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Experience of patients and physiotherapists within the AFTER pilot randomised trial of two rehabilitation interventions for people aged 50 years and over post ankle fracture: a qualitative study

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ABSTRACT

Objectives To explore patient and staff experience of best-practice rehabilitation advice (one session of face-to-face self-management advice with up to two additional optional sessions) compared with progressive functional exercise (up to six sessions of face-to-face physiotherapy) after ankle fracture.

Design The study drew on phenomenology using interviews and a focus group.

Setting Participants were from three NHS Trusts in England, UK.

Participants A purposive sample of 20 patients with ankle (malleolar) fractures from the Ankle Fracture Treatment: Enhancing Rehabilitation-pilot trial (now completed) were interviewed (median 50 min) from May 2019 to January 2020. They were 6 months post injury, over 50 years of age, (median 66, 12 females) and had received surgical or non-surgical treatment (seven internal fixation surgery, seven close contact casting, six walking boot). A focus group of five physiotherapists who had provided the study interventions (2.5 hours) was undertaken.

Results The findings show the acceptability of both interventions through the themes, 'being helped' (for patients) and 'developing expertise' (for staff) with subthemes of choosing and progressing. Progressive exercise added value with a perceived increase in strength, motion, ability to undertake activities and continued use of the workbook. Both staff and patients valued physiotherapy expertise demonstrated through interpersonal skills, advice, individualised exercise plans and active monitoring of progression. Best practice advice was particularly helpful in the early stages of recovery and with the use of mobility aids.

Conclusion Both interventions were acceptable but progressive exercise was highly valued by patients. Developing expertise through experiential learning enabled staff to facilitate progression. Adjustments to the workbook and the addition of exercises for continued recovery in the best practice advice would enhance a future study. Research during treatment provision may provide further insights into the challenges of facilitating progression of exercise.

Trial registration ISRCTN16612336; AFTER-pilot trial).

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Qualitative methods enabled participants to share their lived experience of the two treatments and what was important to them.
⇒ Analysis of the interviews and focus group provided insight into the acceptability of the treatments and the complexity surrounding delivery of the treatments.
⇒ A broader sample of patients and staff, and interviews during treatment may have elicited new aspects of experience, increasing the transferability of the findings to other populations.

INTRODUCTION

Ankle fractures represent about 1 in 10 of all fractures managed in UK hospitals.[1] Peak incidence is in women aged 60–70,[2] usually after a fall from standing height, so most are considered fragility fractures.[3] People who sustain a stable ankle fracture typically have a period of immobilisation in a cast or walking boot and weightbearing and/or ankle movement restrictions. Those with more severe ankle fractures undergo surgery followed by the same immobilisation, weight-bearing and/or movement restrictions. When these restrictions are removed, usually 6 weeks after injury, some patients are referred for physiotherapy. Physiotherapy provision is variable across the UK[4 5] and recovery can be prolonged with persistent disability at 6 months post injury.[4] To explore the feasibility of a randomised comparison of two different

Box 1 The Ankle Fracture Treatment: Enhancing Rehabilitation (AFTER) feasibility randomised controlled trial (RCT) design

The AFTER study was an external multicentre pilot RCT to assess the feasibility of undertaking a definitive trial comparing best-practice advice versus progressive exercise for adults aged 50 years and over after an ankle fracture.

Participants were aged 50 years and over with an ankle fracture requiring surgical management or non-operative management by immobilisation for at least 4 weeks, from five National Health Service hospitals in the United Kingdom.

Participants were allocated 1:1 via a central web-based randomisation system to: (1) best-practice advice (one session of face-to-face self-management advice delivered by a physiotherapist and up to two optional additional advice sessions if deemed to be required by the treating physiotherapist) or (2) progressive exercise (up to six sessions of individual face-to-face physiotherapy). Progressive exercise included the provision of an exercise diary and an action planner. They rated their confidence in performing the exercise and planned where and when to do their exercises and what to do if they experienced difficulties with the exercises. The patient participant and their physiotherapist also signed the action planner. Strength exercises were progressed using the modified Borg Rating of Perceived Exertion scale. All physiotherapists delivering the AFTER trial interventions attended a face-to-face training session and completed treatment logs to record sessions.

Outcome measures were assessed at 3 and 6 months after randomisation. The main instrument was the Olerud and Molander Ankle Score,[32] a patient-reported outcome measure of ankle symptoms and function.

rehabilitation interventions, for adults aged 50 years and over, we undertook a pilot trial (outlined in box 1), which compared[1] best-practice advice (one physiotherapy led session of face-to-face self-management, two additional optional sessions) and[2] progressive functional exercise over 4 months (up to six sessions of individual face-to-face physiotherapy).[6 7] The Ankle Fracture Treatment: Enhancing Rehabilitation-pilot trial (AFTER) demonstrated that a definitive trial would be feasible. Modification of the intervention and better follow-up were advised.[7] A prespecified qualitative study, identified in the study protocol,[6] was also undertaken to investigate patient and staff experience, and acceptability of the two interventions.

There is a limited literature exploring patient experience of treatment and recovery from ankle fracture.[4 8–10] These studies identify the challenges of coping with non-weight bearing and the struggle to adapt and move using walking aids. Often a determination to get back to work and normal life is combined with concern about the future and further injury. Major trauma patients, including those with ankle fracture, struggle to find the right physiotherapy and to feel normal, they need to integrate their injury into their sense of self and feel they enjoy life.[11] Interactions with physiotherapists are valued if patients feel listened to, involved and are able to increase their confidence.[12] Patients may increase their mobility through working with their body, thoughts and emotions.[13 14] Building on these findings, this study aimed to gain a better understanding of the experience of two interventions for ankle fracture. Also, to gain insight into patient's experience of treatment at a stage of recovery that is currently under reported in the literature (6 months post injury). The insight gained was used as part of an assessment of the feasibility of a definitive randomised trial and to refine the intervention prior to further evaluation. The lived experience of recovery from ankle fracture more broadly is reported separately.[15] In addition, staff experience of the provision of the treatments was sought. The research questions were: (1) what is the experience of receiving advice or progressive exercise treatments post ankle fracture? and (2) what is the experience of providing best practice advice or progressive exercise treatments for ankle fracture?

METHODS

The study drew on phenomenology[16] and Heidegger's notion of lived experience, as guided by other studies of injury.[17] Heidegger explored the meaning of 'Daesin' and what it is like to be in this world. Important considerations in the 'lifeworld' of a person were temporality, the past, present and future as well as 'forestructures', the social, cultural and historical context of the person.[16] In this study, the phenomenological gaze[18] was focused on the everyday experience of treatment and recovery from ankle fracture and the meaning it had for participants. To gain an understanding of the participant's experience, the researchers took a stance of openness to what is unknown or taken for granted. This understanding enabled the researcher to draw experiences together to create 'structures of experience'[18] identified in this study as themes. These themes were used to inform the development of the interventions in the definitive trial. Researchers maintained a reflexive approach and were aware of their own positionality during interpretation of meaning.[19] Field notes were taken after each interview to aid analysis. The lead researcher was a woman, experienced in qualitative health services research and traumatic injury. A second researcher was a man, a physiotherapist and an experienced quantitative researcher. Reflexivity enabled the exploration of taken for granted meanings and maintained the focus on the participants' understanding, feelings and relationships.[20] Unstructured interviews were undertaken with two key questions, what has it been like for you since you fractured your ankle? and what has it been like receiving best practice advice or supervised progressive exercise? Prompts were used such as tell me more about that, how did you feel, what did you think, what helped or hindered at that point? Participants were given study information and had at least 24 hours to consider participation. Interviews took place face-to-face in a private area of a hospital or a meeting

Table 1 Facture classifications

Fracture classification	Definition
44A1	Tibia/fibula, malleolar segment, infrasyndesmotic, isolated fibular injury
44A3	Tibia/fibula, malleolar segment, infrasyndesmotic fibular injury with a posteromedial fracture
44B1	Tibia/fibula, malleolar segment, transsyndesmotic isolated fibular fracture
44B2	Tibia/fibula, malleolar segment, transsyndesmotic fibular fracture with a medial injury
44B3	Tibia/fibula, malleolar segment, transsyndesmotic fibular fracture with a medial injury and fracture of the posterolateral rim (Volkmann's fragment)
44C2	Tibia/fibula, malleolar segment, suprasyndesmotic, wedge or multifragmentary diaphyseal fibula fracture
44C3	Tibia/fibula, malleolar segment, suprasyndesmotic, proximal fibular injury

room in a hotel. One interview took place via the telephone. Two participants had partners present during the interview. Informed written or verbal consent was taken just before the interview. The focus group used similar principles with NHS staff to explore the experience of intervention delivery, what worked well and the challenges encountered.

Sample

Interviews were undertaken with a purposive sample of 20 patients, 10 from each treatment group, at three hospitals in the south of England, UK. Recruitment continued until saturation was achieved. Participants were 6 months post injury, over 50 years of age (51–82, median 66, 12 women), had received surgical or non-surgical treatment, (seven internal fixation surgery, seven close contact casting, six walking boot) and were immobilised for at least 4 weeks. Table 1 shows the fracture classification used and table 2 provides participant information.[21] A range of age was used to ensure anonymity. Interviews were undertaken from May 2019 to January 2020 (18 by ET, 2 by DJK, in 6, both researchers were present) and were of 24–75 min duration (median 50 min). One potential participant declined to participate. None of the patient participants was known to the researchers. One

Table 2 Participant information

Age range	Sex	Fracture classification	Intervention
50–60	Female	44B2	Supervised progressive exercise
70–80	Male	44B1	Supervised progressive exercise
70–80	Female	44B2	Best practice advice
80–90	Female	44B2	Supervised progressive exercise
50–60	male	44B2	Best practice advice
50–60	Female	44B1	Best practice advice
60–70	Male	44A1	Supervised progressive exercise
60–70	Female	44B1	Best practice advice
70–80	Male	44B1	Supervised progressive exercise
50–60	Male	44A3	Supervised progressive exercise
70–80	Male	44B1	Best practice advice
60–70	Female	44C2	Best practice advice
50–60	Female	44B2	Supervised progressive exercise
60–70	Female	44B3	Supervised progressive exercise
50–60	Male	44B2	Supervised progressive exercise
60–70	Female	Missing data	Supervised progressive exercise
50–60	Female	44C3	Best practice advice
70–80	Male	44B2	Best practice advice
60–70	Female	44B2	Best practice advice
60–70	Female	44B2	Best practice advice

face-to-face focus group with a convenience sample of five physiotherapists, (2.5 hours), who had provided the interventions, was undertaken at the end of the recruitment phase by ET and DJK. The staff participants were known to one researcher in their role as chief investigator for the AFTER-pilot trial (DJK).

Analysis

Interviews and the focus group were audio-recorded, transcribed verbatim and NVivo (QSR International, Melbourne, Australia) was used to manage the data. Each participant's world was understood through listening, reading and writing.[18] Codes or units of meaning within the data were clustered together to form subthemes and an overarching theme to provide a structure for the experiences. Similarities and differences across the transcripts were identified. Analysis was led by (ET) with reflective discussion with (DJK) and the wider team. Rigour was facilitated by immersion in the data, reflexivity and an audit trail.[22]

Patient and public involvement

Patient and public involvement partners shaped the design of the AFTER-pilot trial and embedded qualitative study, and set up, through the Oxford led UK Musculoskeletal Trauma PPI group. One PPI partner (JG) was involved throughout the AFTER-pilot trial and embedded qualitative study. JG advised on the management and analysis of the study during its conduct and co-authored this article.

RESULTS

The overarching theme for patients was 'being helped' and for staff was 'developing expertise' which were conveyed through subthemes of choosing and progressing. The patients had taken part in the trial for the opportunity of having physiotherapy, increased monitoring, to further knowledge and to benefit others. Participants felt they had been approached in a thoughtful way, at an appropriate time and were able to make an unhurried decision. The outcome tools were considered to be acceptable and not onerous; however, some had concerns about the appropriateness of the questions, for example, assessment of pain and being able to hop or run.

> It's very difficult to answer the questions truthfully because there's nowhere you can say like, for example, the pain one, no I don't have pain really, just now and again, and so I put slight pain beside it, which is not what I think you want (80–90, Female, 44B2, supervised progressive exercise).

The patients' experience of the treatments was expressed through being helped, choosing and progressing.

Theme 1: 'Being helped'

Being helped—acceptability of progressive exercise

Participants who received progressive exercise were extremely pleased, felt lucky and grateful for the support. All participants felt they had progressed with strength, motion and ability to undertake activities. They could not imagine how they or others would recover without progressive exercise sessions with the physiotherapist. They continued to use exercises learnt during their sessions. Some identified the burden of transportation to hospital on family. One older participant stopped after four sessions due to the burden on daily life. They valued the workbook, direction to appropriate exercises, being taught exercises, having a home exercise plan and feedback on progression. The expertise of the physiotherapist alongside their concern for the participant and their recovery was highly valued. The participants expressed their experience as being helped to move by a physiotherapist with the skills and expertise they lacked. The theme 'being helped' was conveyed through subthemes of choosing and progressing.

(1) Acceptability of progressive exercise—subtheme 'choosing'

Participants thought that choosing exercises required knowledge of their body, how to undertake the exercises properly and knowing which exercises were required for progression. Some participants felt they could choose exercises based on their prior experience, but most felt they could not do this on their own. Participants noted how physiotherapists assessed them and moved about the workbook choosing the best exercises at each session.

> If I'd been provided with a book full of exercises, which one would have been the most suitable for me? And in fact, if I hadn't had his guidance I would have chosen the ones that were too easy or too hard. Before I started seeing him I went on the internet and had a look at a YouTube video about this guy who had a broken ankle and was doing these exercises. So I started doing them and ended up nearly hurting myself and so I'm not going to do that anymore (60–70, female, missing fracture classification data, supervised progressive exercise).

Physiotherapists were considered to know important things about them, their injury, other limitations, and their aspirations.

> Well I just felt that it would be better to have the six sessions, knowing my background with the (disability) and everything like that, I felt having someone there to push me like the physio does would be better for me (60–70, male, 44A1, supervised progressive exercise).

Not knowing a patient well enough or listening to their concerns could lead to disappointment, for example, when pain caused by lack of bone healing was not recognised.

(2) Acceptability of progressive exercise—subtheme 'progressing'

To ensure progression, physiotherapists were experienced at encouraging, reassuring and enabling. They acted as a companion through a really tough time. Some

found that structure in the form of an exercise diary helped their memory of what they had achieved and were pleased with the positive response to their endeavours.

> For me having a checklist to fill in everyday worked very well and having somebody to at least see the checklist, it's more difficult to encourage yourself, so I am surprised they do it with no physio or very little physio (50–60, male, 44B2, supervised progressive exercise).

Participants identified progression in terms of their strength, motion and ability to undertake daily life. Knowing when and how to progress exercises was key.

> He always told me what I could do to make it harder or to make it easier on each of the exercises and I was careful to make sure I never went above what he said (50–60, male, 44A3, supervised progressive exercise).

Being helped—acceptability of best practice advice

Recovery for the participants who received 'advice' identified their determination to get back to everyday life. The advice they were given was crucial for knowing what exercises to do in the early phase of recovery and for managing crutches, frames and stairs. However, the advice session was often felt to be too late to be useful and the exercises too easy. Some participants continued to use the exercises if their ankle was swollen or stiff. Being active at home quickly replaced the exercises.

> That's all very well but you've been digging your allotment and doing all these other jobs you know. Whereas it looks like these exercises seem to think I sit downstairs reading a book or watching a television, apart from swinging my ankle around and so I think one compensates for the other (70–80, male, 44B1, best practice advice).

Some developed their own exercise plan based on their own and others' knowledge but largely these were enhanced activities they wanted to achieve such as swimming or walking.

> I probably did more physio myself than I would have done if I'd gone to a physio appointment. I did all the pool stuff because my daughter had just done it and so I knew exactly what to do, the edge of the step stuff and leaning and pushing but yes interesting (50–60, female, 44B1, best practice advice).

More support and reassurance was preferred. Key time points where physiotherapy was needed were, in hospital, on discharge, on weight bearing and later on in recovery to get back to sport, for example, yoga and running.

> The advice sheet itself takes you up to a certain point of mobility and that's it. It doesn't help to explain what happens after that. It doesn't tell you what to expect, whether you've got stiffness, how to improve flexibility, once you're through that 'I can walk about' but I can't run, I can't do yoga, I can't do sports type activities… If you're an active person actually you want to get back to your sports activity and the sheet doesn't allow you to do that (50–60, female, 44C3, best practice advice).

To conclude, overall participants, regardless of treatment allocation, had all returned to daily life or changed their circumstances to fit with their abilities. However, all had activities they were unable to do now that they undertook preinjury, such as, squatting, walking long distances or on uneven surfaces, and climbing mountains.

> Yes until I'm back to what I consider to be my normal self and I'm able to walk like I used to. I used to think nothing of going and walking five or ten miles, whereas I know damn well if I try to do five miles now I'll be in agony come the end, I'd probably do it but I would suffer (50–60, male, 44A3, supervised progressive exercise).

Theme 2: 'Developing expertise'

Developing expertise—acceptability of progressive exercise

Developing expertise for physiotherapists was through choosing the right exercise and enabling progression. Choosing the right exercise for each individual and ensuring progression through repetition was challenging but improved with experience.

(1) Acceptability of progressive exercise—subtheme 'choosing'

For physiotherapists, the progressive exercise intervention was enjoyable and acceptable. The sessions enabled them to monitor patients, they felt it extended their practice and empowered patients. The exercises were considered similar to normal practice but with extra activities. Although some found it different to normal physiotherapy and questioned its transferability into practice, due to time constraints.

> With follow-ups where we usually have thirty minutes, I don't think it would be feasible to do all those components. You could do one or two but not all of them (staff 2, focus group).

Staff were impressed by the high standard of the workbook. This was considered beneficial for patients.

> So whether it was because it was so thorough and you had the booklet, they had the nice folder and the whole thing was quite shiny and they were really invested into it (staff 4, focus group).

Physiotherapists needed to develop expertise in knowing where everything was and choosing the right exercises, and this improved with experience.

> Looking through the exercises I felt that I was flicking back and forth a bit in the booklet and if you are to deliver it you want the staff members to really know

that inside out and say right da da da and this and this could really help (staff 3, focus group).

Helpful support was the training and use of the intervention quick reference guide. Suggestions to improve the intervention materials were ways to identify the degree of difficulty of exercises and tabs to help them navigate the workbook. Staff noted the importance of having protected time for training and the benefits of face-to-face time with the researcher. Online training was considered useful as a continued reference but constraints of finding the time and the current burden of online training could limit its uptake.

When we got the training from (name) everyone recognises that we've got a few hours blocked and nothing else to think about, whereas the risk is at some point you have to find thirty minutes to do online training (staff 1, focus group).

(2) Acceptability of progressive exercise—subtheme 'progressing'

Developing expertise in ensuring progression of resistance exercises was challenging for physiotherapists. There was debate about intensity and the number of repetitions 'three to four reps but that does not really correlate with high intensity' (S2 focus group), the lack of use of the modified Borg Rating of Percieved Exertion scale (a way of measuring how hard they worked during exercise),[23] the quality of movement, ageing and frailty, the addition of walking and the addition of load on the muscle.

It's massive, and I think that we're often under loading people, not challenging people enough and that's one of the reasons they're not getting better (staff 4, focus group).

Goal setting was accepted as normal practice and plans for discharge. However, there was an awareness that not everyone had reached their full potential and it was suggested extending the intervention past 4 months might help residual impairments.

There were other things that he wasn't doing perhaps and probably could have benefitted from a couple more sessions but he'd achieved his overall goal and so he was discharged (Staff 3, focus group).

The modified Borg Rating of Perceived Exertion scale to aid exercise progression was challenging to use. The confidence rating (participants score their confidence to undertake the exercise programme) was variably used but was considered a useful addition to practice.

The confidence score is good though, I think. It's something that we've had some training on before and is useful to see if patients actually understand what you're telling them (staff 5, focus group).

Exercise diaries could identify patient's efforts to exercise and physiotherapists were sometimes surprised by the frequency of their use.

I was quite surprised at how good they were at filling out the diary because I reserve the diary for my more difficult patients (staff 4, focus group).

In general, staff preferred face-to-face interactions, so that they could use a range of skills (assessing, demonstrating, positioning, sensing, observing) and familiarise them with the workbook. Trying to navigate the workbook and explain to patients was felt to be challenging over the phone.

Acceptability of best practice advice

Best practice advice was considered to be normal practice, had the potential to be empowering and was uncontentious. The high quality of the best practice advice booklet was welcomed. Participants noted that although some patients did return or ring for further advice, most did not. Professional ideals of being able to see all patients after ankle fracture, tailor their care to their needs and maximise their potential were strongly held. This discussion was balanced with knowledge of the reality of working with scarce resources.

That's when you feel like you're doing someone a disservice because I'd like them to be able to go back to being reasonably okay. I know you might not be able to get someone absolutely 100% but you wouldn't want them to feel that restricted when potentially they would be alright (staff 4, focus group).

Participants discussed their generic concerns for this group of patients, which were the transition from boot/cast to walking, footwear, pain and swelling, return to specific activities such as sport, squatting and kneeling, and achieving a balance between providing enough information and overloading patients. Web, phone and digital-based media were suggested as future possibilities to expand opportunities for learning about recovery. Overall, it was felt that extending best practice advice for later recovery or the workbook, if adapted slightly for ease of use, could help with these generic concerns.

DISCUSSION

The findings show the acceptability of both interventions through the themes, 'being helped' (for patients) and 'developing expertise' (for staff) with subthemes of choosing and progressing. Progressive exercise added value with a perceived increase in strength, motion, ability to undertake activities and continued use of the workbook. Both staff and patients valued physiotherapy expertise, demonstrated through interpersonal skills, advice, individualised exercise plans and active monitoring of progression. Best practice advice was particularly helpful in the early stages of recovery and with the use of mobility aids.

Implications for research are that: (1) the workbook was highly valued and required minor adjustment to reduce the components of progressive exercise to facilitate delivery and simplify the process of exercise prescription, (2) best practice advice should be delivered as soon as possible after the period of cast or boot use and provide a greater degree of advice and exercises for later recovery, (3) therapeutic interactions that involve patients, educate and provide direction were acceptable and enabled treatment completion, and (4) face-to-face interactions were thought to facilitate assessment and decision-making regarding progression.

Saturation of the theme and subthemes for patients was obtained but interviews during the intervention delivery period may elicit further detail about the knowledge and skill required for progressive exercise. A broader sample from across the UK that included the very old, chronic disability, comorbidity and different ethnic groups may provide new insights. Patients in both groups aimed to return to normal and they felt that the outcome tools used in the pilot randomised controlled trial did not highlight the subtle changes they felt were important. The use of tools such as the Patient-Reported Outcomes Measurement Information System (PROMIS)[24] with individual tailoring of responses via computer-adaptive formats may be more acceptable to the generic outcome tools used and will be explored in future studies.[25] Developing a core outcome set for ankle fractures that involves patients should also improve relevance of outcomes.[26]

The findings identify the challenges of recovery. As identified in previous research, recovery from ankle fracture was a struggle[4 8–10] and, as with major trauma patients, participants valued 'being helped' by physiotherapists.[11] Progressive exercise required sustained, concentrated time and effort, and patients determinedly undertook their exercises, balanced activities around daily life and liked monitoring their progress. Patients used the treatment session to validate or refute their concerns, such as pain, stiffness and causing further damage, and to focus on future activity. Goal setting and monitoring exercise activity could support participants' endeavours, leading to increased confidence and hope for future recovery, also found in other studies of recovery from injury.[11 27] In contrast, for those who had best practice advice, daily life was the driver for recovery and social connections were used to access help.

Staff identified the challenges of developing expertise in facilitating progression of resistance exercises. Expertise was demonstrated through listening and attuning to patient need, knowing about the person, the injury, the exercises, assessing progress and tailoring exercise activity to the individual. As in other studies, patients valued knowing their physiotherapist, feeling positive about their interactions[28] and relationships based on trust and rapport.[29 30] Face-to-face interactions and familiarity with the workbook facilitated judgements on the choice of exercise. The high quality of the workbook and protected training time were crucial, but learning through the experience of having regular participants was key. Physiotherapists felt that resistance exercises prescribed for patients after ankle fracture often do not follow current resistance exercise prescription guidelines, an important component of the intervention that will likely require training, monitoring and feedback. Concern was expressed about the continued loss of function at 6 months, how it might impact on levels of frailty[31] and the possible role of physiotherapy in maximising longer term recovery.

CONCLUSION

The progressive exercise intervention and the best practice advice were acceptable and minor adjustments were suggested for the main trial. The definitive AFTER trial (National Institute for Health and Care Research reference: NIHR201950) design and intervention were refined based on this study and the quantitative findings.[7] It will assess the clinical effectiveness of physiotherapist-supervised rehabilitation (4–6 sessions) versus self-directed rehabilitation (a single session of advice provided by a health professional in fracture clinics, and provision of materials to support independent progression of rehabilitation) for adults aged 50 years and over, after ankle fracture. In addition, future research to understand the psychosocial aspects that support developing confidence and the ability to sustain exercises during recovery would be valuable.

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