〈Research Note〉

Adaptation among Older Adults Who Relocate to Care Facilities in Japan

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日本における施設移転後の高齢者の適応

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＜Abstract＞

Current healthcare of older patients in Japan is characterized by shorter hospital stays for conditions that are increasingly serious. This often necessitates permanent or temporary relocation to care facilities, which represents a major life event. This study aimed to clarify the characteristics of adaptation to relocation, among these older adults.

We enrolled 131 participants and divided them into adaptation and non-adaptation groups on the basis of their scores on an assessment questionnaire. The adaptation group comprised a high percentage of people who relocated by choice and had a high level of independence. They also tended to participate in recreational activities and showed speech and behavior that indicated reliance on facility staff. In contrast, the non-adaptation group comprised a high percentage of older adults that had relocated for the first time; in addition, they had higher rates of constipation and symptomatic disease.

＜要旨＞

現在の日本の医療において，入院患者の重症化，在院日数の短期化がみられている。そのため，病院を退院後，施設にリロケーション（移転）する高齢者も多くみられる。高齢者にとってリロケーションとは，新たな適応を要求される重大なライフイベントとなりうる。本研究の目的は，施設へリロケーションする高齢者の適応の特徴を明らかにすることである。

アセスメントシートの質問項目の得点により，対象者131名を適応状況によりグループに分け分析を行った。その結果，適応群は本人の希望で移転した割合が高く，自立度が高かった。またレクリエーションに参加したり，職員を頼りにする言動がみられた。対照的に，非適応群は施設への移転が初めてである割合が高く，便秘や病気の状態の悪化がみられた。

本研究により，日本において施設に移転する高齢者の適応の特徴が明らかになった。特に，移転後の環境を自分でコントロールすることが難しい高齢者に対して，ケア提供者が高齢者にとってより良い生活を支援する体制を整えていく必要性が示された。また，身体症状といった高齢者の不適応のサインに注目し，高齢者の課題に早期介入していくといったアプローチにより，高齢者の施設生活への適応が促される可能性があると思われる。

Key words
adaptation 適応
older adults 高齢者
relocation リロケーション
care facility 高齢者施設

I. INTRODUCTION

Japan is becoming a super-aging society, with the percentage of adults aged 65 or above reaching 24.1% of the population in 2012[1]. The current healthcare situation in Japan is such that hospitalized older patients typically have more severe disease managed over shorter hospital stays which has a serious impact on older adults with decreased recuperative ability. Older adults with health problems who cannot live independently at home usually decide to relocate to a care facility for elders. However, this is a major life event that requires adaptation to new living circumstances.

The North American Nursing Diagnosis Association defines relocation stress syndrome as the physiological and psychosocial disturbances that follow relocation from one environment to another[2]. In particular, relocation is recognized as a stressful life event that can deteriorate the health status of older adults[3] and critically change their social interactions[4]. For older adults to live securely in facilities after they relocate, their caregivers must understand these complex dynamics.

Previous studies on relocation of older adults in Japan have looked at the psychological characteristics associated with adaptation[5] and the effect of relocation on those living in the community[6]. There have also been studies seeking to understand the experiences of older adults after they have relocated[7][8]. Other research works provide information on how to mitigate the damage caused by relocation[9] and have considered risk factors affecting older adults who return to their own home from a hospital[10]. However, no studies or assessment tools exist to understand the relocation process to care facilities in Japan.

In Western countries, guidelines exist to manage the relocation of older adults[11], and there are guidelines for best nursing practice[12]. Furthermore, scales have been researched that can measure maladaptation symptoms after relocation[13] and models of allostasis to relocation by older adults have been applied[14]. When creating scales, critical parameters for relocating older adults, have been clarified and used in interventions[15].

In general, Japanese older adults are often more concerned about the needs of people around them and can be less affected by Western concepts of self-responsibility and self-reliance. For example, they may be more likely to acquiesce to the wishes of others when admitted to a care facility. As a result, their feelings may become unstable, which may lead to physical symptoms such as insomnia and constipation when they have relocated[7]. For this reason, it is important to pay attention, perform an early assessment, and provide medical intervention to support adaptation of the older adults who have relocated to a care facility.

In such a situation, it is increasingly important to focus on older adults who have relocated to a care facility, to perform early

and appropriate assessment along with early intervention to support adaptation. As the reason for this, assessment scales that can assess the level of support needed after older adults relocate are urgently needed in Japan. This study, therefore, aimed to clarify the characteristics of adaptation among older adults who relocate to care facilities in Japan.

Ⅱ. METHODS

1. Study Design

We used a Relocation Assessment Questionnaire based on a conceptual model and performed a cross-sectional study with this tool to assess how older adults in Japan adapted to relocation. To assess adaptation to relocation, participants were separated into adaptation and non-adaptation groups on the basis of their scores on the Relocation Assessment Questionnaire. The study was performed among older adults in care facilities in Japan. The care facilities for the elderly included in the study were health care facilities, long-term care welfare facilities, and a care house.

2. Setting and Participants

We explained the purpose of the study to the nursing administrators and caregivers at the care facilities involved and obtained their consent. The inclusion criterion was that older adults must have been staying at the care facility for more than two weeks when the questionnaire was delivered. We chose this period as it was considered sufficient for caregivers to be able to understand changes in their patients and because changes frequently occur within a week of relocation among older adults[7)16)]. Caregivers selected those residents who met this criterion, explained the study directly to them, and obtained their consent.

3. The Relocation Assessment Questionnaire

The Relocation Assessment Questionnaire was based on a conceptual model entitled "A typical model for understanding relocations to the health-care facility in Japan" (Figure 1). The model was created using case studies of eight people who relocated to care facilities and was from the perspective of the older adults. The subsequent Relocation Assessment

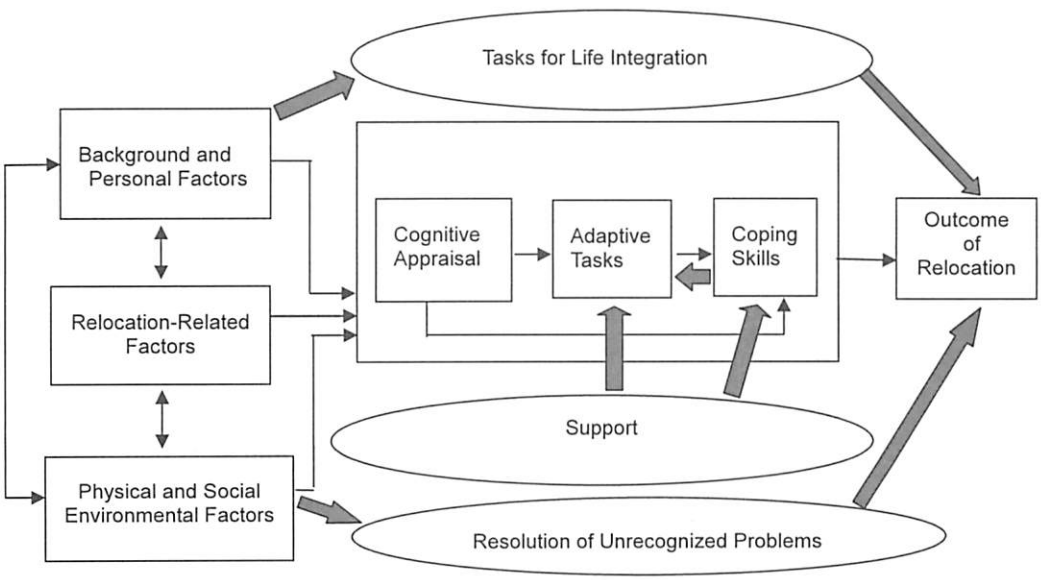

Figure 1. A typical model for understanding relocations of the health-care facility for the elderly in Japan (Komatsu et al,2007)

Questionnaire included questions on constipation and insomnia, which are common after relocation, especially among Japanese older residents[17]. The final questionnaire comprised 44 questions to be completed by the caregivers in the second week after relocation.

Six questions were on background and personal factors. The other 38 questions were used as a scale to clarify whether or not an older adult had adapted to their relocation and consisted of 10 subscales. The subscales were as follows: relocation-related factors, such as intention to relocate, (three questions); physical factors (body condition), such as constipation, (four questions); social environmental factors, such as conversations with others, (five questions); cognitive appraisals, such as statements on life in the facility, (three questions); adaptive tasks, such as worsening of disease state, (five questions); coping skills, such as asking for help from others, (five questions); tasks for life integration, such as anxiety toward the future, (three questions); resolution of unrecognized problems, such as loss of appetite or troubles with others, (three questions); support of care facility staff and others (four questions); and outcome of relocation, such as becoming accustomed to the care facility, (three questions).

Responses were recorded on a 5-point Likert scale, as follows: "applies," "somewhat applies," "neither," "does not really apply," and "does not apply." Thus, scores ranged from 5 (strongly agree) to 1 (strongly disagree), with total possible scores of 190. Higher scores indicated higher adaptation to the care facility after relocation. The time required to respond was about 10 minutes.

4. Data analysis

Cronbach's alpha coefficient was calculated for the 38 questions that affect adaptation. In addition, using descriptive statistics, we clarified the characteristics of the older adults who had relocated to facilities.

We divided older adults into adaptation and non-adaptation groups on the basis of their responses to the Relocation Assessment Questionnaire. The Mann-Whitney U test was used to test for statistical differences in the responses between the adaptation and the non-adaptation groups. SPSS 20.0J was used to analyze the data.

5. Ethical considerations

The research ethics committee of the participating university approved this study. Consent was first obtained from the manager of each facility before the study was explained to the nurses, social workers, or other health care professionals at each facility who served as points of contact, and their consent obtained. Finally, the study was explained in writing to the older adults, their families, and caregivers, and informed consent was obtained. No direct burden was placed on the older adults participating in this study.

The sheet describing the data was placed in individual envelopes, sealed up, collected, and retained in a thorough manner. Sheets containing data were placed in individual envelopes, carefully sealed, and returned. Storage and management after their return was also extremely thorough. Personal information was protected throughout the study, and privacy was ensured.

Ⅲ. RESULTS

1. Participants and selection of cut-off values for adaptation

In total, 150 Relocation Assessment Questionnaires were completed, of which 131 had no missing data. The median (midpoint) score among the 131 responses was 128 points,

which we used as the cut-off point. Participants were then divided into the adaptation group (n = 66), who scored more than 128 points, and a non-adaptation group (n = 65), who scored less than 128 points.

2. Reliability of the Relocation Assessment Questionnaire

The Relocation Assessment Questionnaire had an overall Cronbach's alpha coefficient of 0.76. The individual alpha coefficients for the 10 subscales were 0.39, 0.59, 0.74, 0.70, 0.43, 0.51, 0.73, 0.55, 0.73, and 0.78 for the relocation-related factors, physical factors (body condition), social environmental factors, cognitive appraisals, adaptive tasks, coping skills, tasks for life integration, resolution of unrecognized problems, support of care facility staff and others, and outcome of relocation, respectively.

3. Characteristics of relocated older adults

The mean age of the older adults who had relocated was 85.9 ± 7.4 years, and most were women (78.6%). A large number had dementia (76.3%), which was mild (32.8%), moderate (35.1%), or severe (8.4%). Among the relocation-related factors, this survey covered their first relocation to a care facility in 56.5% of participants, and only 18.3% had relocated by choice. Caregivers typically made referrals and explained the need for admission to a care facility before relocation (72.6%). Furthermore, most guided participants around the facilities after relocation (67.1%).

Of the physical factors (body condition), few of the older adults were independent at the time of relocation (27.5%) and some had language impairments (16.0%). After relocation, constipation (35.2%) and depression (16.8%) appeared in some older adults.

The social environmental factors included that a little under half of the older adults brought personal familiar items into their rooms (30.5%) or treasured items when they relocated to the care facility (16.8%). However, the rate of participation in recreation and other events held in the facility was high (71.8%), and many of the older adults communicated with others, having conversations with caregivers (73.2%) and other residents (46.6%).

With regard to the older adults' cognitive appraisal of the care facility, some did not accept living in the facility, making comments such as "I have nowhere else to go" (12.3%) and "I don't like it here" (5.4%). The caregivers felt that some of the older adults were just "putting up with life in the facility" (21.4%).

On the adaptive tasks subscale, complaints of "I want to go home" (16.8%) and "I don't feel well" (15.2%), and worsening disease states (10.7%) were seen in some of the older adults. Some older adults also caused trouble with other residents (7.6%). Caregivers responded that some of the older adults were difficult to provide care to (40.5%).

In terms of coping skills, older adults often used problem-focused coping for adaptation issues, such as "seeking help from the caregiver" (56.5%), "expressing their wishes" (47.3%), and "seeking help from other residents" (13.0%). Emotional coping was also used, with older residents getting angry, crying, or becoming agitated (20.6%).

Under the tasks for life integration, some older adults expressed worries or anxiety (20.6%) and made negative statements about themselves (17.5%). In most cases, support was provided by caregivers (50.4%) and family members (35.1%).

In the resolution of unrecognized problems subscale, caregivers frequently resolved physical issues such as constipation and loss of appetite that were not recognized by the older

adults themselves (34%). Similarly, caregivers tried to resolve psychiatric issues such as a gloomy countenance or not smiling (22.1%) and social issues such as trouble with other residents and dissatisfaction with the facility (13.8%).

4. Factors affecting adaptation

Using the mean score of 128 points as a reference, the participants were divided into adaptation (50.4%) and non-adaptation (49.6%) groups, and the 44 questions of the Relocation Assessment Questionnaire were analyzed to identify factors related to adaptation to relocation. Tables 1 and 2 list the questions for which there was a significant difference ($p < 0.05$).

Table1. Factors in Adaptation after the relocation (n=131)

Factors(Questions)	Group	*n*(%) 5 Applies	4 Applies somewhat	3 Neither	2 Does not really apply	1 Does not apply	*p* value
"the individual's own wishes' relocation"	Adaptation	12(18.2)	10(15.2)	19(28.8)	9(13.6)	16(24.2)	<.001
	Non-adaptation	1(1.5)	1(1.5)	13(20.0)	15(23.1)	35(53.8)	
"independent in daily living"	Adaptation	8(12.1)	20(30.3)	11(16.7)	19(28.8)	8(12.1)	<.001
	Non-adaptation	1(1.5)	7(10.8)	7(10.8)	14(21.5)	36(55.4)	
"brought treasured personal items with them"	Adaptation	5(7.6)	12(18.2)	16(24.2)	9(13.6)	24(36.4)	<.001
	Non-adaptation	2(3.1)	3(4.6)	6(9.2)	13(20.0)	41(63.1)	
"used their own familiar items"	Adaptation	19(28.8)	13(19.7)	7(10.6)	12(18.2)	15(22.7)	<.001
	Non-adaptation	3(4.6)	5(7.7)	7(10.8)	12(18.5)	38(58.5)	
"participated in recreational activities and events"	Adaptation	37(56.1)	20(30.3)	3(4.5)	4(6.1)	2(3.0)	<.001
	Non-adaptation	16(24.6)	21(32.3)	8(12.3)	8(12.3)	12(18.5)	
"conversations with caregivers"	Adaptation	45(68.2)	13(19.7)	4(6.1)	2(3.0)	2(3.0)	<.001
	Non-adaptation	14(21.5)	24(36.9)	8(12.3)	11(16.9)	8(12.3)	
"conversations with other residents "	Adaptation	35(53.0)	14(21.2)	5(7.6)	7(10.6)	5(7.6)	<.001
	Non-adaptation	6(9.2)	6(9.2)	12(18.5)	12(18.5)	29(44.6)	
"relied on caregivers"	Adaptation	14(21.2)	28(42.4)	14(21.2)	6(9.1)	4(6.1)	<.001
	Non-adaptation	3(4.6)	21(32.3)	19(29.2)	4(6.2)	18(27.7)	
"relied on family "	Adaptation	11(16.7)	17(25.8)	22(33.3)	9(13.6)	7(10.6)	.006
	Non-adaptation	5(7.7)	13(20.0)	19(29.2)	6(9.2)	22(33.8)	
"enjoying life in the facility"	Adaptation	6(9.1)	23(34.8)	34(51.5)	3(4.5)	0(0.0)	<.001
	Non-adaptation	0(0.0)	4(6.2)	33(50.8)	13(20.0)	15(23.1)	
"expressing their wishes"	Adaptation	26(39.4)	13(19.7)	8(12.1)	9(13.6)	10(15.2)	.002
	Non-adaptation	11(16.9)	12(18.5)	13(20.0)	7(10.8)	22(33.8)	
"seeking help from caregivers"	Adaptation	30(45.5)	17(25.8)	8(12.1)	7(10.6)	4(6.1)	<.001
	Non-adaptation	11(16.9)	16(24.6)	8(12.3)	9(13.8)	21(32.3)	
"seeking help from other residents "	Adaptation	2(3.0)	11(16.7)	12(18.2)	11(16.7)	30(45.5)	.015
	Non-adaptation	0(0.0)	4(6.2)	9(13.8)	11(16.9)	41(63.1)	
"the resolution of mental issues by caregivers"	Adaptation	7(10.6)	12(18.2)	26(39.4)	11(16.7)	10(15.2)	.025
	Non-adaptation	0(0.0)	10(15.4)	25(38.5)	14(21.5)	16(24.6)	

Mann-Whitney *U* test ($p < 0.05$)

Table2. Factors in Non-adaptation after the relocation (n=131)

Factors(Questions)	Group	n(%)					p value
		5 Applies	4 Applies somewhat	3 Neither	2 Does not really apply	1 Does not apply	
"being constipation"	Adaptation	8(12.1)	8(12.1)	8(12.1)	19(28.8)	23(34.8)	.002
	Non-adaptation	15(23.1)	15(23.1)	14(21.5)	9(13.8)	12(18.5)	
"being language disorders"	Adaptation	4(6.1)	1(1.5)	3(4.5)	3(4.5)	55(83.3)	<.001
	Non-adaptation	9(13.8)	7(10.7)	8(12.3)	8(12.3)	33(50.8)	
"being depression"	Adaptation	1(1.5)	7(10.6)	3(4.5)	13(19.7)	42(63.6)	.001
	Non-adaptation	6(9.2)	8(12.3)	17(26.2)	9(13.8)	25(38.5)	
"Worsening of disease"	Adaptation	0(0.0)	4(6.1)	11(16.7)	11(16.7)	40(60.6)	<.001
	Non-adaptation	4(6.2)	6(9.2)	20(30.8)	18(27.7)	17(26.2)	
"saying things such as 'I want to go home'"	Adaptation	2(3.0)	5(7.6)	8(12.1)	10(15.2)	41(62.1)	.017
	Non-adaptation	8(12.3)	7(10.8)	12(18.5)	9(13.8)	29(44.6)	
"becoming angry, crying, or becoming agitated"	Adaptation	1(1.5)	7(10.6)	7(10.6)	13(19.7)	38(57.6)	.044
	Non-adaptation	7(10.8)	12(18.5)	7(10.8)	9(13.8)	30(46.2)	
"caregivers also responded that "caring for this person is difficult"	Adaptation	5(7.6)	8(12.1)	7(10.6)	18(27.3)	28(42.4)	<.001
	Non-adaptation	9(13.8)	31(47.7)	12(18.5)	8(12.3)	5(7.7)	
			2 yes	1 no			
"moving to a facility for the first time" (n=123)*	Adaptation		31(50.8)	30(49.2)			0.27
	Non-adaptation		43(69.4)	19(30.6)			
		4 severe	3 moderate	2 mild	1 no		
dementia (n=127)*	Adaptation	0(0.0)	17(26.6)	25(39.1)	22(34.4)		<.001
	Non-adaptation	11(17.5)	29(46.0)	18(28.6)	5(7.9)		

Mann-Whitney U test [* χ^2test] ($p < 0.05$)

In the adaptation group, the main reason for relocation was the individual's personal choice, with many being functionally independent ($p < 0.001$). Many also brought treasured personal items with them when they relocated to the facility and used their own familiar items ($p < 0.001$). Furthermore, many participated in recreational activities and events, and had conversations with caregivers and other residents ($p < 0.001$). The percentage who relied on caregivers ($p < 0.001$) or family ($p = 0.006$) was also high.

Coping behaviors for adaptation used by a high percentage of the adaptation group included enjoying life in the facility ($p < 0.001$), expressing their needs ($p = 0.002$), seeking help from caregivers ($p < 0.001$), and seeking help from other residents ($p = 0.015$). With respect to psychiatric issues, their resolution by caregivers promoted adaptation ($p = 0.025$).

In contrast, the non-adaptation group included a high percentage of people moving to a facility for the first time ($p = 0.027$). Many also had moderate to severe dementia ($p < 0.001$), constipation ($p = 0.002$), language disorders ($p < 0.001$), depression ($p = 0.001$), or other conditions. We also observed a worsening of disease ($p < 0.001$), and a high percentage complained, making statements such as "I want to go home" ($p = 0.017$). Non-adapting residents also used more emotional coping with anger, crying, or becoming agitated ($p = 0.044$). A high

percentage of caregivers also responded "caring for this person is difficult" ($p < 0.001$).

Ⅳ. DISCUSSION

Previous studies on relocation among older adults have examined the effects of whether an individual contributes to the decision to relocate, whether the relocation was predicted, the extent to which the older adult controlled events associated with the relocation, and the degree of environmental change associated with the relocation[18]. In Japan, the negative impact of certain aspects of care facility life on the mental health of older adults has been reported[19], and background factors that affect adaptation have been identified [20].

In this study, the mean age of the older adults was high, and many had dementia. Furthermore, for many of them, this was the first relocation to a care facility that represented a major environmental change. To compound this, few relocated by choice or had high levels of functional independence, and some had speech disorders. Together, these factors probably made it difficult for them to control their environments after being relocated.

In addition, few older adults in the non-adaptation group brought treasured or familiar items with them, which may have countered adaptation. Some had constipation and depressive symptoms after relocating, and these symptoms are physical signs of maladaptation. In the responses to questions in the cognitive appraisal subsection, language and behavior suggestive of resignation and non-acceptance were seen in some responses. It is therefore important to focus on words showing these cognitions in older adults and understanding their feelings. Under adaptive tasks to life in the care facility, worsening of the disease or of physical symptoms was evident and included complaints of not feeling well. Nurses involved in long-term care serve an important role in decreasing the negative consequences of relocation in older adults[21]. Caregivers should focus on these physical symptoms and deal with them through early intervention.

We noted that many caregivers of those in the adaptation group made referrals and discussed the care facility before relocation and guided the older adults around the facility during relocation, and all this may have facilitated adaptation. In addition, many people in the adaptation group participated in recreational activities or events and interacted with caregivers or other residents. Social engagement is important in older adults who have relocated[22], and the results of this study showed that the arrangement of their social environment is important to promote post-relocation adaptation in older adults. It also necessary to develop a support system so that older adults can live in facilities separated from their own homes.

The coping skills of the older adults were not limited to emotional coping; many also applied problem-focused coping. When coping skills were not seen in an older adult, the caregiver often facilitated adaptation to care facility by helping to resolve psychiatric issues. Caregivers who resolved issues for older adults became dependable for them, which emphasized the importance of communication with the caregiver as a major support for relocated older adults[23]. Caregivers must remain aware that older adults frequently rely on them, and they must seek to resolve issues together or on behalf of these older adults.

Based on the results of this study, we suggest several early interventions after

relocation. First, caregivers should talk to the residents and confirm their needs immediately after relocation. This is important to make them habituated to communicating their wishes freely in the new environment. Second, it is necessary to carefully observe new residents for changes in their physical conditions, because symptoms such as constipation and health deterioration can be signs of maladaptation. Third, post-relocation adaptation could be promoted by assessing and supporting adaptive tasks and problem-focused coping among individuals. The results of this study may be applied to nursing practice to support and improve adaptation to the life in the care facilities.

V. STUDY LIMITATIONS

This study did not have a large sample size, so it was not possible to clarify the criterion-related validity and construct validity. The Cronbach's alpha score of the Relocation Assessment Questionnaire was also not very high.

Because we assessed older adults two weeks after relocation, our study results apply only to early changes in adaptation, and there is no external criterion to assess whether the older adults completely adapted or did not adapt to the environment. This limitation can be addressed in future studies. Furthermore, we only clarified initial changes that occurred in the two weeks after relocation, and there are no other external standards for determining adaptation/maladaptation in older adults for this point in time.

VI. CONCLUSION

This study showed the characteristics related to adaptation among older adults that relocate to care facilities in Japan. This study therefore demonstrated the necessity of establishing a system that would allow caregivers to support favorable lifestyles for older adults who, after relocation, find it difficult to control their environment themselves. Such a system would require focusing on signs of maladaptation in older adults. Because exacerbation of physical symptoms was also demonstrated to be a sign of maladaptation, it is important that caregivers pay attention to physical symptoms and conduct early intervention for problems exhibited by older adults. Our results suggested that an approach based on the results of this study could encourage adaptation of older adults to life in a care facility.

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REFERENCES

1) Health and Welfare Statistics Association : Statistics tables, J Health Welf Stat, 60:44, 2013
2) NANDA International 2012 - 2014 : NANDA Nursing Diagnoses; Definitions and Classification, Igaku-Shoin, Tokyo ,2012
3) Schulz R, Brenner G: Relocation of the Aged: A review and theoretical analysis, JGerontol, 32:323-333, 1977
4) Magilvy K, Congdon G: The crisis nature of health care transition for rural older adults, Public Health Nurs, 17: 336-345, 2000
5) Shimonaka Y, Nakazato K, Hasegawa K: Psychological effect of institutionalization (2):adaptation and personality traits, Soc Gerontol, 14: 49-64, 1981
6) Ando T: Trends in studies on the effects of relocation among elderly in the community: health and psychosocial adjustment after

relocation, Jpn J Gerontol, 16: 59-65, 1994

7) Komatsu M, Hamahata A, Magilvy K: Coping with the changes in living environment faced by older persons who relocate to a health-care facility in Japan, Jpn J Nurs Sci, 4: 27-38, 2007

8) Sakaue M, Kondo T: Elderly women developing a "sense of themselves" after relocation to a care home, J Jpn Occup Ther Assoc, 29:587-596, 2010

9) Matsuda C: Information of communicating between family caregivers of elderly persons with dementia and care staff at a short-stay service, J Jpn Acad Gerontol Nurs, 12: 68-74, 2008

10)Nakanishi I : The predictable or beyond-predictable damages of the discharged elderly patients to home: the presence and risk factors of the fourth type of relocation, J School Nurs Soc Services, Health Sciences University of Hokkaido, 8: 21-30, 2012

11)Hertz E, Rossetti J, Koren E, Robertson F: Evidence-based guideline: Management of relocation in cognitively intact older adults, J Gerontol Nurs 33:12-18, 2007

12) Kirst J, Peck S : Older adult relocation: considerations for nurse practitioners, J Nurs Practitioners, 6:206-211, 2010

13)Bekhet K, Zauszniewski A, Nakhla E: Psychometric properties of the pressure to move scale in relocated American older adults: further evaluation, Issues Ment Health Nurs, 32: 711-716, 2011

14)Ewen H, Kinney J: Application of the model of allostasis to older women's relocation to senior housing, Biol Res Nurs, 00:1-12, 2013

15)Bekhet K, Zauszniewski A, Matel-Anderson M: Resourcefulness training intervention: assessing critical parameters from relocated older adults' perspectives, Issues Ment Health Nurs, 33:430-435, 2012

16)Manion S, Rantz J : Reloaction stress syndorome: a comprehensive plan for long-term care adminissions, Geriatr Nurs, 16:108-112, 1995

17)Komatsu M, Hamahata A: Adaptive tasks and coping skills affecting relocation of older adults to a facility, J Jpn Acad Health Behav Sci.28:82-92, 2013

18)Chenitz C: Entry into a nursing home as status passage, Geriatr Nurs, 4:92-97, 1983

19)Nakazato K, Shimonaka Y, Hasegawa K: Psychological effect of institutionalizatio n(1):adaptation and cognitive traits, Soc Gerontol, 12:59-73, 1980

20)Ando T, Koyano W, Yatomi N, Watanabe S, Kumagai S : Relocation and adjustment after relocation in elderly community residents, Jpn J Gerontol, 16:172-178, 1995

21)Fraher A, Coffey A : Older people's experiences of relocation to long-term care, Nurs older people, 23: 23-27, 2011

22)Dupuis-Blanchard S, Neufeld A, Strang R : The significance of social engagement in relocated older adults, Qual Health Res,19:1186-1195, 2009

23)Newson P: Relocation to a care home, part two: exploring helping strategies, Nurs Residential Care, 10:373-377, 2008