Recognition of roles of various professionals by home-visiting specialists

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Abstract. [Purpose] To support home care patients through specialist teams, it is important that home-visiting specialists recognize the roles of other professionals. The present study aimed to determine whether home-visiting specialists recognized the roles of various other professionals. [Subjects and Methods] The study population comprised 400 nurses, 400 rehabilitation specialists, and 122 managerial dieticians providing home medical care. A questionnaire examining whether the home-visiting specialists recognize the roles of various other professionals was mailed to the participants. Returned questionnaires indicated agreement for participation in this study. Based on the responses to the questionnaire, 49 nurses (response rate: 12.3%), 74 rehabilitation specialists (18.5%), and 42 managerial dieticians (34.4%) were included in the study. [Results] Among all the professionals, the recognition of roles of their own profession was greater than that of other professions, as indicated by their response to the question “to explain possible changes in symptoms and how to deal with possible changes in symptoms.” Unlike in case of other professionals, role recognition among managerial dieticians was less than 70% for all items. [Conclusion] Home medical care teams do not always comprise the most suitable professionals. An understanding of how to compensate for gaps in professional roles is therefore important. Good physical assessment skills and an understanding of symptoms of various disorders is important, regardless of the profession.

Key words: Questionnaire, Role recognition, Home-visiting specialist

INTRODUCTION

According to data compiled by the National Livelihood Survey of 2017 in Japan, primary diseases in need of nursing care included the following: dementia (18.0%), cerebrovascular disease (16.6%), physical debilitation due to aging (13.3%), and fractures and falls (12.1%)1). Furthermore, the progression of diseases affecting elderly people in need of nursing care have a strong relationship with dietary factors. It has been shown that home-visiting nutritional guidance might be associated with delayed cognitive decline of elderly people2). However, because there are few home-visiting managerial dieticians nationally, home-visiting nurses and rehabilitation specialists have limited experience working with them and low recognition of their role3). To support home care patients through specialist teams, it is important that home-visiting specialists recognize the roles of other types of professionals3). The aim of this study was to determine recognition of the roles of different professionals among home-visiting nurses, rehabilitation specialists, and managerial dieticians.

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SUBJECTS AND METHODS

Participants were 400 nurses, 400 rehabilitation specialists, and 122 managerial dieticians providing home medical care. A questionnaire about the recognition of the role of each profession among home-visiting specialists was mailed to national home-visit nursing stations and rehabilitation stations with not hospitals. It was asked that questionnaires be returned to indicate agreement to participate in this study. Based on the responses to the questionnaire, 49 nurses (response rate: 12.3%), 74 rehabilitation specialists (54 physical therapist, 17 occupational therapist, 1 speech therapist) (18.5%), and 42 managerial dieticians (34.4%) were included in the study. The characteristics of the participants are presented in Table 1.

The original questionnaires were developed based on previous studies. Content validity of the questionnaire was established from 4 experts who were familiar with visit medical care. The experts consisted of three nurses and one physical therapist. The questionnaire inquired about years of experience, years of experience in home medical care, and the role of profession in supporting home care patients through specialist teams. The questions about the role of each profession were shown in Table 2. The questions about the role of each profession belonged to four overall categories: “support for elderly people in need of nursing care,” “support for elderly persons with dementia,” “support for patients at the end of life,” and “support for intractable neurologic disease patients”. Each categories included sub-entry such as “To explain possible changes in symptoms to other professionals,” or “To explain how to deal with possible changes in symptoms to other professionals.”

The study was approved by the Toyohashi Sozo University of Health Sciences Ethical Review Board (Authorization Number: H2016007).

Years of experience and years of experience in home medical care were compared using one-way analysis of variance (ANOVA) and multiple comparisons. The presence or absence of the role of each type of job to support were compared using $\chi^2$ tests. All analyses were conducted using IBM SPSS Statistics for Windows (version 19.0); p<0.05 was considered statistically significant.

RESULTS

Comparisons of role recognition for each professionals among home-visiting specialists are presented in Table 2. For the question “To explain possible changes in symptoms and how to deal with possible changes in symptoms,” recognition of one’s own role compared to that of other professionals was higher for all professions.

For nurses, one’s own role recognition of “support for elderly persons with dementia,” “support for patients at the end of life,” and “support for intractable neurologic disease patients” were recognized more highly compared with role recognition by other professions. Role recognition by other professions were not less than 70% for nurses.

For rehabilitation specialists, all items showed differences in role recognition. However, “support for elderly persons with dementia” showed role recognition of less than 70%. Nurses’ recognition was especially low (23–50%) for items related to “support for patients at the end of life.”

For managerial dieticians, role recognition by other professions of less than 70% was present for all items. However, one’s own role recognition over 70% was seen for items in “support for elderly people in need of nursing care” and “to report changes in symptoms to other professionals.”

| Table 1. Characteristics of the participants |
|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|-------------|
| Female (n (%)) | Nurses 47 (98.0) | Rehabilitation specialists 25 (34.2) | Managerial dieticians 36 (92.3) | p value 0.01* |
| Age (n (%)) | | | | |
| 20–29 | 0 (0) | 15 (21) | 5 (13) |
| 30–39 | 6 (13) | 28 (38) | 12 (31) |
| 40–49 | 18 (38) | 25 (34) | 12 (31) |
| 50–59 | 21 (44) | 5 (7) | 7 (18) |
| 60–69 | 3 (6) | 0 (0) | 3 (8) |
| Years of experience (months) | 234.9 ± 99.0† † † | 164.5 ± 86.1 | 170.5 ± 116.6 | <0.01* |
| Years of experience in home medical care (months) | 103.9 ± 77.3† † † | 66.3 ± 56.9 | 52.7 ± 65.7 | <0.01* |

Values are expressed as the mean ± standard deviation. *p<0.05, †nurses vs. rehabilitation specialists, ††nurses vs. managerial dieticians.
Nurses had more ratios of female than other specialists, and the years of experience were high, too. Because the Japanese home medical care began with home-visit nursing stations, it is thought that this result reflects the history of the Japanese home medical care. In home medical care, patient information is shared among various professionals in service representative meetings and care conferences, and future medical directionality is discussed. However, teams in home medical care are not always comprised of the most suitable professionals. Therefore, clarifying how to compensate for gaps in professional roles is important. Furthermore, all professionals feel it is their role to explain possible changes in symptoms and how to deal with

### Table 2. Comparison of role recognition of each professionals among home-visiting specialists

| Support for elderly people in need of nursing care | Nurses | Rehabilitation specialists | Managerial dieticians |
|---------------------------------------------------|--------|---------------------------|-----------------------|
| To explain possible changes in symptoms in elderly people in need of nursing care to other professionals | 48, 68, 34 | 41, 71, 31 | 22, 47, 34 |
| (100, 93, 87)* | (85, 97, 80)* | (46, 64, 87)* |
| To explain how to deal with possible changes in symptoms in elderly people in need of nursing care to other professionals | 48, 68, 34 | 39, 69, 31 | 10, 35, 32 |
| (100, 93, 87)* | (81, 95, 80)* | (21, 48, 82)* |
| To explain changes in symptoms in elderly people in need of nursing care that should be shared with other professionals | 48, 68, 34 | 37, 71, 29 | 14, 48, 31 |
| (100, 93, 87) | (77, 97, 74)* | (29, 66, 80)* |
| To report changes in symptoms in elderly people in need of nursing care to other professionals | 48, 66, 34 | 42, 71, 29 | 26, 49, 35 |
| (100, 90, 87) | (88, 97, 74)* | (54, 67, 90)* |

| Support for elderly persons with dementia | Nurses | Rehabilitation specialists | Managerial dieticians |
|------------------------------------------|--------|---------------------------|-----------------------|
| To explain possible changes in symptoms in elderly persons with dementia to other professionals | 47, 67, 32 | 37, 70, 24 | 13, 26, 30 |
| (98, 92, 82)* | (77, 96, 62)* | (27, 36, 77)* |
| To explain how to deal with possible changes in symptoms to other professionals | 48, 66, 32 | 29, 69, 23 | 9, 16, 24 |
| (100, 90, 82)* | (60, 95, 59)* | (19, 22, 62)* |
| To explain communication methods for cognitive functional decline to other professionals | 47, 60, 29 | 25, 70, 21 | 4, 10, 15 |
| (98, 82, 74)* | (52, 96, 54)* | (8, 14, 39)* |
| To explain support methods for activities of daily living and cognitive functional decline to other professionals | 47, 56, 29 | 36, 70, 27 | 9, 17, 24 |
| (98, 77, 74)* | (75, 96, 69)* | (19, 23, 62)* |
| To explain support methods of caregivers for cognitive functional decline to other professionals | 47, 59, 31 | 32, 70, 23 | 7, 22, 26 |
| (98, 81, 80)* | (67, 96, 59)* | (13, 40, 47)* |
| To explain the need for treatment changes due to cognitive functional decline to other professionals | 47, 66, 32 | 24, 58, 20 | 4, 16, 18 |
| (98, 90, 82)* | (50, 80, 51)* | (8, 22, 46)* |
| To report changes in symptoms in elderly persons with dementia to other professionals | 47, 67, 31 | 38, 72, 26 | 19, 37, 28 |
| (98, 92, 80)* | (79, 99, 67)* | (40, 51, 72)* |

| Support for patients at the end of life | Nurses | Rehabilitation specialists | Managerial dieticians |
|----------------------------------------|--------|---------------------------|-----------------------|
| To explain possible changes in symptoms in patients at the end of life to other professionals | 48, 68, 33 | 16, 54, 17 | 7, 29, 23 |
| (100, 93, 85)* | (33, 74, 44)* | (15, 40, 59)* |
| To explain how to deal with possible changes in symptoms to patients at the end of life to other professionals | 46, 66, 33 | 11, 54, 14 | 7, 28, 19 |
| (96, 90, 85) | (23, 74, 36)* | (15, 38, 49)* |
| To explain changes in symptoms in patients at the end of life that should be shared with other professionals | 46, 67, 33 | 11, 57, 18 | 5, 35, 20 |
| (96, 92, 85) | (23, 78, 46)* | (10, 48, 51)* |
| To report changes in symptoms in patients at the end of life to other professionals | 48, 66, 33 | 24, 58, 25 | 15, 45, 29 |
| (100, 90, 85)* | (50, 80, 64)* | (31, 62, 74)* |

| Support for intractable neurologic disease patients | Nurses | Rehabilitation specialists | Managerial dieticians |
|---------------------------------------------------|--------|---------------------------|-----------------------|
| To explain possible changes in symptoms in intractable neurologic disease patients to other professionals | 48, 65, 31 | 39, 68, 23 | 8, 25, 15 |
| (100, 89, 80)* | (81, 93, 59)* | (17, 34, 39)* |
| To explain how to deal with possible changes in symptoms in intractable neurologic disease patients to other professionals | 48, 65, 30 | 35, 67, 23 | 6, 24, 14 |
| (100, 89, 77)* | (73, 92, 59)* | (13, 33, 28)* |
| To explain changes in symptoms in intractable neurologic disease patients that should be shared with other professionals | 48, 66, 32 | 36, 67, 20 | 8, 35, 19 |
| (100, 90, 82)* | (75, 92, 51)* | (17, 48, 49)* |
| To report changes in symptoms in intractable neurologic disease patients to other professionals | 47, 67, 32 | 41, 70, 26 | 17, 46, 29 |
| (98, 92, 82)* | (85, 96, 67)* | (35, 63, 74)* |

Numbers in parentheses are percent agreement of nurses, rehabilitation specialists, and managerial dieticians, respectively. *p<0.05.
them. In this study, over 70% of nurses and rehabilitation specialists recognized their own role for all questions. On the other hand, managerial dieticians were recognized for their role in “support for elderly people in need of nursing care,” but had low recognition for other items. Managerial dieticians in home care not only provide nutritional care, but also explain nutritional status and problems to other professionals and the patient’s family. Because patients at the end of life are desiring to stay at home in recent years, it is thought that the need for home care including visits from managerial dieticians for these patients, as well as those with intractable neurologic disease, will increase in the future. Therefore, physical assessment skills and understanding of symptoms of disorders will be important regardless of profession.

Nurses showed no role recognition less than 70%. Because visiting nurses deliver medical care, they are the profession that is closest to patients before they return home. Visiting nurses are required to explain changes in symptoms and how to deal with possible symptoms to other professionals. Therefore, role recognition for nurses in this study might have been high similar to previous studies.

Previous research reported that rehabilitation specialists were involved in the prevention of disuse syndromes and falls, and improvement in daily activity, but not improvement of psychological ability. These results that role recognition for rehabilitation specialists was low for “support for elderly persons with dementia” is similar to findings of previous study. However, rehabilitation specialists perform evaluations of cognitive ability and provide treatments for cognitive state to elderly people. Among frail elderly people, it is important to evaluate physical, cognitive, and social problems comprehensively. To provide better healthcare, all professions should be considered important in relation to cognitive function, to deepen the understanding between professions in the future.

As medical care is often carried out for patients at the end of life, nurses are involved with patients at this stage. However, cancer patients became a target of rehabilitation through the enactment of the basic law for anticancer (2006) and medical fee revision in FY 2010. Studies and reports of patients at the end of life by rehabilitation specialists have increased accordingly. However, the rehabilitation of patients at the end of life has a shorter history than that of nurses. Therefore, it is considered that role recognition of nurses is high generally, and that role recognition of rehabilitation specialists by other professionals was low in this study.

This study has some limitations. The rate of response to the questionnaire was low. In addition, the actual situation of cooperation of other professionals in participants was not clear. Therefore, further studies are needed to determine how to gain the cooperation of other professionals and the effects of presence or absence of cooperation of managerial dieticians.

### Funding
It was financially supported by JSPS KAKENHI grant number JP15K11828.

### Conflict of interest
None.

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