

Factors associated with overall satisfaction level of older people regarding medical-health and long-term care service within residential areas

Seiichi YOKOO^{1,2}, Sumihisa HONDA¹, Ryoichiro IWANAGA², GORO TANAKA²

¹ Department of Public Health Nursing, Nagasaki University Graduate School of Biomedical Sciences, Japan

² Department of Psychiatric Rehabilitation Science, Unit of Rehabilitation Sciences, Nagasaki University Graduate School of Biomedical Sciences, Japan

Purpose: This study examined the factors related to the overall satisfaction level of older people treated at home, regarding medical and welfare services in their area of residence.

Method: The survey targeted older people who reported using the services at a day rehabilitation center in Nagasaki Prefecture. The survey investigated the individuals' backgrounds of, including their age, sex, period of long-term care insurance use, living environment, details and anxiety. It also indicated, through a self-rate system, the extent of information sharing among medical personnel and long-term care workers. The Japanese version of the Client Satisfaction Questionnaire 8-item version (CSQ-8J) was used to measure their level of satisfaction with medical and long-term care services.

Results: Data from 205 people were analyzed, which included 73 men (35.6%) and 132 women (64.4%). The mean age was 81.2 ± 7.6(mean±standard deviation) years, the mean period of long-term care insurance was 38.1 ± 38.2 months, and the mean CSQ-8J score was 24.8 ± 5.7 points. The results of the multiple regression analysis (backward stepwise method) showed that only the item "information on illness and treatment is shared among medical personnel and long-term care workers" was significantly associated with the CSQ-8J score ($p = 0.007$). The results suggest the need to determine the details of the information regarding illness and treatment that should be shared among concerned parties.

ACTA MEDICA NAGASAKIENSIA 64: 45–51, 2020

Key words: satisfaction, older people, medical and long-term care service

Introduction

The aging rate in Japan is 28.1% as of 2019, and it is expected to continue to increase¹. When compared with the aging rate in other high-income countries, Japan's rate peaked in 2005 and is expected to continue to maintain this high level in the future^{2,3}. With the progressively aging population in Japan, the government proclaimed that the medical system would be switching from the conventional "Hospital-based end-of life" care to "completely community-based" medical care⁴. Consequently, the length of hospital stay is decreasing year by year, whereas the number of older people receiving in-home medical long-term care is increasing. The Japanese

government has enhanced a comprehensive networking system between medical-health care provision and long-term care provision for older people within residential areas since 2012. This ensures that older people with both medical and nursing care needs are supported in their local area of residence⁵. An integration policy of high-quality medical-health care provision systems including advanced acute and community-based integrated care systems have been introduced to guarantee medical-health care and long-term care for older people within residential areas in each region prefecture. Medical-health and long-term care systems have been reformed into an integrated community care system to secure the provision of in-home end-of-life care, so that care can be received in

Address correspondence: Seiichi Yokoo, Department of Public Health Nursing, Nagasaki University Graduate School of Biomedical Sciences, 1-7-1 Sakamoto, Nagasaki 852-8520, Japan

Tel and Fax: +81-95-819-7982, E-mail: s-yokoo@nagasaki-u.ac.jp

Received June 17, 2020; Accepted August 31, 2020

familiar residential surroundings.

An assessment of the care for older peoples has highlighted the importance of caregiver's understanding⁶ regarding of factors that affect the perception of quality of care from the perspective of older people. It is crucial to clarify the recognition of and satisfaction with medical welfare services by older people themselves to improve and develop the quality of medical-health and long-term care services for this group who are treated at home in Japan.

Previous studies have evaluated the level of satisfaction regarding quality of based on individual characteristics of the care receivers Age-based verification indicates that older people are highly satisfied with the outpatient care they receive⁷. Moreover, older patients, especially older people aged 75 to 84 years, are more satisfied with inpatient care than other age groups⁸. Similarly, most of the previous studies that have addressed care satisfaction by age have demonstrated that older people showed higher satisfaction than younger people in general. In terms of gender differences, 139 literature review reports have shown that gender does not affect overall satisfaction⁹. An interracial study found that White people's satisfaction scores were greater for Hispanic or Latino patients and less for Asian people, while there was no significant difference for Black or African American people¹⁰. Based on participants' educational background, it was found that individuals with a high level of education are less satisfied with the services they receive in outpatient studies¹¹. A study of patients enrolled in hospital databases also found that support for decision-making processes, as well as patient consent, was associated with overall patient satisfaction¹². A study on the degree of satisfaction for older people in one region found that the group that underwent an intervention in health education tended to be more satisfied with the health management program than the group that did not

receive the intervention¹³.

There are many studies that have focused on the degree of satisfaction with one particular type of welfare service¹⁴⁻¹⁷ or medical service^{18,19} provided at home. Studies have also examined the overall level of satisfaction with medical-health and long-term care services, including reports on studies that evaluated the level of satisfaction of older people who received medical-health and long-term care services using simple tabulation²⁰ and qualitative studies²¹. However, research remains limited in terms of a comprehensive evaluation of medical and welfare services provided in older people's areas of residence. Therefore, the present study evaluated the factors related to the overall level of satisfaction with the medical and welfare services provided in residential areas for older people who are treated at home.

Materials and Methods

1) Operational definitions

“Long-Term Care Insurance System”: Japan is facing the challenges of aging and nuclearization of families. Some people are forced to give up their careers to take care of their aged relatives. The long-term care insurance system, established in 2000, aims to achieve a long-term care solution that is supported by society as a whole²². If you become bedridden, demented, acquire a condition that requires constant care (condition of need for long-term care), or if you need support for your daily life such as housework and dressing, a preventive care service is particularly effective (condition of need for support)²³. This system allows you to receive nursing care services if you are in a state. Conditions regarding the need for long-term care is divided into 7 levels²⁴(Table 1).

Table 1. Condition of need for long-term care is divided into 7 levels

Long-term care level	
Persons requires support 1	Certification for long-term care is in condition to be admitted that standard time is equivalent to under 32 minutes or this more than 25 minutes
Persons requires support 2 Persons requires long-term care 1	Certification for long-term care is in condition to be admitted that standard time is equivalent to under 50 minutes or this more than 32 minutes
Persons requires long-term care 2	Certification for long-term care is in condition to be admitted that standard time is equivalent to under 70 minutes or this more than 50 minutes
Persons requires long-term care 3	Certification for long-term care is in condition to be admitted that standard time is equivalent to under 90 minutes or this more than 70 minutes
Persons requires long-term care 4	Certification for long-term care is in condition to be admitted that standard time is equivalent to under 110 minutes or this more than 90 minutes
Persons requires long-term care 5	Certification for long-term care is in condition to be admitted that standard time is equivalent to more than 110 minutes

The estimate is calculated using the reference time for long-term care certification in five fields (i.e., direct assistance, with daily life, indirect assistance with daily life, BPSD-related actions, functional training-related actions, and medical-related actions). The care level is judged from 1: Requires Support to 5: Requires Care based on the sum of that time and additional fees for dementia.

2) Survey period

The survey was conducted from April 2013 to March 2014.

3) Study participants

We surveyed older peoples who used day rehabilitation center in Nagasaki Prefecture (four facilities: two facilities in Nagasaki City, one in Nishisonogi District, and one in Isahaya City).

4) Survey tool

(1) Individual characteristics: Questionnaire included the respondent's sex, age, period of use of long-term care insurance service (period of use of the care insurance system service mainly for older peoples aged 65 years and above enforced in 2000: period of use of public social insurance services), certification for long-term care (certified to be in a condition requiring long-term care according to the physical and mental conditions stipulated in the long-term care insurance system. Certification is classified into seven categories equated to Requires Support 1 or 2 through to Requires long-term care 1 to 5), whether the person lives with other family members, receipt of public funding, living environment, anxiety about social changes, anxiety about one's own health, and anxiety about a spouse's health, and the following items: "Information on my own illness and treatment is shared among medical personnel and long-term care workers," "Information on my own illness and treatment is shared among long-term care workers," "Information on my own medical care intentions is shared among medical personnel and long-term care workers," and "Information on my own medical care intentions is shared among long-term care workers."

(2) Satisfaction Scale: The Japanese Client Satisfaction Questionnaire 8-item version (CSQ-8J). The CSQ-8J is the Japanese version of the eight-item version of the Client Satisfaction Questionnaire developed by Attkisson²⁵, the reliability and validity of which was verified by Tatemori²⁶. Each item consists of a four-point Likert scale ranging from 1 (*not good*), 2 (*somewhat good*), 3 (*good*), and 4 (*very good*). The total CSQ-8J score was calculated by adding the scores for each item. The total CSQ-8J score takes an integer value between 8 and 32 points, the higher the score, the higher the level of satisfaction²³. The CSQ is available in several version : the original 31-item version, and 8-item versions. The 8-item version used in this study is relatively easy to use and highly reliable²⁷.

5) Survey method

Prior approval was obtained from the managers of the four-day rehabilitation center in Nagasaki Prefecture regarding

survey cooperation.

The researchers directly visited the day rehabilitation center that had consented to participate in the study. They explained the purpose, method, and ethical considerations of the study both verbally and in writing, and then obtained written consent from the managers. The researchers also explained the purpose, method, and ethical considerations of the research to the respondents both verbally and in writing. Consent to participate in the study was assumed once the survey form was placed in the collection box. We excluded individuals diagnosed with dementia by their attending physician, or those for whom cooperation in the survey was deemed to be difficult by the person in charge of the facility owing to the individual's poor physical or mental state at the time of the survey. The survey was a self-administered anonymous questionnaire, except in the case where the participants asked the researcher to write the answers on the survey form on their behalf.

6) Statistical methods

The mean CSQ-8J scores were analyzed using a t-test for each of the above individual characteristics. Multiple regression analysis (backward stepwise method) was performed using the CSQ-8J score as the dependent variable regarding the individual characteristics mentioned under the 'survey tools' section (sex, age, period of use of long-term care insurance service, etc.).

Long-term care certification was divided into "support required" ("support required 1 and 2") and "long-term care required" (long-term care required "1-5"), and then set as binarized data. Age and the long-term care insurance service usage period, as continuous quantities, were analyzed as the following categories. Age was divided (≥ 75 years, < 65 years), whereas long-term care insurance usage periods were divided by the median value (≥ 26 months, < 26 months). J SPSS 25.0 for Windows was used for statistical analyses; the statistical significance level was set as $< 5\%$.

7) Ethical considerations

This study was approved by the Nagasaki University Graduate School of Biomedical Sciences Ethics Review Board (approval number: 150514412).

Results

Requested survey cooperation was sent to 230 people. Data from 205 of the 220 respondents were included in the analysis set; questionnaires with incomplete responses were excluded (valid response rate, 93.2%).

1) Basic characteristics of the participants (Table 2)

Of the 205 participants, 73 were men (35.6%) and 132 were women (64.4%). The mean age was 81.2 ± 7.6 (mean \pm standard deviation). The mean long-term care insurance usage period was 38.1 ± 38.2 months. The mean CSQ-8J score was 24.8 ± 5.7 points, and Cronbach's α coefficient was 0.877. Regarding the question on the receipt of public funds, 106 participants (51.7%) responded "Yes," whereas 99 participants (48.3%) responded "No." Of the four items of information sharing, "I think so" (67.3-71.0%) was the most

common response. Of the three items of anxiety, the most common response was "anxious" (33.2-59.5%).

2) Differences in mean CSQ-8J scores based on individual characteristics (Table 3)

Items that showed a significant difference in the mean CSQ-8J scores were as follows. Receipt of public funds had a significantly higher number of "Yes" than "No" responses ($p=0.020$). The item "Information on illness and treatment is shared among medical personnel and long-term care workers"

Table 2. Characteristics of the participants

Variables		n	%
Sex	Male	73	35.6
	Female	132	64.4
Age (years) ^a	65–75	41	20.0
	75 \geq	164	80.0
Period of long-term care insurance use (months) ^b	26 \geq	101	49.3
	26 <	100	48.8
Level of satisfaction with medical long-term care service (CSQ-8J) ^c	24 \geq	119	58.0
	24 <	86	42.0
Level of long-term care requirement	Persons requires support 1	19	9.3
	Persons requires support 2	36	17.6
	Persons requires long-term care 1	81	39.5
	Persons requires long-term care 2	47	22.9
	Persons requires long-term care 3	15	7.3
	Persons requires long-term care 4	5	2.4
Family members residing in the same house	Yes	163	79.5
	No	42	20.5
Receiving public funds	Yes	106	51.7
	No	99	48.3
Environment around the home	Sloping ground	93	45.4
	Flat ground	112	54.6
Vehicle parking alongside the home	Possible	158	77.1
	Impossible	47	22.9
Housing style	Detached house	169	82.4
	Apartment building	36	17.6
Information on illness and treatment is shared among medical personnel and long-term care workers	I think so (yes)	145	70.7
	I don't think so (no)	60	29.3
Information on illness and treatment is shared among long-term care workers	I think so (yes)	149	72.7
	I don't think so (no)	56	27.3
Information on medical care intentions is shared among medical personnel and long-term care workers	I think so (yes)	138	67.3
	I don't think so (no)	67	32.7
Information on medical care intentions is shared among long-term care workers	I think so (yes)	145	70.7
	I don't think so (no)	60	29.3
Anxious about their future life	Yes	112	54.6
	No	93	45.4
Anxious about their own health	Yes	122	59.5
	No	83	40.5
Anxious about their spouse's health	Yes	68	33.2
	No	31	15.1
	No spouse	106	51.7

^a Age: mean \pm standard deviation, minimum–maximum, median: 81.2 ± 7.6 , 65–97, 83

^b Period of long-term care insurance use: mean \pm standard deviation, minimum–maximum, median: 38.1 ± 38.2 , 1–194, 26

^c CSQ-8J: mean \pm standard deviation, minimum–maximum, median: 24.8 ± 5.7 , 11–41, 24

Table 3. Differences in CSQ-8J means values based on characteristics of the participants

Variables		Mean (SD) ^a	P value ^b
Sex	Male	24.1 ± 6.1	0.211
	Female	25.2 ± 5.5	
Age (years)	65–75	24.1 ± 5.8	0.367
	75 ≥	25.0 ± 5.7	
Period of long-term care insurance use (months)	26 ≥	25.1 ± 5.6	0.506
	26 <	24.5 ± 5.9	
Level of long-term care requirement	Persons requires support	25.2 ± 4.9	0.504
	Persons requires long-term care	24.6 ± 6.0	
Family members residing in the same house	Yes	25.1 ± 5.8	0.170
	No	23.7 ± 5.4	
Receiving public funds	Yes	25.7 ± 5.9	0.020
	No	23.8 ± 5.3	
Environment around the home	Sloping ground	25.1 ± 5.0	0.556
	Flat ground	24.6 ± 6.2	
Vehicle parking alongside the home	Possible	24.8 ± 5.8	0.945
	Impossible	24.7 ± 5.4	
Housing style	Detached house	24.8 ± 5.6	0.914
	Apartment building	24.9 ± 6.4	
Information on illness and treatment is shared among medical personnel and long-term care workers	I think so (yes)	25.7 ± 5.7	<0.001
	I don't think so (no)	22.6 ± 5.2	
Information on illness and treatment is shared among long-term care workers	I think so (yes)	25.4 ± 5.7	0.010
	I don't think so (no)	23.1 ± 5.5	
Information on medical care intentions is shared among medical personnel and long-term care workers	I think so (yes)	25.7 ± 5.7	<0.001
	I don't think so (no)	22.9 ± 5.2	
Information on medical care intentions is shared among long-term care workers	I think so (yes)	25.2 ± 6.0	0.109
	I don't think so (no)	23.8 ± 5.0	
Anxious about their future life	Yes	24.4 ± 6.1	0.249
	No	25.3 ± 5.2	
Anxious about their own health	Yes	24.0 ± 5.7	0.015
	No	26.0 ± 5.6	
Anxious about their spouse's health	Yes	24.7 ± 5.6	0.632
	No	24.1 ± 6.3	

^a standard deviation^b t-test

had a significantly higher number of “I think so” than “I don't think so” responses ($p < 0.001$). The item “Information on illness and treatment is shared among long-term care workers” had a significantly higher number of “I think so” than “I don't think so” responses ($p = 0.010$). “Information on medical care intentions is shared among medical personnel and long-term care workers” had a significantly higher number of “I think so” than “I don't think so” responses ($p = 0.001$). “Anxious about own health” had a significantly higher number of “No”

than “Yes” responses ($p = 0.015$).

3) Factors related to the CSQ-8J score (Table 4)

Table 4 shows the results of the multiple regression analysis (backward stepwise method). The only item significantly associated with the CSQ-8J score was “Information on illness and treatment is shared among medical personnel and long-term care workers” ($p = 0.007$).

Table 4. Multiple linear regression between characteristics of the participants and CSQ-8J

Variables	β^a	SE ^b	P value ^c
Information on illness and treatment is shared among medical personnel and long-term care workers	3.58	1.31	0.007
	R ²	0.074	

^a regression coefficient.^b standard error^c regression analysis backward stepwise method

Discussion

1) Mean CSQ-8J score

The mean CSQ-8J score for older people receiving home care in this study was 24.8 ± 5.7 (mean \pm standard deviation). We compared the average CSQ-8J score in this study with the CSQ-8J average score of previous studies that were verified using CSQ-8J in older people. The CSQ-8J score after breast reduction of older people was found to be approximately 30.3 points²⁸. The mean CSQ-8J score in a randomized clinical trial on nutritional counseling in hospitalized older people was 28.1 ± 3.6 points²⁹, whereas that in a randomized trial on nursing case management of frail older people was 25.0 ± 5.2 points³⁰. Although it is not possible to make a simple comparison based only on the common point that the study participants were older people, the results of this study had low values compared those of previous studies. Studies have shown that satisfaction is low when the client's health condition is poor^{31,32}. Our participants were visiting outpatient facilities from their own homes for rehabilitation regarding their physical and mental health during recovery. Also, in this study, "Yes" in the "Anxious about their own health" item was 122 (59.5%), which was a subject with many concerns about health. In previous studies²⁸⁻³⁰, the participants had completed surgery, management, and counseling to improve their health. The low value of the results in our study may be due to the health condition of the participants. It is inferred that the health level of the subjects in this study was higher than that of the previous studies²⁸⁻³⁰, and it is possible that the difference in health level affected the difference in the average score of CSQ-8J.

2) Factors related to overall satisfaction with medical and welfare services within residential areas

Our results showed that the item "Information on illness and treatment is shared among medical personnel and long-term care workers" is a factor associated with overall satisfaction. In a previous study, Kajonius⁵ showed shared that information is significantly associated with the level of satisfaction in care, indicating the need for information exchange not only with the older people but also with all personnel involved in the care of older people. The results of our study also showed the need for information sharing, which is consistent with previous studies.

Hirasawa³³ clarified that one of the factors that influence satisfaction with care managers is an "understanding of the person's illness." The present study found similar results to Hirasawa's³⁴ study in terms of the level of satisfaction with the comprehensive services available in the individual's area

of residence, although the studies differed somewhat, as Hirasawa's investigated the degree of satisfaction with a single professional in the individual's area of residence. Japanese nurses have been educated as medical staff and recognized as medical staff. On the other hand, long-term care workers are recognized as non-medical workers because they have not been educated as medical workers. The welfare sector in Japan employs welfare workers with different educational backgrounds, including care workers with national qualifications and qualified home helpers who have completed training courses run by local governments and the private sector. Long-term care workers with different backgrounds may have a different "understanding of illness," which may have affected the degree of sharing regarding "information on illness and treatment." The Ministry of Health, Labour and Welfare (Japan) stipulates the information that should be shared between medical and nursing care personnel³⁴ as follows: "Status of the patient/user and changes in their physical condition, medication status," "Information on patient/user illness, medications used, etc.," "Details of explanations on medical conditions provided to patients and their families and how the explanations were provided," and "Expected changes in physical condition and coping methods, medical institutions that respond to sudden changes, and preferred medical treatment in case of sudden changes." Sharing this information may improve the overall level of older people's satisfaction with medical and welfare services. In the long-term care insurance service, medical personnel and long-term care workers regularly meet. In this meeting, we think that it is necessary to further share the "information on illness and treatment" of older people.

In the future, by instilling the necessity of "sharing information on illness and treatment" among medical personnel and long-term care workers, cooperation between medical care and long-term care will be promoted, and the quality of elderly care in each region of Japan will be improved.

This survey was conducted within a single prefecture and was limited to older people using the services at a day rehabilitation center. As such, it is necessary to expand the survey area and increase the sample size in future studies.

Conclusions

The mean CSQ-8J score for the older peoples receiving home care in this study was 24.8 ± 5.7 . Whether or not information on illness and treatment is shared among medical personnel and long-team care workers was a factor associated with the level of satisfaction. Older peoples who thought that

the information had been shared had a high level of satisfaction.

Acknowledgements

This study is part of a study funded by the Japan Society for the Promotion of Science Grant-in-Aid for Scientific Research (Basic Research C: Project No. 15K11792). There was no conflict of interest between the principal investigator and the study collaborators in this study.

We would like to express our heartfelt gratitude to all the older peoples who cooperated in this study, all the staff of the outpatient rehabilitation centers, and the late Professor Hideyuki Nakane for his extensive guidance.

References

- 1) Ministry of Health, Labour and Welfare. http://www8.cao.go.jp/kourei/whitepaper/w-2016/zenbun/1s1s_1.pdf Accessed: MAY25,2020
- 2) UNITED NATIONS. World Population Prospects 2017. <https://esa.un.org/unpd/wpp/Data-Query/> Accessed: MAY25,2020
- 3) Cabinet Office: International Trend of Aging. https://www8.cao.go.jp/kourei/whitepaper/w-2018/html/zenbun/s1_1_2.html Accessed: MAY25, 2020
- 4) Prime Minister of Japan and his Cabinet: National Assembly Report on Social Security Reform. <http://www.kantei.go.jp/jp/singi/kokuminkaigi/pdf/houkokusyo.pdf>, Accessed: MAY25,2020
- 5) Muranaka M. Meaning and Logic of Regional Inclusive Care *Journal of Japan Home Care Association* 17(2):5-10,2014
- 6) Kajonius PJ, Kazemi A. Structure and process quality as predictors of satisfaction with elderly care. *Health and Social Care in the Community* 24(6):699-707,2015
- 7) Rahmqvist M, Bara AC. Patient characteristics and quality dimensions related to patient satisfaction. *Int J Qual Health* 22(2):86-92,2010
- 8) Rahmqvist. Patient satisfaction in relation to age, health status and other background factors: a model for comparisons of care units. *Int Qual Health Care* 13:385-390,2001
- 9) Crow R, Gage H, Hampson S, Hart J, Kimber A, Storey L, Thomas H. The measurement of satisfaction with healthcare; implications for practice from a systematic review of the literature. *Health Technol Assess* 6(32):1-224,2002
- 10) Jordan VW, Nicholas R, Mithew K, Attkisson CC. Evaluating cultural competency and patient satisfaction in an urban dermatology clinic. *Dermatology Online Journal* 23(6):18,2017.
- 11) Bautista RE, Glen ET, Shetty NK. Factors associated with satisfaction with care among patients with epilepsy. *Epilepsy Behave* 11:518-524,2007
- 12) Kjekken I, Dagfinrud H, Mowinckel P et al. Rheumatology care: involvement in medical decisions, received information, satisfaction with care, and unmet health care needs in patients with rheumatoid arthritis and ankylosing spondylitis. *Arthritis Rheum* 55:394-401,2006
- 13) Chao J, Xie W, Yang Y, Liu H, Jiang L, Liu P. The effect of integrated health management model on the satisfaction among Chinese elderly. *Arch Gerontol Geriatr* 57(1):27-31,2013
- 14) Kim EY, Yeom HE. Influence of home care services on caregivers' burden and satisfaction. *Journal of Clinical Nursing* 25:1683-1692, 2016
- 15) Ayalon L, Green O. Live-In Versus Live-Out Home Care in Israel: Satisfaction With Services and Caregivers' Outcomes. *The Gerontologist* 55(4):628-642,2015
- 16) Tashiro K, Sugisawa H. Factors related to overall satisfaction towards nursing care of the elderly and their families. *Journal of Japan Home Care Association* (11)2: 30-38,2008
- 17) Grant LA, Rockwood T, Stennes L. Client satisfaction with telehealth services in home health care agencies. *Journal of Telemedicine and Telcare*, 21(2):88-92,2015
- 18) Carter AJE, Arab M, Harrison M, Goldstein J, Stewart B et al. Paramedics providing palliative care at home: A mixed-methods exploration of patient and family satisfaction and paramedic comfort and confidence. *Journal of the Canadian Association of Emergency Physicians* 11:1-10,2019
- 19) Kasai Y, Yotsuya M. Comparison of the Satisfaction of Users of Visiting Nurses Station vs Nurses' Home Service. *Journal of the Home Care Association* (12)1:53-61,2008
- 20) Wakamatsu H, Imanaka Y, Maesawa S. Evaluation of Home Care by Users: Focusing on User Satisfaction. *Public Health Research* (45)2: 150-158,1996
- 21) Sakuma S, Sasaki T, Kudou A. Satisfaction Status of Home Care Recipients through the use of Nursing Care Insurance Service. *Journal of Japan Home Care Association* (9)2:83-92,2005
- 22) Ministry of Health, Labour, and Welfare. <https://www.mhlw.go.jp/content/12300000/000614772.pdf> Accessed: JULY27,2020.
- 23) Ministry of Health, Labour, and Welfare. <https://www.mhlw.go.jp/topics/kaigo/nintei/gaiyo1.html> Accessed: JULY27,2020.
- 24) Ministry of Health, Labour, and Welfare. https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/hukushi_kaigo/kaigo_koureisha/nintei/gaiyo2.html Accessed: JULY27,2020.
- 25) Larsen DL, Attkisson CC, Hargreaves WA, Nguyen TD. Assessment of client/patient satisfaction: development of a general scale. *Eval Program Plann* 12(3):197-207,1979
- 26) Tachimori H, Ito H. Review of the reliability and validity of the Japanese Version of Client Satisfaction Questionnaire 8 Item Version. *Psychiatry* (41)7:711-717,1999
- 27) Bowling A. Measuring Disease :A review of disease-specific quality of life measurement scales. *Open University Press, Buckingham, Philadelphia:* 115-117,1995
- 28) Braig D, Eisenhardt SU, Stark GB, Penna V. Impact of increasing age on breast reduction surgery: A single center analysis. *J Plast Reconstr Aesthet Surg* 69(4):482-6,2015
- 29) Casals C, García-Agua-Soler N, Vázquez-Sánchez MÁ, Requena-Toro MV, Padilla-Romero L, Casals-Sánchez JL. Randomized clinical trial of nutritional counseling for malnourished hospital patients. *Revista Clinica Espanola* 215(6):308-14,2015
- 30) Gagnon AJ, Schein C, McVey L, Bergman H. Randomized controlled trial of nurse case management of frail older people. *J Am Geriatr Soc* 47(9):1118-1124,1999
- 31) Hall JA., Milburn MA, Epstein AE. A causal model of health status and satisfaction with medical care. *Medical Care* 31:84-94,1993
- 32) Marshall GN, Hays RD, Mazel R. Health status and satisfaction with health care: Results from the Medical Outcomes Study. *Journal of Consulting and Clinical Psychology* 64(2):380-390,1996
- 33) Hirasawa Yasuko. Analysis of Factors Affecting Satisfaction With the Care Manager for Long-Term Care Insurance Service Users. *Care Welfare Studies* (16)2: 209-215,2009
- 34) Ministry of Health, Labour, and Welfare. http://www.mhlw.go.jp/file/05-Shingikai-12301000-Roukenkyoku-Soumuka/tebiki_3.pdf Accessed: MAY 25,2020.

