

Influences of care dependency on attitudes toward evacuation among elderly community residents

メタデータ	言語: eng 出版者: 公開日: 2017-10-04 キーワード (Ja): キーワード (En): 作成者: メールアドレス: 所属:
URL	http://hdl.handle.net/2297/46829

Influences of care dependency on attitudes toward evacuation among elderly community residents

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Abstract

This study was performed to examine attitudes toward evacuation (wish to stay at home, access evacuation sites) among elderly community residents that were able to choose either evacuation or to stay at home when evaluation instructions were issued, as well as factors influencing them, focusing on care dependency. A questionnaire survey was conducted among 85 elderly community residents (mean age: 77.7; female: 81%) , 24 and 61 of whom were using and were not using Long-term Care Insurance services (care services) , respectively, to examine their attitudes toward evacuation, awareness of disaster preparedness, and necessary actions. The results were as follows: community disaster risks: "Recognize," 79%; oral medications/medication notebooks: "Prepared," 51%; evacuation sites/routes: "Confirmed," 73%; and methods to contact other family members in the event of a disaster: "Considered," 69%. With regard to attitudes toward evacuation when such instructions were issued, 35% and 65% wished to stay at home and access evacuation sites, respectively. The tendency toward staying at home was more marked among care service users and those who did not recognize the community's disaster risks. Care service users also showed a lower rate of participation in disaster drills held by the community. These results suggest that care dependency may be a factor influencing attitudes toward evacuation, although the details of the influence remain unclear.

KEY WORDS

natural disaster, attitudes toward evacuation, long-term care insurance services, elderly community residents,

Introduction

In Japan, when the risk of a disaster increases, the mayor of the municipality issues evacuation advisories to areas corresponding to the type of the disaster based on the Disaster Countermeasures Basic Act¹⁾. Such advisories do not refer to mandatory evacuations, as they are based on the idea that individuals, rather than municipalities, bear the ultimate responsibility for protecting their lives. Thus, it is necessary for residents to previously confirm and appropriately recognize the necessity of evacuation from their homes, as well as the possible danger of moving upstairs¹⁾. However, a previous study examining actions actually adopted for evacuation revealed that some community residents did not or failed to evacuate even when evaluation instructions were

issued²⁾. This suggests that residents' attitudes toward evacuation, such as wishing to stay at home or access evacuation sites, influence the actions they actually adopt when evacuation advisories or instructions are issued.

In a previous study examining 238 households' attitudes toward evacuation, 81.1% and 10.9% answered that they would evacuate and not evacuate unless an evacuation advisory/instruction was issued, respectively, in the event of an earthquake³⁾. In another study involving 2,977 households in a coastal area, 7.7% answered that they would not follow evacuation orders⁴⁾. It is important for elderly residents, who tend to be particularly vulnerable to disasters, to sufficiently prepare themselves for evacuation in advance. In a previous study involving 56 elderly households, 91% answered that they would not

actively evacuate even if evacuation was mandatory⁵⁾. Furthermore, approximately 40% of 130 households engaged in home care wished to stay at home during a disaster for reasons, such as to avoid inconvenience at evacuation sites⁶⁾.

The sex, age, and income have been reported to influence community residents' attitudes toward evacuation⁴⁾. In our previous study, 62 elderly community residents leading an independent life were examined to clarify their attitudes toward evaluation when it was instructed, and approximately 70% and 30% wished to access evacuation sites and stay at home, respectively, and the method to collect disaster-related information was regarded as a factor associated with such a difference in attitudes toward evacuation⁷⁾. On the other hand, when examining 39 households with an elderly member/members using outpatient care services, nearly half wished to stay at home if their homes were partially affected by a disaster⁸⁾. Such an attitude was associated with their impressions of living in their own homes or at evacuation sites, in addition to their recognition of disasters possibly occurring in the community⁸⁾.

In line with this, there may be differences in attitudes toward evacuation and factors influencing them between elderly community residents leading an independent life and those requiring care daily. However, these items have not yet been examined, focusing on care dependency. The present study examined elderly community residents, who were able to choose either evacuation or staying at home based on their own intentions, to clarify their attitudes toward evacuation when evaluation instructions were issued, as well as factors influencing them, focusing on care dependency.

Definition of Terms

Disasters: natural disasters, such as earthquakes, tsunamis, typhoons, floods, landslides, and heavy snow.

Evaluation instructions: issued by the mayor of municipality to lead residents to evacuate, as necessary, when a disaster has occurred or may occur; if evacuation may lead to dangerous situations, instructions to ensure safety by staying or evacuating indoors are given (Disaster Countermeasures Basic Act Article 60)⁹⁾.

Evacuation: an act to protect one's safety from disasters

Attitudes toward evacuation: manifested as the wish to access evacuation sites or stay at home when evaluation

instructions are issued by the mayor of municipality to community residents.

Methods

1. Subjects

To examine elderly community residents, who are able to choose either evacuation or staying at home based on their own intentions when evaluation instructions are issued, subjects were limited to A-City residents aged 60 or over, who were independent in outdoor mobility, and selected from participants of health promotion programs, community-based comprehensive support center/community salon users, or those using one of the 3 outpatient care facilities located in the city. A-City has never suffered damage due to earthquakes, tsunamis, or volcano eruptions, but it comprises areas affected by river flooding¹⁰⁾.

2. Study method

An interview was conducted with each subject using a questionnaire sheet containing semi-structured questions.

3. Study items

1) Subjects' attributes

The age, sex, duration of residency, and family structure were examined.

2) Health status

The subjects were asked whether their normal physical condition was 'Favorable' or 'Poor'. The use of oral medications and Long-term Care Insurance services (care services) by them was also clarified.

3) Disaster experience

The subjects were asked whether or not they had disaster experience.

4) Attitudes toward evacuation

Using the Bousaiobogaki sheet [Saigainokorogamae]¹¹⁾, the researcher explained to the subjects that evacuation-related information provided by municipalities is classified into: information to prepare for evacuation, evacuation advisories, and evaluation instructions, in addition to clarifying their alert levels and contents. Subsequently, the subjects were asked whether they would wish to 'Access evacuation sites' or 'Stay at home' when such instructions were issued.

5) Awareness of disaster preparedness

Questions regarding the community's disaster risks were asked with 2 answer options: 'Recognize' or 'Do not recognize'

6) Actions for disaster preparedness

Questions regarding oral medications/medication notebooks were asked with 2 answer options: 'Prepared' or 'Not Prepared'. Other questions and answer options were as follows: evacuation sites/routes: 'Actually accessed and confirmed' or 'Not confirmed'; emergency food supply (including drinking water) : 'Stored' or 'Not stored'; emergency kits: 'Prepared' or 'Not prepared'; methods to contact other family members to confirm their safety during a disaster: 'Considered' or 'Not considered'; support from other family members and neighbors during a disaster: 'Available' or 'Not available'; and participation in disaster drills held by the community: 'Participated' or 'Not participated'.

4. Study period

The study was conducted within the period between September 2014 and October 2015.

5. Analysis

To analyze factors influencing the subjects' attitudes toward evacuation, the associations of such attitudes with their attributes, health status, disaster experience, awareness of disaster preparedness, and actions for it were examined using the chi-square test, Fisher's exact test, and t-test. Subsequently, a binomial logistic regression was performed using a stepwise method, with attitudes as dependent variables. As independent variables, variables showing a significant correlation on univariate analysis and those possibly influencing attitudes toward evacuation were entered after confirming their multicollinearity ($VIF \geq 10$). The chi-square test, Fisher's exact test, and t-test were also used to compare the associations of attitudes toward evacuation with attributes, the health status, disaster experience, awareness of disaster preparedness, and actions for it between care service users and non-users. Furthermore, a binomial logistic regression was performed using a stepwise method, with attitudes as dependent variables, and variables showing a significant correlation on univariate analysis and those possibly influencing the recognition of evacuation as independent variables after confirming their multicollinearity ($VIF \geq 10$). For these analyses, SPSS ver. 23 was used, with the significance level set at 5%.

6. Ethical considerations

The study was conducted with the approval of the Medical Ethics Committee of Kanazawa University (approval numbers: 536 on August 11, 2014; and 608

on July 8, 2015). The subjects and heads of the study facilities were provided with oral and written explanations of the study objective, methods, and ethical considerations to obtain the former's written consent to participate in the study.

Results

Eighty-five residents, who met the inclusion criteria, and consented to participate, were studied.

1. Subjects' attributes (Table 1)

The 85 subjects' mean age was 77.7. There were 69 (81.2%) females and 29 (34.1%) living alone. The mean duration of residency in the community was 44.2 years.

2. Health status

The physical conditions of 71 (83.5%) were favorable, and oral medications were used by 65 (76.5%). The numbers of care service users and non-users were 24 (28.2%) and 61 (71.8%), respectively.

3. Disaster experience

Disaster experience was present in 10 (11.8%).

4. Awareness of and actions for disaster preparedness (Table 2)

Responses to each question were as follows: the community's disaster risks: 'Recognize': 67 (78.8%); oral medications/medication notebooks: 'Prepared': 43 (50.6%); evacuation sites/routes: 'Confirmed': 62 (72.9%); emergency food supply: 'Stored': 54 (63.5%); emergency kits: 'Prepared': 43 (50.6%); methods to contact other family members to confirm their safety during a disaster: 'Considered': 59 (69.4%); support from other family members during a disaster: 'Available': 70 (82.4%); support from neighbors during a disaster: 'Available': 63 (74.1%); and disaster drills held by the community: 'Participated': 55 (64.7%).

5. Attitudes toward evacuation and factors influencing them

Among the subjects, 30 (35.3%) and 55 (64.7%) wished to stay at home (home group) and access evacuation sites (evacuation group), respectively, when evaluation instructions were issued.

These attitudes toward evacuation showed a significant correlation with care service use and recognition of the community's disaster risks. The proportions of care service users and those who did not recognize the community's disaster risks were markedly higher in the home group (Table 1, $p=0.022$ and Table 2, $p=0.043$, respectively).

Table 1. Comparison of Attributes, the Health Status, and Disaster Experience between the Home and Evacuation Groups

Characteristics		Total (n=85)	Attitudes toward evacuation		p
			Home (n=30)	Evacuation sites (n=55)	
			Mean±SD		
Attributes					
Age	(years)	77.7 ± 9.3	79.5 ± 9.1	76.8 ± 9.4	0.196 ¹⁾
Residency	(years)	44.2±18.3	41.9 ± 19.1	45.5 ± 18.0	0.393 ¹⁾
Sex	Male	16 (18.8)	7 (23.3)	9 (16.4)	0.432 ²⁾
	Female	69 (81.2)	23 (76.7)	46 (83.6)	
Family structure	Living alone	29 (34.1)	10 (33.3)	19 (34.5)	0.910 ²⁾
	Others	56 (65.9)	20 (66.7)	36 (65.5)	
Health status					
Physical condition	Favorable	71 (83.5)	25 (83.3)	46 (83.6)	1.000 ³⁾
	Poor	14 (16.5)	5 (16.7)	9 (16.4)	
Oral medication use	Yes	65 (76.5)	25 (83.3)	40 (72.7)	0.271 ²⁾
	No	20 (23.5)	5 (16.7)	15 (27.3)	
Care service use	Yes	24 (28.2)	13 (43.3)	11 (20.0)	0.022 ^{2)*}
	No	61 (71.8)	17 (56.7)	44 (80.0)	
Disaster experience	Yes	10 (11.8)	3 (10.0)	7 (12.7)	1.000 ³⁾
	No	75 (88.2)	27 (90.0)	48 (87.3)	

¹⁾ t-test²⁾ χ^2 -test³⁾ Fisher's exact test* $p < 0.05$

Table 2. Comparison of the Level of Awareness of and Actions for Disaster Preparedness between the Home and Evacuation Groups

Characteristics		Total (n=85)	Attitudes toward evacuation		χ^2 -test p
			Home (n=30)	Evacuation sites (n=55)	
			n (%)		
Awareness of disaster preparedness					
Community's disaster risks	Recognize	67 (78.8)	20 (66.7)	47 (85.5)	0.043 *
	Do not	18 (21.2)	10 (33.3)	8 (14.5)	
Actions for disaster preparedness					
Oral medications/medication notebooks	Prepared	43 (50.6)	16 (53.3)	27 (49.1)	0.709
	Not prepared	42 (49.4)	14 (46.7)	28 (50.9)	
Evacuation sites/routes	Confirmed	62 (72.9)	19 (63.3)	43 (78.2)	0.141
	Not confirmed	23 (27.1)	11 (36.7)	12 (21.8)	
Emergency food supply	Stored	54 (63.5)	15 (50.0)	39 (70.9)	0.056
	Not stored	31 (36.5)	15 (50.0)	16 (29.1)	
Emergency kits	Prepared	43 (50.6)	13 (43.3)	30 (54.5)	0.323
	Not prepared	42 (49.4)	17 (56.7)	25 (45.5)	
Methods to contact other family members	Considered	59 (69.4)	17 (56.7)	42 (76.4)	0.060
	Not considered	26 (30.6)	13 (43.3)	13 (23.6)	
Support from other family members	Available	70 (82.4)	23 (76.7)	47 (85.5)	0.310
	Not available	15 (17.6)	7 (23.3)	8 (14.5)	
Support from neighbors	Available	63 (74.1)	21 (70.0)	42 (76.4)	0.522
	Not available	22 (25.9)	9 (30.0)	13 (23.6)	
Participation in disaster drills held by the community	Participated	55 (64.7)	16 (53.3)	39 (70.9)	0.105
	Not	30 (35.3)	14 (46.7)	16 (29.1)	

* $p < 0.05$

A total of 5 variables were entered in the binomial logistic regression model using a stepwise method with attitudes toward evacuation as dependent variables: care service use and recognition of the community's disaster risks showing a significant correlation on univariate analysis as independent variables; and the age, sex, and duration of residency as covariates. Regarding the first 2 variables as factors markedly influencing attitudes toward evacuation, the odds ratio of the probability of wishing to stay at home was 3.278 times higher among care service users compared with non-users (B=1.187, p=0.021, odds

ratio: 3.278, confidence interval: 1.192-9.019; Table 3) , and 3.197 times higher among those who did not recognize the community's disaster risks compared with those who did (B=1.162, p=0.040, odds ratio: 3.197, confidence interval: 1.053-9.703; Table 3) .

6. Comparison of the study items between care service users and non-users

Care service use showed a significant correlation with the age, oral medication use, disaster experience, and participation in disaster drills held by the community. Care service users were older (Table 4, p=0.001) , showing

Table 3. A Binomial Logistic Regression Model with Attitudes toward Evacuation as Dependent Variables:

1: Home (30) : and 0: Evacuation sites (55) n=85

Independent variable	Comparative/standard category	B	Odds Ratio	95% confidence interval for the odds ratio		p
Care service use	1: Yes/0: No	1.187	3.278	1.192	9.019	0.021 *
Community's disaster risks	1: Do not recognize/0: Recognize	1.162	3.197	1.053	9.703	0.040 *
Constant		-1.242	0.289			0.000

Contribution ratio (R² value): 0.143 Correct answer rate: 70.6 Hosmer-Lemeshow test: $\chi^2=2.636$ (p=0.268)(df=2)

* p < 0.05

Other independent variables

Age (years)

Sex (1:Female, 0:Male)

Residency (years)

Table 4. Comparison of Attributes, the Health Status, and Disaster Experience between Care Service Users and Non-users n=85

Characteristics		Care service use		p
		Yes	No	
		(n=24)	(n=61)	
Attributes				
Age	(years)	84.9 ± 6.3	74.8 ± 8.7	p < 0.001 ¹⁾ **
Residency	(years)	40.0 ± 24.1	45.9 ± 15.4	0.277 ¹⁾
Sex	Male	6 (25.0)	10 (16.4)	0.370 ²⁾
	Female	18 (75.0)	51 (83.6)	
Family structure	Living alone	9 (37.5)	20 (32.8)	0.680 ³⁾
	Others	15 (62.5)	41 (67.2)	
Health status				
Physical condition	Favorable	18 (75.0)	53 (86.9)	0.205 ²⁾
	Poor	6 (25.0)	8 (13.1)	
Oral medication use	Yes	24 (100)	41 (67.2)	0.001 ³⁾ **
	No	0 (0)	20 (32.8)	
Disaster experience	Yes	6 (25.0)	4 (6.6)	0.027 ²⁾ *
	No	18 (75.0)	57 (93.4)	

¹⁾ t-test

²⁾ Fisher's exact test

³⁾ χ^2 -test

* p < 0.05

** p < 0.01

higher proportions of those storing oral medications (Table 4, $p=0.001$), those without disaster experience (Table 4, $p=0.027$), and those not participating in disaster drills (Table 5, $p=0.022$), compared with non-users.

The factors influencing attitudes toward evacuation were also compared between care service users and non-users. For the former, binomial logistic regression analysis was performed using a stepwise method with the community's disaster risks showing a significant correlation on univariate analysis as an independent variable, and the age and duration of residency as

covariances; however, this model was not established. For the latter, as no variable showed a significant correlation on univariate analysis, a binomial logistic regression analysis was performed using a stepwise method with variables showing $p=0.1$ or lower as an independent variable, and the age and duration of residency as covariances. Although the model, into which the confirmation of evacuation sites/routes and availability of support from other family members were incorporated, was established, marked influences on attitudes toward evacuation were not observed (Table 6).

Table 5. Comparison of the Level of Awareness of and Actions for Disaster Preparedness between Care Service Users and Non-users $n=85$ n (%)

Characteristics		Care service use		p
		Yes (n=24)	No (n=61)	
Awareness of disaster preparedness				
Community's disaster risks	Recognize	19 (79.2)	48 (78.7)	0.961 ¹⁾
	Do not recognize	5 (20.8)	13 (21.3)	
Actions for disaster preparedness				
Oral medications/medication notebooks	Prepared	16 (66.7)	27 (44.3)	0.063 ¹⁾
	Not prepared	8 (33.3)	34 (55.7)	
Evacuation sites/routes	Confirmed	19 (79.2)	43 (70.5)	0.418 ¹⁾
	Not confirmed	5 (20.8)	18 (29.5)	
Emergency food supply	Stored	13 (54.2)	41 (67.2)	0.261 ¹⁾
	Not stored	11 (45.8)	20 (32.8)	
Emergency kits	Prepared	9 (37.5)	34 (55.7)	0.130 ¹⁾
	Not prepared	15 (62.5)	27 (44.3)	
Methods to contact other family members	Considered	14 (58.3)	45 (73.8)	0.164 ¹⁾
	Not considered	10 (41.7)	16 (26.2)	
Support from other family members	Available	19 (79.2)	51 (83.6)	0.753 ²⁾
	Not available	5 (20.8)	10 (16.4)	
Support from neighbors	Available	17 (70.8)	46 (75.4)	0.665 ¹⁾
	Not available	7 (29.2)	15 (24.6)	
Participation in disaster drills held by the community	Participated	11 (45.8)	44 (72.1)	0.022 ^{1)*}
	Not participated	13 (54.2)	17 (27.9)	

¹⁾ χ^2 -test

²⁾Fisher's exact test

* $p < 0.05$

** $p < 0.01$

Table 6. A Binomial Logistic Regression Model with Non-users' Attitudes toward Evacuation as Dependent Variables: 1: Home (17) : and 0: Evacuation sites (44) $n=61$

Independent variable	Comparative/standard category	B	Odds Ratio	95% confidence interval for the odds ratio		p
Evacuation sites/routes	1: Not confirmed/0: Confirmed	1.054	2.869	0.854	9.645	0.088
Support from other family members	1: Not available/0: Available	1.107	3.027	0.716	12.802	0.132
Constant		-1.524	0.218			0.000

Contribution ratio (R^2 value): 0.126 Correct answer rate: 78.7 Hosmer-Lemeshow test: $\chi^2=4.378$ ($p=0.112$)($df=2$)

Other independent variables

Age (years)

Sex (1: Female, 0: Male)

Residency (years)

Discussion

1. Elderly community residents' disaster preparedness levels and attitudes toward evacuation

As disasters preparedness measures, emergency food supply was stored in 63.5%, emergency kits were prepared in 50.6%, oral medications/medication notebooks were prepared in 50.6%, and methods to contact other family members during a disaster were considered in 69.4% of all cases. In a previous study conducted in the United States, involving 1,304 individuals aged 50 or over¹²⁾, the proportion of those storing a 3-day supply of food and drinking water as a disaster preparedness measure was 67.7%. Although it is not appropriate to simply compare this with the results of the present study, as the community's vulnerability to hazards is different, the proportion of those storing such supply was slightly lower in the latter, possibly due to an older age.

Evacuation sites/routes were confirmed in 72.9%. In a previous study examining 21 community residents with spinal injury, evacuation sites were actually accessed and confirmed in 55.0%¹³⁾. The higher rate observed in the present study may have been associated with the subjects' independence in outdoor mobility, although they were using care services.

Independently of care dependency, 35.3% and 64.7% of the subjects wished to stay at home and access evacuation sites, respectively, when evacuation instructions were issued. As the attitudes toward evacuation of elderly individuals, who are independent in outdoor mobility, have been unclear, this may be an important finding. In a previous study on such attitudes⁸⁾, 46.2% of 39 households using outpatient care services wished to stay at home, while 53.8% of them wished to access evacuation sites if their homes were partially affected by a disaster. When focusing on the latter, the value was higher in the present study, and this may also be explained by the subjects' higher level of independence in outdoor mobility, indicating a higher ability to adapt to life at an evacuation site. On the other hand, 35% of them wished to stay at home even when evacuation instructions were issued. The target city comprises areas affected by river flooding¹⁰⁾, but it has never suffered damage due to earthquakes, tsunamis, or volcano eruptions, resulting in a low proportion of residents with disaster experience, at 11.8%. In this respect, it is likely that the subjects were unable to predict life-threatening risks, or adopt appropriate

actions to protect themselves even when evacuation was instructed.

2. Factors influencing attitudes toward evacuation

Care service use and recognition of the community's disaster risks were shown to influence attitudes toward evacuation. The odds ratio of the probability of wishing to stay at home was 3.278 times higher among care service users than non-users. As the former require care for part of their daily activities, their wish to stay at home may have reflected their consideration of the difficulty in obtaining such care at evacuation sites. This simultaneously indicates the possibility of such individuals making inaccurate judgment on evacuation sites.

Similarly, the odds ratio of the probability of wishing to stay at home was 3.197 times higher among those who did not recognize the community's disaster risks than those who did. Risk perception has been reported to be key to understand the evacuation-related decision-making process¹⁴⁾. Enhancing such perception, recognition of the community's disaster risks may play an important role in the process of deciding whether or not to evacuate. In order to appropriately understand the community's disaster risks, it may be necessary to actively use information provided by municipalities through their websites, such as hazard maps, while sharing past disaster experiences. Furthermore, as opportunities to learn about dangerous locations within evacuation routes, identified by volunteer groups for community-based disaster preparedness, are also offered, residents should take them to enhance their understanding of the community's disaster risks.

3. Differences in attitudes toward evacuation between care service users and non-users

The rate of oral medication use was higher among care service users than non-users, possibly representing the characteristics of individuals using such services. The proportion of those with disaster experience was also higher among the former, and this point should be examined in future studies involving an increased number of subjects. A high proportion of care service users had not participated in disaster drills held by the community, highlighting the necessity of increasing opportunities for them to participate in such events, as it is important to promote disaster preparedness in the community through collaboration with residents.

Although a model was established with the confirmation

of evacuation sites/routes and availability of support from other family members incorporated as factors influencing non-users' attitudes toward evacuation, it did not reveal marked influences on such attitudes. On the other hand, considering that this model adopted independent variables different from those used for the binomial logistic regression analysis of all subjects (n=85), including non-users, it was suggested that variables influencing non-users' attitudes toward evacuation may have been different. This should also be examined in future studies involving an increased number of subjects.

Factors influencing care service users' attitudes toward evacuation were not clarified, possibly due to the insufficient number of subjects. Therefore, it may be necessary to perform analysis involving an increased number of subjects in the future.

Study Limitations and Challenges

The subjects of this study were limited to residents of a community and care facility users. Therefore, the results should be examined involving an increased number of subjects.

Conclusion

This study examined 85 elderly community residents, who were able to choose either evacuation or staying at home based on their own intentions, to clarify their attitudes toward evacuation when evaluation instructions were issued, as well as factors influencing them, focusing on care dependency. The mean age was 77.7, and females and care service users accounted for 81%

and 28%, respectively. The results are summarized as follows: the community's disaster risks: 'Recognize': 79%; oral medications/medication notebooks: 'Prepared': 51%; evacuation sites/routes: 'Confirmed': 73%; and methods to contact other family members during a disaster: 'Considered': 69%. Regarding attitudes toward evacuation when evaluation instructions were issued, 35% and 65% wished to stay at home and access evacuation sites, respectively. The tendency toward staying at home was more marked among care service users and those who did not recognize the community's disaster risks. Care service users also showed a lower rate of participation in disaster drills held by the community. Based on these results, care dependency may be a factor influencing attitudes toward evacuation, although the details of such an influence remained unclear.

Acknowledgment

The authors would like to express their sincere gratitude to all the people who cooperated with this questionnaire survey, as well as those who provided great support for it.

This was part of graduate studies by the second groups (the 16 and 17 classes) of the Department of Nursing, School of Health Sciences, College of Medical, Pharmaceutical, and Health Sciences, Kanazawa University. It was also part of a research project supported by Grants-in-Aid for Scientific Research (C) FY2013-2016 (grant number: 25463618) and (B) FY 2012-2015 (24390504).

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地域在住の高齢者において介護の有無が避難行動の意向に及ぼす影響

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要 旨

本研究は、自身の意思で避難所または自宅待機を選択して避難することが可能な地域在住の高齢者において、災害時の避難指示に対する避難行動の意向（自宅に居たい、避難所に移動したい）とその影響要因を明らかにして、介護の有無がその意向に及ぼす影響について分析することを目的とした。介護保険サービスを利用している 24 人と利用していない 61 人の計 85 人（平均年齢：77.7 歳、女性：81%）を対象として、避難行動の意向、防災意識、防災行動に関して聞き取りによる質問紙調査を実施した。居住地域における災害の危険性を知っている者は 79%、内服薬・お薬手帳を常備している者は 51%、避難所・避難経路を確認したことがある者は 73%、発災時の家族との連絡方法を考えている者は 69% だった。避難指示が発令した際、自宅に居たいという意向の者は 35%、避難所に移動したいという意向の者は 65% であった。介護保険サービスの利用者の方が利用していない者より、自宅に居たいという意向に影響していた。居住地域における災害の危険性を知らない者の方が知っている者よりも自宅に居たいという意向に影響していた。また、介護保険サービスの利用者の方が利用していない者よりも、地域の防災訓練への参加者の割合が低かった。以上のことから、介護の有無が避難行動の意向の影響要因の一つであることが示されたが、それぞれの意向に影響する要因は明らかにならなかった。