Geriatric Nursing 36 (2015) 462–466

Contents lists available at ScienceDirect

Geriatric Nursing

journal homepage: www.gnjournal.com

Feature Article

An evaluation of Snoezelen® compared to 'common best practice' for allaying the symptoms of wandering and restlessness among residents with dementia in aged care facilities

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ARTICLE INFO

Article history:
Received 16 April 2015
Received in revised form
15 July 2015
Accepted 18 July 2015
Available online 17 August 2015

Keywords:
Dementia
Wandering
Restlessness
Snoezelen
Standard care
Evaluation

ABSTRACT

Snoezelen has become an increasingly popular therapy in residential aged care facilities in Australia and elsewhere, despite no conclusive evidence of its clinical efficacy. This paper reports on an evaluation of the use of Snoezelen compared to 'common best practice' for allaying the dementia related behaviors of wandering and restlessness in two residential aged care facilities in Victoria, Australia. Sixteen residents had their behavior and responses to Snoezelen or 'common best practice' observed and recorded over three time periods. The Wilcoxon signed-rank test showed there was a significant improvement in behaviors immediately after the intervention and after 60 min. However, no significant differences were found between residents receiving Snoezelen and 'common best practice' interventions for the reduction of the dementia related behaviors.

Introduction

Originally developed in the 1970s as a leisure resource for Dutch children with learning disabilities, Snoezelen[d] is a term coined to describe the use of multi-sensory rich environments to stimulate the primary senses of sight, smell, hearing, taste and touch. Traditionally Snoezelen has been delivered in a dedicated room equipped with a variety of lights, moving objects, music, aromas, and tactile objects. Snoezelen environments have become very sophisticated incorporating "high tech" fiber optics, bubble tubes, strobe lights, aroma steamers, image projectors and ceiling mounted mirror balls.[1] The costs associated with setting up a Snoezelen room can be high, ranging from $10,000 to $30,000 or higher depending on the type and quantity of equipment used.[2,3] The Snoezelen sensory experience has also been transported to the individual resident's bedside via a mobile cart[4] or incorporated as an outdoor garden.[5]

The use of multi-sensory therapies including Snoezelen have become increasingly popular in Australian residential aged care facilities (RACFs)[5–8]; and elsewhere[1,4,9–13] for the management of the behavioral and psychological symptoms of dementia (BPSD).[2,3,14–18] It also has been suggested that Snoezelen improves cognition, mood,[12,15,19] communication[10] and wandering behaviors.[20] The rationale for the use of Snoezelen in dementia is that people with dementia are more vulnerable to the effects of sensory deprivation which can play an important, but often neglected role in maladaptive behaviors.[14,21,22] A multi-sensory environment places fewer demands on cognitive abilities and capitalizes on sensorimotor abilities. Snoezelen is seen as a way to reach people with dementia who may lack higher order processing abilities, by providing an accessible and enabling environment that can both stimulate and relax the person.

In dementia care, Snoezelen has been delivered as a group or individual therapy[22,23] or as a 24-h care experience.[24] The delivery of Snoezelen as a group activity is common in aged care facilities where scarce resources mean therapists are often only able to administer group programs.[2]

Conflict of interest statement: No conflict of interest has been declared by the authors.
Funding: The JO and JR Wicking Trust funded the project on which this paper reports.
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[d] Snoezelen is a registered trademark of ROMPA.

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http://dx.doi.org/10.1016/j.gerinurse.2015.07.005

A Cochrane Review of the use of Snoezelen[25,26] found no clear evidence of its clinical efficacy for people with dementia; and a recent trial examining the impact of a 'Snoezelen' room intervention compared to one-to-one activity sessions on agitated behavior, mood, cognitive and functional status for residents with dementia, found no significant differences between the two interventions.[27]

This paper reports on Stage Two of a larger project *(Description and Evaluation of Snoezelen® for Managing Dementia Related Behaviours in Victorian Aged Care Facilities*). Stage One findings are reported elsewhere.[6] The aim of Stage Two was to evaluate the impact of Snoezelen delivered in a dedicated room by an activity therapist compared to 'common best practice' interventions as provided by care staff (nurses and personal care assistants), in allaying the dementia related behaviors of wandering and restlessness. Wandering and restless are two commonly occurring dementia related behaviors which are known to contribute to care staff stress and burden[28] as they can be present for long periods and can be very demanding of staff time.[29] We did not investigate the impact of the type of dementia, comorbidities, or effects of medications on these behaviors but rather, set out to understand what changes these two distinct approaches may have had on the severity of behaviors over time.

Materials and method

A descriptive observational method was used in two RACFs in Victoria, Australia, one of which had a dedicated Snoezelen room. Observation studies are commonly used in the aged care setting, especially with people who are living with dementia.[30,31]

When dealing with the BPSD, care staff have at their disposal a number of 'common best practice' interventions including psychosocial strategies such; as speaking with the resident to determine the cause of their behavior; diversion and distraction activities; engagement of the resident in meaningful and appropriate pastimes; rest; one-on-one social interactions, and pain assessment and management.[32] Care staff used their knowledge of the resident and clinical judgment to determine which strategies to use on a case by case basis. A qualified diversional therapist was solely responsible for the organization and delivery of the Snoezelen in this study. Snoezelen sessions were implemented on the basis of the diversional therapist's knowledge of the resident and prior experience.

Approval to conduct the study was obtained from the La Trobe University, Faculty of Health Sciences Research Ethics Committee (FHEC08/20) and the participating RACFs.

Sample

Purposeful sampling was used to recruit sixteen older people with dementia from two RACFs. Care managers at each participating facility identified residents who were known to exhibit the BPSDs in question. All had moderate to severe cognitive impairment (Psychogeriatric Assessment Scale scores between 10 and 21) and were unable to provide informed consent to participation. Consent was therefore obtained from their authorized representative, usually a family member or guardian prior to commencement of data collection. The Nurse Unit Manager in each facility identified possible participants, approached their authorized representative on behalf of the research team and asked if the research nurses could contact them about the study. The research nurses contacted all those families that expressed an interest in participation to explain the study.

Data collection

Two research nurses experienced in aged care and dementia who did not work at the facilities, observed and recorded the dementia related behaviors of interest in participating residents, and their responses to the interventions (Snoezelen or 'common best practice') over four weeks. The observations were undertaken from discrete positions at each facility, including from within the Snoezelen room, and the research nurses continually assessed the awareness of participants to their presence, withdrawing if they thought the resident was being unsettled.

Participating residents were kept under observation by the research nurses across morning, afternoon and evening shifts for any signs of the behaviors in question and care staff also alerted the research nurses when behaviors were noted. Data were collected using a simple behavioral observation chart adapted from the Queen Elizabeth Behavioural Assessment Graphical Scale (QEBAGS).[29] The QEBAGS utilizes three categories of behavioral disturbances (wandering, restlessness and aggression) which may occur in isolation or may co-exist.[29] The QEBAGS allows for the description of four types of behavioral typologies within each of the categories, with each representing an increase in the level of disturbance. The wandering typology included 'aimless wandering'; 'wandering with some purpose'; 'wandering in an asocial manner' and 'wandering, not amenable to reason.' The restlessness typology comprised 'restless but cooperative'; 'restless, uncooperative'; restless, interfering with others' and restless with continuously disruptive behavior.'

The research nurses spent two days at each facility establishing an understanding of Snoezelen and 'common best practice' interventions used to manage behavior and introducing themselves to staff, participants and families; and repeat observation days were incorporated into the study design. Both were given training in observation techniques prior to data collection, including learning to standardize recording using the QEBAGS and achieving inter-rater reliability[33] by piloting the modified QEBAGS form with two residents over two days. A consensus of the coding schema was reached after independent coding of the QEBAGS and discussion of observations and 80% concordance was achieved.

The behaviors and interventions used to manage the behaviors of the 16 residents diagnosed with dementia were observed and recorded for two days per week over a twelve-week period by a research nurse stationed at each site. Some residents had their behavior and the interventions observed on more than one occasion. Observational data were collected at four time points for each episode of behavior: T0 = observation when the behaviors occurred and before any intervention by staff; T1 = immediately after the initiation of an intervention; T2 = 30 min after the intervention; and T3 = 60 min after the intervention. The research nurses rated the behaviors of interest, wandering (W) and restlessness (R), at each time point on a 4-point scale: 1 = behavior stopped or person settled, 2 = behavior improved, 3 = behavior on going, or 4 = behavior worsened.

Data analysis

Descriptive statistics were used to compare the effects of Snoezelen or 'common best practice' (grouped as 'non-Snoezelen') in allaying the dementia related behaviors of interest over the measured time periods. Due to the small number of participants, non-parametric tests were used in conjunction with observational data. All statistical analyses were completed using the Statistical Package for the Social Sciences.[34]

Results

The characteristics of the study participants are outlined in Table 1.