Using the Pool Activity Level instrument to support meaningful activity for a person with dementia: A case study

Emma Dudzinski

Abstract

Statement of context: Activity participation is beneficial for the wellbeing of people with dementia; however, care staff and caregivers experience difficulties with facilitating activity for this client group.

Critical reflection on practice: This practice analysis outlines the therapy process conducted by an occupational therapist using the Pool Activity Level instrument, to support meaningful activity for a person with dementia, in an acute inpatient environment.

Implications for practice: The Pool Activity Level instrument enables people with dementia to engage in meaningful activity. Occupational therapists are well positioned to integrate this tool within daily care, to enable all staff and caregivers to engage alongside a person with dementia in activity at an appropriate level.

Keywords: Dementia, meaningful activity, Pool Activity Level

Statement of context

The presence of discrete deficits in cognition, mood, behaviour and function leads to difficulties with participation in activity for people with dementia (Innes et al., 2015). Inactivity can have detrimental effects on physical and mental health (Wenborn et al., 2008). Factors associated with inactivity include a lack of care staff knowledge to facilitate appropriate and meaningful programmes (Beck, 2001); poor staffing levels (Lawrence et al., 2012); and the design of the physical environment which may hinder activity participation (Jones and van der Eerden, 2008). The National Dementia Strategy for England states that participating in activities is 'a major determinant of quality of life' (Department of Health (DH), 2009: 58).

Pool (2012) suggests that two key aspects of effective activity provision are the identification of activities that are personally meaningful to the individual and knowing the individual's current level of ability to engage in activity. This is based upon the underpinning principle that people with cognitive impairment also have abilities, and that when an enabling environment is presented to the person, these potential abilities can be realised.

This paper outlines the therapy process conducted by an occupational therapist using the Pool Activity Level (PAL) instrument (Pool, 2012), to support meaningful activity for Claire (pseudonym) who has a diagnosis of vascular dementia (VaD). The PAL instrument was developed to assist non-professionals to facilitate people with cognitive impairment to engage in meaningful activity. It consists of a life history profile to find out the person's interests, a PAL checklist to determine the person's current level of ability to engage in activity, plus additional tools for interpreting the results and creating individual action plans.

Case study: Claire

Claire is a woman in her early 70s with a diagnosis of VaD alongside a neurological condition which she has had for over 30 years. Claire was admitted to an acute mental health inpatient ward for older persons due to an abrupt deterioration in cognitive functioning following a stroke. On admission,

Claire was aware that she was in hospital but exhibited restlessness, wandering and agitation. She would rarely engage within any occupational therapy activity groups.

Therapy process

Choice of instrument. The aim of therapy was to facilitate meaningful activity at an appropriate level for Claire. The PAL instrument was chosen as an accessible and practical tool that describes a person's ability to engage in activities. Whilst there are a number of other assessment tools that exist for this purpose (that is, the Allen's Cognitive Levels Screen (Earhart et al., 2003) and the Assessment of Motor and Process Skills (Fisher, 2003)), many are specific to occupational therapy and require practitioners to undergo additional training. One of the benefits of using the PAL, however, is that it can be completed by caregivers and care staff; therefore, the occupational therapist can aim to involve the multi-disciplinary team and family members within the PAL process. This tool was envisaged, in the long term, to be integrated into day-to-day care provision, in order for all staff to acquire the knowledge and skills to provide meaningful activity. As per the National Dementia Strategy (DH, 2009), the key aim was to ensure an informed and effective workforce to help improve the quality of life and care for people with dementia.

Life history profile. The assessment process began with completing a life history profile, which comprised of a series of questions on topics including childhood, adulthood and likes and dislikes. This was aimed at gathering and recording information to identify activities meaningful to Claire.

A convenient time was arranged for Claire, her husband, her daughter and the occupational therapist to complete the life history profile together. This served as a mechanism to encourage social interaction and reminiscence amongst the family. Cotelli et al. (2012) highlight the potential beneficial effects of reminiscence on the wellbeing and autobiographical memory of people with dementia. Photographs of significant life events for Claire were also used to promote expression and recognition. This provided a focus for discussion and made the activity meaningful (Astell et al., 2010).

Claire was able to engage in conversation using simple language skills, and only when questions were directly asked of her. Whilst she only spoke briefly about aspects of her past, the aim of the profile was not to test her memory, but to help guide activity selection in line with her interests. Cohen-Mansfield et al. (2010) found that people's activity preferences do not change when they have dementia; likewise, Phinney et al. (2007) suggest that activities matter most when they are intrinsically meaningful in the context of past experience. Claire's family members were therefore well positioned to identify such opportunities, given their knowledge of her history, and provided a natural cue to discuss Claire's interests in a non-threatening way. However, one limitation to relying on caregiver knowledge was that Claire's husband was unable to provide any detailed information on Claire's childhood; therefore, this aspect of her profile was not explored in detail.

The PAL checklist. The next stage of the PAL involved completing the checklist to identify Claire's ability to engage in activity. The PAL checklist consists of nine everyday activities, with four descriptions for each to represent the four activity levels: planned, exploratory, sensory and reflex. The description that most closely matches the individual's performance over the past two weeks is ticked. The activity level that is most frequently ticked indicates the person's level of ability to engage in activity.

A comprehensive study by Wenborn et al. (2008) demonstrated that the PAL checklist has adequate validity and reliability. It is also recommended in the National Clinical Guideline for Dementia (NICE, 2006) as an instrument to facilitate activity participation.

The occupational therapist observed Claire complete specific activities on the checklist over a period of 2 weeks, to allow for variation of abilities to be taken into account. Staff were also approached in order to improve the inter-rater reliability on the scales.

Claire presented at an exploratory level for each activity, indicating that she can carry out very familiar tasks in familiar surroundings. The process of doing an activity is most important to a person at this level, rather than a tangible outcome, as the person will not have a clear understanding of the task aims. This highlights the significance of enabling activity to occur in a structured format, to promote meaningful participation to the best of the person's ability.

Outcome

Activity profile: Once the occupational therapist had an awareness of Claire's activity level and interests, the PAL activity profile was used to support meaningful activity. There are four activity profiles which provide information about a person's likely abilities and limitations at each of the four levels. Claire's activity profile highlighted the importance of breaking an activity into manageable components and keeping directions simple and understandable.

Pool (2012) suggests giving priority to activities which have most importance for the person with dementia, so that they are able to do as much as possible in those aspects. As painting was one of Claire's valued occupations, her activity profile was used to facilitate a painting task at the exploratory level. Prior to facilitating the activity, the process of painting was broken into manageable components which included selecting a paintbrush, choosing a colour, and painting a section of the picture. A wide-handled paintbrush was also provided to reduce the necessary amount of fine motor movement, as due to Claire's co-existing neurological condition, she often experienced poor coordination, ataxia and tremor.

Care was taken to ensure that there was plenty of space to carry out the painting task, as Claire often became agitated in cluttered environments. This fits well with the biopsychosocial (Kitwood, 1997) and sensoristasis (Kovach, 2000) models, which suggest that it is not always the person who needs to change, but rather their surrounding environment that may be preventing enablement. For these reasons, the activity took place in a quiet area for Claire to work alone, which promoted engagement and minimised distraction. Pacing and energy conservation techniques were also used. Painting equipment was easily accessible and was placed within Claire's line of vision, as recommended in her activity profile. This consisted of paper, paint and paintbrushes, and these were presented neatly on the desk in front of Claire.

The occupational therapist explained the task to Claire using short sentences to ensure that it was easy to understand. Connecting phrases and prepositions were also avoided, as recommended in her activity profile. Claire quickly chose a paintbrush, but took a long time to select a colour; therefore the occupational therapist supported Claire by offering her two colours, allowing for some element of choice. This approach was taken throughout, as Claire often struggled to select a colour without guidance.

Claire's exchange of dialogue was limited during the task; therefore conversation was verbally facilitated by the occupational therapist using short and simple sentences. In accordance with her exploratory activity profile, the occupational therapist placed an emphasis on what had been achieved in terms of experiencing the activity, rather than the end result. Claire reported that she enjoyed using the paintbrush and the different colours throughout the task. She was able to produce three basic paintings during the session.

Critical reflection on practice

The approach towards therapy with Claire was personcentred, which was grounded in the theory that how a person lives with dementia is affected not only by a neurological impairment, but also by a person's health, biography, personality and social psychology (Kitwood, 1997). The reasons for assessment, therefore, were not purely to distinguish Claire's level of cognitive disability and corresponding level of function, but to enhance her experience, through an increased understanding of her abilities and the provision of appropriately presented occupations.

Unfortunately, Claire did not respond to the personal photographs used to encourage reminiscence during the life history profile session. Astell et al. (2010) found that in response to family photographs, people with dementia produced quite limited information; whereas, when shown generic photographs, people with dementia produced quite detailed stories of personal significance. This suggests that personal items perform as a memory test, whereas generic items evoke different recollections in different people. Claire was, however, able to partake in discussions about her interests when directly questioned. She also displayed a noticeable contrast in disposition before and after the life history profile session, from agitated to calm. Studies indicate that socialising is an important activity for older people, and that communication achieving close contact between the person with dementia and their caregiver will enhance the person's mood (Go"tell et al., 2009).

The process of completing the PAL checklist was simple and the instructions were clear, reflecting previous anecdotal feedback from practitioners (Wenborn et al., 2008). Whilst Claire's fluctuations in memory and functioning occurred both hourly and daily, the checklist was able to capture the range of variation by considering her occupational performance over the past 2 weeks. This process can also be repeated and used as an outcome measure to monitor the individual's progress. Therefore, information regarding Claire's function and cognitive status over time can be gained from the raw data contained in the nine domains.

Claire engaged well during the painting session facilitated by the occupational therapist using the activity pro- file. An initial indication of her satisfaction was evidenced when Claire described the aspects of the task that she enjoyed. It may be that the activity provided a sense of continuity for Claire, by allowing her to feel that her life remained fundamentally unchanged, as long as she could still do those things that mattered most to her. Christiansen (1999: 549) argues that 'identities are closely tied to what we do'; therefore, when faced with the cognitive losses that come with dementia, activity may sustain a sense of self through habitual and meaningful routines. This is supported by studies carried out with people with mid-stage dementia, indicating that they were more likely to participate in activities which they could relate to (Harmer and Orrell, 2008)

Nevertheless, at the same time that activity provides a sense of continuity, being involved in activity was undoubtedly more challenging for Claire. This is due to the cognitive and perceptual decline that accompanies VaD, not to mention how societal and institutional practices can serve to limit opportunities for involvement. Unfortunately, this was the first time that painting had been offered to Claire on the ward, as therapy staff followed a pre-planned timetable. Phinney et al. (2007) recognise that structured activity imposed on a person's daily routine, without taking into account the individual's history of preferred activities, may be less meaningful than one that emerges from habitual rhythms and patterns of daily living. This may go some way towards explaining Claire's lack of engagement within previous occupational therapy activity groups.

Summary

It is important to recognise that this paper is based upon a single case study example. The main implication for practice arising from this analysis is the significance of grading activity to enable a person with dementia to engage in meaningful activity, as this is essential for the maintenance of

health and wellbeing. In order for activities to have meaning, the therapist needs to understand the person they are working with; therefore, spending time identifying their personal history, preferences and level of skills retained is essential.

The PAL instrument consequently provides the tools to assess these features and then adapt the environment so Dudzinski 67 that suitable activities are more accessible. It is important, however, that the occupational therapist does not limit activity to what is traditionally offered. An opportunity to be part of a group, in addition to having individual time is also important.

Finally, although occupational therapists are experts in understanding occupation, they must not only focus on working directly with the person with dementia but also with staff and caregivers. This is because the PAL instrument is not occupational therapy specific. Therefore, by offering training, modelling techniques and addressing concerns, this will encourage staff and family members to engage alongside the person with dementia, at a level appropriate to them.

Key messages

- Activity is beneficial for the wellbeing of people with dementia.
- The PAL instrument enables people with dementia to engage in meaningful activity.

Research ethics: Formal ethical approval was not required as the Pool Activity Level instrument was already being utilised within the practice setting; the assessment did not constitute research and therefore did not require ethical approval.

Declaration of conflicting interests: The author declares that there is no conflict of interest.

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

References

- Astell AJ, Ellis MP, Alm N, et al. (2010) Stimulating people with dementia to reminisce using personal and generic photographs. *International Journal of Computers in Healthcare* 1(2): 177–198.
- Beck C (2001) Identification and assessment of effective services and interventions: The nursing home perspective. *Aging and Mental Health* 5: S99–S111.
- Christiansen CH (1999) Defining lives: Occupation as identity: An essay on competence, coherence, and the creation of meaning. *American Journal of Occupational Therapy* 53: 547–558.
- Cohen-Mansfield J, Marx MS, Thein K, et al. (2010) The impact of past and present preferences on stimulus engagement in nursing home residents with dementia. *Aging and Mental Health* 14: 67–73.
- Cotelli M, Manenti R and Zanetti O (2012) Reminiscence therapy in dementia: A review. *Maturitas* 72(3): 203–205.
- Department of Health (2009) *Living Well with Dementia: A National Dementia Strategy*. London: DH Publications.
- Earhart C, Pollard D, Allen C, et al. (2003) *Large Allen Cognitive Screen (LACLS) Test Manual*. Colchester, CT: S&S.
- Fisher AG (2003) *AMPS: Assessment of Motor and Process Skills. Volume 1: Development, Standardization, and Administration Manual*, 5th ed. Colorado: Three Star Press.

- Go[°]tell E, Brown S and Ekman SL (2009) The influence of caregiver singing and background music on vocally expressed emotions and moods in dementia care: A qualitative analysis. *International Journal of Nursing Studies* 46: 422–430.
- Harmer B and Orrell M (2008) What is meaningful activity for people with dementia living in care homes? A comparison of the views of older people with dementia, staff and family carers. *Aging and Mental Health* 12(5): 548–558.
- Innes A, Page SJ and Cutler C (2015) Barriers to leisure participation for people with dementia and their carers: An exploratory analysis of carer and people with dementia's experiences. *Dementia*. Epub ahead of print 10 February 2015. DOI: 10.1177/1471301215570346.
- Jones GMM and van der Eerden WJ (2008) Designing care environments for persons with Alzheimer's disease: Visuoperceptual considerations. *Reviews in Clinical Gerontology* 18: 13–37.
- Kitwood T (1997) *Dementia Reconsidered: The Person Comes First*. Buckingham and Philadelphia, PA: Open University Press.
- Kovach CR (2000) Sensoristasis and imbalance in persons with dementia. *Journal of Nursing Scholarship* 32(4): 379–384.
- Lawrence V, Fossey J, Ballard C, et al. (2012) Improving quality of life for people with dementia in care homes: Making psychosocial interventions work. *The British Journal of Psychiatry* 201(5): 344–351.
- National Institute for Health and Care Excellence (NICE) (2006) *Dementia: Supporting People with Dementia and their Carers in Health and Social Care (CG42).* London: National Institute for Health and Care Excellence.
- Phinney A, Chaudhury H and O'Connor DL (2007) Doing as much as I can do: The meaning of activity for people with dementia. *Aging and Mental Health* 11(4): 384–393.
- Pool J (2012) *The Pool Activity Level (PAL) Instrument for Occupational Profiling: A Practical Resource for Carers of People with Cognitive Impairment*, 4th ed. London: Jessica Kingsley Publishers.
- Wenborn J, Challis D, Pool J, et al. (2008) Assessing the validity and reliability of the Pool Activity Level (PAL) checklist for use with older people with dementia. *Aging and Mental Health* 12(2): 202–211.