STUDY OF FACTORS PROMOTING AND HINDERING SUBJECTIVE WELL-BEING AMONG INSTITUTIONALIZED OLDER ADULTS IN JAPAN

MITSUO KIMURA and KAZUE SAWAMI
Faculty of Nursing School of Medicine, Nara Medical University

Received March 23, 2022

Abstract

Objective: This study aimed to examine the factors that promote or inhibit subjective well-being among Japanese older adults.

Methods: Factors that promote or hinder subjective well-being among residents of Japanese senior care facilities were identified and analyzed based on the background and characteristics of the Japanese people.

Results: Factors found to promote subjective well-being included a total of 23 items related to age and physical and mental health, functions and roles in life, health and vitality, participation and perception of roles, level of freedom in activities and level of staff responsiveness, and connection with nature. The inhibiting factors included 14 items related to aging, morbidity, pain, decreased mental and physical functions that inhibit activities, and dissatisfaction with family and facilities.

Conclusion: The subjective well-being of the institutionalized elderly in Japan is promoted when the degree of freedom at the behavioral level is high and inhibited when it is low. In addition, because of the Japanese elderly's unique traditions, culture, and lifestyle, they are less receptive to care from others outside the family, making institutionalization an inhibiting factor for their subjective well-being. In this context, it is useful older adults to acquire new roles and thereby recognize their dignity.

Key words: facilities for the elderly, subjective well-being, promoting factors, inhibiting factors, Japanese background

I. INTRODUCTION

In Japan, family members are the primary caregivers because of the traditions, culture, and values unique to the elderly generation[1]. However, when family caregiving becomes difficult due to the deterioration of the elderly person's physical or mental condition or due to family circumstances, admission to an elderly care facility is chosen. For this reason, Japan's elderly care facilities currently accommodate over 2.1 million individuals[1]. Furthermore, senior care facilities are increasingly regarded as "places to spend the last days of life[2], " with enhancing quality of life (QOL) in senior care facilities becoming an issue of importance.

In old age, periods of poor health are inevitable, as physical functions decline with age. Even if there is a decline in psychosomatic function, maintaining and improving QOL or subjective well-being is essential[3]. In the context of subjective well-being, there are differences in tradition, culture, and lifestyle between foreign countries and Japan, and the factors that influence these differences are unique to Japan[4-6]. To this end, we identified "thoughts of elderly people in institutions unique to Japan" and further selected factors affecting the Japanese elderly's subjective well-being. These were categorized as promoting and inhibiting factors and analyzed separately, and were then examined based on the background and characteristics of the Japanese people.

II. METHOD

1. Extraction of literature

Geriatric healthcare facilities and nursing homes are the major facilities for the elderly in Japan[1]. The Philadelphia Geriatric Center (PGC) Morale Scale[7] has been widely used in the literature on the subjective well-being of the elderly[3]. We searched for original papers registered in the online medical journals using the following search terms: "geriatric healthcare facility, geriatric welfare facility, nursing home" and "subjective well-being, PGC Morale Scale" and "elderly, geriatric" on the search date 2021-02-07. As a result, a total of 86 articles were retrieved. From these, 11 articles were selected for analysis based on the selection criterion of studies that examined the factors influencing the subjective well-being of elderly residents (Fig.1).

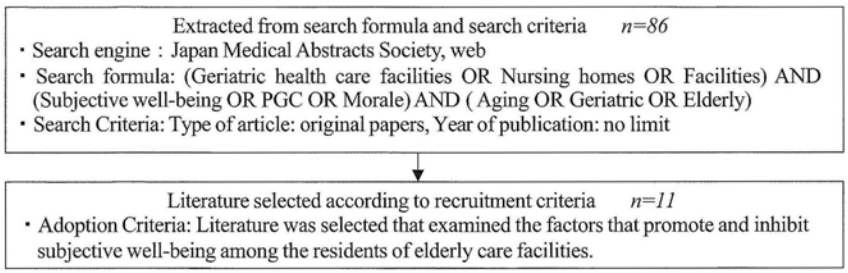

Fig. 1. Flowchart of literature extraction

2. Classification and Examination

(1) Extraction of promoting and inhibiting factors

Items that were examined in relation to subjective well-being were extracted from the target literature and categorized according to factors that promote or inhibit subjective well-being. Items with a positive relationship with subjective well-being that were found to be significantly different at the 5% significance level were classified as facilitating factors, while items with a negative relationship were classified as inhibiting factors.

(2) Classification of promoting factors and inhibiting factors

Factors that promote or inhibit subjective well-being were classified based on the components of the International Classification of Functioning, Disability, and Health (ICF)[8].

III. RESULTS

1. Factors Extracted

(1) Factors extracted (Table 1.)[9-19]

The association between subjective well-being and demographic attributes of the elderly/of older adults was examined in five studies[9,12,13,16,19]. In a study examining aging by Yokota[9], the results of comparisons among individuals aged 65 to 94 years who were divided into 5-year groups showed that the percentage of people with high subjective well-being was concentrated in the 75-79-year-old and 80–84-year-old groups. In the subjective survey of older adults, four studies examined related factors[9-12,15,16,18].

Table 1. Factors Affecting Subjective Well-Being

No	Author (Year of issue)	Title of the article	Positive influence factors	Negative influence factors	Factors with no impact
1	Yokota[9] (1995)	A Study of Subjective Well-Being Among Elderly Residents of Geriatric Facilities	1. Age: In the age group of 5 years from 65 to 94 years, about 70% of the people with high subjective well-being are concentrated in the age group of 75 to 84 years. 2. Degree of independence in motor functions. 3. Voluntary participation in various activities	1. Aging over 85 2. Complaints about the facility 3. Prevalence of bone and muscle disorders 4. Lack of spontaneous behavior 5. Functional impairment in hygiene 6. Functional impairment in GBS scale assessment	Gender, marital status, family structure, faith, cognitive functioning, anxiety, depression, activities of daily living, reason for admission, type of residential facility, and availability of a counselor
2	Suzuki, et al.[10] (1999)	The Factors Influenced on Subjective Happiness of the Elderly Person: Part2. Survey on the Elderly Persons' Happiness with Admission to Nursing Home	-	Family concerns	Depressive tendencies, health concerns, financial concerns, relationships with the opposite sex, and friends
3	Yamashita, et al.[11] (1999)	Changes of Activities of Daily Living and Quality of Life in a Special Nursing Home During a One-year Period	-	Depression	Cognitive functions, apathy, activities of daily living
4	Iriuchili-ma, et al.[12] (2002)	The Relationship Between the Environmental Factor Recognizing Stresses in the Living Environment and the Quality of Life in Geriatric Facilities	Activities of daily living	1. Depression 2. Environmental stress associated with depressive tendencies	Gender, stress in the inconveniences of life, stress in hygiene
5	Kameda[13] (2005)	The relationship between subjective well-being and understanding of care as 'respect for individuality' among residents in a health care facility for the elderly	Frequency of participation in functional training	-	Gender, cognitive function, activities of daily living, and group training

6	Mitsumo -to[14] (2007)	The relationship between subjective well-being and understanding of care as 'respect for individuality' among residents in a health care facility for the elderly	1.Person-focused care 2.Aging in people with high perceptions of person-focused care.	-	-
7	Hosoi, et al.[15] (2009)	The Effect of a Rehabilitation Program Provided by Full-Time Physical Therapists on Quality of Life of Nursing Home Residents	1.Physical and mental health 2.Daily role function (body) 3. Overall health and vitality 4. Function in social life 5.Daily role function (mind) 6. Mental health and subjective health	Physical pain	Physical function, activities of daily living
8	Matsudaira, et al.[16] (2010)	Factors related to the subjective well-being of elderly residents of special nursing homes	1. Smiles of staff members 2. Sense of freedom in life 3. Freedom to go out	1. Prevalence of renal and urinary disorders 2. Currently have a disease of concern 3. Current pain	Age, gender, marital status, living with family prior to admission, distance between home and facility, length of stay, presence, or absence of a counselor in the facility, presence or absence of a medical examination, illness other than renal or urological illness, number of illnesses, activities of daily living, eating and drinking, bringing in favorite items, possession of money, freedom of use of a telephone
9	Ogahara, et al.[17] (2010)	Effects of the existence of subjective role on health-related QOL and subjective QOL among residents of Geriatric Health Services Facilities	1.Spontaneous sense of a role for others 2.Spontaneous sense of a role for oneself 3.Awareness of roles for others through the encouragement of staff	-	Sense of a role for family, sense of a role for friends in the facility, sense of a role for friends outside the facility, sense of a role for oneself as prompted by staff
10	Ota, et al.[18] (2014)	Significance of Quality of Life Assessment in Elderly Residents of Geriatric Health Care Facilities	Vitality Daily role functioning (mental) Mental health	Physical pain	Level of care required, nutrition index, physical functioning, daily role functioning (physical), general health, social functioning, physical health
11	Kawai, et al.[19] (2015)	Subjective well-being and its relating factors in the elderly living in care facilities	Subjective health Connection with the natural environment	The relationship between oneself and one's ancestors and descendants	Age, gender, level of care required, years in the facility, education, visits from relatives, visits from non-relatives, friends in the facility, enjoyment of seasonal events, hope for a final place, concern for a great unseen power, concern for the peace that comes from praying

Note: The items of the positive relation with the subjective happiness which recognized the significance at the significance level of 5% were made the promoting factors, and the items of the negative relation were made to be the inhibiting factor. However, Iriuchishima's study [12] found that GFI and AGFI in the analysis of covariance structure were 0.9 or more items.

Of these, the living environment stress examined by Iriuchijima included stress related to the environment and facilities, to freedom of living, and to hygiene[12], with stress arising from living and the environment excluded[20]. According to Mitsumoto, the factor affecting subjective well-being is "perceived respect for the individual," which is defined as the caregiver's serious treatment of the resident's dignity and the resident's clear recognition of this[14]. Hosoi [15], Ota [18], and other researchers used the MOS 36-Item Short-Form Health Survey (SF-36 or 8) to examine the subjective factors of physical and mental health, physical function, daily role (physical), physical pain, overall sense of health, vitality, social life function, daily role (mental), and mental health. Ogasawara investigated the role of subjective awareness[17]: This included, firstly, the perception of the presence of family members, friends within the facility, and friends outside the facility was considered; Secondly, whether the work associated with the role was prompted by staff or by the individual's own will was analyzed, and further, whether the work was done for others or for themselves. In the survey conducted by Kawai using the Spirituality Rating Scale Related to Health in the Elderly[21], the following items were identified: feelings of connection with nature, existence of a greater invisible power, and comfort obtained through prayer[19].

(2) Factors that promote and hinder the subjective well-being of institutionalized elderly residents

The factors promoting subjective well-being were the following: twenty-three items related to "age and physical and mental health," "functions and roles in life," "health and vitality," "participation and consciousness of roles," "freedom in activities and responsiveness of staff" and "connection with nature".

Disincentives: A total of 14 items related to "aging, illness, and pain," "physical and mental functional decline inhibiting activity," and "dissatisfaction with family and facility".

2. Classification of Factors Promoting and Inhibiting Subjective Well-Being (Fig.2.)

(1) The classification shown in Fig.2.

In Fig.2, the relevant the factors promoting and inhibiting well-being are inserted into the ICF components[8], where the middle layer of the ICF indicates life function, which encompasses "mental and physical functions and structures," "activities," and "participation"[8,22].

Individual life function consists of "health status" in the upper layer and "environmental factors" and "personal factors" in the lower layer. These are inter relationships and composite relationships[8] with arrows pointing in both directions, indicating that intervention in one factor may affect other factors[8,22].

(2) Factors promoting and inhibiting subjective well-being classified into ICF domains.

Factors that promote and inhibit subjective well-being were categorized and analyzed in each of the six ICF domains. Under the domain of health status, factors of age, physical and mental health, and individual dignity were applicable, while life functions, roles, and independence in physical activity fell under the domain of physical and mental functions and structures. Under

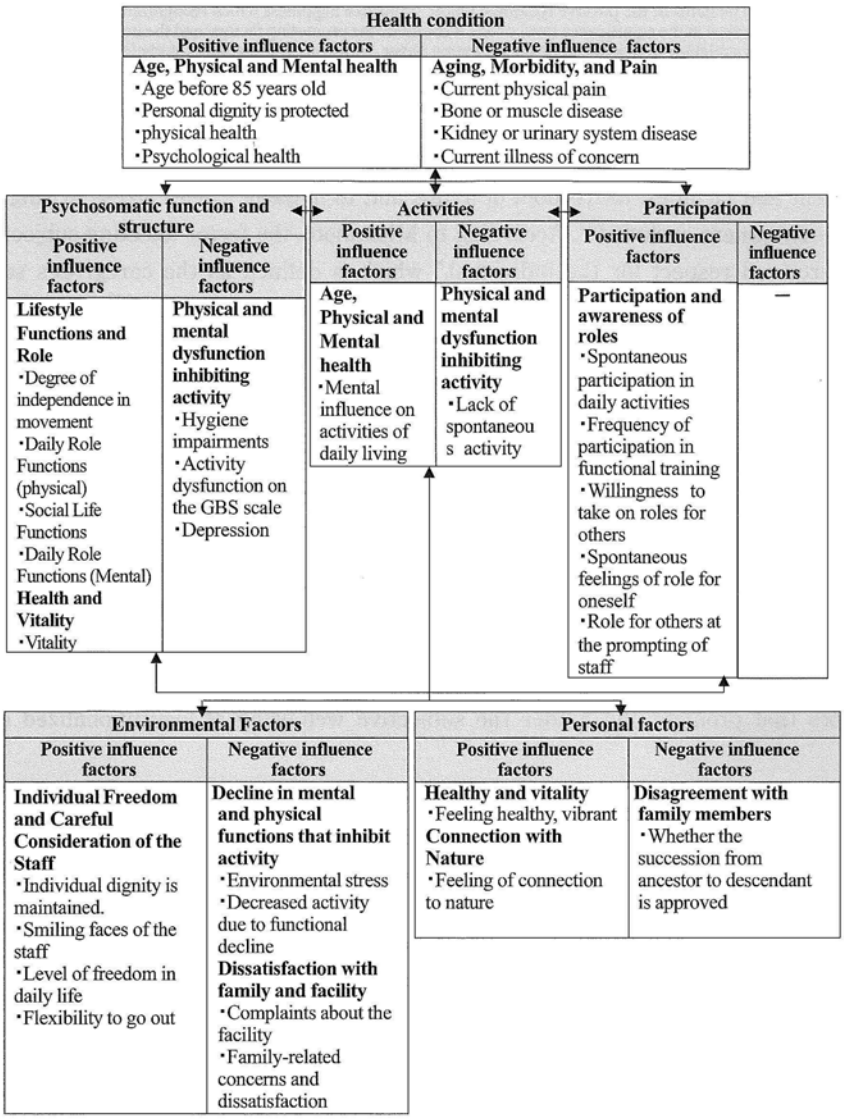

Fig. 2. Classification of factors into ICF constructs to analyze the interactions among the factors of subjective well-being.
Based on Interactions among the Components of ICF (World Health Organization), 2002, p17.

the domain of activities, daily activities were included, and regarding participation, participation in activities and the sense of fulfilling a role for others were included. Environmental factors included personal freedom, responsiveness of staff, and individual dignity, and individual factors included a feeling of health and vitality, and a feeling of connection with nature.

IV. DISCUSSION

1. Interactions and causal relationships between factors that promote and inhibit subjective well-being among institutionalized elderly residents

The factors promoting and inhibiting subjective well-being in Fig. 2. can be interpreted as follows: Residents who maintain their functions and vitality in their daily lives will maintain good health and freedom and will voluntarily play a role in various activities, thus creating a virtuous cycle of "successful aging with a rich sense of purpose in life[3]". A sense of freedom in life promotes autonomy[23], and the reclaiming of spontaneity enhances the sense of ego integration in old age[24], which is thought to contribute toward "attitude toward aging[3,7]. In addition, Japanese people tend to enhance their subjective sense of well-being[4-6] by contributing to the benefit of others. The Japanese elderly are reported to have the longest life expectancy in the world[1,2,25], and while they are highly active and maintain their roles until around the age of 80, when they are prevented from continuing to do so and are forced to live with the assistance of others, they tend to feel "very apologetic," "not wanting to cause trouble," and "not wanting to be a burden to others[25,26]". This is a psychological trait unique to Japanese people. For this reason, the Japanese elderly who require nursing care are characterized by a tendency to become psychologically depressed.

In addition, the majority of the elderly people in Japan wish to spend their final days at home[25-27]. When their wishes are not fulfilled and they require long-term care in an institution, they become psychologically dissatisfied and feel "forced" to stay there. When their wishes are not fulfilled, and their expectations of care from their families at home are not met, the resulting sense of dissatisfaction with family members[10,19,28] is considered a factor that causes depression, creating a vicious psychological cycle. In addition, when institutionalization restricts outings, it adds to the negative feelings of "being admitted and further confined". This sense of disappointment with family members and the facility, along with illness and decline in physical function, is the main source of residents' sense of unhappiness[28]. Furthermore, in cases of dissatisfaction with the facility, the matter is dealt with in a passive internal manner by the individual, such as giving up or resolving the issue within themselves[29], thus decreasing the motivation for various activities. This vicious cycle results in a decline in elderly residents' subjective sense of well-being.

Additionally, the Japanese elderly have spent their childhood in close proximity with nature and have lived according to the traditional Japanese value of "protecting the home". However, when they feel that this connection has been severed, their sense of values is compromised and accompanied by a great sense of loss. A further characteristic of institutionalized residents is that many of them live with difficult symptoms, such as illness and chronic pain[9,10,16,17,19,28]. This can easily reduce the level of physical activity and the motivation necessary for spontaneous activity.

Despite these negative conditions associated with institutionalization, a person's sense of well-being increases if they feel that they are fulfilling their role and that they are esteemed and valued as individuals[14]. Therefore, the key is to intervene in such a way that elderly feel that they are fulfilling their roles and are esteemed by others.

2. Consideration of care based on analysis results

In order to "feel that one has fulfilled one's role," a factor that strongly influences the subjective well-being of elderly facility residents, it is necessary not only to make their role known to others, but also to practice the actual role[17]. For this reason, it is necessary to encourage them to take on household chores and activities. In addition, roles should be created that are compatible with the cultural trait[4-6] of finding fulfillment in responding to the expectations and attention of others, a desire unique to the Japanese. Another initiative by which even elderly residents with declining ADL can obtain some role is intergenerational care[30]. This concept is described as "people of different generations working together and helping each other, and the wisdom and resourcefulness acquired by the elderly, as well as their ideas and interpretations of things, being passed on to the younger generation," a method in which "the interaction itself is directly linked to the fulfillment of a role[31]." Intergenerational care can be practiced even as physical capabilities decline with age, and is expected to improve subjective well-being by promoting a sense of purpose in life through the reacquisition of roles.

Added to this is the "importance of the individual and preservation of dignity" component, a relationship in which the individual's thoughts and intentions are understood and given full consideration, which requires adequate time for dialogue in order to "listen to the individual's thoughts". One method for "listening to thoughts" is "active listening[32]," proposed by Carl Rogers, an American psychologist and counselling specialist, in 1957. Active listening comprises three elements, based on an attitude of respect for the individual on the part of the listener: "empathic understanding," "unconditional positive regard," and "self-concordance." By putting oneself in the other person's shoes and listening with empathy to their feelings, "dialogue that respects the individual" is achieved[33]. Furthermore, team care by introducing psychiatric reminiscence therapists[34] and trained listening volunteers[35-37] who specialize in support for this care can help residents recognize that they are valued as individuals and that their dignity is protected, thereby reducing negative feelings towards the facility and restoring their self-esteem. This is expected to result in "facility-specific subjective well-being".

3. Limitations and challenges of this study

Among the surveys of subjective well-being collected, the study by Yamashita et al.[11] was the only longitudinal study that captured changes over a one-year period. However, no interaction between factors was shown. In addition, there were differences in the elderly's roles, personal dignity, and relationships with family members depending on the duration of institutionalization, how they live in institutions, demographic attributes such as age and gender, and regional characteristics (e.g., urban vs. rural areas) [17,38-40]. Therefore, to construct a theory, it is necessary to include factors such as the course of life of the elderly after institutionalization, characteristics by age group, and regional characteristics, as well as to accumulate and compare further studies examining the causal relationships among the various factors.

V. CONCLUSION

The subjective well-being of institutionalized Japanese elderly is promoted or inhibited by

changes in their level of freedom of behavior. In addition, owing to attitudes derived from traditions, culture, and lifestyles unique to the elderly in Japan, they are less receptive to care from others outside the family, and institutionalization is an obstacle to their subjective well-being. To address this issue, reacquisition of their roles, appropriate care for them as individuals, and recognition of their dignity and value are considered effective approaches.

CONFLICT OF INTEREST

The authors report no conflicts of interest. The authors alone are responsible for the content in and writing of the paper.

REFERENCES

1) Cabinet Office: Aging situation, 2021 White Paper on Aging Society (2021). https://www8.cao.go.jp/kourei/whitepaper/w-2021/html/zenbun/index.html
2) Ministry of Health, Labour and Welfare, Director-General for Statistics and Information Policy: Vital Statistics, Table 1-25: Number of deaths, composition ratio, place of death, yearly (2020). https://www.mhlw.go.jp/toukei/youran/indexyk_1_2.html
3) Shinichi Sato: Successful aging and purpose of life in old age. Koichi Yaguchi, Shinichi Sato. Aging Psychology-Understanding and Supporting Aging (First Edition). Kitaooji Shobo Publishing Co., Ltd., Kyoto, 37-52, 2007.
4) Shigehiro Oishi, Ed Diener: Goals, culture, and subject-wellbeing. ED Diener, Culture and Well-Being (Social Indicators Research Series Volume 38): Springer, 93-108, 2009.
5) Yukiko Uchida, Vinai Norasakkunkit, Shinobu Kitayama: Cultural constructions of happiness: Theory and evidence. J Happiness Stud. 5: 223-239, 2004.
6) Yukiko Uchida, Yuji Ogihara: Cultural construal of Happiness: Cultural psychological perspectives and future direction of happiness research. Japanese Psychological Review. 55(1): 26-42, 2012 .
7) Lawton M.P: The Philadelphia Geriatric Center Morale Scale: a revision. J Gerontol .30: 85-89, 1975.
8) World Health Organization: International Classification of Functioning, Disability and Health (Revised Edition), Chuohoki Publishing CO., Ltd., Tokyo, 2002.
9) Takao Yokota: A Study of Subjective Well-Being Among Elderly Residents of Geriatric Facilities. Journal of Japan Academy of Psychiatric and Mental Health Nursing. 4(1):37-46, 1995.
10) Kihachiro Suzuki, Takao Osanai, Takuhiko Kato, Masayuki Soma, Tomomi Harata, Noriko Nagao: The Facfors Influenced on Subjective Happiness of the Elderly Person: Part2. Survey on the Elderly Persons' Happiness with Admission to Nursing Home. Bulletin of the School of Allied Medical Sciences, Hirosaki University. (23): 145-153, 1999.
11) Kazuya Yamashita, Kenichi Iijima, Shotai Kobayashi: Changes of Activities of Daily Living and Quality of Life in a Special Nursing Home During a One-year Period. Japanese Journal of Geriatrics. 36(10): 11-714, 1999.
12) Kazutaka Iriuchijima, Kazuo Aoki: The Relationship Between the Environmental Factor Recognizing Stresses in the Living Environment and the Quality of Life in Geriatric Facilities. The Journal of Tokyo Academy of Health Sciences. 5(2):75-85, 2002.

13) Ryo Kameda: Evaluation of QOL in healthcare facility for the elderly. Journal of Investigation for Physical Therapy. 8: 10-14, 2005.
14) Yoko Mitsumoto: The relationship between subjective well-being and understanding of care as 'respect for ndividuality' among residents in a health care facility for the elderly. Journal of Human Care Studies. 8: 28-37, 2007.
15) Toshiki Hosoi, Hithosh Maruyama: The Effect of a Rehabilitation Program Provided by Full-Time Physical Therapists on Quality of Life of Nursing Home Residents. Rigakuryoho Kagaku. 24(2): 173-178, 2009.
16) Yuka Matsudaira, Shigeko Takayama, Naruhumi Suganuma, Ikue Ogawa: Factors related to the subjective well-being of elderly residents of special nursing homes. Jpn J Public Health. 57(2): 121-130, 2010.
17) Kakuya Ogahara, Koji Tanaka, Sachiko Niwa, Mituru Ogaki, Yasuho Hukumoto: Effects of the existence of subjective role on health-related QOL and subjective QOL among residents of Geriatric Health Services Facilities. Japanese Journal of Occupational Therapy Research. 13(1): 7-11, 2010.
18) Junko Ohta, Hiroshi Yutaka, Kana Fujii, Keiko Yamazato, Takuo Kiten, Hitomi Fujikawa, Yuki Kawasaki, Kiyoshi Tanaka: Significance of Quality of Life Assessment in Elderly Residents of Geriatric Health Care Facilities. The Journal of Metabolism and Clinical Nutrition. 17(2): 239-247, 2014.
19) Fumiko Kawai, Hiroko Nakano, Miyuki Sato, Hiroshi Shibata, Harue Suzuki: Subjective well-being and its relating factors in the elderly living in care facilities. Applied Gerontology. 9(1): 31-42, 2015.
20) Kazutaka Iriuchijima: The Development of a Scale of Cogunition of the Stress of Living Environments in the Elderly at Institutions. J. Archit. Plann. Environ. Eng., AIJ. (534): 101-108, 2000.
21) Hisae Misawa, Masami Nojiri, Naoakira Nino: Spirituality Raring for the Elderly in community-A study of validity and reliability-. Journal of Japan Health Medicine Association. 18(4): 170-180, 2010.
22) Satoshi, Ueda: Understanding and utilizing ICF, Kyosaren, Tokyo, 2005.
23) Deci,E.L., Flaste,R.: Why we do what we do: The dynamics of personal autonomy, 1995, translated by Masaharu Kage: Why autonomy and competence are important, supervised by Shigeo Sakurai: The power to grow people, Shinyosha Co., Ltd., Tokyo, 21-99, 1999.
24) Erikson,E.H.,Erikson,J.M.,& Kivnick,H.Q: Vital Involvement in Old Age, 1988,translated by Masanori Tomonaga, Rieko Tomonaga: Old age-Lively involvement, Misuzu Shobo Co., Ltd.,Tokyo, 179-229, 1990.
25) Ministry of Health, Labour and Welfare: 2016 White Paper on Health, Labor and Welfare-Considering a Social Model to Overcome the Aging Population (2016).
https://www.mhlw.go.jp/wp/hakusyo/kousei/16/
26) The Nippon Foundation: National survey on how to reach the end of life (2021). https://www.nippon-foundation.or.jp/who/news/pr/2021/20210329-55543.html
27) Takami Fujimaki, Yuriko Sasuga, Takako Ushida: The Thoughts toward Present Life-The Thoughts of Elderly Person Aged 75 or Over Who Selects a Nursing Home as a Home at Last-. Journal of Japan Academy of Gerontological Nursing. 12(1): 80-86, 2007.
28) Yukie Miyazaki: The sources of subjective happiness about recuperating persons.-By using Qualitative research method (The first report)-. Bulletin of Yanagawa Rehabilitation Academy・Fukuoka International Medical and Welfare Academy. 5: 18-28, 2009.
29) Toshie Kusunaga, Yoshihiko Yamazaki: Elderly Persons' Satisfactions and Dissatisfactions with Geriatric Intermediate Care Facilities and Styles of Coping with Dissatisfactions. Japanese Journal of Social Welfare. 43(2): 82-92, 2003.
30) Maiko Tatematsu: Methods of the Role and the Intergenerational Care for the Elderly Provision from the

Institution's Viewpoint -Study on Making the Interactive Relation between the Elderly and Community-. Journal of Home Economics of Japan. 59(7): 503-515, 2008.

31) Atsuko Kusano: The need for intergeneration, edited by Atsuko Kusano, Hiroyuki Akiyama: Intergeneration, Modern spirit No444, Shibundo Co., Ltd., Tokyo, 5-8, 2004.

32) Yuko Morikawa: active listening, edited by Hiroshi Ujihara, Katsuyuki Ogawa, Kunio Kondo, MIkihatiro Tatara, Hirohisa Higashiyama, Syouji Murayama, Yasuhiro Yamanaka: Counseling dictionary, Minerva Shobo Co., Ltd., Kyoto, 9, 1999.

33) Ministry of Health, Labour and Welfare: "Listening" to the story-What is active listening? -Mental health portal site for workers (2021).
https://kokoro.mhlw.go.jp/listen/

34) Japan Reminiscence Society Homepage: Certified course for Psychiatric Recaller (Reminiscian).
http://www.fureai.or.jp/~psytex/shinryou.html

35) Yasuko Hoshina: Relationship of mental condition of elderly persons in residential facilities and their willingness to accept volunteers offering conversation and companionship. An Official Journal of the Japan Primary Care Association. 34(3): 203-208, 2011.

36) Yasuko Hoshina: Elderly persons' current situation, intentions and needs on conversation and companionship in residential facilities. Journal of Gerontological Nursing and Caring Research. 7(1):1-12, 2016.

37) Naoko Kishi, Nobuko Aida, Akemi Ogata, Naoko Kobayashi, Yoko Nagaya, Makomi Takaki, Mie Oyagi, Chika Miura: Current Status of Volunteer Listening Activities for the Elderly and Factors for Continuation. Journal of Japan Society of Nursing and Health Care. 16(1): 18-30, 2014.

38) Kazuo Higaki, Tomoko Nishikawa, Eiko Kawakami: Subjective well-being for hospitalized elderly people -Chronological change during eight month period-. Annual Reports of Faculty of Rehabilitation, Shijonawate Gakuen University. (1):29-35, 2005.

39) Shinichi Demura, Masahiro Noda, Masaki Minami, Yukio Ishikawa, Nobuhiko Tada, Jinzaburo Matsuzawa: Examination of Lifestyle Factors Related to Morale in Community Dwelling Elderly: Comparison in Gender and Age-Stages. Japanese Journal of Physiological Anthropology. 8(4): 77-81, 2003.

40) Chikako Fujita, Rie Funaki, Keiko Matsumoto: Meaning of the role of the late-stage elderly in home. Proceedings of the Japanese Nursing Association: Community Health Nursing. (35): 122-124, 2005.