activity [13]. This paper, presents the third phase where the findings from the Delphi Study were presented to

physiotherapists in order to explore the clinical implications. To address these varied aims, the researchers adopted Pragmatism as the theoretical approach to underpin the studies [25,26]. Pragmatism asserts that there are multiple ways of knowing or seeking knowledge [27]. A pragmatic position provided the opportunity for the researchers to understand the meanings of exercise and physical activity from different perspectives. That is, the perspectives of people with MS living in the community who experience life with a chronic progressive neurological condition as well as the perspectives of physiotherapists who were involved in working with people with MS. Combining the insights of the different perspectives that exist and the knowledge gained through exploring this topic from different viewpoints might help to shape treatment ideas about exercise and physical activity in people with MS living in the community.

### *Focus group method*

This study took a qualitative approach which incorporated three focus groups. Focus groups are widely used in healthcare research to gauge group opinions about a shared topic of interest [28,29]. This study utilised focus groups because of some of the key advantages, such as, the ability to gather information from more than one person all within one space, at the same time and around a topic of shared interest, thereby creating a wealth of information [28,29]. Data emerging through this type of interaction amongst research participants are neither captured using quantitative designs nor certain qualitative designs, for example, one to one interviews.

Approval was granted by the School of Health Sciences and Social Care Research Ethics Committee, Brunel University London (Reference number 13/09/PhD/01) and Research and Development approval from Buckinghamshire Healthcare NHS trust (Reference RXQ/577) for one focus group (Focus Group 1). Ethics considered were related to confidentiality, anonymity, informed consent and the right to withdraw from the study.

### *Recruitment and participants*

Convenience sampling was used to recruit participants to all the focus groups [30]. A three-strand strategy for recruitment was implemented. These include raising awareness of the study through the local physiotherapy clinical interest group, emailing managers of community therapy teams and contacting physiotherapists working within the MS Therapy Centres.

Physiotherapists were included if they had experience working with people with MS in the community at a senior level (at least 2 years). These physiotherapists would be more suited to give their views and opinions as they have the knowledge and experience of working with people with MS. Physiotherapists were excluded if they had no experience working in the community and no experience working with people with MS.

Recruiting participants to the focus groups posed many challenges, mainly around sample size. Recommended size of a focus group ranges from four [29] to fourteen per group [28] and the aim was to recruit a minimum of 12 participants. However, the number of participants recruited was based on the practicalities associated with interest ( $n=24$ ) and availability ( $n=14$ ). Of the physiotherapists interested, seven were unable to make any of the suggested dates and times and three cancelled on the day of the focus group.

A topic guide (see [Supplementary information](#)) was developed based on study aims and the findings from a previous Delphi

**Table 1.** Showing the exercise and physical activity priorities and the reasons people with MS engage in exercise and physical activity.

	The prioritised exercise and physical activity practices of people with MS	The prioritised reasons why people with MS engage in exercise and physical activity
1	Self-care activities (e.g., shaving, shower, washing and dressing, cleaning teeth)	To improve MS symptoms (e.g., to improve or maintain strength, reduce pain and reduce spasms)
2	Everyday life activities (e.g., transferring, standing, pushing wheelchair or walking, climbing stairs)	Out of necessity (e.g., part of daily activities, activities that must be done)
3	Domestic activities (e.g., cooking, shopping, housework, laundry)	To keep active (e.g., to keep mind and body active, to maintain function and keep transferring)
4	Transportation (e.g., using public (bus/taxi) or personal transportation)	For mobility (e.g., to keep walking)
5	Leisure activities (e.g., gardening, dancing, sport, visiting friends)	Living with MS now and in the future (e.g., fear of deterioration, to combat MS)
6	Activities due to family roles (e.g., spending time with family, looking after children/grandchildren)	For self-reliance (e.g., to maintain ones' independence and choice)
7	Stretches (e.g., activities done to stretch the upper and lower limbs)	Emotional wellbeing (e.g., pleasure, improve mood, reduce stress)
8	Physiotherapy (e.g., activities done with or by a physiotherapist)	For self-esteem (e.g., to manage weight, sense of achievement, self-worth)
9	Activities without weights (e.g., upper and lower limb exercises, abdominal, bed and chair exercises)	Flexibility (e.g., to maintain or improve flexibility)
10	Activities with technology (e.g., computer, move it for MS DVD, phone,Wii)	For social reasons (e.g., social, feel connected, be part of community)

study which highlighted the prioritised exercise and physical activity practices and the reasons people with MS engage in physical activity [12]. Indicative topics included the meanings of exercise and physical activity, physiotherapists' perspective of the Delphi results and the implications for clinical practice within the community. Cue cards identifying the prioritised categories from the Delphi Study were used as a tool to facilitate the discussions (Table 1).

The three focus groups were held at an agreed time and location that suited participants. Two groups were held at participants' place of work, one outside working hours (Focus Group 1) and one during the team meeting slot within working hours (Focus Group 3). The other group (Focus Group 2) was held after work in a quiet meeting room at a central location.

The primary researcher (AS), who had previous experience of facilitating focus groups, facilitated all three groups. All the focus groups followed a similar pattern as set out by the topic guide. However, the researcher was not bound by the topic guide and at points exercised the freedom to explore thoughts and ideas based on the responses from each group. Each focus group lasted between 70 to 90 minutes.

For quality assurance, after every major topic the main points were summarised to clarify and or confirm views expressed with the group. Active participation was encouraged by asking questions, for example, "anything else you want to say about this before we move on?", and specific opposing views were encouraged by asking, whether or not anyone else had a different view or different experience.

### Data management and analysis

The focus groups were audio recorded and transcribed verbatim by an independent professional transcriber. The primary researcher (AS) anonymised each transcript and checked them for accuracy against the audio recordings.

The focus groups were analysed separately using the principles of Framework Analysis [31]. The technique involves 5 iterative stages of analysis namely, Familiarisation- reading the transcripts, making notes and listening to each focus group several times: initial codes and ideas were identified deductively and inductively, which reflected the thoughts and general impressions of each

group; Identifying a thematic conceptual framework-this phase was informed by the topic guide as well as the research questions and similar patterns within the data were identified and merged in order to identify the key themes. The conceptual framework was discussed with the co-researchers prior to the next phase of the analysis; Labelling- involved applying the conceptual thematic framework to all the focus groups. All transcripts were labelled with the key themes identified using the thematic framework; Charting-this phase further reduces the data by summarising the content of each labelled paragraph. A thematic matrix was created and organised to reflect the themes across the data set and with reference to each participant within the group. This chart was used to identify patterns that were similar and different within the data. During this process, participants' quotations were maintained to ensure that interpretations were grounded in the data; Mapping and Interpretation- the matrix-based charts were read and re-read across the themes and also across all groups. Each chart was mapped separately to identify the key dimensions and associated major themes. Major themes along with their sub-themes were developed by the primary researcher (AS) and discussed with the co-researchers (LD and MN). Following critical discussions adjustments were made in some instances to the major themes or subthemes. This data analysis method provided a structured approach to the sorting, organising and interpretation of data.

### Processes to enhance rigour and credibility

The primary researcher (AS) with a background in physiotherapy conducted the focus groups and analysed the data. Acknowledging that this could have influenced aspects of the study a number of checks were employed. These included a reflexive journal which was kept throughout the data collection and analysis processes. Issues highlighted were discussed with the co-researchers in order to address potential assumptions [32]. Also, transcripts from the focus groups were shared with the co-researchers (LD and MN) who reviewed each stage of the analysis and critical discussions ensued which enhanced the methodological rigor and transparency of the process [33].

Table 2. Demographic profile of study participants.

Participant	FG	Gender	Age	Band	Location
1	FG1	Female	29	Band 6	Community-NHS
2	FG1	Female	35	Band 7	Community –NHS
3	FG1	Female	37	Band 7	Community- NHS
4	FG1	Female	38	Band 7	Community –NHS
5	FG1	Female	33	Band 6	Community –NHS
6	FG2	Female	27	Band 6	Community- NHS
7	FG2	Female	50	Band 6	Community- NHS
8	FG2	Female	26	Band 6	Community- NHS
9	FG2	Female	48	Band 6	Community-NHS
10	FG3	Female	34	Band 6	MS Therapy Centre
11	FG3	Female	44	*Band 5	MS Therapy Centre
12	FG3	Female	40+	Mx	MS Therapy Centre
13	FG3	Male	30	Band 6	MS Therapy Centre
14	FG3	Male	57	Mx	MS Therapy Centre

FG1: Focus Group 1; FG2: Focus Group 2; FG3: Focus Group 3; Mx: Manager; NHS: National Health Service.

\*Met criteria based on experience- participants had at least 2 years experience working with people with MS in the community.

## Results

Fourteen physiotherapists (12 Females, 2 Males) with experience of working with people with MS in the community participated in three focus groups (FG1, FG2 and FG3). Two focus groups (FG1,  $n=5$ ; FG2,  $n=4$ ) included physiotherapists who work within the National Health Service (NHS). The third focus group (FG3,  $n=5$ ) included physiotherapists working at a charity based organisation- The MS Therapy Centre.

Participants in all three focus groups irrespective of their seniority interacted well throughout the group discussions. The researcher observed a yielding and an allowing of views to be expressed even if they were not the most common opinion of the entire group. Table 2 shows the demographic profile of each participant.

Four major themes were developed from all the focus group discussions. These were, “Blurred terminologies”, “Influencing factors for the meaning of exercise and physical activity”, “When professional expertise meets experiential expertise” and “The resolve: resolving experiential and experiential tensions”. Illustrative anonymised quotes will be presented using some key detail such as, abbreviations to note facilitator (Fac) and respondent (R), a numbering system to denote changes in respondents’ quotation (e.g. R1, R2), a focus group number to denote references made by the three focus groups (e.g. FG1) and transcript line for transparency.

### Blurred terminologies

Participants across all three focus groups described exercise and physical activity based on its attributes. For exercise, inherent attributes expressed were that these were formal activities with a set structure and challenge:

R1 I was just thinking sort of more formal things like going to a gym class or you know going out for a run ...you know something more formal really.

R2 Activity, fitness ...

R3 Challenges. set yourself some challenges. And um ... you know you want to get your heart rate up to a certain level for a certain amount of time. And um ... or you want to do a certain distance in a certain time, you want to beat your previous record (FG3, 159–185)

Participants across all FGs expressed that the inclusion of words such as challenge, increased heart rate, fitness, strength and performance were necessary for any activity to be described as exercise.

In contrast, physical activity was associated with different attributes such as non-specific activity, less demanding and goal directed as part of daily living:

R1 Things like walking the dog, walking to the shops, carrying the shopping.

R2 As its maybe a less intensive form of exercise (FG1, 270–274)

Collectively, participants agreed that both exercise and physical activity were forms of activities, where one was intensive (exercise) and the other less intensive (physical activity). These were the common grounds shared between participants and across all the groups. However, the interconnection and overlapping that exists between exercise and physical activity as well as how they are used interchangeably in clinical practice led to some blurring of terminologies which presented challenges in ascribing meanings to both. These debates led to participants re-evaluating their own descriptions of exercise and physical activity and reasoning out loud the sense of uncertainty with their definitions of exercise and physical activity:

R1 I kind of don't agree with my own definition ...

R2 Yeah me too ... that's funny how I feel like that as well. ... because you've asked us to ...

R3 Yeah I feel like that as well.

R2 ... differentiate between the two, and thinking of exercise as being structured in some way. So as you said about you know to achieve a specific end. And physical activity – basically anything that gets your heart rate above where you're resting ... so could be anything.

(FG2, 215–233)

Physiotherapists descriptions of exercise and physical activity were largely in line with the literature [19]. Nonetheless, this notion that physical activity could be “anything” was the view that caused some uncertainty over the meaning of exercise and physical activity. This led to a series of reasoning to substantiate their claims or negotiating with others why it was so difficult to define. Ultimately the groups realised that in addition to terminologies used to define both words, other factors also contributed to their meanings.

### Influencing factors for the meaning of exercise and physical activity

Participants were asked what influenced their understanding of exercise and physical activity. Training versus pragmatism in the community was noted as a key factor. Participants felt that undergraduate training led to physiotherapists being more prescriptive in their treatment designs and tended to be more exercise focused. However, they expressed that when working with people living in the community they had to be more pragmatic in treatment designs:

R1 Yeah I think the reality of working versus potentially what you learn in the classroom. you know we're relatively keen, we're relatively interested in exercise and how that affects the body. But it would almost seem when you go out to work that the majority of the population don't think like that. So therefore you end up kind of changing maybe from prescribing exercises to okay well what is our overall goal here .

R2 Yeah, yeah. You need to get a lot more pragmatic don't you

(FG2, 345–376)

This pragmatism led one focus group to discuss the language they used in practice which placed a greater emphasis on movement rather than to focus solely on exercise. This they felt was in keeping with taking a more functional approach.

Participants also discussed how language could either positively or negatively affect the way people think about exercise and physical activity:

*R1 I think it's just sort of general language and general usage. Say the media for example, if they talk about exercise, they're going to be talking about the more formal stuff aren't they, not talking about just walking up the stairs or doing the garden.*

*R2 Yeah but still with the media with the whole sports and you know fitness and you know lose weight and that stuff.*

*R1 Probably puts people off actually isn't it?*

*R2 Yeah.*

*R1 So the language is really important isn't it?*

*R2 Yeah.*

*(FG3, 278–296) general agreement amongst the group.*

Another pragmatic influence was government led initiatives and lack of resources in clinical practice:

*R ... right so we work in the NHS – you can't keep people ... we're not allowed, and we can't see people every week for exercise or stretches. And mainly from a resource point of view initially, but also in terms of sort of the self- management, you know the expert patient, you know facilitating patients to manage their conditions ... I think you then end up looking at exercise in a very different sort of way, cos it's not something that they're coming to you for – you are trying to encourage them to take on board the principles and then do it in their everyday life. (FG1, 462–475)*

There was a sense that some of the government led initiatives [34] constrained how they viewed exercise and physical activity and also raised concerns about whether or not the direction of these generalised government led initiatives reflected patients' current need.

### When professional expertise meets experiential expertise

When participants reflected on the results of the Delphi study [12] various responses were observed in the narratives of all participants in the NHS and the MS Therapy Centre. Their responses demonstrated some ambiguity in the categorisations which led to the creation of inner tensions in their discussions. Words used to describe their feelings were 'surprised', 'not surprised', 'feeling sad' and 'ridiculous', but these views were not static and in some cases changed through the process of discussion:

*R1 I wouldn't have thought driving was a physical activity.*

*R2 Yeah I was thinking about driving.*

*R1 Public transport yeah, but I wouldn't have thought driving. Having to walk to get a bus?*

*R2 But it's the effort that they take to do it.*

*(several people speaking)*

*R1 Yeah, no I mean fair enough, but it never occurs to me that ...*

*R4 Yeah but they consider it as an exercise or physical activity that ... (inaudible – several people speaking)*

*R2 I mean getting ready to go out, and then going out and then getting back ...*

*R4 It's the effort – they're so knackered, aren't they, they're so tired.*

*R2 Or getting in and out of a car, Just the logistics of going out.*

*R3 I think that's probably what they're talking about.*

*R1 No I think that means that you don't actually really think about ... you know you just think well that's just getting in the car and going somewhere. But actually if that is something that they're thinking of as physical activity maybe we need to plan more around it. and think a bit more about (laughs) how it fits (inaudible)*

*(FG3, 385–439)*

A similar attitude emerged when participants were presented with the results from the top 10 reasons people with MS engaged in certain activities:

*R1 ... to improve the MS symptoms ... like range of movements, strength ... to me that seems so impairment based, which the activities they did weren't impairment reasons, they were much more participation reasons. And these self-esteem, emotional wellbeing (pointing at cue cards) – I would have thought they would have been much higher up. And improving your balance for example would have been at the bottom. I'm quite surprised at that. Out of necessity I ... I kind of ... understand ... you know like getting up, getting dressed ...*

*R2 Yeah would be quite high up (several people speaking)*

*(FG1, 957–970)*

The above illustration reflected the views expressed by the other groups (FG2 and FG3) and highlighted a sense of bewilderment about the reasons people with MS reported for engaging in exercise and physical activity. There appeared to be a genuine lack of understanding from the professionals' perspective in light of what they perceived to be a mismatch between what people with MS say they do and the reasons they engage in such practices. This apparent mismatch identified by the therapists created inner tensions within themselves as well as amongst their peers as they contemplated whether or not realistically these claims fitted the therapeutic approach based on their professional knowledge of MS. Most of this unease was centred on the most important reason people with MS reported for engaging in exercise and physical activity was to improve MS symptoms [12]. Participants expressed the uncertainty about whether or not their interventions improve MS symptoms.

Following the above debates, the tone and language transitioned to a phase where participants attempted to understand and make sense of the Delphi results:

*R1 if you haven't got the energy to get washed and dressed then you're not going to do anything else are you?*

*R2 It is functionally biased ...*

*Fac And why do you say functionally biased?*

*R2 Well me as an individual, I would like to keep my independence. And if you look at each one; Self-care activities, Everyday life activities and Domestic activities – by being able to do those I keep my independence ...*

*R1 And probably if they cannot achieve the first three they won't be able to do the rest. (FG3, 876–903)*

However, there was still a lingering concern about whether or not the exercise and physical activity people with MS engaged in was adequate to contribute towards levels of fitness. This level of fitness was in line with what they expressed in earlier section, for example, improved heart rate. Following contemplation some participants concluded that the results of the top 10 activities identified and prioritised by people with MS had little to do with exercise:

*R The only thing is it sounds more like people are thinking about their priorities in terms of what's important to them, and not so much how much physical activity and exercise they get from those things (FG1, 761–765)*

Physiotherapists within the MS Therapy Centre acknowledged some of the challenges people with MS living in the community experience due to severity in disabilities and as such may choose activities accordingly:

*R But also you know looking at these activities, they're activities actually where we wouldn't have thought of – they're looking at them through their eyes where they're limited with their physical ability. So actually playing a game with the Wii at home with a TV, with the interaction, or doing ... 'cos you can do physical activity with a Wii ... for them they feel they're able to do some of it, and perhaps they're not embarrassed. (FG3, 698–707)*

Participants realised the impact personal choice might have on decisions regarding the types of activities people in general engage in.

### The resolve: resolving professional and experiential tensions

Following the debates and attempts to make sense of the Delphi results, physiotherapists' discussions transitioned to resolve the issues (e.g. how people with MS prioritised their activities) raised by people with MS. This was evident by physiotherapists' reflections on whether or not the results of the Delphi study could inform current physiotherapy practice in the community. Participants attempted to understand the perspectives of people with MS through the lens of existing rehabilitation approaches. The majority of the participants felt that over the years there had been a shift in approach to managing long-term conditions in the community. This shift was attributed to the ethos of most community rehabilitation teams that placed an emphasis on Multi-Disciplinary Team (MDT) working and goal setting. Discussions across all three focus groups emphasised the importance of using a functional approach to managing people with MS within the community:

*Fac So does this affirm or not what you already do?*

*R1 Yeah I think it does, yeah.*

*R2 I think we've certainly been trying to . not move away, but sort of really think about when you give someone exercises to do, like and by exercises I mean you know specific exercises targeting specific issues, that you try and be a bit more thoughtful about putting it into some sort of functional context.*

*(FG1, 1188–1198)*

Participants within FG3 reflected on the importance of having the support of a clinical psychologist to work alongside physiotherapists in encouraging people with MS to be more active. They reminisced how this form of support was helpful in the past but was now lacking. This resulted in physiotherapists having to assume a dual role dealing with the physical and the psychological manifestations of MS. They cited examples such as attempting to manage cognitive and anxiety related problems but often lacking in those skills:

*R ... it should be a combined approach. And we get quite good at being psychologists I think because we have to listen a lot, and from our experience we can give advice that is useful. But we're obviously not qualified psychologists, so a lot of our physio is psychology, but it does help to have that experience to help people adjust to their changing life with MS, and to keep them where they are if we can ... (FG3, 1266–1286)*

Participants also acknowledged the need to re-evaluate some aspects of the physiotherapy approach to manage people with MS in the community. For example, the need for focused attention on activities associated with transportation, leisure, family roles and technology as these were not usually considered during

goal setting. There was a sense that these activities were not at the forefront of physiotherapy assessment and treatments:

*R1 See I think that one; activities due to family roles, I don't really address, and I think that's probably 'cos I don't have children and my family don't live nearby. So I think that's probably something that is good to have brought up.*

*R2 Yeah. And I think it would really challenge maybe how you do work . 'Cos I think you know when you think about it in like inpatient settings if we are having difficulty either setting goals or achieving outcomes or whatever for the patient, we would definitely get friends and family in, and maybe we don't do that enough in the real community environment where that person is living (FG2, 921–936)*

Participants expressed that the Delphi results revealed the driving force behind the reasons people with MS engaged in exercise and physical activity, which challenges the way current treatment programs are designed. The results demonstrated the value of having a wider view of exercise and physical activity as they began to reconsider their own description of exercise and physical activity:

*R I thought it was interesting seeing what a lot of patients consider to be activities that I've never really thought of as being activities, and maybe trying to incorporate that a little bit more into the goal setting, which I would say I don't necessarily do (laughs). It certainly yeah makes you think what things are regarded as physical exertion (FG3, 1224–1231)*

However, some participants despite embracing this wider view of exercise and physical activity and reconsidering their initial descriptions returned to having a central focus on the physiological attributes of exercise and physical activity. This suggests that for some participants their "resolve" was incomplete and highlights the challenges associated with working with people with disabilities especially when theoretical and practical applications were misaligned:

*R I know, and I think that that's the thing though isn't it, because there's that real difficult thing of going "This is what I think would really help you". "you know this is what I know from my theory and my background knowledge" and you know ... I mean I don't think that it is necessarily evidence, it's what you know you feel and what we feel that this would be the best thing for you. But ... so many of them just don't want it – they just don't want what we think's best. And maybe that's okay, and I think that that's kind of ... yeah ... I'm definitely feeling a lot like that. (laughter) (FG2, 739–752)*

Of note, participants expressed the desire to do what was best for their clients. However, the Delphi results highlighted the disparity between "professionals' best" and "patients' best".

## Discussion

This study explored physiotherapists' interpretation of exercise and physical activity, opinions about the prioritised exercise and physical activity practices of people with MS living in the community through reflections on the Delphi results [12] and its implications for clinical practice. Four major themes were developed across the focus groups. The views expressed by physiotherapists who work within the NHS and the MS Therapy Centre were similar and collectively informed the major themes and related subthemes.

### Ascribing meaning to exercise and physical activity: The physiotherapists' perspective

To the authors' knowledge, this is the first study to examine in depth the meanings community physiotherapists working with people with MS ascribed to exercise and physical activity. Physiotherapists drew on the underlying physiological attributes

of exercise (intensive) and physical activity (less intensive) as a way to differentiate the two terms. However, interestingly whereas physiotherapists reported that they used both exercise and physical activity in clinical practice, their discussions presented evidence that their natural default position was towards exercise that led to fitness. This focus on exercise reflected threads of their professional identity in relation to exercise prescriptions where physiotherapists are perceived as experts in exercise provision; a view supported and promoted by different professional bodies both internationally and nationally [15,16]. This finding is important as it suggests that whilst the use of exercise is embedded into clinical practice, physical activity, while considered, was less routine in application. This tendency to focus predominantly on fitness might be limiting the scope of physiotherapists in clinical practice and risks excluding other types of activities used by people with MS, that might be meaningful and necessary for sustaining physical activity in the longer term.

This study provided support that physiotherapists' understanding of exercise and physical activity was influenced by their professional knowledge, which reflected their diverse ways of acquiring information. These sources include, national guidelines (NICE) [18], government initiatives such as the 'expert patient' and 'start active stay active' [34,35], media and through clinical interaction. However, this study highlights that these diverse knowledge bases might have competing agendas resulting in a mismatch between what organisations can offer and the expectations of people with MS. This signals that the structures embedded in the current health system to promote physical activity could unintentionally create a barrier to exercise and physical activity promotion. Studies have identified barriers to exercise and physical activity such as factors related to the individual and their environment (e.g. fatigue, access) [10,36]. In addition, external factors such as lack of knowledge of professionals have also been described as a barrier [10,36,37]. However, this study extends the evidence base further to suggest that health professionals' understanding and attitudes towards exercise and physical activity might also be a barrier to sustained engagement of community based physical activities. Furthermore, within physiotherapists' discussions there was the suggestion that they were being constrained by service demands and expectations, which had an impact on what they would realistically offer people with MS. Hence existing health systems may also act as a barrier to appropriate delivery of services.

### ***When professional expertise meets experiential expertise***

The professionals' perspective provided some insight into the attitudes of physiotherapists. It highlighted that the experiential perspective (people with MS) challenged the knowledge base that grounded physiotherapists' understanding of exercise and physical activity as evidenced by the mixed reactions across the focus groups. For example, physiotherapists could identify with some of the benefits of exercise and physical activity reported by people with MS, particularly the psychological and social benefits. However, there was unease as physiotherapists questioned whether or not exercise interventions improved MS symptoms. These views highlight some of the challenges with translating research evidence into the reality of clinical practice. The reasons for these disparities could be explained in two ways. Firstly, there is widespread research evidence that supports the use of exercise and physical activity to improve MS symptoms [1,2]. However, this evidence is predominantly related to people with MS who are mildly or moderately affected by MS. The research evidence for

the benefits of exercise and physical activity in people severely affected by MS is inconclusive [38]. Secondly, engagement and improvement related to exercise is arguably easier to measure, and a core component of physiotherapy practice, as such, there might be greater emphasis placed on those outcomes rather than maintenance or improvement in every-day life. This was highlighted by the focus on fitness as well as the acknowledged limitation in considering relevant goals.

Also, the mixed reactions expressed across the focus groups pointed to the theoretical model that guided their professional practice. For example, they sought to objectify the claims made by people with MS, which is a trait of the biomedical model of practice [39]. This inherent trait challenged whether or not they utilised a holistic approach to management as stated in the focus groups discussions. Similar findings have been reported, where an autographical account of two physiotherapists' reflections on their models of practice highlighted that whilst they embraced a patient centred approach, threads of a biomedical approach lingered within their practice ideology [40]. For participants in this study, their views shifted along a continuum of different theoretical models of practice spectrum; whereby some participants were within the biomedical frame and others transitioning along that frame of practice to a more holistic view. As such, the views of those transitioning and those with the biomedical frame collided.

These findings suggest that physiotherapists working within the biomedical frame were challenged by the subjective experiences of people with MS. It also highlighted that physiotherapists should be aware of their theoretical framework and beliefs about exercise and physical activity, which guides their practice. Physiotherapists over the years have been keen to adopt other models of practice that reflect a more holistic view [39,41], however, as evident from this study, this can be difficult in practice. An approach that offers space for a flexible assessment, intervention, monitoring and support at the right time might be a step forward in managing the unpredictable nature of MS [42].

Another aspect of the findings in relation to the mixed reactions illuminated the gap that exists between professional expertise and experiential expertise. Whilst physiotherapists considered their views and opinions within the context of activities done to and for the body, people with MS did not limit their responses to expressions about activities to the body but reflected a broader and more holistic view of exercise and physical activity. People with MS expounded the concept of exercise and physical activity within the context of their lives [12]. This supports previous findings where health professionals by nature seek to prioritise health whereas the complexity of the lived experiences of the patient might prioritise other areas of life, such as family roles [43]. Therefore, understanding both perspectives might facilitate greater collaboration between physiotherapists and people with MS.

### ***Clinical Implications***

There are a number of clinical applications from this study, some have already been discussed above. The study highlights that greater clarity is needed about the key benefits of physical activity for people with MS. Physiotherapists were found to be confident with the effects of exercise and fitness but less confident about the impact of physical activity. This could be a reflection of the evidence base as the majority of studies in people with MS is reflective of those mildly or moderately affected with the condition [1,3]. Also, it calls for written physical activity clinical



guidance for people with MS which can provide a frame of reference for physiotherapists working in the community.

Also, the activities people with MS prioritised [12] challenged the knowledge base of physiotherapists and was a contributor to the tensions noted in the focus groups. These priorities unearth insights into people with MS' preferences for light physical activities. Given the differences in insights between physiotherapists and people with MS as demonstrated in this study, further research that explores the understanding of sedentary behaviours would be valuable, given its increased relevance to health [44,45].

Additionally, through reflections on the results of the Delphi study [12] physiotherapists made judgements about existing clinical practice. They recognised the importance of collaborative MDT working. This way of working provides a comprehensive approach to the management of MS [18] and help health professionals cope in managing the variability and progressive nature of MS [43,46]. Therefore, the overlapping of roles, which extended beyond physiotherapy boundaries signals the importance of signposting people with MS to the appropriate professionals as an essential part of MDT working. This view supports cross disciplinary involvement in physical activity promotion initiatives.

Furthermore, physiotherapists highlighted the importance of goal setting. All physiotherapists within the study reported being involved in and valued the role of goal setting in managing MS in the community. Goal setting is one of the key pillars that underpin neurological physiotherapy practice [47,48] and has been recommended for people with MS [18]. Other studies have also identified the importance of goal setting that focuses on the needs of the individual [39], as well as a tool to facilitate and enhance exercise and physical activity [22]. However, despite the widespread use of goal setting, physiotherapists in this study expressed the need to focus more on patient related priorities, as people with MS were using their individual priorities as the driving force or the motivation to engage in exercise and physical activity. This knowledge presents another tool which could be used by health professionals to design meaningful, engaging and sustainable physical activity programmes in community dwelling people with MS.

Lastly, physiotherapists, in light of the results from the Delphi study reframed their understanding of exercise and physical activity which was largely shaped and aligned to the definition outlined in the literature. Physiotherapists sought to deliver exercise and physical activity interventions in a way that people with MS could gain the health benefits that lead to physical fitness. However, for people with MS, they had a complex and nuanced relationship with exercise and physical activity [12,13]. From the person with MS perspective, their engagement with exercise and physical activity was less about the health benefits and more about participating in activities they deemed meaningful (e.g self-care, domestic type activities social participation [12]). What the results highlight is the importance of both physiotherapists and the person with MS listening to each other during the therapeutic exchange and creating the space for non-judgemental discussions about exercise and physical activity. Physiotherapists therefore are tasked with engaging with people with MS, being mindful of their attitudes about physical activity and use this as a way to engage and promote physical activity that would ultimately lead to the health benefits associated with physical activity. This could be a starting point for engaging and sustaining exercise and physical activities in community dwelling people with MS.

### **Strengths and Limitations**

One of the key strengths of this study was the implementation of this approach to elicit views and opinions from the perspectives of physiotherapists in relation to exercise and physical activity. Focus groups provided complementary views of the Delphi study findings [12]. One of the benefits of using this group based interaction was its ability to highlight the beliefs and or attitudes of physiotherapists in relation to exercise and physical activity. This was demonstrated by the tensions and debates which resulted from the exploration of the exercise and physical activity practices of people with MS. Likewise, this demonstrated the added benefit of using focus groups to explore different views on a topic that has the potential to challenge personally held views and clarify opinions or lead to the adjustments previously held views [28]. In addition, the number of participants was deemed adequate to gain in-depth insights about exercise and physical activity from the professionals' perspective. Recruiting participants to the focus groups was challenging. However, despite the size and experience levels, group interactions were good as observed by lively discussions and debates.

Limitations relating to this study are acknowledged. It should be acknowledged that the researcher with a background in physiotherapy was involved in conducting the focus groups as well as data analysis processes, which might influence aspects of the study. Also physiotherapists were aware of the primary researcher's (AS) professional background and as such, might have adjusted their views accordingly. To account for these influences on the part of the researcher a number of checks were employed.

Also, this study was part of a larger study and did not explore explicitly the health promotion practices of physiotherapists working with community dwelling people with MS. Whilst the results from this study has implications for health promotion practices, further research is required to explore this area especially for people with MS; a condition for which there is no cure.

### **Conclusion**

Physiotherapists value exercise and physical activity as a method to manage the symptoms associated with MS. Physiotherapists are strategically placed in the community to initiate discussions, assess, and create opportunities to enhance the physical activity practices of people with MS. This study demonstrates that for this to happen, greater clarity of the message around the benefits of physical activity in people with MS is required and the importance of priority goal setting, as these might be key drivers for engaging and motivating people with MS in physical activity. Also, in enhancing the collaborative relationship between physiotherapists and people with MS, physiotherapists should be aware of their attitudes and beliefs about exercise and physical activity which guides their practice as these could either be enhancing or restrictive to people with MS.

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## References

- [1] Rietberg MB, Brooks D, Uitdehaag BM, et al. Exercise therapy for multiple sclerosis. *Cochrane Database Syst Rev.* 2004;3:1–27.
- [2] Ensari I, Motl RW, Pilutti LA. Exercise training improves depressive symptoms in people with multiple sclerosis: results of a meta-analysis. *J Psychosom Res.* 2014;76(6):465–471.
- [3] Motl RW, McAuley E, Snook EM. Physical activity and multiple sclerosis: a meta-analysis. *Mult Scler J.* 2005;11(4):459–463.
- [4] Klaren RE, Motl RW, Dlugonski D, et al. Objectively quantified physical activity in persons with multiple sclerosis. *Arch Phy Med Rehabil.* 2013;94(12):2342–2348.
- [5] Motl RW, Goldman M. Physical inactivity, neurological disability, and cardiorespiratory fitness in multiple sclerosis. *Acta Neurol Scand.* 2011;123(2):98–104.
- [6] Plow MA, Resnik L, Allen SM. Exploring physical activity behaviour of persons with multiple sclerosis: a qualitative pilot study. *Disabil Rehabil.* 2009;31(20):1652–1665.
- [7] McAuley E, Motl RW, Morris KS, et al. Enhancing physical activity adherence and well-being in multiple sclerosis: a randomised controlled trial. *Mult Scler J.* 2007;13(5):652–659.
- [8] Sangelaji B, Smith CM, Paul L, et al. The effectiveness of behaviour change interventions to increase physical activity participation in people with multiple sclerosis: a systematic review and meta-analysis. *Clin Rehabil.* 2016;30(6):559–576.
- [9] Asano M, Duquette P, Andersen R, et al. Exercise barriers and preferences among women and men with multiple sclerosis. *Disabil Rehabil.* 2013;35(5):353–361.
- [10] Kayes NM, McPherson KM, Taylor D, et al. Facilitators and barriers to engagement in physical activity for people with multiple sclerosis: a qualitative investigation. *Disabil Rehabil.* 2011;33(8):625–642.
- [11] Beckerman H, De Groot V, Scholten MA, et al. Physical activity behavior of people with multiple sclerosis: understanding how they can become more physically active. *Phys Ther.* 2010;90(7):1001–1013.
- [12] Stennett A, De Souza L, Norris M. Physical activity and exercise priorities in community dwelling people with multiple sclerosis: a Delphi Study. *Disabil Rehabil.* 2018;40(14):1686–1693.
- [13] Stennett A, De Souza L, Norris M. The meaning of exercise and physical activity in community dwelling people with multiple sclerosis. *Disabil Rehabil.* 2018:1–7. [Epub ahead of print]. <https://doi.org/10.1080/09638288.2018.1497715>.
- [14] Somerset M, Campbell R, Sharp DJ, et al. What do people with MS want and expect from health-care services? *Health Expect.* 2001;4(1):29–37.
- [15] Chartered Society of Physiotherapy. Physiotherapy works: multiple sclerosis (MS). 2011 [cited 2013 Jun]. Available at: <http://www.csp.org.uk/publications/physiotherapy-works-multiple-sclerosis-ms>.
- [16] World Confederation for Physical Therapy (WCPT). Policy Statement: Description of physical Therapy. 2014. [cited 2015 Apr]. Available at: <http://www.wcpt.org/policy/ps-descriptionPT>.
- [17] Dean E. Physical therapy in the 21st century (Part I): toward practice informed by epidemiology and the crisis of lifestyle conditions. *Physiother Theory Pract.* 2009;25(5–6):330–53.
- [18] NICE. Multiple sclerosis: Management of multiple sclerosis in primary and secondary care [cited 2014 Nov 8]. Available at: <http://www.nice.org.uk/guidance/cg>.
- [19] Caspersen CJ, Powell KE, Christenson G. Physical activity, exercise and physical fitness: definitions and distinctions for health-related research. *Public Health Rep.* 1985;100(2):126–131.
- [20] Learmonth YC, Adamson BC, Balto JM, et al. Investigating the needs and wants of healthcare providers for promoting exercise in persons with multiple sclerosis: a qualitative study. *Disabil Rehabil.* 2018;40(18):2172–2180.
- [21] Williams TL, Smith B, Papathomas A. Physical activity promotion for people with spinal cord injury: physiotherapists' beliefs and actions. *Disabil Rehabil.* 2018;40(1):52–61.
- [22] Mulligan H, Fjellman-Wiklund A, Hale L, et al. Promoting physical activity for people with neurological disability: perspectives and experiences of physiotherapists. *Physiother Theory Pract.* 2011;27(6):399–410.
- [23] McGrane N, Galvin R, Cusack T, et al. Addition of motivational interventions to exercise and traditional physiotherapy: a review and meta-analysis. *Physiotherapy.* 2015;101(1):1–12.
- [24] Stennett A. Exercise and physical activity in people with multiple sclerosis: an exploration of priorities, meanings and implications for clinical practice. PhD [dissertation]: Uxbridge: Brunel University London; 2016.
- [25] Creswell JW, Klassen A, Clark V, et al. Best practices for mixed methods research in the Health Sciences. Maryland: National Institute of Health; 2011.
- [26] Biesta, G. Pragmatism and the philosophical foundations of mixed methods research. *Sage handbook of mixed methods in social and behavioural research.* Second edition. United Kingdom: SAGE Publications, 2010. p. 95–118.
- [27] Tashakkori A, Teddlie C. (eds.) *Mixed methods in social and behavioral research.* Second edition. UK: SAGE; 2010.
- [28] Goodman C, Evans C. Focus Groups. In Gerrish K, Lacey A. *The research process in nursing.* 6th edition. United Kingdom: Wiley-Blackwell; 2010. p. 358–368.
- [29] Kitzinger J. The methodology of focus groups: the importance of interaction between research participants. *Sociol Health Illn.* 1994;16(1):103–121.
- [30] Procter S, Allan T, Lacey, A. Sampling. In Gerrish K. and Lacey A. *The research process in nursing.* 6th edition. United Kingdom: Wiley-Blackwell; 2010. p. 142–152.
- [31] Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In: Bryman A, Burgess RG. *Analysing qualitative data.* London: Routledge; 1994. p. 173–194.
- [32] Finlay L. “Outing” the researcher: the provenance, process, and practice of reflexivity. *Qual Health Res.* 2002;12(4):531–545.
- [33] Tod A. Interviewing. In Gerrish K, Lacey A. *The research process in nursing.* 6th edition. United Kingdom: Wiley-Blackwell; 2010. p. 345–357.
- [34] Department of Health. *The Expert Patient. A New Approach to Chronic Disease Management in the 21st Century.* DH, London. 2001.
- [35] Department of Health: Start Active Stay Active. [cited 2012 Jul] Available at: <https://www.gov.uk/government/publications/start-active-stay-active-a-report-on-physical-activity-from-the-four-home-countries-chief-medical-officers>. 2011.
- [36] Borkoles E, Nicholls AR, Bell K, et al. The lived experiences of people diagnosed with multiple sclerosis in relation to exercise. *Psychol Health.* 2008;23(4):427–441.
- [37] Learmonth YC, Marshall-Mckenna R, Paul L, et al. A qualitative exploration of the impact of a 12-week group exercise

- class for those moderately affected with multiple sclerosis. *Disabil Rehabil.* 2013;35(1):81–88.
- [38] Toomey E, Coote SB. Physical rehabilitation interventions in nonambulatory people with multiple sclerosis: a systematic review. *Int J Rehabil Res.* 2012;35(4):281–291.
- [39] Nicholls DA, Gibson BE. The body and physiotherapy. *Physiother Theory Pract.* 2010;26(8):497–509.
- [40] Mudge S, Stretton C, Kayes N. Are physiotherapists comfortable with person-centred practice? An autoethnographic insight. *Disabil Rehabil.* 2014;36(6):457–463.
- [41] Leplege A, Gzil F, Cammelli M, et al. Person-centredness: conceptual and historical perspectives. *Disabil Rehabil.* 2007;29(20–21):1555–1565.
- [42] De Souza LH. Multiple sclerosis: approaches to management. London: Chapman and Hall; 1990.
- [43] Smith CM, Hale LA, Olson K, et al. Healthcare provider beliefs about exercise and fatigue in people with multiple sclerosis. *J Rehabil Res Dev.* 2013;50(5):733–743.
- [44] Motl RW, Fernhall B, McAuley E, et al. Physical activity and self-reported cardiovascular comorbidities in persons with multiple sclerosis: evidence from a cross-sectional analysis. *Neuroepidemiology.* 2011;36(3):183–191.
- [45] Marrie RA, Horwitz R, Cutter G, et al. Comorbidity, socioeconomic status and multiple sclerosis. *Mult Scler J.* 2008;14(8):1091–1098.
- [46] Carter H, McKenna C, MacLeod R. Health professionals' responses to multiple sclerosis and motor neurone disease. *Palliat Med.* 1998;12(5):383–394.
- [47] Ashford S. Client health education and empowerment through physiotherapy in neurorehabilitation. In Scriven A. *Health promoting practice: the contribution of nurses and allied health professionals.* China: Palgrave MacMillan; 2005. p. 168–180.
- [48] Playford ED, Siegert R, Levack, W, et al. Areas of consensus and controversy about goal setting in rehabilitation: a conference report. *Clin Rehabil.* 2009;23(4):334–344.