

Dementia care based on hospital size: An internet-based survey of nurse experience

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Abstract

The aims of this study were to examine variations in dementia care based on hospital size and to identify opportunities for improvement of care level.

We conducted a large-scale survey of nurses focusing on 1) the comparison of dementia care between large hospitals (≥ 500 beds; “large” hospitals) and small-to-medium hospitals (< 500 beds; “small-to-medium” hospitals) and 2) the areas of improvement in education and medical systems to improve dementia care.

In total, 2,386 nurses who participated in internet-based surveys conducted in March 2014 were requested to complete a 91-item questionnaire regarding the state of and issues concerning dementia nursing. Of 1,311 respondents (54.9% response rate), the responses of only 805 nurses (33.7%) who had experience in dementia nursing in the past 5 years were analysed. The χ^2 test was used to compare the responses between two groups: nurses from large hospitals and those from small-to-medium hospitals. Content analysis of the items led to the creation of seven categories for extraction. Based on the results, the quality of dementia care should be improved, with special consideration given to strengthening educational programmes.

Aim

We aimed to examine variations in dementia care based on hospital size and to identify opportunities for improvement of care level.

Method

This cross-sectional, observational study was conducted between March 11 and March 17, 2014.

Participants

We assessed the responses of 2,386 nurses registered with the medical panel of a research company (INTAGE Co.) in March 2014. However, we included the responses of only those nurses who had experience in dementia nursing in the past 5 years.

Questionnaire

An internet-based survey that included 91 items concerning knowledge, assessment, implementation, organisation and ethical issues for dementia nursing was conducted. For preparing the questionnaire items, 16 ward nurses who were involved in dementia nursing and who participated in a previous study participated in focus group interviews regarding the difficulties faced in dementia nursing. The final questionnaire was prepared by cumulating the results of these interviews and those of the previous study, and the content was examined by researchers (one psychiatrist, two psychiatric nurses and one expert researcher of geriatric nursing).

The main questionnaire items were grouped as follows: 25 items on attributes, 8 on knowledge of dementia, 27 on assessment, 23 on implementation, 7 on organisation and 1 on ethical issues.

The responses were to be provided according to a two-category method or four-point Likert scale, depending on the item.

Analysis method

Based on the hospital size definition of the Ministry of the Health, Labour and Welfare under the receiving behaviour survey [1-3] we divided hospital size according to bed count: hospitals with ≥ 500 beds were considered large hospitals, whereas those with < 500 beds were considered small-to-medium hospitals. Further, based on this division, we used the χ^2 test to compare the responses for the 91 survey items. Following this step, the researchers examined the items with significant differences using content analysis and summarised the results obtained into categories. For regional comparison, after we divided participant responses into those from urban and suburban settings, the test was repeated to compare the responses for the survey items based on this categorisation. All analyses were performed using IBM SPSS (Version 22.0; IBM Corp., Armonk, NY, USA).

Ethical considerations

Research request was delivered to the medical panel of the survey company INTAGE Co. without the knowledge of the target person. The responses were anonymously prepared to protect personal

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information. The survey company is a Privacy Mark Licensing Business Operator of the Japan Information Economic and Social Promotion Association, which requires adequately protected data. Before survey completion was requested, the questionnaire content and method were reviewed by the company for potential ethical issues. On completion, the participants were prearranged an on-screen explanation about the purpose and method of the study, the protection of personal information and the intended use of data; subsequently, their informed consents were obtained.

Results

In total, 1,311 registered nurses (54.9%) responded to our internet-based survey. Of these, the responses of 805 nurses (33.7%) who had experience in dementia nursing in the past 5 years were included in the analysis.

Participant backgrounds

The study sample included 103 male and 702 female nurses, belonging to two age groups: 40–49 (39.9%) and 30–39 (30.7%) years. Of the total, 129 nurses (16%) were working at large hospitals and 669 (83%) at small-to-medium hospitals. According to the work type, 38.9% worked in acute care hospitals, 16.9% in long-term care facilities, 1.8% in aged-care hospitals and 45.2% in other facilities. The most common medical care department was medical ward (26.1%), followed by mixed medical care (19.4%) and surgical (9.2%) wards.

Hospital size-based comparison

Implementation of dementia care: Four items were included on dementia care in the survey: 1) content of care implementation to improve cognitive function, 2) implementation of measures to enable easier adaption to daily routine, 3) method ingenuity to prevent falls and 4) privacy protection. Large hospitals frequently performed each of these items compared with small-to-medium hospitals.

Creating necessary discharge summaries: Five questions were included on the preparation of the necessary summary for discharge. The content and adjustments required for delirium, behavioural disorders, caregiver situation and post-discharge ADL, self-care and support were better summarised in the discharge summaries of large hospitals than in those of small-to-medium hospitals. Regarding the discharge adjustment by the discharge coordinator, examination of the overall responses indicating ‘very well adjusted’ and ‘considerably adjusted’ accounted for approximately half (54.3%) of all responses in large hospitals and 32.6% of those in small-to-medium hospitals.

Staff placement: Two items were included for the staffing structure, and large hospitals were significantly better prepared in terms of the number of nurses and collaboration systems to access hospital resources that can ensure patient safety and hygiene.

Information sharing: In the survey, seven questions were included concerning sharing of patient information.

a. Timing of discussions regarding medical care life following discharge

At large hospitals, discussions were conducted within 2 weeks of hospital admission as per approximately half of the respondents (52.7%) and 2 weeks post admission until the prospect of discharge as per 61.2% of the respondents. On the other hand, at small-to-medium hospitals, 41.6% of the respondents held discussions once the prospect of discharge arose, whereas 25.38% were unsure, with a significant difference noted in the timing of discussions ($p < 0.001$).

b. Provision of information to family members regarding patient release

The rate of provision of information was 72.9% at large hospitals, whereas it was 55.3% at small-to-medium hospitals ($p < 0.001$).

c. Information sharing among nurses regarding the dementia symptoms of patients

Responses indicating that information sharing was ‘performed often’ or ‘performed fairly often’ were obtained from 62.8% of the respondents belonging to large hospitals and from 47.4% of those belonging to small-to-medium hospitals ($p < 0.01$).

d. Implementation of a discharge conference

Responses indicating that discharge conferences were ‘performed very often’ or ‘performed fairly often’ were obtained from 47.3% of the respondents belonging to large hospitals and 25.5% of those belonging to small-to-medium hospitals ($p < 0.01$).

e. Information sharing among different nursing occupations and disciplines in terms of treatment plan

Responses indicating that information sharing was ‘performed very often’ or ‘performed fairly often’ were obtained from 47.3% of the respondents belonging to large hospitals and from 35.4% of those belonging to small-to-medium hospitals ($p < 0.01$).

f. Cooperation with caregivers regarding care methods and support

Responses indicating ‘very good cooperation’ or ‘considerable cooperation’ were obtained from 34.9% of the respondents belonging to large hospitals and 25.7% of those belonging to small-to-medium hospitals ($p < 0.05$).

g. Discussion of treatment plan among different nursing occupations and different disciplines

Responses indicating that there were ‘plenty’ or ‘considerable’ discussions held were obtained from 29.4% of the respondents belonging to large hospitals and from 22.0% of those belonging to small-to-medium hospitals ($p < 0.05$).

Resource utilisation

A larger proportion of the large hospitals utilised nursing professionals for nursing care, liaison nurses for specialised nursing, certified nurses and social workers.

Ethical issues

Many respondents answered that nurse’s at large hospitals experienced ethical issues regarding treatment decision and direction.

Discussion

Aspects and issues of assessment, information sharing and resource utilisation according to hospital size

Implementation of assessment and dementia care during hospitalisation and summaries required for discharge

Compared with small-to-medium hospitals, large hospitals provide significantly more substantial dementia care for the seven categories. However, <50% of the nurses responded that they conducted assessments and delirium screening using assessment items shared

with other nurses, which requires improvement through educational programmes.

Regarding dementia care, it is believed that 'care to improve cognitive function' and 'innovations that the dementia patient can easily adapt to' are essential parts of daily life care. However, at large and small-to-medium hospitals, <50% of the respondents implemented such care, which emphasises the need to revise the knowledge and techniques of nursing methods, irrespective of the number of hospital beds.

Further, undoubtedly, the results for 'preparation of the summary required for discharge', 'staff organisation system' and 'resources' were satisfactory at large hospitals. However, approximately 50% of the nurses at these hospitals prepared summaries. Therefore, in the future, standardisation of the necessary items leading to early connection to community and home should be examined even in large hospitals.

It was noted that dementia care depends on patient assessment, professional services, staff level, training and support and discharge plan and that improvement in the quality of these factors affects patient outcomes and the cost of acute care [4-6]. Therefore, large hospital education regarding discharge plan and an educational programme aimed at improving cooperation with small-to-medium hospitals should be examined going forward.

Information sharing

Regarding information sharing, the highest rates were noted in large hospitals (72.9%), whereas only 55.3% of the respondents from small-to-medium hospitals reported that information sharing was performed. On the other hand, other items were noted in ≤50% of the respondents, leading to the conclusion that patient information sharing was not adequately performed.

Overall, our results suggest that sharing of patient information was insufficient. In the future, it is necessary to establish a system that

can provide effective cooperation between large and small-to-medium hospitals as well as to establish a medical system that allows patients to receive appropriate dementia care, regardless of the size of the treating hospital.

Limits and challenges of research

Because we relied on an internet-based questionnaire survey, qualitative content, including issues relating to hospital systems and collaborations, was not considered. Therefore, it is necessary to accumulate research evidence focusing on the effects of introducing dementia care on the quality of healthcare for patients with dementia in the future.

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