DOI: 10.35772/ghm.2024.01029

Understanding the daily life needs of older public assistance recipient subgroups in Japan: A qualitative study

Keiko Ueno^{1,2}, Daisuke Nishioka^{1,3}, Junko Saito⁴, Shiho Kino^{1,5}, Naoki Kondo^{1,2,6,7}

²Department of Health and Social Behavior, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan;

⁴Division of Behavioral Sciences, National Cancer Center Institute for Cancer Control, Tokyo, Japan;

⁶Institute for Future Initiatives, The University of Tokyo, Tokyo, Japan;

⁷ Japan Agency for Gerontological Evaluation Study (JAGES Agency), Tokyo, Japan.

Abstract: Transition from individual-level treatment to social-level intervention should be made to improve people's daily living conditions for reducing health inequality, which is a major global public health concern. Older public assistance recipients in Japan are socially vulnerable and require healthcare, long-term care, daily living, and social care support. Understanding the diverse daily living needs among public assistance recipient subgroups would prompt the development of novel support measures in the welfare sector. Therefore, this study aimed to understand the daily life needs of older recipient subgroups (segments) created quantitatively in our previous study. We interviewed four caseworkers at municipal welfare offices in 2021; the interview data were analyzed using a qualitative descriptive method to describe the daily life needs of the five older recipient segments for each sex. Five themes of daily life needs were demonstrated: *i*) housing, *ii*) financial, *iii*) welfare service, *iv*) healthcare, and *v*) no daily life needs. Consequently, we identified the daily life needs of some older recipient segments, indicating the necessity for support interventions. Future research would help interview other professionals from various backgrounds to further understand the daily life needs of older recipient segments.

Keywords: public assistance recipients, older people, segmentation, daily life needs, qualitative study

Introduction

Transition from individual-level treatments focusing on modifying people's behaviors to social-level interventions that improve their daily living conditions should be made to reduce health inequality, which is a major global public health concern (1). A public assistance program in Japan (seikatsu-hogo) is a government-provided social assistance program aimed at ensuring a minimum standard of living for individuals below the poverty line. Qualified households can receive monthly financial assistance alongside complete exemptions from medical and long-term care expenditures. Approximately 1.6% of the population is currently enrolled in this program (2). Although public assistance recipients receive equal financial assistance, recent studies have demonstrated health inequalities owing to their individual social backgrounds (3,4), thereby indicating that recipients could benefit from additional non-financial support tailored to their needs, including support for daily life.

Older public assistance recipients are more likely

to require healthcare, long-term care, daily living, and social care support than younger recipients (5). The proportion of households with people aged 65 years or older receiving public assistance is 55.5% in 2023 (2). Therefore, older recipients should be the primary target age group for supportive intervention. Since 2021, a healthcare support program has been implemented to provide health and social care to individuals of all ages receiving public assistance in welfare offices. A major challenge in implementing this program is identifying the appropriate targets for intervention and care planning (6). Thus, we focused on theories and practices in business and social marketing to provide tailored support interventions. Segmentation involves dividing an entire target group into subgroups (segments) based on their characteristics (7). Each segment comprises individuals with similar characteristics and needs. Understanding the diverse daily living needs of older recipients using the segmentation method would provide new support measures in the welfare field.

In this study, we aimed to understand the daily life

¹Department of Social Epidemiology, Graduate School of Medicine and School of Public Health, Kyoto University, Kyoto, Japan;

³ Department of Medical Statistics, Research & Development Center, Osaka Medical and Pharmaceutical University, Osaka, Japan;

⁵ Department of Oral Health Promotion, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan;

needs of older recipient segments, which were created quantitatively by applying the segmentation approach in our previous study (8), to offer tailored medical and social support interventions for these segments.

Study design and data collection

Setting and participants

We interviewed caseworkers at municipal welfare offices in Japan from September to October 2021. The caseworkers were local government officials in welfare offices responsible for administrative activities related to processing paperwork for protection applications and conducting interpersonal support through routine home visits. Purposive sampling was used to recruit caseworkers working in two municipal welfare offices (A and B), which had provided data for quantitative analysis in our previous study (8). In 2021, Municipality A had a population of 98.927, with 26.2% aged \geq 65 and 1.8% receiving public assistance. Municipality B had a population of 184,577, with 24.6% aged ≥ 65 and 2.7% receiving public assistance. Participants were recruited from experienced caseworkers with at least 3 years of experience, based on the fact that approximately 60% of caseworkers had less than 3 years of casework experience (9). We agreed on data saturation after conducting two joint interviews involving four participants by employing the concept of "information power." The information power is that the number of participants in qualitative interview studies depends on their information, which is relevant to the actual study (10).

Data collection

KU (a female physician with 19 years of clinical experience and 4 years of qualitative researcher training) conducted a joint interview with caseworkers *via* video Zoom conference (Zoom Video Communications Inc., U.S.A.). A joint interview is a format between individual interviews and focus groups where interviewees who have a relationship with each other can express their opinions (*11*). We obtained written consent from all interviewees to participate in this study.

We used an interview guide during the interviews (Supplemental File 1, *https://www.globalhealthmedicine. com/site/supplementaldata.html?ID=84*). Participants were asked whether they could recall older recipients with similar characteristics from the segments obtained in our previous study (8). Subsequently, we asked them to describe the daily life needs of the recipient segment. Participants were asked these two questions about each segment of male older recipients (Supplemental Figure S1a, https://www.globalhealthmedicine.com/site/supplementaldata.html?ID=84) and that of female older recipients (Supplemental Figure S1b, https://www.globalhealthmedicine.com/site/supplementaldata.

html?ID=84). The daily life needs of older recipient segments were normative needs defined by caseworkers in relation to norms or desirable standards (12). Interviews were conducted, audio-recorded, and transcribed in Japanese.

Data analysis

All the interview data were translated from Japanese to English. We analyzed the data using the qualitative descriptive method (13). UK and NK conducted data analysis. After reviewing the verbatim transcripts, text segments were divided into codes. All identified codes were evaluated and compared to determine content overlap and similarity. Codes were classified into subthemes based on their similarities and differences. Themes were generated from these subthemes. To ensure credibility and trustworthiness, all authors discussed and reviewed the transcribed data, subthemes, and themes throughout the process. Subsequently, we sent the findings to the interviewees and asked them to check for any differences from the intended content. MAXQDA 2022 (VERBI GmbH, Berlin, Germany) was used for data analysis.

Ethics approval

The study protocol was approved by the Ethics Committee of the Graduate School and the Faculty of Medicine of Kyoto University (approval no.: R3565) in accordance with the Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects.

Daily life needs of older public assistance recipient segments

Four participants who agreed to be interviewed were recruited (Table 1). Joint interviews were held twice with caseworkers working in Municipalities A and B. The duration of the interview was 85 min for Municipality A and 80 min for Municipality B.

The themes, subthemes, and examples of raw data regarding the daily life needs of older recipient segments for each sex are presented in Table 2 a and b. Five themes of daily life needs were demonstrated: *i*) housing (male Segments 1 and 3), *ii*) financial (male Segment 1 and female Segments 2 and 3), *iii*) welfare service (male Segment 3), *iv*) healthcare (female Segment 5), and *v*) no

ID	Sex	Municipality	Years of casework experience
1	Male	А	7
2	Male	А	9
3	Male	В	3
4	Male	В	3

daily life (female Segment 4) needs. The participants did not identify any daily life needs in male Segment 2 and female Segment 1. No descriptions of daily life needs were provided for male Segments 4 and 5 because none of the participants answered that they could think of older recipients from these segments.

Housing is widely recognized as an essential social determinant of health (14). As mentioned in a subtheme of male Segment 2, a relief facility is defined as "a facility that aims to provide livelihood assistance by accepting recipients who have difficulty leading their daily lives due to significant physical or mental disabilities" (15). Relief facilities accept people with mental disabilities who are discharged from mental hospitals and older persons with multiple disabilities or intellectual disabilities and thus serve as a last resort for those who have difficulty finding a place to live (15).

(a)

Hence, caseworkers were concerned that if those in male Segment 2 would not be accepted into the relief facility, they would not be able to find a place to live.

Three segments of older recipients had financial needs. Managing finances is essential for maintaining safe and independent living in older people, yet it often becomes impaired with age. A previous study demonstrated that women, particularly those with a history of stroke, reduced cognitive functioning, and difficulty in activities of daily living had significantly greater difficulty in managing their finances (16). The financial needs "not reporting working income" in female Segment 2 are explained by the system requiring caseworkers to receive an income declaration form at least once a month or every 3 months from recipients capable of working (17). The program for supporting the improvement of household finances for recipients

Table 2. Daily life needs of each segment of male (a) and female (b) older public assistance recipients

Segment	Quantitative results	Qualitative results			
		Theme	Subtheme	Examples of raw data	
1	Workers	Financial needs	Getting charged a co- payment at the time of hospitalization	These individuals receive a reduced cost of livelihood assistance when they are hospitalized. In contrast, the amount of their own payment to the hospital arises. As the pension is not sufficient to cover their living expenses, they have to pay for it partially. Therefore, when hospitalized, their standard of living decreases. (ID 2)	
			Being unable to manage rent payments	Because they can earn their own living expenses to some extent, which means that they can earn the housing assistance portion, they cannot set up a payment by proxy. (ID 3)	
2	Facility residents with disablity	Housing needs	Being unable to live in a relief facility	Relief facilities are for people who have difficulty living in an ordinary home, but there are some people who cannot easily live there; people whose ADLs have declined considerably, people with mental illness, and people who are not certified as having a mental disability but have difficulty living are unable to live in a relief facility. (ID 1)	
		Daily life needs were not identified by participants.	Daily life needs were not identified by participants.	Caseworkers may not be aware of their life issues because they notice that people in the facility receive support from other agencies. (ID 3)	
3	People with psychiatric disorders living at home	Housing needs	Not being accustomed to living in a rental house	When they do not fit well in a rental house, they are too young to move to a facility, so we need to consider support that emphasizes living at home for a longer period of time. (ID 3)	
		Welfare service needs	Refusing to use welfare service for persons with disabilities	Some people refuse welfare services for persons with disabilities. It is difficult to find appropriate services for them. (ID 2)	
4	People living at home with support	All participants stated that they could not think of older recipients from this segment; therefore, no descriptions of daily life needs were provided.			
5	People who have started using public assistance due to life events	All participants stated that they could not think of older recipients from this segment; therefore, no descriptions of daily life needs were provided.			

Note: The quantitative results were adapted from Reference 8. Adapted with permission.

(h)

Segment	Quantitative results	Qualitative results				
		Theme	Subtheme	Examples of raw data		
1	Facility residents aged over 85 years with disability, psychiatric disorders	Daily life needs were not identified by participants.	Daily life needs were not identified by participants.	For those who are in a facility, the facility takes care of their lives; therefore, in a sense, I think we do not give them direct support. (ID 2)		
2	Workers	Financial needs	Not reporting working income	From our point of view, if they have properly reported the income they have earned, there is no problem. (ID 1)		
3	People living in rental house with support needs	Financial needs	Being unable to manage day-to-day finances	They have dementia and already start having trouble managing their finances. (ID 3)		
4	People with physical diseases living in public house	No daily life needs	Having no daily life needs	I wonder if there are relatively few people with life issues. (ID 1) I honestly cannot think of their life issues. (ID 4)		
5	People who have started using public assistance due to life events	Healthcare needs	Not seeing a doctor regularly	We provide assistance for their routine medical visits, but I think it is not so demanding. (ID 1)		

Table 2. Daily life needs of each segment of male (a) and female (b) older public assistance recipients (continued)

Note: The quantitative results were adapted from Reference 8. Adapted with permission.

has been implemented since 2018 to assist in proposing budget management (18). Older recipients are not included in the target population. It is preferable for caseworkers to provide financial management support to them in cooperation with other stakeholders.

In this study, caseworkers did not identify any daily life needs in male Segment 2 and female Segment 1. They stated that older recipients living in the facility received support from care workers and that older recipients on long-term care insurance were supported by care managers (licensed professionals who coordinated the care specified in the care plan and monitored the care process within an individualized budget based on the client's eligibility level). The caseworkers believed that support activities for older recipients were not required when they had already received support from other professionals. When operationalizing the identified segments results, information on whether older recipient segments are provided with support from other professionals will help prioritize the segments that need the most support.

Caseworkers noted that older recipients in female Segment 4 did not have any daily life needs. These recipients appeared to live independently at home. Conversely, some caseworkers may be unable to find the daily life needs of all older recipients due to their enormous workload. The standard allocation for caseworkers in city welfare offices is one per 80 households (19). However, in Municipality A, each caseworker was responsible for an average of 96 households; in Municipality B, it was 100. In future research, we can consider interviews with other professionals engaged in support activities for the recipients to verify the segment's daily life needs if caseworkers do not recognize them.

The daily life needs of older recipients were not described by caseworkers in male Segment 4 and 5. Although the finding that none of the caseworkers could recall older recipients from these two segments demonstrated the advantages of machine learning techniques in discovering results that would otherwise be difficult to obtain (20), it was not possible to assess the daily life needs of these segments. This issue needs to be addressed in future studies.

To our knowledge, this is the first study to examine the daily life needs of older assistance recipients by segment. Segmentation is often described as "population or patient segmentation" in the medical field and is widely used in different clinical contexts (21). However, no previous studies have utilized segmentation in the welfare field. Our approach makes valuable contributions by offering new support measures for welfare care. However, this study has several limitations. First, we collected data only from caseworkers but not from other professionals. Although the participants were experienced caseworkers and were from welfare offices that provided data for creating the segments, it would be better to examine the daily needs of recipients from the other professional's perspective. Second, the transferability of our findings may be limited because we used the segments created from the data of the recipients in two municipalities and interviewed caseworkers working in these two municipalities.

In conclusion, we identified a wide variety of daily

life needs of older recipient segments. Contrarily, the findings revealed that caseworkers did not identify any daily life needs in some segments. Future research would help interview other professionals from various backgrounds further to understand the daily life needs of older recipient segments.

Acknowledgements

We would like to thank the caseworkers in municipalities A and B for their cooperation during our interviews.

Funding: This study received support from the Japan Society for the Promotion of Science (JSPS) Grant-in-Aid for JSPS Fellows (JP202012355), JSPS KAKENHI grants (17K19793, 18H04071, 20K20774, 22K21081, and 23K16326), and JST RISTEX grants (JPMJRX21K6). These funding bodies had no discretion or involvement in the study protocol, analysis, interpretation of the results, or submission of this manuscript.

Conflict of Interest: The authors have no conflicts of interest to disclose.

References

- Commission on Social Determinants of Health (CSDH). Closing the gap in a generation: Health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. Geneva, Switzerland. 2008. https://iris.who.int/bitstream/ handle/10665/69832/WHO_IER_CSDH_08.1 _eng. pdf?sequence=1 (accessed March 30, 2024)
- Ministry of Health, Labor and Welfare. National survey on public assistance recipients: summary of results on July 2023. https://www.mhlw.go.jp/toukei/saikin/hw/hihogosya/ m2023/dl/07-01.pdf (accessed March 30, 2024). (in Japanese)
- Nishioka D, Saito J, Ueno K, Kondo N. Frequent outpatient attendance among people on the governmental welfare programme in Japan: assessing both patient and supplier characteristics. BMJ Open. 2020; 10:e038663.
- Nishioka D, Saito J, Ueno K, Kondo N. Non-financial social determinants of diabetes among public assistance recipients in Japan: A cohort study. J Diabetes Investig. 2021; 12:1104-1111.
- World Health Organization. Integrated care for older people: guidelines on community-level interventions to manage declines in intrinsic capacity. 2017. https://www. who.int/publications/i/item/9789241550109 (accessed March 30, 2024)
- Ueno K, Nishioka D, Kondo N. Expectations and problems of the healthcare management support program for public assistance recipients. Nihon Koshu Eisei Zasshi. 2022; 69:48-58. (in Japanese)
- Lee N, Kotler P. Social Marketing: behavior change for social change, 6th ed. Thousand Oaks, SAGE Publications, 2019.
- 8. Ueno K, Nishioka D, Saito J, Kino S, Kondo N. Identifying meaningful subpopulation segments among

older public assistance recipients: A mixed methods study to develop tailor-made health and welfare interventions. Int J Equity Health. 2023; 22:146.

- Ministry of Health, Labor, and Welfare. Welfare office staffing structure survey, 2016. *https://www.mhlw.go.jp/ toukei/list/dl/125-1-01.pdf* (accessed March 30, 2024). (in Japanese)
- 10. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. Qual Health Res. 2016; 26: 1753-1760.
- 11. Morris SM. Joint and individual interviewing in the context of cancer. Qual Health Res. 2001; 11:553-567.
- Bradshaw JR, Cookson RA, Sainsbury R, Glendinning C. Jonathan Bradshaw on social policy: selected writings 1972-2011. York, York Publishing Services Ltd, 2013.
- Yin R. Qualitative research from start to finish. 2nd ed. New York, The Guilford Press, 2016.
- World Health Organization. WHO housing and health guidelines. Geneva, World Health Organization, 2018. https:// iris.who.int/bitstream/handle/10665/276001/9789241550376eng.pdf (accessed March 30, 2024)
- Matsuki H. Chapter 10 Forty years after "feed them and let them sleep": relief facilities and "minimum standards". In: Welfare plus alpha social assistance schemes in Japan (Uzuhashi T, eds.). Minerva Shobo, Kyoto, Japan, 2013. (in Japanese)
- Bleijenberg N, Smith AK, Lee SJ, Cenzer IS, Boscardin JW, Covinsky KE. Difficulty managing medications and finances in older adults: A 10-year cohort study. J Am Geriatr Soc. 2017; 65:1455-1461.
- 17. Masuda, M, Wakino K. Understanding public assistance: support for low-income people and the public assistance system. Houritsu Bunka Sha, Kyoto, 2020. (in Japanese)
- Ministry of Health, Labor and Welfare. Implementation of the program for supporting the improvement of household finances for public assistance recipients. *https://www. mhlw.go.jp/content/12000000/001092876.pdf* (accessed March 30, 2024). (in Japanese)
- Ministry of Health, Labor and Welfare. 5 Current state of the welfare system and directions for reform. Materials distributed by the National Strategy Council 3. 2012. https://www.cas.go.jp/jp/seisaku/npu/policy04/ pdf/20120409/shiryo3.pdf (accessed March 30, 2024). (in Japanese)
- Everitt B. Cluster analysis. 5th ed. West Sussex, John Wiley & Sons Ltd, 2011.
- Yan S, Kwan YH, Tan CS, Thumboo J, Low LL. A systematic review of the clinical application of datadriven population segmentation analysis. BMC Med Res Methodol. 2018; 18:121.

Received April 10, 2024; Revised June 20, 2024; Accepted July 11, 2024.

Released online in J-STAGE as advance publication July 14, 2024.

*Address correspondence to:

Keiko Ueno, Department of Social Epidemiology, Graduate School of Medicine and School of Public Health, Kyoto University, Floor 2, Science Frontier Laboratory, Yoshidakonoecho, Sakyo-ku, Kyoto-shi, Kyoto, 606-8315, Japan. E-mail: ueno.keiko.6s@kyoto-u.ac.jp