Geriatric Nursing xx (2016) 1–6

Contents lists available at ScienceDirect

Geriatric Nursing

journal homepage: www.gnjournal.com

Research Paper

The role of nursing staff in the activities of daily living of nursing home residents

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ARTICLE INFO

Article history:
Received 22 June 2016
Received in revised form
28 October 2016
Accepted 7 November 2016
Available online xxx

Keywords:
Activities of daily living
Nursing staff
Role
Nursing homes
Observation
Physical activity
Residents
Supervision
Support
Taking over

ABSTRACT

The aim of this cross-sectional study was to explore the role of nursing staff in residents' activities. Nursing home residents (n = 723) were observed in their wards, randomly five times for one minute between 7 a.m. and 11 p.m. Resident's (in)activity and the role of nursing staff or others in this activity were recorded. Roles were defined as 'taking over the activity', 'giving support', or 'supervision'. Nurse observers were interviewed to obtain insight into their observation-experiences. Residents were observed in activities of daily living in 31% of all 3282 observations, and inactive in 57%. Nursing staff provided support in 51% of the observations and took over activities in 45%; supervision was rarely observed (4%). Nurse observers who knew the residents reported that a large part of activities were taken over unnecessarily. Based on these results, nursing staff are recommended to provide more supervision and support to optimize residents' activities and independence.

Introduction

Maintaining activities of daily living (ADL) and instrumental ADL (IADL) is of major importance in the frail nursing home population. It is well known that performing ADL and IADL, such as washing, dressing and preparing food, has a positive influence on physical functioning[1] and is associated with a higher self-esteem[2] and with a higher quality of life.[3,4] Furthermore, residents' quality of life is positively influenced by their independence in these daily activities.[5,6] Despite these positive effects, nursing home residents spend their day mainly inactive.[7–9]

Nursing homes are facilities that provide 24 h functional support and care for people who require assistance with daily activities, and have identified health needs. Nursing home care aims to provide a supportive, safe, and homelike environment in which residents are assisted to maintain their functional status as long as possible.[10] In Dutch nursing homes, nursing staff are mainly certified nurse assistants (CNAs),[11,12] with three years of secondary-vocational training. Besides, registered nurses (RNs), with four years of secondary-vocational training or bachelor-education, are part of the nursing staff. Henderson[13] defined nursing in 1960 as: "The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible." This definition by Henderson[13] implies that, also in the nursing home, it is the core business of nursing staff to encourage residents to perform daily activities and to encourage their independence.

Since nursing staff provide 24/7 care, they play a key role in care provision and, ideally, demonstrate leadership behavior in encouraging nursing home residents in daily activities and maintaining independence. Nursing home residents' dependence is related to nursing staff behavior.[14] Nursing staff can play different roles in the activities of the residents, for example, nursing staff could give instructions to complete the activity step-by-step. Moreover, nursing staff could take over residents' activities,

Conflict of interest: None.

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0197-4572/$ – see front matter © 2016 Elsevier Inc. All rights reserved.
http://dx.doi.org/10.1016/j.gerinurse.2016.11.002

which is not encouraging independence and physical activity. Previous intervention studies[2,15–24] have focused on changing the nursing behavior towards motivating and supportive behavior in the daily activities of nursing home residents. In these studies, nursing staff were taught motivational techniques to encourage residents. Most intervention studies reported on the effects on residents, for example, residents' functioning in ADL. Other studies[22–24] evaluated change in behavior of nursing assistants using observations. Nursing staff were observed for 15–30 min in these studies, and their performance of function-focused care activities was evaluated using the Restorative Care Behavior Checklist (RCBC).[25] Function-focused care activities performed by nursing staff could be encouraging the resident verbally to walk or walk together with the resident by instead of pushing their wheelchair. Although these studies showed whether or not nursing assistants performed function focus care behaviors during care moments at an intervention setting, they do not provide insight into different roles of nursing staff in residents' activities during the day. Insight into the role of nursing staff in different activities of residents, especially ADL and IADL, could provide useful information for developing and evaluating nursing interventions to encourage residents in activities and their independence. Therefore, the aim of the current study was to explore the role of nursing staff in residents' ADL and IADL.

Methods

A cross-sectional mixed-method design was used in this study, consisting primarily of quantitative observations in Dutch nursing homes and additional qualitative semi-structured interviews. To explore the role of nursing staff in residents' ADL and IADL during daily nursing care, the observations were conducted anonymously. Due to the anonymous observations all residents and all nursing staff in the wards could be observed without participation bias. The observations were conducted in June and July of 2014. Dutch nursing homes provide long-term care in psychogeriatric and somatic wards. Psychogeriatric wards are provided for people with dementia, while somatic wards focus on people with physical problems.[26] The qualitative component of this study consisted of semi-structured interviews with the nurse observers, these interviews were conducted after the quantitative data collection.

Participants

Seven nursing homes in the southern part of the Netherlands participated in this study. The participating nursing homes are embedded in the Living Lab of Aging and Long-Term Care.[27] The nursing homes consisted of 19 psychogeriatric and 11 somatic long-term care wards and housed 723 residents (383 and 340 residents from psychogeriatric and somatic wards, respectively). The sample included the nursing home residents present in the ward during the observations, and the people who were involved in residents' activities, distinguishing between nursing staff (both RNs and CNAs) and others (such as family and volunteers). No distinction was made between CNAs and RNs, they were put together as "nursing staff." Furthermore, three of the five observers were RNs between 25 and 39 years of age, with up to 20 years of work experience.

Measures

The following background characteristics of the residents were extracted from the residents files: gender, age, mobility (mobile, wheelchair dependent or bedridden), functioning in ADL (measured by the Barthel index; BI),[28] and cognitive functioning (assessed by the Cognitive Performance Scale; CPS).[29] The BI ranges from 0 to 20, with a lower score indicating increased disability,[28] and the CPS ranges from 0 to 6 with a higher score indicating more severe cognitive impairment.[29]

A self-developed observation list was used to register the daily (in)activity the resident was engaged in, and the role of nursing staff and others in the resident's activity. The development of the observation list consisted of a pilot observation study, validity check, and adjustments to the list; more details about the development can be found elsewhere.[7] The daily (in)activities residents could be engaged in were categorized into 1) inactivity, 2) ADL and IADL, and 3) communication and hobbies. When residents were engaged in daily activities, it did not mean that residents were physically active themselves, since their activities could be taken over.

ADL consisted of personal care (e.g., brushing teeth, combing one's hair), going to the bathroom, eating and drinking (e.g., eating with hands or cutlery), mobility (e.g., walking, pushing a wheelchair, changing position), dressing (e.g., taking off one's clothes), and bathing (e.g., having a shower, washing at the sink). IADL that can be relevant for nursing home residents in their wards included domestic activities (e.g., setting the table) and preparing food/pouring a drink (e.g., preparing a sandwich).

The role of nursing staff in residents' ADL and IADL was categorized as 'taking over the activity', 'giving support' or 'supervision.' 'Taking over the activity' was registered when nursing staff performed the activity instead of the resident (e.g., a resident in a wheelchair was pushed by the nurse, or a resident was dressed by a nurse). 'Giving support' consisted of verbal support (e.g., giving instructions), and/or physical support (e.g., taking somebody by the arm). 'Supervision' meant that the nurse observed the resident's activity and interfered when necessary (e.g., the nurse walked beside the resident and could intervene if the resident stumbled). These categories were based on a pilot observation study, in which residents' activities and positions, and the kind of support residents received (no support, some support or a lot of support) were scored.

Semi-structured interviews were conducted with each of the three nurse observers who performed the observations. The nurse observers were asked about their experiences during the observations, their perceptions of the role of nursing staff, and their ideas for positively changing the role of nursing staff in residents' daily activities.

Procedure

Permission for the anonymous observations was provided by the management of each participating nursing home by signing a research declaration. The contact person within the nursing home provided information about the number of residents in each ward. Nursing staff in the wards were informed about the observations and completed the inventory of the background characteristics of each resident living in the ward.

The observations were conducted by one out of five observers (three nurses, one research assistant, and one researcher). Two of nurse observers conducted the observations within the nursing home they were employed in. In order to prevent observation bias and to reach a high interrater reliability, all observers received a three and a half hours' training program before starting, in which they received instructions for observations, practiced observations using video fragments, and discussed the definitions 'taking over', 'support' and 'supervision' to reach consensus between the observers.

In each nursing home, the observations were performed during a 16 h period (between 7.00 a.m. and 11.00 p.m.), divided over two days. To provide an overview of the whole time period, the