Introduction

Japan is experiencing a rate of population aging that is unprecedented worldwide [1]. The Ministry of Health, Labour and Welfare is promoting the community-based integrated care system, which aims in enriching long-term care, healthcare, support, and preventive services so that elderly individuals can maintain the lifestyle to which they are accustomed [2]. The community-based integrated care system that comprehensively ensures the provision of healthcare, nursing care, prevention, housing, and livelihood support will be established by 2025 [2]. This system would allow elderly individuals to follow their own habits and live in familiar environments, even when they require long-term care [2]. The collaboration between medical care and long-term care is important in the community-based integrated care system.

Stroke is a leading cause of long-term disability in Japan and worldwide [3,4]. Considering the aging Japanese population, an increased incidence of stroke is
expected [5]. Many stroke patients require rehabilitation to reduce their degree of disability and enhance their likelihood of returning to functional independence at home [6]. In general, stroke rehabilitation in Japan is consistent throughout the acute, convalescent, and maintenance phases [7]. Stroke rehabilitation during the acute phase aims to encourage the compensatory functions of the cerebrum and facilitate the restoration of impairment functions while preventing disuse syndromes at the acute care ward [7]. In the convalescent phase, patients who are past the acute phase and who can be expected to further improve functions with rehabilitation undergo intensive rehabilitation in the convalescent rehabilitation ward until discharge from the hospital [7]. The main purpose of rehabilitation in the maintenance phase is to maintain the acquired functions, activities, and social participation for as long as possible. Throughout these consistent stroke rehabilitation processes, collaboration between medical care and long-term care professionals is crucial to ensure continuous daily living support for patients and their family caregivers, as well as for efficient use of social resources.

The Japanese Association of Occupational Therapists developed the Management Tool for Daily Life Performance (MTDLP), which has been found to contribute to comprehensive community care based on a 2008 geriatric health promotion project by the Ministry of Health, Labour and Welfare [8]. Daily life performance includes all aspects of life, including activities of daily living (ADL), instrumental activities of daily living (IADL), work, hobbies, and leisure. Daily life performance can be inhibited by decreased mental and physical function due to illness or aging, unhealthy lifestyle, poor interpersonal relationships, and changes in living environment [8]. MTDLP is an intervention tool used in occupational therapy and a support method that focuses on finding meaningful occupation for subjects to increase recovery and improve disabilities that inhibit daily life performance. MTDLP consists of a series of processes that include intake, assessment, planning, intervention, and transference of tasks.

In stroke rehabilitation, transitional care is required for the support of daily life performance for patients and their family caregivers after leaving the hospital. Consequently, collaboration between occupational therapists in medical care and care managers in long-term care is very important in the early stages after discharge. However, to our knowledge, no studies have reported the effects of collaboration between occupational therapists in medical practice and care managers in communities regarding the care of stroke patients in the early stages after discharge. This study aimed to explore whether collaboration between occupational therapists and care managers using MTDLP supports the daily life performance at 1 month after discharge in stroke patients.

**Methods**

**Subjects**

Patients were admitted with stroke to seven acute care wards and eight convalescent rehabilitation wards and were prescribed rehabilitation for home discharge. We prospectively enrolled 15 patients [77.3 ± 7.9 years (mean ± SD)] in the acute care ward and 22 patients [71.7 ± 9.6 years] in the convalescent rehabilitation ward between September 2012 and January 2013. This study was conducted based on the Ethical Standards of the Japanese Association of Occupational Therapists. All subjects gave written informed consent to participate. Each subject had the opportunity to refuse participating in the study.

**Study design**

All participants received occupational therapy based on MTDLP. Occupational therapists conducted collaborative tasks using MTDLP for care managers before discharge of all subjects. Collaborative tasks conducted by occupational therapists using MTDLP included creating and delivering the daily life performance transfer sheet (Fig. 1), conducting home visits with care managers, and attending a care service conference before discharge. These collaborative tasks were carried out in order to enable continued support and to maintain and improve the daily activities of subjects after discharge.

All subjects were assessed via the Barthel Index [9], which measured ADL; the Lawton and Brody IADL scale [10]; and a measure of self-rated health [11], which was used as a quality of life (QOL) index for daily life performance. Participants were assessed both at discharge and 1 month after discharge. Furthermore, transmission items (i.e., information transmitted from occupational therapists to care managers) relating to instructions for patients’ daily living support after discharge were collected using the daily life performance transfer sheet at discharge. The Barthel Index has been widely used to assess ADL in stroke patients. It consists of the following ten items relating to basic ADL: feeding, transfer, grooming, toilet use, bathing, mobility, stairs, dressing, and control of bowels and bladder. Scores on the Barthel Index range from 0 to 100, with lower scores indicating greater dependency [12]. The Lawton and Brody IADL scale has been widely used to assess IADL. Scores range from 8 to 24, with lower scores indicating greater dependency. The scale assesses the following functional abilities: using the telephone, shopping, preparing meals, doing housework, doing laundry, using transpor-
**Daily Life Performance Transfer Sheet**

Name: __________________________ Age: ______ years  Sex (male/female)  Date of creation: ______ (year) ______ (month) ______ (day)

I have instructed the following for the patient to maintain my health and living behavior after discharge from hospital.
I ask for support in a daily basis in order to continue performing these activities.

**Person in charge:**

| [Living status when healthy] | [Cause of present hospitalization] | [Difficulties and areas to improve the patient’s status] | [Current living status] (describe abilities) | *Check the relevant box* | [Goals and content of occupational therapy during rehabilitation treatment] |
|------------------------------|-----------------------------------|---------------------------------------------------------|---------------------------------|--------------------------|--------------------------------------------------------------------------------|
| ADL items                    | [Currently performing]            | [Would like to perform]                                 | [Improvement expected]         | [Support needed]          | [Special remarks]                                                                 |
| Eating & drinking            | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Moving to/from a wheelchair  | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Grooming                     | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Toilet activities            | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Bathing                      | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Walking on level ground      | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Walking upstairs             | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Dressing                     | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Moving indoors               | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Moving outdoors              | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Using transport              | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Shopping                     | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Cooking                      | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Cleaning                     | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Laundry                      | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Tidiness & taking out garbage| □                                  | □                                                       | □                               | □                        |                                                                                           |
| Money management             | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Making a telephone call      | □                                  | □                                                       | □                               | □                        |                                                                                           |
| Medication management        | □                                  | □                                                       | □                               | □                        |                                                                                           |

[Assessment summary and problems to be solved]

[Support content and programs to continue]

---

**Fig. 1.** Daily life performance transfer sheet.
Reproduced from the Japanese Association of Occupational Therapists. (June 17, 2014). Management tool for daily life performance. [Brochure]. p. 6, Document 4, with permission.
The copyright (personal and property rights) to this sheet belongs to the Japanese Association of Occupational Therapists. The unauthorized use, copying, duplication, reproduction, input to recording media, or changes to the content are prohibited with exceptions to the copyright law.
Collaboration using the management tool for daily life performance

Self-rated health is an important indicator of QOL [13] and was thus used as a proxy for QOL. Self-rated health was assessed by asking respondents, “In general, how would you rate your health today?” Possible response options were “very good” (1), “good” (2), “moderate” (3), “bad” (4), or “very bad” (5) [11].

The MTDLP process

The following section summarizes the standard MTDLP process [8].

Intake

Subjects and their families are interviewed regarding their desired daily life performance using a daily life performance interview sheet. A “wish and interests checklist” is used when subjects cannot verbally express their desires.

Daily life performance assessment

Subjects’ desired daily life performance and factors that inhibit daily activities are assessed using the International Classification of Functioning, Disability, and Health (ICF) and the MTDLP sheet.

Daily life performance improvement plan

A support plan to enable subjects to implement daily life performance is drafted based on the MTDLP sheet. The intervention program is divided into a basic program (approach for mental and physical function), an application program (approach for activities and participation), and a social adjustment program (adaptive approach for environmental adjustments to the subject’s living environment).

Intervention, re-evaluation, and revision

Provide the training, support, adjustment, and reassessment required to improve daily life performance based on planning.

Completion; transference of tasks

The outcomes and course of MTDLP are summarized in the daily life performance transfer sheet (Fig. 1). The support measures necessary to improve future daily life performance are transferred to professionals involved in the patient’s life support, including care managers and care staff. In this study, occupational therapists conducted collaborative tasks using the MTDLP for care managers.

Data analysis

Paired t-tests and the Wilcoxon Signed-Rank Test were used to compare scores on the Barthel Index, the Lawton and Brody IADL scale, and assessments of self-rated health at discharge versus 1 month after hospital discharge. P-values < 0.05 indicated statistical significance. All statistical analyses were performed using SPSS version 19 (SPSS, Tokyo, Japan).

Results

Subjects’ demographic characteristics and clinical data are shown in Table 1. Mean ages of patients in the acute care and convalescent rehabilitation wards were 77.3 ± 7.9 years and 71.7 ± 9.6 years, respectively. Patients (n = 37) included 15 (seven men and eight women) from the acute care ward, and 22 (10 men and 12 women) from the convalescent rehabilitation ward. Approximately 87% of acute care ward patients and 68% of convalescent rehabilitation ward patients had experienced ischemic stroke. Eight patients from each of the acute care and convalescent rehabilitation wards had right-sided hemiparesis; whereas, five from the acute care ward and nine from the convalescent rehabilitation ward had left-sided hemiparesis. The percentages of patients from the acute care ward receiving different care levels were as follows: support level 1, 7%; support level 2, 13%; care level 1, 20%; care level 2, 7%; care level 3, 7%; care level 4, none; care level 5, 7%; and unapplied, 40%. The percentages of patients from the convalescent rehabilitation ward receiving different care levels were as follows: support level 1, 5%; support level 2, 13%; care level 1, 20%; care level 2, 7%; care level 3, 7%; care level 4, none; care level 5, 7%; and unapplied, 40%.

| Variables | Acute care ward (n = 15) | Convalescent rehabilitation ward (n = 22) |
|-----------|--------------------------|-----------------------------------------|
| Age, years, mean ± SD | 77.3 ± 7.9 | 71.7 ± 9.6 |
| Female, n (%) | 8 (53.3) | 12 (54.5) |
| Type of stroke, n (%) | ischemic 13 (86.7) | 15 (68.2) |
|         | hemorrhage 1 (6.7) | 2 (9.0) |
|         | other 1 (6.7) | 5 (22.7) |
| Hemiparetic side, n (%) | right 8 (53.3) | 8 (36.4) |
|         | left 5 (33.3) | 9 (40.9) |
|         | other 2 (13.3) | 5 (22.7) |
| Care levels in long-term care insurance, n (%) | support level 1 1 (6.7) | 1 (4.5) |
|         | support level 2 2 (13.3) | 2 (9.1) |
|         | care level 1 3 (20.0) | 2 (9.1) |
|         | care level 2 1 (6.7) | 0 |
|         | care level 3 1 (6.7) | 10 (45.4) |
|         | care level 4 0 | 3 (13.6) |
|         | care level 5 1 (6.7) | 2 (9.1) |
|         | unapplied 6 (40.0) | 2 (9.1) |

SD: standard deviation
level 2, 9%; care level 1, 9%; care level 2, none; care level 3, 45%; care level 4, 14%; care level 5, 9%; and unapplied, 9%.

Table 2 shows ADL, IADL, and self-rated health scores at discharge and 1-month follow-up. Scores on the Barthel Index increased significantly from discharge to 1 month after discharge among acute care ward patients \( (p = 0.04) \). In contrast, assessment of self-rated health decreased significantly from discharge to 1 month after discharge in both acute care and convalescent rehabilitation ward patients \( (p = 0.04 \text{ and } p = 0.02, \text{ respectively)} \). There were no significant differences in other scales of daily life performance at discharge versus 1 month after discharge. Figure 2 shows the items transmitted from occupational therapists to care managers relating to patient support after discharge.

### Discussion

Findings of the present study indicated that ADL scores among acute care patients improved significantly from discharge to 1-month follow-up, indicating less

| Acute care ward (n = 15) | 1 month after discharge | \( p \) |
|--------------------------|-------------------------|--------|
| Barthel index, mean ± SD | 69.3 ± 30.1 | 76.3 ± 30.3 | 0.04 |
| Lawton and Brody IADL scale, mean ± SD | 3.1 ± 2.6 | 3.1 ± 2.9 | 0.83 |
| Self-rated health, mean ± SD | 3.3 ± 0.8 | 2.9 ± 0.9 | 0.04 |

| Convalescent rehabilitation ward (n = 22) | 1 month after discharge | \( p \) |
|-----------------------------------------|-------------------------|--------|
| Barthel index, mean ± SD | 71.6 ± 26.3 | 74.8 ± 26.0 | 0.15 |
| Lawton and Brody IADL scale, mean ± SD | 2.3 ± 1.8 | 2.7 ± 1.9 | 0.16 |
| Self-rated health, mean ± SD | 3.2 ± 0.7 | 2.7 ± 0.9 | 0.02 |

SD: standard deviation; IADL: instrumental activities of daily living

Among patients from the acute care ward, transmission items primarily related to outdoor and indoor movement, bathing, toilet use, shopping, and use of public transportation. Among patients from the convalescent rehabilitation ward, transmission items primarily related to indoor and outdoor movement, transfers, toilet use, stair use, bathing, dressing, and shopping. In general, a wider variety of items were transmitted for patients from the convalescent rehabilitation ward compared to the acute care ward.

**Fig. 2.** The items transmitted from occupational therapists to care managers.
dependence a month after discharge. Furthermore, IADL scores were maintained from discharge to 1-month follow-up in both acute care and convalescent rehabilitation patients. These results suggest that the patients’ plan of ADL and IADL may have been included in the care plan after discharge, and the intervention support may have worked effectively. Therefore, collaboration between occupational therapists and care managers using MTDLP may have worked effectively on the care plan after discharge and may have promoted independent daily living in stroke patients.

Some studies have reported that ADL among stroke patients were maintained for 1 year after discharge [14, 15]. On the other hand, Yoshino, et al. reported that ADL among stroke patients were significantly decreased 1 month after discharge [16]. Research findings have attributed this decreased activity following discharge to poor health services, effects of climate, negative family attitudes, indoor movement, and low motivation [17]. These previous reports indicate that ADL tend to decline immediately after discharge in stroke patients. Therefore, collaboration between medical care and long-term care professionals is crucial to ensure continuous living support for patients and their family caregivers, as well as efficient use of social resources.

Costs associated with the collaboration between medical care and long-term care professionals (e.g., patient home visits during hospitalization) is covered by medical insurance in Japan. Likewise, it covers the costs associated with transfer of information from medical professionals to care managers during hospitalization of patients regarding their care plans following discharge. However, due to medical fees, daily occupational and physical therapy tend to be regarded as more important than patients’ home visits or providing information to care managers. Moreover, patients who independently perform ADL often do not receive the certification of long-term care and the care plan for preventive by long-term care or community support system. As a result, the ability of more independent patients to perform ADL and IADL may be reduced, making daily living care necessary. Furthermore, the method of collaboration between occupational therapists and care managers for discharge of stroke patients was not established. This problem in the collaboration method was also considered to be caused by the fact that occupational therapists often neglect collaboration with care managers. In this study, occupational therapists conducted collaborative tasks using MTDLP for care managers before patient discharge. Specifically, occupational therapists contacted care managers using the daily life performance transfer sheet before discharge to ensure continuous daily living support and maintain and improve patient’ abilities after discharge. Furthermore, occupational therapists conducted home visits together with care managers and attended the care service conference before patient discharge. By systemizing the collaboration method using MTDLP, occupational therapists will be able to further promote cooperation with care managers and reliably transfer information of daily living support after discharge for stroke patients.

In the present study, the items transmitted from occupational therapists to care managers in regarding patients from the acute care ward related primarily to outdoor and indoor movements, bathing, toilet use, shopping, and use of public transportation. In patients from the convalescent rehabilitation ward, transmission items related primarily to mostly indoor and outdoor movement, transfers, toilet use, stair use, bathing, dressing, and shopping. The daily life performance transfer sheet makes it possible to clearly transmit information necessary for the support of ADL and IADL after discharge. To maintain and improve ADL and IADL after discharge, it is important that these transmission items are reflected in the patient’s care plan in the long-term care system.

In this study, improved self-rated health in acute care and convalescent rehabilitation ward patients was observed 1 month after discharge following an MTDLP intervention involving collaborative tasks between occupational therapists and care managers. Self-rated health is well known to be an important indicator of QOL; it has also been reported to predict mortality [18−20] and the prognosis of stroke patients [21]. Stroke has been shown to lead to depressive and anxiety disorders and other emotional effects [22]. One-third of all stroke patients experience significant depressive symptoms after the onset of stroke [23]. Accordingly, one study reported that reducing the number of depressive symptoms among disabled older adults would be beneficial in improving self-rated health as well as maintaining and promoting QOL [24]. Subjective ratings of overall health remain strongly and independently associated with depressive symptoms, even when controlling for physical illness and functional disability [25]. Greater attention should therefore be given to the self-rated health of older adults with stroke, particularly in relation to the significant impact of depression on their self-rated health [26]. Addressing elements of daily life that affect subjective well-being are also being increasingly recognized as beneficial to recovery from and adaptation to stroke [27]. In a randomized controlled multi-center trial, Noto et al. showed that occupational therapy using MTDLP improved QOL for dependent community-dwelling elderly individuals [28]. MTDLP is a support method focusing on providing meaningful occupation to patients to aid
in their recovery and to improve disability in daily life performance. Collaboration between occupational therapists and care managers using MTDLP may improve QOL for stroke patients through sharing the information on patients’ meaningful occupation.

Study limitations

The present study had several limitations. First, the sample size was small due to an insufficient number of stroke patients who required daily living support after discharge. Second, as a control group was not established, we cannot verify the effect of collaboration between occupational therapists and care managers on patient outcomes after discharge. Future studies could utilize a control group to assess the effects of an intervention involving collaborative tasks using MTDLP. Third, collaboration skills of occupational therapists and care managers were not sufficiently controlled in this study. The meeting we held regarding collaborative tasks using MTDLP was attended by occupational therapists; care managers received individual explanations only. Finally, it was unclear whether the items transmitted from occupational therapists to care managers were reflected in the care plan after discharge. Going forward, it will be necessary to further promote patient home visits and the care service conference to care managers in order to ensure transmission items are reflected in the care plan.

Conclusion

The findings of this study suggest that collaboration between occupational therapists and care managers using the MTDLP might be effective in promoting independent daily living after discharge in stroke patients. Based on these findings, collaboration between occupational therapists and care managers using the MTDLP should be encouraged to support the daily life performance of stroke patients.

Acknowledgments: This study was supported by a 2012 geriatric health promotion project by the Ministry of Health, Labour and Welfare (Grant-in-Aid for the promotion of geriatric health projects).

References

[1] Muramatsu N, Akiyama H. Japan: super-aging society preparing for the future. Gerontologist. 2011; 51: 425–32. doi: 10.1093/geront/gnr067.
[2] Ministry of Health, Labour and Welfare [online]. Long-Term Care Insurance System of Japan [cited 2016 November 21]. Available from: http://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/dl/ltcisj_e.pdf
[3] Ministry of Health, Labour and Welfare [online]. Statistics and Information Department, Minister’s Secretariat, Comprehensive survey of living conditions [cited 2016 December 14]. Available from: http://www.mhlw.go.jp/english/database/db-hss/cslctables.html.
[4] Ovbiagie B, Nguyen-Huyhn MN. Stroke epidemiology: advancing our understanding of disease mechanism and therapy. Neurotherapeutics. 2011; 8: 319−29. doi: 10.1007/s13311-011-0053-1.
[5] Van der Cruyssen K, Vereeck L, Saeys W, Remmen R. Prognostic factors for discharge destination after acute stroke: a comprehensive literature review. Disabil Rehabil. 2015; 37: 1214−27. doi: 10.3109/09638288.2014.961655.
[6] Agarwal V, McRae MP, Bhardwaj A, Teassel RW. A model to aid in the prediction of discharge location for stroke rehabilitation patients. Arch Phys Med Rehabil. 2003; 84: 1703−9.
[7] Abo M, Kakuda W. Rehabilitation for cerebrovascular disease: current and new methods in Japan. JMAJ. 2012; 55: 240−5.
[8] The Japanese Association of Occupational Therapists. (June 17, 2014). Management tool for daily life performance. [Brochure].
[9] Mahoney FI, Barthel D. Functional evaluation: the Barthel Index. Md State Med J. 1965; 14: 56−61.
[10] Lawton MP, Brody EM. Assessment of older people: self-maintaining and instrumental activities of daily living. Gerontologist. 1969; 9: 179−86.
[11] World Health Organization [on line]. World Health Survey 2002: Short questionnaire rotation A [cited 2016 December 19]. Available from: http://www.who.int/healthinfo/survey/whsshortindividuale.pdf
[12] Carod-Artal FJ, Coral LF, Trizotto DS, Moreira CM. The stroke impact scale 3.0: evaluation of acceptability, reliability, and validity of the Brazilian version. Stroke. 2008; 39: 2477−84. doi: 10.1161/STROKEAHA.107.513671.
[13] Skånér Y, Nilsson GH, Sundquist K, Hassler E, Krakau I. Self-rated health, symptoms of depression and general symptoms at 3 and 12 months after a first-ever stroke: a municipality-based study in Sweden. BMC Fam Pract. 2007; 8: 61.
[14] Paolucci S, Grasso MG, Antonucci G, Troisi E, Morelli D, Coiro P, et al. One-year follow-up in stroke patients discharged from rehabilitation hospital. Cerebrovasc Dis. 2000; 10: 25−32.
[15] Sim TC, Lum CM, Sze FK, Or KH, Sum C, Woo J. Outcome after stroke rehabilitation in Hong Kong. Clin Rehabil. 1997; 11: 236−42.
[16] Yoshino J, Sasaki Y, Usuda S. Changes in activities of daily living after discharge from a convalescence rehabilitation ward. Rigakuryoho Kagaku. 2008; 23: 495−9 (in Japanese).
[17] Hosoi T, Sawada Y, Kato G, Fujita H, Takahashi K, Kurokawa Y. Changes of physical activity before and after discharge from a recovery rehabilitation unit. Rigakuryoho Kagaku. 2010; 26: 111−5 (in Japanese).

[18] Mossey JM, Shapiro E. Self-rated health: a predictor of mortality among the elderly. Am J Public Health. 1982; 72: 800−8.

[19] Santiago LM1, Novaes Cde O, Mattos IE. Self-rated health (SRH) as a predictor of mortality in elderly men living in a medium-size city in Brazil. Arch Gerontol Geriatr. 2010; 51: e88−93. doi: 10.1016/j.archger.2010.01.004.

[20] Fernández-Ruiz M, Guerra-Vales JM, Trincado R, Fernández R, Medrano MJ, Villarejo A, et al. The ability of self-rated health to predict mortality among community-dwelling elderly individuals differs according to the specific cause of death: data from the NEDICES cohort. Gerontology. 2013; 59: 368−77. doi: 10.1159/000348781.

[21] Carod-Artal FJ, Egido JA. Quality of life after stroke: the importance of a good recovery. Cerebrovasc Dis. 2009; 27: 204−14. doi: 10.1159/000200461.

[22] Bossù P, Salani F, Cacciari C, Piccietto L, Cao M, Bizzoni F, et al. Disease outcome, alexithymia and depression are differently associated with serum IL-18 levels in acute stroke. Curr Neurovasc Res 2009; 6: 163−70.

[23] Hackett ML, Yapa C, Parag V, Anderson CS. Frequency of depression after stroke: A systematic review of observational studies. Stroke 2005; 36: 1330−40.

[24] Han B, Jylha M. Improvement in depressive symptoms and changes in self-rated health among community-dwelling disabled older adults. Aging Ment Health. 2006; 10: 599−605.

[25] Mulsant BH, Ganguli M, Seaberg EC. The relationship between self-rated health and depressive symptoms in an epidemiological sample of community-dwelling older adults. J Am Geriatr Soc. 1997; 45: 954−8.

[26] Han B, Small BJ, Haley WE. The structure of self-rated health among community-dwelling older adults with stroke. Home Health Care Serv Q. 2001; 20: 1−15.

[27] Darlington AS, Dippel DW, Ribbers GM, van Balen R, Passchier J, Busschbach JJ. Coping strategies as determinants of quality of life in stroke patients: a longitudinal study. Cerebrovasc Dis. 2007; 23: 401−7.

[28] Noto S, Murai C, Takeuchi S, Iwase Y, Nakamura H. Effect of occupational therapy using “the management tool for daily life performance” for dependent community-dwelling elderly: A randomized controlled multi-center trial. The Japanese Occupational Therapy Research (sagyouryouhou). 2014; 33: 259−69 (in Japanese).