This document is the Accepted Manuscript version of a Published Work that appeared in final form in International Journal of Therapy and Rehabilitation copyright © MA Healthcare, after peer review and technical editing by the publisher. To access the final edited and published work see

https://www.magonlinelibrary.com/doi/abs/10.12968/ijtr.2019.0036

Cole Mary-Jane, Barratt Rosalie V, Mein Gill K

UK rehabilitation professionals' experiences undertaking shortterm responses after sudden-onset disaster

Abstract

Background/Aims: Rehabilitation professionals can be members of international emergency responding medical teams after a natural disaster or following conflict. There is little research that explores the experiences of rehabilitation professionals who participate in these short-term emergency responses. The aim of this study was to explore the experiences of rehabilitation professionals, specifically those of occupational therapists and physiotherapists. Objectives included examining personal and professional development opportunities, and how these experiences might inform future responses and the rehabilitation professional role.

Methods: A phenomenological approach was undertaken. Eight semi-structured interviews were carried out with rehabilitation professionals who had worked as part of short-term response following conflict or sudden-onset disaster. Transcriptions were analysed using thematic analysis.

Findings: Two main themes and subsequent subthemes emerged. Theme 1 was challenges, with subthemes: an emotional journey; have I made a difference; and cultural and contextual awareness. Theme 2 was opportunities, with subthemes: a short-term response; working together; and developing skills and knowledge.

Conclusions: The experiences of UK-based rehabilitation professionals on short-term rotational responses as part of an emergency specialised rehabilitation team were overall positive. Challenges have implications for developing future pre- and post-response training and support. Further research is recommended to determine the contribution of these responses and to continue to develop understanding of the rehabilitation professional role in a responding specialised rehabilitation team.

Key words: Allied health personnel; Disaster response; Qualitative; Rehabilitation; Staff development

INTRODUCTION

Rehabilitation is increasingly recognised as a necessary aspect of medical and patient-centred care following emergencies, particularly sudden-onset disasters

which can result in a surge of traumatic injuries (World Health Organization (WHO), 2016).

The WHO (2016) has emphasised the importance and relevance of rehabilitation, the lack of which can adversely affect local individuals, families and communities. The WHO also stress the need for emergency medical teams to provide rehabilitation services post disaster to minimise the potential legacy of long term disability; a specialised care team for rehabilitation is now recommended as a minimum standard (WHO, 2016).

An emergency medical team now responds to large-scale emergencies overseas following a sudden-onset disaster or humanitarian crisis. Emergency medical teams are groups of health professionals that treat patients affected by an emergency or disaster. A sudden-onset disaster is currently defined by the WHO (2018) as both 'natural' disasters (e.g. earthquakes, hurricanes, floods) and man-made or 'complex' disasters (e.g. sudden conflict situations arising from varied political factors) for which there is little or no warning. Harrison (2007) and Norton et al (2013) stress the importance of a timely response of relevant health professionals to these disasters has become more prominent.

Research has highlighted the necessity for rehabilitation professionals in countries where local healthcare professionals may be low in numbers or lack necessary specialist knowledge and skills to cope with rehabilitation following a disaster (Redmond et al, 2011; The Sphere Project, 2011; Gowing et al, 2017). Rehabilitation professionals are well placed to address additional social and cultural barriers that are likely to exist in emergency situations (WHO, 2016). Within an emergency medical team, the WHO (2016) described rehabilitation professionals as covering a range of professionals including physiotherapists, occupational therapists, orthotics and prosthetics, speech and language therapists and rehabilitation nurses.

Previous research has identified experiences of medical personnel and health professionals working in conflict situations, and after hurricanes or earthquakes. A range of issues associated with responses were highlighted including motivation to respond, preparedness and role (Harrison, 2007; Klappa et al., 2010; Stangeland, 2010; Gowing et al 2017), challenges with coping, reintegration on homecoming (Rivers et al 2013; Kelly et al, 2014; Brooks et al 2015), and perceptions of personal and professional benefits gained (Scanell-Desch and Doherty, 2010; Richardson and Ardagh, 2013). However limited literature refers to short-term responses or the experiences of rehabilitation professionals.

At the time of this study most rehabilitation professionals in the UK responding to a sudden-onset disaster were physiotherapists, occupational therapists or rehabilitation nurses. Most were employees of the National Health Service requiring special leave to work in disaster areas for periods of two to three weeks.

Potential responding rehabilitation professionals were prepared by a UK Non-Governmental Organisation (NGO) with humanitarian training and concentrated updates in specialist clinical areas in the context of a post-disaster situation. On return to the UK following the response, all rehabilitation professionals received a team debrief from the UK NGO personnel which included, for example, information on total numbers of patients seen. In addition, responders were offered a one-to-one debrief, received an online health check and elective psychological support.

Following requests by in-country host organisations and local partners, four teams of rehabilitation professionals (a total of 4-6 per team) went in rotation to Gaza in 2014 post conflict, and three to Nepal in 2015 after the earthquake and were embedded into the countries' responses. The profiles of the responding teams were selected to provide short-term local clinical capacity building in relation to specialism needs e.g. spinal cord injury, amputees. Members of the responding teams worked alongside local physiotherapists, occupational therapists, nurses, prosthetists and social workers in hospitals, rehabilitation facilities, in patients' homes and in the community. In addition, technical training and education was provided 'at the bedside' and through seminars.

In total, each response (made up of successive teams) lasted up to approximately three months. There was a designated team lead and rehabilitation co-ordinator who provided leadership for the whole response period.

AIM

The aim of this study was to explore the experiences of rehabilitation professionals – specifically physiotherapists and occupational therapists – on the short-term responses described earlier. Objectives include examining associated personal and professional development and how these experiences might inform subsequent training and development of future rehabilitation teams and the role of the responding rehabilitation professional.

METHODS

A phenomenological approach was used, using semi-structured interviews with open- ended questions, to explore the experiences of rehabilitation professionals who have worked on short-term emergency responses overseas with a specialised rehabilitation team.

Participants

Participants were recruited via the UK Chartered Society of Physiotherapy (CSP) professional network ADAPT, the Continuing Professional Development professional network for Chartered Physiotherapists (and Occupational Therapists) in International Health and Development, with an invitation to participate.

To be eligible for the study participants had to be rehabilitation professionals with experience working as part of a short-term emergency response overseas. Overall, 14 rehabilitation professionals replied. A total of 10 were recruited to this study on a first reply basis. Out of the 10 rehabilitation professionals, 2 were unable to undertake the interview for logistical reasons and did not take part. The other 4 did not correspond following their initial reply to the study, for reasons unknown. Creswell (2015) recommends that three to ten participants is a sufficient sample size for studies using a qualitative phenomenological approach.

The eight rehabilitation participants were aged between 29 and 44 years of age and had worked across various health specialisations within the UK before responding overseas. All participants went to Gaza or Nepal, or both. Three participants had previously worked overseas. The length of each response for each participant ranged from 2-3 weeks. All participants were given alphanumerical identifiers for their responses

Ethical approval

The Faculty Research Ethics Committee (FREC) at Kingston University and St George's University of London granted approval for this research (approval number FREC2016-06-001). All participants signed informed consent forms.

Procedure

All of the final eight participants (six physiotherapists and two occupational therapists) provided written informed consent before interview. Two researchers (MJC and RVB) undertook the semi-structured interviews. Interviews were guided by specific questions and further prompts to gain greater depth and detail (Table 1).

For participant convenience, seven interviews were undertaken using the electronic telephone platform Skype and one was completed face-to-face. Interviews took place between September 2016 and January 2017 and lasted between 40 and 90 minutes. Interviews were audio recorded and later transcribed 'verbatim'. Both researchers kept post-interview field notes during the data collection phase.

The researchers individually reviewed all the transcripts by reading and re-reading each script. Responses were grouped together into like-categories. The researchers followed a thematic approach as outlined by Pitney and Parker (2009). A process of coding and identifying initial categories was undertaken.

Multiple themes were ascribed initially before the final thematic categories emerged. Emerging themes were then compared and contrasted by both researchers until final major and minor themes were agreed. This process, and the final emerging themes, was reviewed and verified by a third researcher (GM).

Results

Two main themes with subthemes representing commonalities emerged:

- Challenges associated with the overseas response.
- Opportunities during and following the overseas response.

Challenges associated with overseas response

Participants experienced emotional challenges associated with responding, with clinical effectiveness, and in relation to culture and context. Subthemes were identified as

- An emotional journey
- Have I made a difference
- Cultural and contextual awareness

An emotional journey

Participants described varying emotions during their response while overseas and these feelings appeared to change depending on the stage of this journey (pre, during or post response).

When questioned about their feelings at being selected to join a team, participants expressed excitement at the prospect, especially if there was previous familiarity or experience of working in that country. Equally, participants conveyed apprehension before leaving the UK as the circumstances and what lay ahead was unknown.

"I guess a mixture of excitement and a little bit of fear; a healthy dose of fear ... I was really looking forward to going to Gaza but obviously it was a big unknown. But my overall feeling of the whole scenario [response] was that it was going to be a good thing and I was looking forward to going." (P3)

Participants identified feelings of self-doubt, questioning their own ability and describing feelings of surprise when being selected for the response. There was a sense of guilt as some participants were leaving a workforce that was under pressure.

"It was tricky getting work to come alongside it and understand what I was doing. They wanted to support me but there was a feeling of guilt around it, that I was choosing to go and, potentially, my colleagues wouldn't have any staffing cover, even though it was going to be annual leave in the end. Then also, the whole feelings of, am I skilled enough for what is needed? I was keen to go, but will I be good enough for the job and am I wasting people's money and time and the people that actually needed it, could they get better therapy input?" (P8)

All rehabilitation professionals discussed the emotional challenges faced. Those who had responded, specifically following the Gaza crisis, found their experience more emotionally distressing.

"It was more emotionally challenging then I thought it was going to be. I found it really distressing just to see [Gaza]. I think you see it so much on the TV, maybe we've become a little bit... desensitised to it. But when you're actually there and you genuinely see what's going on [it was difficult to process]." (P4)

Self-expectations affected the confidence of younger participants with less clinical experience, one feeling initially in awe of the experience of a fellow team member. On reflection however, participants acknowledged that their confidence (personal and professional) grew during the response, in addition to recognising and appreciating the value and skill each individual added to the team.

"Definitely very grateful to have met the people that I did, that were on my team, and they probably have had more of an impact on my professional life that the actual work we did because it's ongoing and it related to what you're doing day to day" (P6)

On return, the majority of rehabilitation professionals described comfortably settling back into work and home life routine. However, their perspectives had changed.

"I think it [the experience] maybe gave me a bit of perspective in that the life that I was living and how different that could be depending on where you were in the world and what situation you're in. I think that really brought home to me ... just to try to make sure to really live life. That was what I felt when I came back from Gaza ... I felt liberated ... I came back with a new lease of life, I felt like I had a new energy to my work, almost thinking outside the box" (P5)

Some participants described struggling to cope on their return home, describing low mood and feelings of detachment.

"People were very supportive, people were interested but didn't really understand what I'd been doing and I found that quite difficult, and I didn't really want to talk about it, either. That was quite difficult in the work situation ... that affected me quite a bit when I came back from Gaza in the fact that I had a bit of a low point about two weeks after ... I'd kind of shut myself away a bit to stop people talking to me about it." (P5)

Returning to the UK prompted some to have thoughts about the value of their short response period and what had been achieved.

"There were some just really, really lovely patients ... I was really sad to leave ... they had a music group going ... this beautiful Buddhist music and I bawled my eyes out [cried a lot] as we left. It's such a short period of time; you were just getting started really and then you leave so you wonder, well, how much point was that? How much did I really contribute?" (P1)

Have I made a difference?

A key aim for the rehabilitation response team is to increase the local capacity for treating the surge of injured people in the short-term, by working with local therapy teams to provide clinical care, and supporting practice with training as necessary to achieve optimal clinical outcome. Participants expressed some frustration in accomplishing this, both logistically as well as clinically.

"There were definitely challenges just on a practical level; when we got there [Nepal], they obviously had a lot of extra patients and a lot of them were from the same region so they had very similar names. There'd been a lot of bed movement and there wasn't an up-to-date list of where patients were. Because there was a lot of family there as well, it was quite chaotic so just actually finding patients was difficult. Because I didn't have much language to go from, that was a challenge just logistically." (P1)

"You're not sure exactly what's happened with the patient before and you're not sure what's going to happen with the patient afterwards... and you can't really follow up what happens later on. So I think that was ... in retrospect that was frustrating" (P7)

Having a clear role for the response period was important and participants valued this as key to ensuring that the response was clinically effective. Participants had mixed perceptions on what they viewed their own professional role to be, expectations of the role, and whether it was possible to evaluate the effectiveness of their interventions. For some, the focus of their response was clear from the outset. For others this became clearer as the response progressed.

"We had a very, very well-defined remit, which meant in a short space of time it was very clear-cut what you were expected to do. We were at one centre with a very clear mandate of training some new staff (local) that they'd recruited to help just with the increase in numbers and then just to give any support we could in terms of just managing the big influx of patients that they were going through." (P2)

I found Nepal quite difficult in - from a clinical point of view - in that I wasn't really ever sure of what my aim was while I was there, what I was trying to achieve. Not me personally, but as us, being there, why we were there ... but really what was our main focus? We did have a clearer aim when we left and we knew that there were other teams following us out we knew we had set objectives for them. We knew what they potentially should be working on, we had identified that." (P5)

While participants believed that their intervention in the short term was most likely to be of some benefit (both directly for patients and indirectly via training local staff), some questioned whether their input would be of benefit over the longer term and questioned the value of their contribution. The time-frame was a difficult issue and expectations of what could be achieved during this period varied between the responding team and the in-country local team. Despite a succession of rotations within an overall response and continuity via a team lead, there was a sense (felt by some participants) that in-country colleagues viewed each rotation as too short.

"It's such a short period of time; you were just getting started really and then you leave so you wonder, well, how much point was that? How much did I really contribute?" (P1)

"Although we were only there for a short term we were handing on to another team. That was one of the things that the staff were a bit - they [incountry team] weren't particularly negative, they didn't say bad things, but I got the feeling that they wished we were there for longer and that they didn't think that two weeks was enough" (P3)

Cultural and contextual awareness

An appreciation of the culture, language and local knowledge through previous experience was felt to be an advantage by participants. For most, responding to an unfamiliar country was met with cultural challenges, including language, local custom and practice.

"I think it's very important to be able to greet people in their local language and have a better understanding of the local customs ... I was helped that I'd been to Nepal before and worked there. So, in terms of the customs, culture and the people, I found it easy transitioning in and it was such a joy to go back." (P7)

"I think something that's lacking is that you don't really get to know the people and you don't really know exactly what they think of you because, one, you're there for a short time, so that brings a little bit of frustration, but secondly you don't speak their language so you don't understand exactly what they're thinking or the tone of voice or anything like that. So there is a lot that is missed." (P8)

Working with clinically complex cases in an unknown, often poorly resourced environment, and with new and unfamiliar clinical colleagues was specifically stressful and challenging. And, for some, the responsibility of taking clinical decisions was testing.

"There was an incident where one of the patients became quite unwell. She couldn't breathe, she was in respiratory distress. We had very little to work with; the power

was off at the time and the oxygen tanks were empty. We could only find two pairs of nasal prongs for the whole place and they were really dirty." (P1)

"We didn't have the diagnostic tools we would normally have ... like operation notes and guidelines, precautions, contraindications from the surgeons ... not having these guidelines was difficult, we were much more autonomous, which for me was quite difficult..." (P5)

Opportunities during and following overseas response

The overseas experience provided opportunities for participants, notably in terms of personal and professional development. New prospects arose, with different practice, roles and responsibilities. Subthemes were identified as:

- A short-term response
- Working together
- Developing skills and knowledge

A short-term response

Despite some apprehension participants relished the opportunity to be part of the rehabilitation team. They were eager to travel overseas to use and share their clinical skills to help others in need, meet new people, gain insight and understanding of other cultures, and welcomed the chance to develop professionally and personally.

"I'd always wanted to work in a disaster situation or in a low-income country, but I suppose I couldn't really make the commitment in my personal life because a lot of the opportunities there are quite long term. So it really appealed to me ... the opportunities that might come from it and the fact that it would be short-term and just all the training really and getting to meet and network with people who've had that experience. It's why I've joined." (P1)

Participants particularly valued the short-term opportunity, expressing that this was more suited to their lifestyle, as well as being a key factor in influencing whether their employer (mainly the NHS) would support their release.

Working together

Before travelling overseas participants appreciated meeting those who would be in the same team. Equally, the opportunity to liaise with team leads and others who had previously responded in an earlier team was valued:

"I knew I got on with them [during training] ... it was nice to have a name for a face. Also one of the girls was very experienced so I felt₁tptally safe with her, knew that whatever

happened she'd keep us right [doing the right thing]. We'd had so much preparation from [team leader] and had loads of prep before the first deployment and then loads of prep with group Skype chats ... so I felt I couldn't have been any more prepared." (P3)

"It was a really nice balance with the other physio who had a lot more experience. She also has done lots of work overseas, including in Nepal, so she spoke Nepalese. So we kind of fell into this role where I ended up being quite good at the organisation side of things and working out the prioritisation. She was great at just getting in there with the Nepalese and some of the more challenging patients with whom language was really useful. So we just worked together on that, which was great." (P1)

The balance of clinical knowledge and experience within the teams was appreciated especially when managing complex clinical presentations or prioritising workload. Peer support, trust and camaraderie were positively expressed by all and this helped team members to cope with challenging circumstances. Having excellent team leadership was emphasised as a necessity and valued within and beyond the clinical context.

"I think the team lead is absolutely crucial ... without a super-strong team leader, I don't think it would've worked as well. I really appreciated the support trying to get a SIM card to keep in touch with my family ... those little things a team leader did make such a difference." (P2)

Working relationships with in-country colleagues developed and was a highlight of the experience.

"They [in-country therapists] were great to work with ... I think we bonded quite well as a team. We made some good friends, we had a lot of fun together actually." (P1)

Developing skills and knowledge

Participants acknowledged that the experience had significantly contributed to enhancing clinical and professional practice.

In anticipation of being a member of a team, all rehabilitation professionals underwent specific formal training and preparation. Participants all commented on the value of attending the entire training offered, including the opportunity to attend specific training required for a particular response; one participant discussed the importance of the hostile environment awareness training before visiting Gaza, appreciating this as reassuring and necessary.

"So just before deployment we had training on going into - what's the word - hostile environments ... which was absolutely fantastic and made you have the skills and awareness before going into such a situation." (P4)

There was an appreciation that substantial learning occurs in-country and team members needed to be flexible and adaptable to deal with constant changing circumstances. Furthermore, clinical work overseas was recognised as being different compared to practice within the UK.

"You can go so far in being prepped for it before you go over but, actually, a lot of it, you have to be there and share and see what the dynamics are. There's change in therapists or change in some of the staffing at headquarters ... or political situations, whatever it may be or areas [places] that you can go to or not, the next day. So you've got to be very adaptable and understanding." (P8)

"You come along with your western hat on ... you've got these clinical ideals ... it's not achievable. It made me understand the [local] team a little more." (P7)

Participants appreciated learning new skills and acknowledged that this exposure and learning influenced their clinical practice back home. Participants valued the opportunity to support in-country therapists through training during clinical practice and by running larger workshops. This experience contributed towards their teaching skills and one participant highlighted that this enabled her to take on more teaching on return to the NHS.

"I learned how to lift and do ridiculous transfers with 40-centimetre height differences ... I learned a lot from that. I had to use it not long after (on return to the UK) with a patient in the community who I found on the floor and we had to shift her immediately; we couldn't wait for the ambulance. Some of those skills came into play that I didn't have before. I'd never learned how to do those sorts of techniques." (P1)

It was appreciated that the experience of being part of the response team contributed towards developing individual personal attributes, such as confidence. This was empowering and affirming.

"When I got back to UK I was thinking, right, well if I can do that [training] to the people that I'd never met, via an interpreter, I think I can certainly buck up my ideas in the UK and start doing

presenting back here. When these opportunities came to me when I was back, I felt like I could approach them much more confidently and therefore present much more effectively." (P3)

The experience of a short-term response provided participants with opportunities to take on new roles in the UK. For some, the experience has been a trigger to build on their work in the humanitarian field.

All participants expressed enthusiasm to be part of a responding team again, with one participant succinctly expressing their view saying they would respond again 'in a heartbeat'.

"I think it [the experience] gave me the confidence to go out and pursue other work overseas in the humanitarian context. Since then I have done three missions and I think that Gaza, career-wise was my springboard to that world." (P7)

Discussion

The WHO (2016) published guidance and recommendations by requiring all responding emergency medical teams to integrate rehabilitation into their team. In December 2016, the UK became the first country to have a dedicated, standalone, emergency rehabilitation team verified by the WHO. Furthermore, the WHO has published guidelines on rehabilitation specialist teams (Mills et al, 2018) and a handbook edited by Lathia et al (2020) supports the preparation of rehabilitation professionals for emergency settings.

The rehabilitation professional role is relatively new. Consequently, learning and reflection after responding, which is vital for improved understanding of such roles – is in its early stages. This study has highlighted important considerations for the continuing development of future pre- and post-response training and education for rehabilitation professionals, and potential areas for further exploration and research. The following points prompt debate: overseas preparedness, the rehabilitation professional's contribution, role clarity and the outcome of the response.

Challenges

Rehabilitation professionals experienced challenges across all stages of their overseas response. Emotional challenges were particularly discussed and these were wide ranging, reflecting findings from previous studies (Klappa et al, 2010; Rivers et al, 2013; Johal et al, 2016). Guilt was also experienced. Individuals struggled with leaving their NHS colleagues to carry their caseload at home, and were specifically concerned with the pressures this would place on them. These findings have implications for developing future pre- and post-training and support, as studies by Rivers et al (2013) and Johal et al (2016) have highlighted. The specifics of training and support may be influenced by the nature of the response e.g. after conflict. For example, individuals may need to be encouraged to seek elected psychological support, despite the offer of this

following the response.

The limited length of each rotational response was mentioned repeatedly within this study. Individuals questioned whether their individual three-week rotation was sufficient in making a difference to the local situation. This study has mainly focused on the individual perspective and not specifically the overall rehabilitation team and it seems reasonable therefore that an individual would question the value of their own impact, as they are responding for a short period of time. This study did not interview the response team leads and coordinators who were responsible for overseeing the entire period; including these individuals may have provided a wider perspective of the team as a whole, adding to the debate. However, making a difference was clearly important to participants. This probing by rehabilitation professionals about their contribution to a response, perhaps suggests that additional longer-term updates, and communication about the overall response (including lessons learnt) may assist in highlighting to individuals, how and where, they have made a difference.

Since the importance of rehabilitation following humanitarian disaster is now recognised (WHO, 2016), measuring the success of any rehabilitation intervention is considered key in ensuring care provided in-country is both effective and appropriate (Cohen and Marino, 2000). Gohy et al (2016) have identified that using a tailored functional score can be relevant for trauma patients in Afghanistan and highlighted that physiotherapy is a necessity within this conflict environment.

NHS support

The majority of the rehabilitation professionals interviewed were NHS staff who were released as part of an agreement with their employer to be able to respond at short notice for up to three weeks to significant overseas emergencies. This allows for clinicians to be released of their normal duties. This study has illustrated that working in a new overseas environment may provide an opportunity for NHS staff to learn new skills, which may be potentially beneficial for both the individual their NHS team on return. These findings are in line with Crisp's (2007) report for the Department of Health. Although concerns were expressed within this study over the short length of the individual response, releasing staff for any longer than three weeks would be challenging and likely to be met with resistance from NHS colleagues. This study suggests that future responses require NHS support and partnership working. Crisp (2007) confirms that providing established support to NHS staff who want to volunteer overseas to give their expertise is paramount, and recommends that for this to be successful, succinct partnership arrangements must be made to support staff being released so that they can easily return to their previous jobs. Crisp (2007) also recommends voluntary organisations and NGOs adopt and follow this policy.

The aim of such short-term responses is to provide immediate emergency surge capacity, working alongside in-country colleagues and give training where required, with the goal for local staff to continue the longer-term rehabilitation response (WHO, 2016). Developing local capacity is crucial to avoid further disability, which is more commonly

observed in low and middle-income countries. The WHO (2016) recognise that organisations that can provide a longer-term response are in a better position to provide this support. Some uncertainty as to the contribution of their individual response for a relatively short rotation was expressed by some participants, as Gohy et al (2016) identified, and warrants further exploring. Future response teams may want to consider sharing additional types of feedback from in-country colleagues and patient beneficiaries.

Confusion and clarification

Some confusion about their role was expressed by a number of participants. This is anticipated, as any emergency is immediate, with minimal time for planning and organisation. At the time of these experiences, there was limited knowledge about the rehabilitation professional's role after sudden-onset disaster, as described by Harrison (2017) and Lee (2014). The WHO's Minimum Technical Standards and Recommendations for Rehabilitation has been published since the participants' experiences and can further prepare respondents about the specifics of the role (WHO, 2016). However, the role is emerging and may need further exploration to improve clarity for responders, particularly in the initial phase of a response and this could be highlighted in preparedness training. Raising awareness about the essential role rehabilitation plays within a humanitarian context, and the contribution rehabilitation professionals have within responding medical teams, is also essential for the future, as illustrated by Gohy et al (2016).

The findings from this study highlight that the response experience has contributed to the development of new skills and learning for responding physiotherapists and occupational therapists. This experience may therefore have supported individual professional development; however, exploring this in depth is beyond the remit of this specific study. There is opportunity for future work to further explore the consequences of these experiences on professional development and clinical practice. For example, on their return, did the responding rehabilitation professional utilise any new skill into their NHS team and/or patient care? And, how do these experiences contribute to emerging rehabilitation roles within the UK?

Developing role and career

The NHS is overstretched, as reported by the Kings Fund (Ham et al, 2012; Maguire et al, 2016; Murray et al, 2016) and consequently the UK has strategically started to try and use their NHS workforce more effectively. Allied Health Professionals – and notably rehabilitation professionals – are now working effectively beyond their previous 'traditional' skill set within new healthcare settings such as emergency departments, GP practices, new specialist services and urgent pre- hospital care settings (Robertson et al, 2014; NHS England, 2017). The experience, knowledge and skills gained as part of an overseas team should be acknowledged as contributing to further opportunity and the developing role and career of the rehabilitation professionals in the UK. While this study contributes to the evidence base, there is clearly a need to increase awareness of the rehabilitation professional's role within the emergency medical teams by developing this understanding through further study. The

potential for collaborative research with partner organisations and relevant NGOs should also be explored.

Limitations

This research explored the experiences of physiotherapists and occupational therapists responding to two different situations, one after a conflict, and the other following an earthquake. Although the experiences contributed to common themes, the different response settings were not compared. Whilst not excluded from the interview criteria, it happened that the team leaders and co-ordinators were not interviewed; their experiences may have influenced the themes. The sample of participants allowed for in-depth descriptions of personal experience however additional participants may have developed the final themes further (four rehabilitation professionals did not respond to the interview invitation). Interviews took place sometime after participants had responded; it is possible that recall bias may have influenced findings.

The main researchers had been members of these responding rehabilitation teams. They were aware of their own experiences and that this position could potentially influence the research process. However, this background facilitated establishing an easy rapport with participants for the purpose of the interviews. Furthermore, their position was recognised as a resource to guide data gathering and interpretation. This possible influence on the interview process was recognised through reflexivity and the writing of reflective notes (Sanjari et al, 2014). That said, the study would have gained further credibility if it had undertaken member checking as suggested by Birt et al (2016).

Conclusion

This study is timely considering recent guidance and recommendations by the WHO requiring rehabilitation to be considered at the immediate stage of an emergency medical teams response. This study illustrates the experiences of UK-based rehabilitation professionals — physiotherapists and occupational therapists specifically — on short-term rotational responses as part of an emergency team. Findings were overall positive. The length of the response was logistically possible. Responding was an opportunity to share and gain skills. Challenges experienced resonate with findings from previous research and include adjusting to a different culture, coping with personal emotions and uncertainty as to the longer-term contribution of the response. Professional opportunities arose afterwards.

Findings have implications for developing future pre- and post-response training and support. Further research is recommended to explore the outcomes of a short-term response as part of a longer response, including the perspectives of beneficiaries, for example, and the impact on return to work in the NHS. Furthermore, further research can continue to develop understanding of the rehabilitation professional's role in a responding team to improve the profile of this professional group, gain recognition and raise awareness of their essential key skills in an overseas emergency response. The opportunity to undertake collaborative international research should be considered.

KEY POINTS

- The role of rehabilitation professionals within an emergency medical team is new
- Rehabilitation professionals have a role following sudden-onset disaster management
- The role can be associated with challenges. Appreciation of these can contribute to preparedness training
- There have been personal and professional development opportunities for UK rehabilitation professionals who have responded to sudden-onset disaster
- Further research is recommended to explore the outcomes of a shortterm response as part of a longer response, including the perspectives of others

Conflict of interest: none.

REFERENCES

Birt L, Scott S, Cavers D et al (2016) Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qual Health Res.***26**(13): 1802-1811

Brooks SK, Dunn R, Sage CAM et al (2015) Risk and resilience factors affecting the psychological wellbeing of individuals deployed in humanitarian relief roles after a disaster. *J Ment Health* **26**(6): 385-413

Carpenter C (1997) Conducting qualitative research in physiotherapy: a methodological example. *Physiotherapy* **83** (10): 547-52

Cohen ME, Marino R J (2000) The tools of disability outcomes research functional status measures. *Arch Phys Med Rehabil***81**(12) Suppl 2: 21-9 Creswell J W (2015) *A concise Introduction to Mixed Methods Research*. 1stedn. Sage, London

Gohy B, Ali E, Van der Bergh R et al (2016) Early physical and functional rehabilitation of trauma patients in the Médecins Sans Frontières trauma centre in Kunduz, Afghanistan: luxury or necessity? *International Health8*(6):381-389 Gowing JR, Walker KN, Shandell LE et al (2017) Disaster Preparedness among Health Professionals and Support Staff: What is Effective? An Integrative Literature Review. *Prehosp Disaster Med*32(3): 321-328

Ham C, Dixon A, Brooke B (2012) *Transforming the delivery of health and social care: The case for fundamental change.* The King's Fund, London www.kingsfund.org.uk/publications/transforming-delivery-health-and-social-care (Accessed 19th February 2019)

Harrison RM (2007) Preliminary investigation into the role of physiotherapists in disaster response. *Prehosp Disaster Med***22**(5):462-465

https://www.kingsfund.org.uk/sites/default/files/NHS-Workforce-Planning-Candace-Imison-James-Buchan-Su-Xavier-Kings-Fund-November-2009.pdf (Accessed 19th February 2019)

Johal SS, Mounsey Z, Brannelly P et al (2015) Nurse Perspectives on the Practical, Emotional, and Professional Impacts of Living and Working in Postearthquake Canterbury, New Zealand Prehosp Disaster Med31(1):10-16 Kelly PJ, Berkel LA, Nilsson JE (2014) Post deployment reintegration experiences of female soldiers from National Guard and reserve units in the United States. Nurs Res63(5):346-356

Klappa S, Audette J, Do S (2010) The Roles, Barriers, and Experiences of Physical and Occupational Therapists in Disaster Relief: Post-earthquake Haiti. *The University of Rhode Island Open Access*

Lee HC (2014) The role of occupational therapy in the recovery stage of disaster relief: A report from the earthquake stricken areas in China.

AustOccupTherJ61(1):28-31

Maguire D, Dunn P, McKenna (2016) *How hospital activity in the NHS has changed over time.* The King's Fund, London

Mills J,Gosney J, Stephenson F et al (2018) Development and Implementation of the World Health Organization Emergency Medical Teams: Minimum Technical Standards and Recommendations for Rehabilitation.

http://currents.plos.org/disasters/index.html%3Fp=39727.html (Accessed 5th February 2019)

Mitra S, Posarec A, Vick B (2013) Disability and poverty in developing countries: a multidimensional study. *World Development***41** C:1–18

Murray R, Jabbal J, Thompson J et al (2016) *How is the NHS performing? Quarterly Monitoring Report 21*. The King's Fund, London

www.kingsfund.org.uk/publications/articles/how-nhs-performing-november-2016 (Accessed 19th February 2019)

NHS England (2017) AHPs into Action: Using Allied Health Professions to transform health, care and wellbeing.

https://www.england.nhs.uk/wp-content/uploads/2017/01/ahp-action-transform-hlth.pdf(Accessed 19th February 2019)

Norton I, Von Schreeb J, Aitken P et al (2013) Technical criteria for classification and minimum standards for Foreign Medical Teams. *World Health Organization*

Pitney WA, Parker J (2009) *Qualitative research in physical activity and the health professions*. Champaign, Illinois, USA

Redmond AD, Mardel S, Taithe B et al (2011) A qualitative and Quantitative Study of the Surgical and Rehabilitation Response to the Earthquake in Haiti. *Prehosp Disaster Med***26**(6):449-56

Richardson S, Ardagh M (2013) Innovations and lessons learned from the Canterbury earthquakes: Emergency department staff narratives. *Disaster PrevManag* **22**(5):405-414

Rivers FM, Gordon S, Speraw S et al (2013) U.S. Army Nurses' Reintegration and Homecoming Experiences After Iraq and Afghanistan. *Disaster Mil Med* **178**(2):166-173

Robertson R, Sonola L, Honeyman M et al (2014) Specialists in out-of-hospital settings: findings from six case studies. The King's Fund, London www.kingsfund.org.uk/publications/specialists-out-hospital-settings (Accessed 19th February 2019)

Sanjari M, Bahramnezhad F, Fomani F K et al (2014) Ethical challenges of researchers in qualitative studies: the necessity to develop a specific guideline. J Med Ethics Hist Med7(14):1-6.

Scanell-Desch E, Doherty MA (2010) Experiences of U.S. Military Nurses in Iraq and Afghanistan Wars, 2003-2009. *J NursScholarsh***42**(1):3-12

Stangeland PA (2010) Disaster nursing: a retrospective review. *CritCareNursClin North Am***22**(4): 421-436

The Department of Health (2007) The Crisp Report. Global health partnerships: the UK contribution to health in developing countries.

http://webarchive.nationalarchives.gov.uk/20080817115435/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_0 65374(Accessed 19th February 2019)

https://www.kingsfund.org.uk/publications/hospital-activity-funding-changes(Accessed 19th February 2019).

The Sphere Project (2011)*Humanitarian Charter and Minimum Standards in Humanitarian Response*. The Sphere Project

World Health Organization (2016) Emergency medical teams: Minimal technical standards and recommendations for rehabilitation. *World Health Organization*.

Geneva. Licence: CC BY-NC-SA 3.0 IGO

World Health Organization. Definitions: emergencies

http://www.who.int/hac/about/definitions//en (Accessed 23rd February 2019)