# Managing Post-stroke Fatigue: A qualitative study to explore multifaceted clinical perspectives.

**Avril Drummond**

Professor of Healthcare Research, School of Health Sciences, University of Nottingham, Floor B, Medical School, Queen's Medical Centre, Nottingham NG7 2UH.

Avril.Drummond@nottingham.ac.uk

**Fiona Nouri**

Research Associate, School of Health Sciences, University of Nottingham, Floor B, Medical School, Queen's Medical Centre, Nottingham NG7 2UH.

Fiona.Nouri@nottingham.ac.uk

**Joanne Ablewhite**

Research Fellow, School of Health Sciences, University of Nottingham, Floor B, Medical School, Queen's Medical Centre, Nottingham NG7 2UH.

Joanne.Ablewhite@nottingham.ac.uk

**Laura Condon**

Research Fellow, School of Medicine, University of Nottingham, 14th Floor Tower Building, University Park, Nottingham, NG7 2RD.

Laura.Condon@nottingham.ac.uk

**Roshan das Nair**

Professor of Clinical Psychology & Neuropsychology, Division of Psychiatry & Applied Psychology, University of Nottingham, Institute of Mental Health, Jubilee Campus, Nottingham, NG7 2TU.

roshan.dasnair@nottingham.ac.uk

**Amanda Jones**

Stroke Nurse Consultant and Clinical lead for Stroke pathway, Q1, Ward, Royal Hallamshire Hospital, Sheffield S11 2JE

amanda.jones81@nhs.net

**Fiona Jones**

Professor of Rehabilitation Research, Faculty of Health, Social Care and Education, Kingston University and St Georges University of London, St George's Campus, Cranmer Terrace, London SW17 0RE
f.jones@sgul.kingston.ac.uk

**Nikola Sprigg**

Professor Stroke Medicine, Division of Clinical Neuroscience, School of Health Sciences, University of Nottingham, Hucknall Road, NG5 1PB

Nikola.Sprigg@nottingham.ac.uk

**Shirley Thomas**

Associate Professor, School of Medicine, University of Nottingham, Floor B, Medical School, Queen's Medical Centre, Nottingham NG7 2UH

Shirley.Thomas@nottingham.ac.uk

**Research Ethics**

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## Abstract

**Introduction:** Post-stroke fatigue (PSF) is common and debilitating. However, while its effective management is a priority for clinicians and stroke survivors, there remains little evidence to provide guidance or underpin practice. Our aim, therefore, was to gain insights into the experiences of clinicians who routinely manage patients with fatigue.

**Method:** Qualitative interview study. The target was to recruit a purposeful sample of approximately 20 participants with expertise in managing PSF and fatigue arising from other conditions. Maximum variation sampling was used to ensure a balance of participants across different settings. Data were analysed using a framework approach, iteratively developed and refined by including emergent themes.

**Results:** We recruited 20 participants: nine occupational therapists (OTs), five physiotherapists, three nurses and three psychologists, which included three 'fatigue experts' from Europe and Australia. Analysis generated core themes around management and strategies used; these were similar regardless of professional background, clinical or geographical setting, or condition treated. OTs felt a particular responsibility for fatigue management, although multi-disciplinary teamwork was stressed by all.

**Conclusion:** There are clear similarities in clinicians' experiences of managing PSF and fatigue across different conditions and also across professional groups. Clinicians rely predominantly on their own clinical knowledge for guidance.

## Introduction

Fatigue is a common symptom of many conditions. Fatigue has three main components: an overwhelming feeling of exhaustion (which is more debilitating than 'usual' tiredness); exhaustion that is out of proportion to recent activity; and an exhaustion which does not necessarily improve with rest or sleep (de Groot et al, 2003).

Fatigue affects 50% of people after stroke (Cumming et al, 2016; Hinkle et al, 2017), can occur in those who have made an otherwise good recovery, and occurs both early and later in recovery (Glader et al, 2002; Hawkins et al, 2017). In an interview study of twenty-two people with PSF, Worthington et al (2017) found that its impact was high even when severity of the stroke was regarded as being relatively mild. All aspects of life were affected ranging across instrumental activities of daily living, leisure activities, social relationships and work life. PSF is linked to poor outcome and lower quality of life (Lerdal and Gay, 2017) and stroke survivors report experiencing PSF many years after their initial stroke (Rudberg et al, 2020). PSF also places a burden on carers (Ablewhite et al, 2021a).

Despite being common, there is little research evidence to guide or underpin the management of PSF. This may be due to differing definitions of fatigue and debate around the possible mechanisms involved. Comprehensive reviews (Hinkle et al, 2017; Aali et al, 2020) and systematic reviews (Kennedy and Kidd, 2018; Wu et al, 2015) of findings from trials and clinical studies have concluded that there is insufficient research to generate evidence-based recommendations. Consequently, national and international clinical guidelines (e.g., RCP, 2016; Lanctôt et al, 2020) rely on low levels of evidence such as expert consensus, to generate recommendations for PSF management. PSF is recognised as a key research priority, both nationally and internationally (Norrving et al, 2018). In the recently published UK priorities for stroke rehabilitation and long-term care research, fatigue was listed fourth in the top ten list (James Lind Alliance and Stroke Association, 2021).

In the absence of definitive guidance, and with an underdeveloped evidence base, our overall aim was to examine the management of PSF (Nottingham Fatigue After Stroke -NotFAST2; Drummond et al, 2020). This present study was one of five components of NotFAST2 with the specific aim of gaining insights from the experiences and expertise of clinicians routinely managing individuals with PSF and fatigue arising from other conditions. The objectives were to explore:

- Thoughts and experiences of fatigue management advice and interventions

- Use of the fatigue management evidence
- Views regarding the key elements to be covered in a management programme.

## Method

### Ethical approval

{Details provided separately as per author guide}

### Participants

Our aim was to recruit a purposeful sample of approximately 20 clinicians, which we believed was sufficient to achieve data adequacy to meet study objectives, and which was likely to reach saturation (Guest et al, 2020). We wanted to recruit those with a clinical interest or recognised expertise in managing PSF, but we also actively recruited participants with expertise in fatigue in other conditions, such as cancer, multiple sclerosis, rheumatoid arthritis.

Maximum variation sampling strategy (Palinkas et al, 2015) was used to ensure we recruited a balance of professionals, in different settings, from a range of geographical areas in the UK. In addition, we aimed to purposefully recruit a minimum of two participants from outside the UK who had recognised expertise in fatigue management, as evidenced by their publications or presentations. This was to broadly benchmark whether UK practice was fundamentally different from that elsewhere.

Inclusion criteria were that participants were a registered nurse, psychologist, Allied Health Professional (AHP) or doctor; had a self-reported interest in fatigue or were approached as an expert in this field. All participants provided informed consent.

### Recruitment

Recruitment was conducted via several channels. We sent emails to clinicians who had shown interest in an earlier study, used social media posts and flyers, approached key experts directly and used professional and condition-specific networks to request publicity for participants. We kept a sampling frame to achieve a balance across professions, regions, expertise and gender.

A participant information sheet and consent form were sent electronically to those who expressed initial interest. These outlined the study and the purpose of the interviews. Assurances were given that any data would be anonymised, treated confidentially, and that participants were free to withdraw at any point. Informed consent was taken prior to interview.

### Data collection

The semi-structured interview guide was developed by the research team with input from the study steering group, based on our scoping review of the literature (Aali et al, 2020) and results from our national survey (Ablewhite et al, 2021). The interview guide covered demographic factors including job title, geographical region, work setting, and conditions treated. It also covered the key issues patients with fatigue presented with and use of any formal fatigue assessments. Participants were given the opportunity to comment on how the current fatigue evidence influenced their practice, and their opinions on the key elements of a fatigue management programme. The interview schedule was shared with two local clinicians working with patients with fatigue: and based on their feedback, changes were made to the order and format.

Participants had the option of a telephone or video-call. Interviews were conducted by experienced qualitative researchers (JA and FN). All interviews were digitally recorded and a unique code was assigned to protect participants' anonymity. After the first five interviews, JA FN and AD reviewed the data and interview guide. No changes to the schedule were required as responses addressed the objectives of the study.

### Data analysis

An independent company transcribed interviews verbatim. Transcripts were checked for accuracy and any identifiers removed (JA and FN). Data analysis was managed using Nvivo software.

A framework method approach (Gale et al 2013, Ritchie et al 2003) was used to analyse data. An initial framework was developed based on the objectives of the study; the framework was then iteratively developed. In the first instance, a selected sample of three transcripts, from three different professional groups, were read by FN and JA who independently summarised the data, and identified initial themes and sub themes. This process was then repeated with emergent themes and sub themes identified as all of the data was coded. The framework was refined and data points were summarised. The data summaries were discussed and agreed with the wider team and steering group to ensure there was agreement of the interpretation of data and the final framework.

## Results

### Participants

We recruited 20 participants: nine OTs, five Physiotherapists, three Clinical Psychologists and three Nurses. Despite several attempts, three doctors who agreed to be interviewed were unable to make appointments due to clinical and time pressures due to the COVID-19 pandemic.

There was a geographical spread of participants from across the UK, and three participants were based outside the UK (Europe and Australia). Of the 20, seven were based in the community, four in hospital, five worked in both settings, three worked in a university, and one worked privately. The majority worked with people with stroke (n=15), some with people with stroke and other neurological conditions, some only with people with neurological conditions such as people with Parkinson's Disease, some with Chronic Fatigue Syndrome and some in fatigue specialist settings. Of note was the fact that two clinicians were living with fatigue themselves due to ongoing conditions.

### Themes

The analysis was organized into six themes. These are presented below with illustrative quotations.

#### 1. Importance of fatigue management

All participants described fatigue as an important issue to be addressed as part of recovery and rehabilitation. Most perceived that acknowledging fatigue as a significant problem gave it legitimacy for their patients.

> *I definitely think by us taking more of an interest in it will make the patients feel more empowered [and] that it isn't just a word they use. P2C034 (physiotherapist)*

Several clinicians felt that that referrals for fatigue management tended to relate to the physical manifestation of fatigue, particularly those related to engagement with rehabilitation, despite the observation that impact of fatigue can be physical, cognitive and emotional. Most participants acknowledged that fatigue was an under-researched topic which had an effect on their practice in that they had to rely on their own clinical knowledge and experience.

> *..if you're talking scientific evidence, we know very little about what works, only from a very small number of underpowered trials. So, we don't know basically. P2C036 (physiotherapist – academic)*

### 2. Responsibility for fatigue management

There was a feeling amongst the majority of the OTs that they take the bulk of the responsibility for fatigue management. Most saw this as an appropriate use of their skillset, knowing that they could refer on to other professionals if necessary.

> *Because as OTs we're all about engagement in meaningful occupations. And if someone's struggling with that, it's our job to try and help them recover. Fatigue is a big part (in that) of people not being able to participate in what they want to do. And as an OT we really want to work on that. That's our ethos really, that's our bread and butter. P2C029 (OT)*

However other professionals cited the central role of the multidisciplinary team (MDT) and the value of joint working with different disciplines. One professional described team review, where all professional groups could contribute their observations and raise any changes for discussion by all, giving a more comprehensive picture of the impact of the fatigue on the individual.

### 3. Assessing fatigue

Despite participants referring to standardised fatigue assessments used, often at the behest of their employing body, most interviewees believed that more subjective, observational methods were more appropriate than standardised measures. Although the need for objective measures to establish a baseline and monitor progress was acknowledged, subjective measures and a patient history were seen as preferable when relaying information to patients and their families. Despite this, one of the physiotherapists thought that the standardised fatigue measures were useful both as an educational and measurement tool. However, most of the interviewees who were not already using validated assessments felt they ought to be investigating appropriate measures.

> *I haven't used this one but I know there's the Modified Fatigue Impact Scale as well which I'm currently in the process of looking at. P2C028 (OT)*

An academic physiotherapist felt that a simple outcome measure for fatigue should be widely agreed to give continuity and enable comparison across research studies. They felt that a simple analogue scale was probably most appropriate and the most likely to be used.

> *None of them are perfect. I think we should be getting ourselves in the fatigue research community behind one of them essentially and saying let's use a common outcome measure across most trials…. But ultimately, I think it comes down to people's experience of it and it may be that when you're looking at assessing the effectiveness of interventions, that a simple analogue scale of how much is fatigue affecting your life may actually be the most powerful tool that we've got available at the moment. P2C036 (physiotherapist – academic)*

### 4. Fatigue management strategies

Variations in fatigue management strategies cited by the participants were linked to professional background, experience, and responsibilities. There were also variations depending on when patients were seen, whether as an in-patient, or at a later stage in a community/out-patient setting. However, the strategies used were broadly applied across all types of fatigue, whether PSF or arising from other conditions. The strategies offered by the clinicians covered five specific areas: the use of diaries, the need to pace and prioritise, fatigue education, the use of specific coping strategies, and exercise.

#### *a. Diaries*

The most frequently cited approach to the management of fatigue was a fatigue/activity diary. Diaries were used in a variety of ways. While some clinicians felt they were appropriate as a memory aid for those with cognitive problems, others felt that they were not useful for those patients. Other clinicians used the diary to plan physical activity to support a programme of healthy behaviour.

> *For some of our patients they probably wouldn't, they wouldn't engage with something like a diary. Many of them have dementia and conditions that affect their memory and their ability to engage with therapy outside of sessions P2C026 (physiotherapist)*

> *I use plans and diaries to help them plan their physical activity... We would then plan the week with them thinking about those key important activities that they want to try and focus on preserving in a way their energy for, for that particular day. P2C024 (nurse)*

Diaries were also cited as a way of keeping the clinician informed about what functional tasks the patient was performing. Diaries were reviewed by the clinician in conjunction with the patient.

Patients were encouraged to set their own pace and self-monitor and record activity, strategies used and progress. The diary therefore acted as a self-help tool to provide a prompt as to what worked or did not. One clinical psychologist described how their patients used the diary to rate their fatigue on a scale from 0 to 10 for their activities and whether this varied at different times of the day. This approach facilitated patients in identifying which times and activities were most fatigue inducing, empowering them to effectively prioritise and timetable activities based on the resultant fatigue. It was believed that an understanding of potential triggers allowed for more effective fatigue management.

> *But I would say from my wider knowledge that diaries can be very useful because it's a way of getting the patient to understand potential triggers, to understand exactly how the fatigue affects them. P2C026 (OT)*

> *I might get them to map out a diary for the week ….. and then in session kind of together we'll go through and go OK, was that a busy activity or was that a quiet activity? What happened between busy activities and quiet activities? Why was it busy? Was it physically busy, was it cognitively busy? Was it emotionally quite draining? So, kind of in that, kind of going through that education again of the different types of fatigue. P2C025 (psychologist)*

However, these findings suggest that, although the use of a diary might seem simple on the surface, their use is much more complex. It was also clear that while some clinicians clearly articulated the need to involve their patients in decisions, others seemed to provide input more prescriptively.

### *b. Pacing and prioritising techniques*

The pacing of activity was widely cited and was often closely, but not always, linked to keeping a diary. It was widely believed that it was detrimental to 'push' the patient to do too much and that they needed to be encouraged to work within (what some participants conceptualised as) their 'energy budget'. Some clinicians believed teaching prioritising and pacing techniques was the most successful strategy in fatigue management. This was referred to as the 3Ps: Pace, Plan, Prioritise, enabling patients to operate within the confines of their fatigue, allowing them to adopt compensatory strategies. One of the nurses interviewed explained:

> *The most successful thing is teaching them to learn to pace. So, to be able to know that if they're going to have a busy day tomorrow, they need to rest today and they need to have a rest day afterwards. And once they have seen, you know, they'll say, for example, you say to them well what were you doing that day? Well, I was out, I did my shopping in the supermarket, and the next day I was jiggered, I couldn't do anything. Then you say well what do you think caused that? And when they look back at their diary, you go through that with them and explain to them the importance of, you know, the regular rest spells and just trying to build up exercise and tolerance as well. P2C032 (nurse)*

Participants believed that prioritising activities empowered the patient to choose those things which were most important to them, although no one articulated the basis for these beliefs. It also prepared patients to accept that there would be certain activities that their fatigue would not allow them to do. The pacing of activity in conjunction with goal setting and the use of a fatigue diary were also seen to be a successful combination of approaches to adopt in the self-management of fatigue. Patients were also encouraged to take regular rest breaks to pace appropriately.

> *And then I try and teach them about pacing themselves and perhaps not trying to do it all in one go. Spread it out throughout the day. Or you might not be able to do it at the same speed that you used to be able to do it at, but that's OK. We can work towards that at a later date. P2C028 (OT)*

> *So, if you know that fatigue is coming, what is most important for you for that day. Remember that if you're going to do something, a particular activity, you may then be too tired later on to do the one thing that's important for you. So just thinking about prioritising what it is around your day and in a way preserving your energy for those things that are most important for you. P2C024 (nurse)*

There was also a recognition by several participants that people needed to accept their fatigue in order to use the strategies:

> *It's about allowing themselves to accept that there's certain things that fatigue will not allow them to do. P2C030 (clinical psychologist)*

### *c. Fatigue education for both patient and family*

The value of education was seen to empower patients to take control of their recovery. One OT said:

> *….we can't really offer enough. We have to empower people to take on board what we're saying and take it forward and implement it. P2C029 (OT)*

The value of engaging the patient's family members or support network in any educational intervention was noted. This managed the family's expectations and prevented them making unrealistic demands, which could potentially undo any benefits achieved by other fatigue management interventions. Clinicians talked about the 'normalising' of fatigue which they felt to be an integral part of fatigue education to help facilitate acceptance. One psychologist referred to creating a 'body map' allowing them to demonstrate what was going on inside the person's brain. Another psychologist took the education one step further by creating a personalised leaflet, in conjunction with their patient that they could give out. It also helped the patient explain why there might be things she didn't feel able to do.

> *.. it's quite often an education thing with the families as well. They can't do that. She can't go out for three days in a row because she's just not fit to do that anymore. You need to give her time to get over it. P2C032 (nurse)*

> *So, we basically created a leaflet together that she could give to her friends. So, it was like this is the type of stroke I've had, these are the things that it affects me with, so fatigue was included in that. This means that I might say no to stuff, please don't not ask me to do things it just means I'm saying no that day, remind me to check on the calendar what's coming up so that we can plan a time that's a good time for me to do something with you, so kind of those kind of things in it as well. P2C025 (psychologist)*

One clinical psychologist, in an in-patient setting, saw it as important to educate not only the patient and family but also the professionals. They stressed it was vital that everyone understood that the fatigue can be both mental and emotional and does not impact on everyone in the same way.

> *So sometimes it's just simple strategies to kind of manage fatigue, education around what fatigue is. I think I often, especially on inpatients, because it's a medical setting, I have to*

> *make that distinction for the patient and the family, and the professionals working with the person that it's also mental and emotional fatigue. So, a lot of education around fatigue is for that particular person. So not an intervention per se, but actually trying to develop an understanding of what fatigue means for the person. P2C030 (clinical psychologist)*

### d. Adoption of coping strategies

Several clinicians, primarily OTs, described encouraging the use of compensatory techniques and coping strategies. The use of equipment or environment modification was seen to reduce the impact of fatigue. For those patients that had returned to or were still working, this often meant practical suggestions to change the way they did their job.

> *I try and explain to patients about modifying their environment in terms of fatigue. You know, if we use the kitchen as an example. Putting everything at a particular level, that might help, save stretching, bending. So, I use all those compensatory techniques. I try and explain to them about grading their activities. You know, building up to what they used to do. Starting off small and grading those. Talk to patients a lot sometimes about the equipment and how that can help. Rather than standing to perhaps iron for an hour use a perching stool or you know, save carrying items use a kitchen trolley. So, I try and discuss all the equipment options with them. P2C028 (OT)*

> *So, for example, if their office was on the ground floor and the photocopier was on the second floor, just going up and down the stairs would be perhaps too much for that person, or allowing them some time to work at home instead of always going into the office. P2C021 (OT)*

One of the interviewees felt that using a coping strategy might possibly be acknowledgement and acceptance of fatigue. However, she believed that many fatigue interventions were more about alleviating fatigue rather than accepting it.

> *It's more about acknowledging that you do have a lot of fatigue, but still that you could go ahead and you could still lead a meaningful life. So, I think that's the bit that's missing a lot from the interventions at the moment. You know, a lot of them it's about alleviating fatigue*

> *and less about accepting fatigue as part of day-to-day life for many. P2C030 (clinical psychologist)*

### *e. Exercise*

Clinicians cited regular exercise as being an important component of any fatigue intervention suggesting that exercise should be graded and tolerance increased over time. However, given the lack of research evidence to support exercise in the management of fatigue after a stroke, it was generally thought that this should be approached with caution and cases considered individually.

> *Again, as part of pacing and in addition to that also try and support them to think of some regular exercise to try and increase their exercise tolerance so that there isn't that mixture (like we were talking about before) that decompensation due to inactivity. Then increasing the level of fatigue that they're experiencing. P2C024 (nurse)*

> *With exercise there have been a couple of small trials that have looked at that that had some early promising effects, but really it's almost no evidence, less than nothing…..I think I'd personally really like to investigate that a little bit further, because I think it has got potential for some people, but I think it has to be done quite carefully. Because biologically one would think that if you improve some of your baseline levels of aerobic capacity or just physical capacity to do things, that maybe that helps reduce some of the physical contributions of fatigue that might be there. P2C036 (physiotherapist – academic)*

When exercise was part of a group activity, it was also felt to provide a valuable opportunity for peer support.

> *And they do a bit of group work so they can discuss and just sort of chat about their experiences so they know it's not just them. P2C032 (nurse)*

One of the psychologists also used other acceptance, commitment and compassion types of approaches, which encouraged patients to be more compassionate and kinder to themselves in managing their fatigue.

## 6. Developing a fatigue management programme: key elements

Several interviewees volunteered that a fatigue management programme should be developed collaboratively with people with lived experience of fatigue. A key message was that any programme would need to be flexible to the needs of individuals because fatigue impacts differently on different people: there was an emphasis on the complexity of fatigue and a feeling that the one size approach would not work. Also, consequently, interventions would have to vary depending on the manifestation of the fatigue. One participant provided an analogy explaining that with a finite amount of energy, all activity should be paced, planned and prioritised to give the best result.

> *…ultimately I'm sure there's not going to be a one size fits all……..So, I think it's going to be multifactorial going forward. P2C036 (physiotherapist – academic)*

> *The analogy I use is that your energy is like your money, you only have so much energy, you only have so much money and you have to decide how you're going to spend it. P2C035 (physiotherapist – academic)*

There was general consensus that any fatigue management programme should be long term, in some cases taking months rather than weeks before optimum benefit might be realised. This suggests that much of the programme would be integrated with primary care and community services. The importance of including self-management and education was stressed by several interviewees, who felt that patients should be encouraged to manage their own condition, because this is a core ethos of rehabilitation. Clinicians could then reduce their input, to reviewing progress.

> *I think whatever strategy and whatever programme it is it's going to be a long term one. It's not something we're going to fix in a few weeks or months. And it's then working out when that, I suppose like any long-term intervention isn't it, it's when it stops becoming less of a responsibility on the healthcare service to provide that and more a community-based living with a chronic disorder. P2C024 (nurse)*

> One OT referred to a specific fatigue management programme for patients with MS which she now used with patients with stroke. This included information about a wide range of activities, including meal preparation and household chores.

> *These programmes have got just snippets of information that really just help to guide them. So, I'd probably say something similar along those lines. Information to guide patients to make their activities easier for them to do. How to conserve their energy. P2C028 (OT)*

## Discussion

We were able to recruit the number of participants we wanted. The majority were OTs but we also interviewed physiotherapists, nurses and psychologists who worked with people with PSF, and with people with 'other' fatigue. Two had fatigue themselves, as well as providing support to people with fatigue clinically.

Our first study objective was to explore clinicians' thoughts and experiences of fatigue management. Interestingly, the strategies used to manage fatigue, regardless of the presenting condition, and regardless of professional grouping, were similar. The most common strategies cited were consistent with recommendations by the UK National Clinical Guideline for Stroke (RCP, 2016), and other international stroke guidelines, for example, the recent Canadian guidelines (Lanctôt et al, 2020), generated predominately from expert consensus. The results mirror what has been reported in a national survey of PSF management practice (Ablewhite et al, 2021b) with regard to the most frequently used strategies, and underline the key role which OTs feel they have in providing fatigue management. It was striking, however, that although common strategies were cited across all the professional groups, there were some differences in how these were actually used with patients. For example, while most clinicians felt that diaries were a useful strategy, there were differences in how these were used operationally with patients, including which patients they were actually used with. There were also differences noted in that some participants felt strongly that strategies should be used to alleviate fatigue whereas others felt that people needed to learn to accept their fatigue: thus, the focus in management was different. However, this was also across the professional groups. Although we only interviewed a small number of participants who were based from outside the UK, there were no clear indications that their overall management was different to that in the UK. However, this would clearly need to be examined further with a larger sample of participants from other countries.

With regard to objective two, exploring fatigue management evidence, only two participants directly referred to any specific evidence or source material to support what they did. This was perhaps not surprising given the lack of robust research to underpin practice (Aali et al, 2021). Several clinicians specifically referred to this lack of evidence and the need for more research, a desire which has also been reported in other studies by therapists (Thomas et al, 2019). There was a recognition of the importance of using tools to measure fatigue, but a reluctance to actually do this in clinical practice, again as previously reported (Ablewhite et al, 2021b). Very few tools were named or identified and the majority of the clinicians did not use any of these routinely. Nevertheless, this study has provided important insights as to how clinicians have operationalised managing people with PSF, and other fatigue, in the absence of a robust evidence base.

There were many views regarding the key elements to include in a fatigue management programme (objective three). Aside from the specific components already identified by participants, there was a recognition of the need to include people who experienced fatigue in the design of any programme. This recognises the value of co-production, defined as ‘people who use services and carers working with professionals in equal partnerships towards shared goals’ (SCIE, 2019). A further need expressed was the appreciation of the importance of any programme being flexible to meet the needs of those with fluctuating energy levels. Many clinicians felt that programmes should address long-term needs of people, a perception in line with the findings of research with longer follow up of people with PSF, which suggests fatigue is a factor for many survivors for many years after their stroke (Duncan et al, 2020; Ytterberg et al, 2020). There was a strong belief across the professional groups that people needed support to self-manage their fatigue.

Although this was a relatively large interview study, there were limitations. The research was conducted during a COVID-19 peak, which affected response, although we did achieve our aim of interviewing twenty clinicians. However, we were unable to interview any doctors despite repeated efforts to do so. We also acknowledge that interviewees recognised themselves as having expertise and interest in the topic, which might not reflect the full breadth of professional views. Of particular note, two clinicians we interviewed also had fatigue themselves arising from ‘other’ conditions. This provided an important multi-faceted perspective, although equally could have introduced some bias. We used framework analysis to develop the themes and undertook the initial analysis with three interviews from three of the professional groups. We accept this methodology may be open to some criticism. However, the process was iterative and we refined the themes as the data were coded to allow the different perspectives to be reflected in the framework.

In conclusion, clinicians rely heavily on their own clinical knowledge to manage PSF, and indeed other conditions which require fatigue management. OTs felt fatigue management was a core aspect of their practice but also saw the need for MDT working: everyone underlined the importance of this. Although there were small operational differences, there were clear overlaps in how fatigue is managed across different conditions, different regions, across professional groups, and there were common views on the essential elements of a fatigue management programme.

**Key Findings**

- Clinicians rely on their own knowledge to manage fatigue (10)
- There are clear overlaps in post-stroke and ‘other’ fatigue management (10).
- OTs view fatigue management as a core area of practice. (10)

**What the study has added.**

Clinicians rely heavily on their own knowledge and the strategies employed for managing patients with fatigue, across different conditions, are similar. Clinicians recognise the need for underpinning research.

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