An occupational therapy intervention for residents with stroke living in UK care homes: A content analysis of occupational therapy records from the OTCH trial.

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Key messages

Key findings:

- Residents' goals focused on leisure activities whereas intervention time was mostly spent on improving function
- There are conflicts between carer time constraints and supporting residents' independence to achieve therapy goals

What the study has added:

This study contributes further understanding about the content of an occupational therapy intervention delivered in UK care homes, including distribution of therapists' time and the goals most important to residents.

Key words: Stroke; care homes; content analysis; goal-setting; assessment; Activities of Daily Living

Abstract

Introduction

This study aimed to describe the content of occupational therapy delivered in a randomised controlled trial of UK care home residents with stroke (The OTCH trial). The trial intervention aimed to maintain or improve residents' activity levels in relation to personal activities of daily living and mobility.

Method

A qualitative design was adopted using content analysis to thematically code and analyse the occupational therapy notes of residents in the intervention arm of the trial. Treatment notes comprised of an initial assessment, a goal and treatment plan, and a description of activities at each visit. A purposive sample of 50 sets of therapy notes was selected reflecting the geographical locations, care home types, and resident characteristics observed in the OTCH trial intervention group.

Findings

Occupational therapists individually assessed residents' function and goals. Planning was sometimes client-centred but not all residents were able to share personal goals. Carers impacted on the success of intervention. Treatment outcomes in relation to increasing functional activity were noted in some cases, but not always fully realised in this frail population.

Conclusion

Increasing functional activity is challenging in care home populations; future studies should assess occupational therapy for residents in relation to leisure or social activities.

Introduction

Stroke is the third main cause of death and the major cause of adult disability in England, costing the NHS over £3 billion a year (National Audit Office 2010). Stroke survivors are often left with high levels of residual functional and cognitive impairment (Pereira et al 2012), and may be are unable to return home after hospitalisation. In England, following a first stroke approximately 10% to 11% of people admitted to an acute stroke unit are discharged to live in a care home (institutional accommodation for those with care needs) with or without nursing support (RCP 2011). It is estimated that around 20-25% of residents in care homes have a history of stroke (ISWP 2012) and are likely to be amongst the most disabled, dependent and vulnerable of the stroke population, yet few receive any form of rehabilitation (Sackley et al 2001).

The National Clinical Guidelines for Stroke (ISWP 2012) recommend that care home residents with stroke should receive assessment and treatment from stroke rehabilitation services in the same way as stroke survivors living in their own homes. Occupational therapy has been shown to be clinically effective for people who have had a stroke (Walker et al 2004). Rehabilitation interventions provided by an occupational therapist form a key part of stroke-specialised rehabilitation throughout the stroke pathway. A systematic review has shown that targeted occupational therapy interventions can improve function in activities of daily living (ADL) and mobility in stroke survivors living in the community (Legg et al 2007). People discharged home following a stroke are likely to have relatively good function and effective social support networks, this is in contrast to people who are discharged to care homes. Discharge to care homes often occurs when the person has such limited functional and or cognitive ability that they cannot remain living independently in the community. Therefore the therapeutic benefits of occupational therapy to care home residents may be more difficult to define and elicit. Certainly another Cochrane review found that there is insufficient evidence for therapeutic benefits when occupational therapy is provided in a care home setting (Fletcher-Smith et al 2013).

While randomised controlled trials are the gold standard of evidence-based practice, such trials frequently do not describe the key components of the intervention in any great detail or specify the particular theoretical stance that underpins occupational therapy practice, making it difficult to replicate such studies. This is particularly important in trials with care home populations where comorbidities and cognitive impairments may mask the therapeutic benefits of occupational therapy. Furthermore there is the higher risk of attrition as people become too ill to participate in longer trial interventions or die. With frail older people adherence to treatment plans is often mediated by others such as family and care home staff. In light of the challenges of undertaking occupational therapy research in care home environments there is a need to further define the process of delivering occupational therapy interventions in care homes, considering the key components of treatment, and the ways in which occupational therapists may best measure and assess the impact of treatment. Therefore this study aims to describe the pragmatic reality of delivering a three month occupational therapy intervention to UK care home residents living with stroke, with a focus on the written content of the occupational therapists' assessment, planning, implementation and evaluation notes. The interventions were delivered as part of a multi-centre cluster randomised controlled trial (*OTCH;* Sackley et al 2012) focusing on improving and maintaining activity in relation to personal ADLs and mobility.

Methods

This qualitative study uses data from the OTCH trial, a large cluster randomised controlled trial (RCT) evaluating the clinical and cost effectiveness of occupational therapy in care homes compared to a usual care control. The study drew purely on written records completed by therapists delivering the intervention. Therapists were asked to complete standardised study documentations comprising of an initial assessment summary; treatment plans outlining problems, goals, actions and outcomes; and treatment notes detailing the therapy at each visit over the intervention period.

Written treatment records formed the data set and there was no opportunity to question occupational therapists for deeper insights into their actions or practice, therefore content analysis provided a robust methodology for analysis, as it is a flexible method for analysing text data (Cavanagh 1997). The guidelines on conventional content analysis outlined by Hsieh and Shannon (2005) were followed to ensure an inductive rather than deductive approach. .

Sample and Data Collection

A purposive sample of 50 therapy notes was selected for analysis which was expected to be sufficient to reach data saturation. The residents were selected from a total of 29 care homes from five study sites: Birmingham, Portsmouth, Stoke on Trent, Taunton and Wolverhampton. Six occupational therapists (from the 19 included in the main study) delivered therapy to the fifty residents. The sets of documents were purposively selected to provide a range of different care homes and resident abilities based on the following aspects:

- Geographical range of care homes representative of all participating sites (e.g. rural and urban)
- Type of care home (with or without nursing care)
- Residents' functional ability at study baseline as measured by the Barthel Index (BI) (Mahoney and Barthel 1965)
- Clinical diagnosis of stoke (confirmed or suspected TIA/Stroke)
- Resident's cognitive ability at study baseline as measured by the Mini Mental State Examination (MMSE) (Folstein et al 1975)
- Resident's ability to provide consent themselves or by consultee consent

OTCH Trial Methods

Data in the OTCH RCT were collected during the course of the trial over a 22 month period between May 2010 and March 2012. Ethical approval was obtained from Coventry Research Ethics Committee (Reference: 09/H1210/88) and informed consent was given by the resident or consultee. Residents who were randomised to the trial intervention group were assessed by an occupational therapist who planned and delivered a targeted, individualised course of therapy for a maximum of 3 months, with no limit to the number of visits made. Therapists were provided with training about the aims of the research and the data collection requirements including the completion of intervention logs. Therapy was to be delivered as it would normally within the NHS, by adopting a client-centred goal setting approach to ADLs, addressing the performance of a task, the environment in which the task is conducted, and addressing any impairments that may limit the performance of the ADLs. The intervention content (the occupation therapy offered to residents) was developed from a literature review on the components and practice of occupational therapy, recommendations made by an expert panel of occupational therapists working within stroke, and a pilot study which showed the intervention to be suitable for this population (Sackley et al 2004).

Therapists were asked to offer and record therapy under the following broad headings:

- Assessment and goal setting
- Communication involving residents, care staff, relatives and other agencies
- ADL training
- Transfers and mobility
- Adaptive equipment, seating, postural management and environmental adaptations
- Other (including treating impairments directly and the use of leisure activities)

Therapists recorded dates and number of visits made, and the amount of time spent on each of the categories per visit on a treatment log. For example if the therapist spent 10 minutes assessing the resident's needs or progress, this time was recorded under the category of 'assessment and goal setting'. They were also asked to complete an initial assessment, a treatment plan and keep treatment notes of each visit. Some therapists chose to include summaries of the goals and outcomes from the intervention but these were not included in the analysis as they were not part of the trial documentation and therefore not available for all study participants. All study documentation were stored confidentially and kept in locked filing cabinets. All data were anonymised and residents were assigned a unique code by the research team for identification purposes.

Data analysis

A qualitative content analysis was performed on the therapy notes. Hand-written notes were transcribed and an initial coding scheme was created by an independent researcher (GS) based on the OTCH trial occupational therapy intervention framework (Sackley et al 2004) with further codes emerging from the data. The coding framework was reviewed and discussed by three researchers (GS, DK, LB) to ensure that it was appropriate and comprehensive. Therapy notes were then coded to this framework by DK with any queries discussed between researchers until agreement was reached. To aid the management and coding of the data NVivo 10.0 software was used, and all codes were applied systematically across the data. The codes were then developed into themes by DK and checked by an independent qualitative researcher (LB) familiar with similar work in this field to increase validity and reliability of the data.

Findings

Sample Characteristics

The sample characteristics of both residents and the care homes from which they were selected were representative of the main trial intervention group in a number of areas as shown in Table 1. Residents' characteristics of gender, age, mean number of co-morbidities and variation in clinical diagnosis of confirmed or suspected stroke or Transient Ischaemic Attack (TIA) were similar; and the care homes chosen were similar to the overall sample in terms of the split between care homes with nursing and care homes without. The number of residents able to provide consent and their BI and MMSE scores indicated low levels of functional ability and moderate cognitive impairment were present at baseline for this group, which was not unexpected in this care home population of stroke survivors.

Table 1. Sample characteristics of care homes and participants by study group

	Study Sample	OTCH Intervention Group
Number of Care Homes	**29**	**114**
With nursing care (%)	18 (62)	61 (54)
Without nursing care (%)	11 (38)	53 (46)
Number of Residents	**50**	**568**
Mean Age (SD)	83.2 (8.18)	82.8 (9.21)
Male (%)	17 (34)	203 (36)
Confirmed Stroke or TIA (%)	41/48* (85)	376/449* (84)
Suspected Stroke or TIA (%)	7/48* (15)	73/449* (16)
Mean No. of co-morbidities per resident	2.90	2.98
Self-consent (%)	28(56)	227(40)
Mean Barthel Index (SD)	8.00 (6.60)	6.53 (5.76)
Mean MMSE (SD)	16.83 (9.55)	13.56 (9.51)

* some missing data. The Barthel Index (Mahoney and Barthel 1965) assesses levels of dependency from 0-20 (dependent to independent). The Mini-Mental State Examination (MMSE; Folstein et al 1975) measures cognitive capability.

Delivering the intervention

The group of residents received 329 visits from therapists in total; the mean number of visits per resident was 7, ranging from 1 to 18 visits. Therapists spent a total of 302 hours with all residents, and the mean amount of time spent per resident was just over 55 minutes per visit. By far the most time (170 hours) was categorised as communication followed by assessment and goal-setting and functional ADL training. The least amount of time (3 hours) was spent on cognitive elements of ADL training (Table 2). The following sections offer further explanation of the specific activities of the intervention reported under the intervention log categories used by the therapists as detailed in Table 2.

Table 2. Time spent and frequency of intervention by intervention category and cumulative

Category of intervention recorded by therapist and time spent (n=50)	**Time in hours (%)**
Assessment and goal setting	42 (14)
Communication	170 (56)
ADL training - cognitive	3 (1)
ADL training - functional	28 (9)
Transfers and Mobility - cognitive	8 (3)
Transfers and Mobility - functional	20(7)
Equipment, seating, posture and environment	13 (4)
Other, *including treating impairments directly and the use of leisure facilities*	18(6)
Total amount of therapy time delivered to residents	302 (100)
Mean length of visit (in minutes)	55
Frequency of visits, including mean and range	
Total no of therapist visits to residents	329
Mean no of therapist visits per resident (range)	7 (1-18)

The Content of the Intervention

The most common types of activity recorded by the therapists were assessment and observation of ADLs (which included goal setting and readjustment of goals); communication; planning the next intervention; function, mobility and transfer techniques; reviewing therapy and advising carers. The least common activities recorded by the therapists were facilitating social activities; arranging discharge home; and memory and cognition techniques. Although some of these activities do not appear within the main headings of the intervention, there was an 'other' category which was able to capture the time spent on these less common activities. Some visits resulted in no intervention being delivered because the resident was unavailable due to being unwell or engaged in another activity.

Assessment and goal setting:

All fifty sets of therapy notes showed evidence of the therapist conducting an initial assessment with the resident in the care home, sometimes this included a member of care home staff or the resident's relative being present. Most often the reason for this was because residents had some level of cognitive impairment or had personally asked for their carer or relative to be present.

The information gathered from the therapist's initial assessment with the resident informed the goal setting process. There were some factors that were likely to have impacted on residents' ability to engage in the goal setting and therapy process from the outset such as their level of orientation and to what extent they were able to carry out ADLs independently at baseline. Also more than a third of residents (34%) were not fully oriented to at least one of the following: time, person, or place. Therapists concluded the initial assessment by asking each resident the broad question: "What is the most important thing for you to be able to do?"

The most common goals documented by therapists following the initial assessment focused on increasing functional activity in general and personal ADLs, described under the headings of function and mobility, followed by washing and dressing, and eating.

"Goal: Increase independence in PADL [personal activities of daily living]

Outcome: Participant can wash face and some of upper body [with] encouragement"

Site D, Resident 004

In contrast to this, goals identified by residents in the final question ("What is the most important thing for you to be able to do?") were more concerned with improvements in leisure and social activities and less on functional aspects of daily life (Table 3 shows these goals in rank order).

Table 3. Important activities as reported by residents at initial goal assessment visit by OT (in rank order)

Responses to question: *What is the most important thing you wish to be able to do?*	**No of residents reporting (%)**
Resident did not state	12 (24)
Walking/'be more active'	11 (22)
Socialising (within and outside CH)	10 (20)
Independence	5 (10)
Crafts (knitting, sewing etc.)	4 (8)
Receiving visitors	3 (6)
Singing	3 (6)
Reading	2 (4)
TOTAL	**50 (100)**

Communication:

Therapists recorded 170 hours as communication and it was very much part of every intervention visit. The guidance to therapists was to record intervention time under this category if it covered the following aspects: 'Including listening to resident's concerns or life story, information giving (to residents, staff, or relatives), referrals to other agencies and ordering equipment'. Directed interventions aimed at improving speech or communication were not common nor did they appear successful (there were no recorded successful outcomes under the communication heading for the 50 residents). Rather therapists took the opportunity at each visit to speak about the resident's level of functional activity in relation to ADLs through initiating and continuing a dialogue with care home staff, managers, activity co-ordinators and other health professionals in the care home, and with residents' relatives, social services, adaptive and mobility equipment providers, stroke club staff and the resident's GP external to the care home environment.

ADL training, transfers and mobility interventions:

Functional activity maintenance or improvements were the focus of the interventions delivered by therapists in this category. Specific examples of treatment within this category include: encouraging and promoting greater involvement in aspects of personal hygiene, supporting residents to feed themselves and enjoy mealtimes; training and practice with walking and using mobility aids, and supervising and assisting residents with bed to chair transfers. The example quotes below show that in some cases the resident showed signs of functional improvement.

"[Resident] mobile with rollator [to] 80m with supervision – x2 rests. Side stepping along bannister (x2 each way) x 15 steps. Again reinforced not to do any of above alone. Continued improvement seen – resident needing less breaks and increased exercise tolerance, balance also improving."

Site D, Resident 003

"Pt [patient] was responsive to OT [occupational therapy] intervention; right ankle shows signs of improvement."

Site C, Resident 025

Adaptive equipment, seating, postural management and environmental adaptations:

Therapists assessed suitability and effectiveness of equipment such as wheelchairs, walking sticks and adaptive cutlery that residents were currently using, and if necessary arranged repair or replacement.

“Visit to [care home]. New ferrule placed on client’s walking stick (spare ferrule also issued to CH staff)”

Site B, Resident 014

“[Assessed] participant eating with spoon. He manages this but spills quite a lot, may benefit from angled spoon. [Plan] – order angled spoon for participant to try.”

Site D, Resident 001

In some cases they were able to refer on to specialist services to provide the correct equipment for residents such as the referral to a specialist hand occupational therapist recorded in the quote below.

“ OT to refer [patient] to the hand OT to assess left contracted hand for possible splinting/new palm protector and advice re: hand hygiene.”

Site B, Resident 031

In one case the therapist was instrumental in facilitating a resident’s discharge home and adapting the intervention to ensure the home environment was safe before discharge took place.

“Home visit completed with [resident’s] consent, purpose of visit/assessment explained, primarily to conduct a [kitchen assessment]. Home visit report to follow. [Resident] had not been home for nearly 1 year.”

Site C, Resident 026

Other:

The other category was designed to capture treating impairments directly, such as hand massage, and enabling residents to access leisure and social activities. The quote below shows that even though the resident was unavailable for therapy at that time, the therapist was still able to plan future input to leisure and social activities.

“[Resident] in hairdressers. Not for input today review next time. Plan –card games, board games and look at when/how to get involved. Word search book – get.”

Site E, Resident 049

Themes emerging from the data

In addition to the categories recorded on the intervention log, a number of other themes emerged from the data as described in the following sections.

Educating carers in assisting residents with therapy:

Therapists spent time educating carers on how to support and assist residents to maximise the potential benefits of the therapeutic interventions, and advising them on the need for residents to be encouraged to practise walking or using mobility aids for instance. This theme is clearly identified in the therapist notes, but is not a category on the treatment log; therefore it is difficult to assess specifically how much time therapists spent on it. Therapists emphasised with carers the importance of residents being active rather than passive in different tasks.

"Liaised with nursing staff re [residents'] ability (functional) and stressed importance of allowing/encouraging her to complete tasks [independently]."

Site C, Resident 025

However in some cases, it was apparent that carers had limited time to promote therapy with residents, and that both residents and carers acknowledged this:

" [Patient] needed help with feet – unfortunately did not have time to practice dressing as carer returned and took over, putting on [patient's] dress and cardigan – discussed with [patient] after practice - she is resigned to having things done for her most of the time, as she says carers often have very little time to support her to do more for herself. Carers agree [patient] able to do more than she does, but they don't have time to support her."

Site D, Resident 014

Brokering services as therapeutic intervention:

The study intervention was delivered directly to residents by therapists in most cases, but on occasion they were unable to provide direct intervention themselves, such as provision of leisure activities or specialist treatments. In these cases they used their knowledge and experience to 'broker' services whether by directly communicating with outside agencies, such as stroke clubs or reminiscence therapists, or through liaison with care home managers, activity co-ordinators and other external agencies such as social services and other community health services.

"Referral made to community OT [occupational therapist] for specialist seating [assessment]."

Site B, Resident 030

"Referral made to hand clinic. Home advised on hand hygiene. "

Site B, Resident 029

Therapeutic outcomes:

Therapists documented a continuous cycle of assessment, planning, review and delivery of interventions across the three-month study period. Most therapists stopped the intervention at the end of the 12 week period as per study protocol, whilst others continued for longer, for instance one resident received 18 visits (Resident 023, site C). The most commonly recorded outcomes for residents were: improved function and mobility in ADLs; finding adaptive equipment useful; and suggestions for carers.

Improved mobility

"Participant self-propelling inside and outside home (reported by staff)."

Site A, resident 042

Finding adaptive equipment useful

"New stick issued – able to mobilize with stick and supervision. New delta rollator issued – able to use independently."

Site B, resident 037

Suggestions for carers

"Bed table move to the right side to encourage [resident] to attend to right side […] Liaise with Matron re changing bed position. Encourage staff to sit [resident] in an upright position"

Site A, resident 041

Discontinuing therapy:

Mostly therapy ended because the resident reached the end of the trial period or was content with the improvement in activity levels they had achieved. Therapists also stopped therapy when residents had reached the goals that had been set or became too unwell to participate. In some cases therapy was discontinued due to issues with resident compliance and motivation.

"At current level of compliance, [patient] has reached level of rehabilitation. Staff encouraged to support [patient] to continue to eat independently in upright seating position. Offer to revisit [patient] before end of 12 week intervention period to check up on [patient]."

Site A, resident 041

"Final [review]. [Patient] sitting next to window. Spoke with [patient] who reports she is continuing to participate as much as she can with ADL [activities of daily living]…No further action – OT [occupational therapy] complete."

Site B, resident 020

Discussion

This study describes the content of occupational therapy notes documenting a three month occupational therapy intervention delivered to UK care home residents living with stroke. The intervention was aimed towards improving residents' occupational performance specifically in relation to personal ADLs and mobility.

Assessment and observation of residents' ADLs was the most commonly recorded intervention by therapists, which included setting therapy goals with residents and reviewing them over the course of the intervention period. The initial assessment visit 'set the scene' in terms of the therapist's first impression of the resident's functional and cognitive status. It was at this visit that goals were set, although there is extensive evidence that therapists reviewed goals on a regular basis and regularly assessed the extent to which they were being met. There was some evidence from therapy notes of client-centred goal setting when comparing residents' statements on the most important thing they wished to do, with therapists written notes on goals within the treatment plans. However, residents' goals tended to focus more on leisure activities whereas most of the goals documented by therapists in the treatment plans focused on improving residents' function in ADLs and increasing their mobility. However it is possible that this was influenced by the RCT study protocol targeting personal ADLs and mobility rather than leisure activities.

Goal-setting has been identified as a main component in the rehabilitation process (Wade and de Jong 2000), and there is consensus that goal setting should follow a client-centred model (Playford et al 2009). However, a recent systematic review of the evidence for patient-centred goal-setting practice in stroke rehabilitation found that in studies where clinicians stated this model, less than a quarter of patients said they had assisted in the goal setting process (Rosewilliam et al 2011). In our study therapists were asked to provide occupational therapy as per normal NHS treatment using a client-centred goal setting approach. There is evidence to suggest that this did not occur in all sampled cases, although the therapy notes reported treatments that were tailored to individuals' needs and capabilities, and discontinuation of therapy if either resident or therapist felt it was not achieving the agreed goals. One possible explanation for client-centred goal setting not occurring is that some of the residents were too cognitively impaired to set their own realistic goals.

Therapists had to address a wide variation in expressed needs, ranging from residents wanting to do 'everything' to very specific goals, such as a resident wanting more movement in their right arm. Goals were set most commonly to promote greater participation and independence in functional mobility, washing and dressing, and eating which was in keeping with the main aims of the overall study intervention and also standard NHS occupational therapy practice in stroke rehabilitation (Steultjens et al 2003). Few sessions involved addressing the facilitation of social activities; arranging discharge home and offering memory and cognition techniques, which is in keeping with findings from a national survey of routine occupational therapy conducted with residents with stroke living in a residential setting (Fletcher-Smith et al 2014).

Goals were sometimes not achieved due to factors such as ill health with resultant decline in participation and function during the intervention. There were other factors that limited the content of the intervention including residents being admitted to hospital or having a fall during the intervention period meaning they were unable to complete the planned therapy. Some residents also appeared to be satisfied with their level of dependence on care home staff and did not engage in the therapy offered. Furthermore one resident expressed concern that care staff did not have time to assist her to dress herself, rather carers preferred to do things for residents as it was quicker.

In general the care home staff were supportive of the study intervention, evidenced by care home managers having agreed to take part in the study. However there are documented instances where therapy planned by the occupational therapist was not fully implemented by care home staff, such as ignoring written and photographic instructions on how to position a resident for greater comfort and to enable them to feed themselves. Evidence suggested that in some situations where there was a need for care staff to reinforce therapy recommended by therapists, this did not occur and when challenged carers stated they lacked sufficient time to do so.

The total time of therapy offered in this study (6.4 hours per resident) was slightly higher than the total of approximately 5 hours reported in similar studies (Walker et al 1999, Gilbertson et al 2000). The amount of time spent on communication at each visit may account for the increased therapy time. There was little evidence of direct communication interventions with residents, but there was evidence of therapists communicating with care staff to act as an advocate for the resident. Although the intervention logs recorded time spent on communication in minutes, the accompanying therapy notes indicated that there was great deal of assessment and planning taking place during this time. Assessment and goal setting was a separate category in the intervention, but communication with residents would also have been an essential component of this process. This shows that some intervention activities may have been difficult to record if they spanned more than one of the pre-defined categories, highlighting the problem of accurately recording how pragmatic interventions are delivered in real world environments.

The findings reveal the range of interventions offered to residents in this study as defined by the OTCH trial intervention were typical of standard NHS occupational therapy delivered as part of stroke rehabilitation services (Fletcher-Smith et al 2014). In the OTCH RCT these interventions did not lead to clinically significant improvements in function as measured by the primary outcome measure, the BI. Some further illuminations of this neutral trial result have been presented in the findings. This includes evidence of mismatched expectations in residents' stated goals compared with goals recorded by therapists in the treatment plans. Also highlighted was the challenge to care staff to adopt new 'techniques' for caring for residents, and it is unlikely that the necessary culture change required would be addressed within the 12 week intervention period. Residents were sometimes reluctant to 'rock the boat', wishing to maintain the status quo within the care home rather than challenge it. Nonetheless treatment notes revealed that small changes in physical appearance or an opportunity to engage in social activities were valued by care home residents. Examples included one resident appearing happier because their nails were clean and tidy, and another resident joining in with an exercise class after receiving the study intervention. There was evidence of the intervention temporarily halting decline in some residents, and even though this may have only lasted for 12 weeks, it provided opportunities for therapists to act as advocates for residents, resulting in referrals to external agencies for both health and social care needs, that may not have occurred otherwise.

Engaging in leisure and social activities was clearly valued by residents (residents' goals often involved social or leisure activities), however this was not measured in the main trial, as it was not the major aim of the intervention. Rehabilitation in functional ADLs is not always possible for this group in this care setting as shown by the findings of the OTCH RCT. Therefore perhaps future occupational therapy interventions need to focus on increasing participation in some chosen and meaningful occupations, with measurable outcomes relating to these activities. It may be that those acting in a professional capacity (i.e. therapists and carers) have different views of quality of life compared to residents. For example Hoe et al (2006) found that when residents with dementia rated their own quality of life it was most highly associated with depression and anxiety, however when care home staff rated the resident's quality of life it was clearly associated with level of dependency. Therefore it may be that the social and leisure activities are set as goals by the residents as these contribute more to their quality of life than the functional aspects focused upon in the OTCH trial.

There are some limitations of this study such as the relatively small sample size of residents' therapy notes as a proportion of the overall trial intervention group (less than 10%). However purposive sampling ensured sample characteristics were representative of the main trial intervention group. Furthermore dependability of the results is increased as study findings are comparable to a much larger national review of routine occupational therapy for care home residents living with stroke, (Fletcher-Smith et al 2014). Detailed information about the therapist's level of experience and specialism was not collected therefore this limits the data as it was not possible to compare different therapists. However this information may have still been unsuitable to present as it might have led to therapists being individually identifiable. The study could benefit from multiple data sources as the residents' views and opinions on their experience of therapy is lacking. The findings could also be strengthened by seeking the views of the care home staff. Whilst the therapy notes have been analysed here, the therapists' views and deeper insights into the process of delivering the OTCH intervention have been captured elsewhere (Masterson-Algar et al 2014).

Conclusion

This qualitative study of therapists' treatment notes details the content and process of delivering occupational therapy to people living with stroke related disabilities in UK care homes. The findings show that therapists focussed on assessment, planning, and reviewing planned treatments to improve or maintain functional activity in ADLs and personal ADLs. 'Success' in terms of the study's aim to increase functional activity in ADLs was noted in some cases, but often was tempered by the frailty and physical dependence associated with the sample population. The large amount of time spent on communication to plan and conduct the therapeutic interventions in this setting, was time away from the resident and the 'hands-on' delivery of the intervention which may have potentially impacted on the primary outcomes of the main trial which were neutral. Further studies describing the content and process of occupational therapy interventions in care homes are needed to increase our knowledge in this area. This will help to develop future interventions that will best serve residents' aspirations whilst also reflecting the likely capabilities of a group with such high incidences of cognitive impairment and frailty. Further research is also needed to explore the benefits of occupational therapy targeted towards increasing participation in leisure and social activities within the care home environment, with tailored outcome measures for assessing these aspects.

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