

## **Research Article**

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# Lifestyles and Preferences of Independent Elderly Patients with Chronic Diseases in Japan - Sex and Age-Related Differences

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# Abstract

**Aim-** To clarify lifestyles including activity and food preferences and its recognition of elderly patients with chronic diseases. **Methods-** A survey of community clinic patients was conducted. The survey included patient activity preferences and interests including physical activities, cultural activities, foods and cooking. **Results-** The three most popular activities and interests were chatting with friends, trying to prevent diseases, and compliance with drug therapy. Women tended to prefer activities related to communication and they showed high interest in healthy foods and cooking such foods. There was a significant difference in physical activities habits between the under 73 years old and the 73 years old and older groups. The results of this study showed that overall, elderly patients are highly interested in health-related information and activities. **Conclusions-**While dietary quality is better for females, they felt that they had inadequate information on managing healthy diets. Although a high proportion of the elderly were interested in diseases and nutrition, they need practical information about healthy foods could contribute to improving lifestyles for the elderly. In addition, promoting sustainable physical activity habits for the elderly over 73 years old could be an effective measure for maintaining fitness.

Keywords: Elderly, Activity, Life, Foods, Cooking, Preference, Women, Physical, Fitness.

## INTRODUCTION

Aging is becoming a priority issue around the world. With highly developed medical care, a variety of diseases and difficult conditions have been solved even among the elderly; however, after receiving appropriate medical care, some elderly patients become inactive, unhealthy or bedridden <sup>[1–3]</sup>. Under a single medical care scheme, it is often difficult to address various problems of the elderly. Socioeconomic situations, lifestyles, nutritional status, inadequate knowledge of social services, and lack of communication with others often highly affects overall quality of life (QOL) for the elderly <sup>[4]</sup>. In addition, even elderly patients who are physically fit may be impaired by mental conditions such as dementia that affect not only themselves, but also other members of their families. Although the average life expectancy of Japanese women is 86.3 years, the healthy life span is only 73.6 years <sup>[5]</sup>. Reducing this 13-year gap is a serious issue for Japan; however, optimal strategies for achieving this remain unclear. This study's objectives were to clarify common activities and understanding of lifestyles and nutritional situation among community-dwelling elderly and consider strategies for better lifestyles and fitness.

## MATERIALS AND METHODS

The participants in this study were middle-aged and elderly patients (>55 years of age) with chronic diseases visiting a community clinic. The survey was conducted from April to May 2017 in a suburb of Kanagawa Prefecture, Japan. Table 1 lists the survey items. Subjects were asked to check mark items from a list of 27 items the activities that they commonly did and applied to their activities in their everyday life. They could also double check mark the three items that were most important to them. They were asked to provide information on sex and age, but their names and other private information were not collected.

Differences between groups were compared using the chi square test, P-values < 0.05 were considered statistically significant.

# Table 1: Questionnaire of common activities and meal status

Among following items, please check what you are commonly doing and apply to activities in your everyday life. You may check ( $\)$  as many items as you want, and you may double check ( $\)$  best three items.

- 1. Frequent chats with friends.
- 2. Regular participation in culture groups
- 3. Participation in volunteer group activities
- 4. Continue working
- 5. Hobbies and classes
- 6. Taking care of pets
- 7. Meals with friends.
- 8. Chatting with friends over tea and coffee
- 9. Trips with family and friends
- 10. Going to a movie
- 11. Going to concerts and theaters
- 12. Going to museums and art exhibitions
- 13. Going out with children and grandchildren
- 14. Exercising
- 15. Taking a walk

 Table 2: Subjects number and classification

- 16. Doing some physical activity (
- 17. Taking care to prevent diseases (
- 18. Collecting information on diseases, drugs and health
- 19. Asking about drugs and diseases for others
- 20. Adhering to drug therapy
- 21. Learning about nutrition
- 22. Setting meals considering disease and nutrition
- 23. Understanding and implementing meals that are suitable for yourself
- 24. Understanding suitable meals for you but finding it difficult to prepare
- 25. Understanding and preparing meals that are suitable for family members

26. Understanding suitable meals for family members but finding it difficult to prepare such meals

)

27. Other

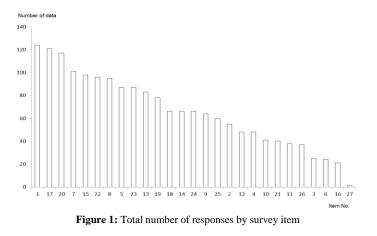
# RESULTS

Two hundred twenty-eight patients participated in the survey. Table 2 shows the number of participants: 69 (30.3%) were male and 159 (69.7%) were female. The age distribution was under 60 years old 19 (8.3%), 60–69 years old 73 (32.2%), 70–79 years old 89 (39.2%), 80–89 years old 43 (19.0%) and over 90 years old 3 (1.3%). Two hundred fourteen of the participants were being treated for lifestyle related diseases and 14 for rheumatoid arthritis and related diseases (RA).

| Total number                | 228                               |  |                    |        |            |          |             |
|-----------------------------|-----------------------------------|--|--------------------|--------|------------|----------|-------------|
| Male/Female<br>Number       | Male<br>69                        | Female<br>159                                      |                    |        |            |          |             |
| Age                         | Under 60                          | 60~69  | 70~79              | 80~89  | Over<br>90 | Under 73 | 73 and over |
| Number                      | 19                                | 73   | 89                 | 43     | 3          | 118      | 109         |
| Diseases                    | Life-style<br>related<br>diseases | Rheumatoid<br>Arthritis and<br>related<br>diseases |                    |        |            |          |             |
| Number                      | 214                               | 14   |                    |        |            |          |             |
| Life-style related diseases | hypertension                      | Diabetes<br>meritsz (DM)                           | hyperlipid<br>emia | Others |            |          |             |
| Number                      | 130                               | 38   | 98                 | 38     |            |          |             |

Figure 1 shows the overall trends for popular activities, recognition of their life, and nutritional status. The most popular responses were item 1 chatting with friends, followed by items 17 prevention of diseases and 20

adherences to drug therapy. The 10 most popular items included 4 items related to communication. And there were two items each related to health and medical care, physical activity, and nutrition, respectively.



From overall tendency of patient's preference, they focus on their health including adherence and common communication.

Figure 2 shows the differences between males and females. A higher proportion of males selected physical activities including items 15 walking, 13 going out with family, 10 going to movies, and 3 volunteer activities. For communication, females were higher for item 1 chatting with friends while males were higher for items 2 participation in culture group activities, 7 having a meal with friends, and 8 chatting with friends over tea and coffee. In the area of nutrition, females were higher for items 22 setting meals considering disease and nutrition, 21 learning about nutrition while a higher proportion of males selected items 23 understanding and preparing suitable meals for themselves and 25 understanding and preparing suitable meals for their family.

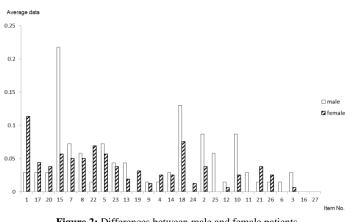
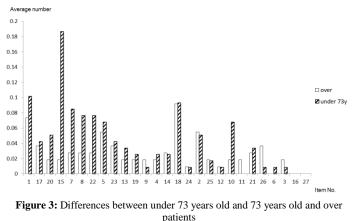


Figure 2: Differences between male and female patients

Significant difference observed higher chatting opportunity in female, and higher walking opportunity in male.

Figure 3 shows the differences between the under 73 years old and the 73 years old and over groups. There were no significant differences for health, cultural and nutrition related items such as items 2 participation in culture groups, 18 collecting information on diseases drugs and health, and 21 learning about nutrition. However, communication related items such as 1 chatting with friends, 7 having meal with friends, 8 chatting with friends over tea were significantly lower for the 73 years old and over group. Also, physical activity and going out items such as 15 walking, 13 going out with family and 10 going to movies were significantly lower for the 73 years old and over group.



Under73 tend to be more active than over73. Significant difference observed in catting opportunity, walking opportunity and having meal or coffee with friends.

Figure 4 shows the distribution for the RA patient group. The most popular item was 1 chatting with friends, followed by 7 meals with friends, 13 going out with children or grandchildren, and 8 chatting over tea. Thus, the most popular 4 items were communication related items. Items 17 prevention of diseases and 20 adherences to drug therapy were ranked seventh and eighth. The rankings were different from the overall study group.

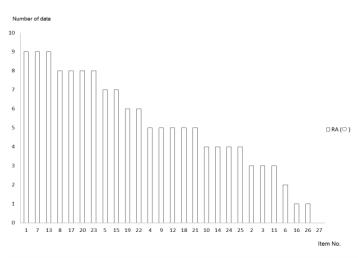


Figure 4: Preferred activities and other issues for RA patients

Patients with Rheumatoid Arthritis prefer items related communication, all best 4 are those of communication.

## DISCUSSION

Regarding overall preferences, the most common activity appeared to be chatting, followed by disease prevention and keeping track of adherence to drug therapy. And among the most frequently selected 10 items, four items were activities that involve communication. Others popular activities were walking, hobbies and two food and nutrition items respectively. These results suggest that the elderly were participating in communication and physical fitness activities that are feasible in everyday life. They were also interested in items related to health and medical care (Fig. 1). It also suggests that they understood the feasibility of items in their everyday lives considering cost and time saving. In addition, it is clear that they are conscious about nutrition and foods<sup>6–8</sup>. Item 21 taking meals considering nutrition was ranked 6th, it is accepted that large numbers of elderly are thinking about nutrition in their everyday life. On the other hand, they also reported that even though they knew foods and meals that were appropriate for them, preparation was difficult (item 24). It is suggested that their understanding of nutrition and foods could be supported by providing practical information on cooking and selection of foods<sup>9</sup>.

For differences between males and females, item (15) walking is significantly higher for males while item (1) chatting with friends is significantly higher for females. It is typical that males participate in more physical activities than females and females participate in more communication related activities than males. A previous report found that physical activity of males and female were not significantly different, however, this was an analysis of young persons<sup>10</sup>. Thus, this study's results provide some insights on elderly persons in Japan. Regarding meals and nutrition, the selection of items 22, 21, 24 and 26 by females indicated both understanding of lack of knowledge and willingness to about nutrition and meals. Both males and females were aware of information on diseases, drug taking and prevention of diseases. These results showed that Japanese elderly were are already making efforts to maintain their health. However, considering differences between males and females for physical and communication activities suggests the possibility of improvement by providing appropriate information and education<sup>11–13</sup>. Since, our results showed that there are the needs related to methods for preparing suitable foods, the nutrition status of the elderly could be improved by providing understandable examples and cooking demonstrations in the community.

Regarding age (Figure 3), the interest in health and related information was not different between the under 73 years old and the 73 years old and over groups, however, it is obvious that the 73 years old and over group does less physical activity than the under 73 years old group. Since 73 is the boundary age for healthy aging in Japan, there is the possibility to promote healthy aging by promoting physical activities in the 73 years old and over group has fewer communication opportunities than the under 73 years old group, it is also necessary to create more opportunities for communication in the communication is a key for healthy aging, not only within the elderly group but also extending communication with other generation groups would be better for the elderly, particularly for those living alone and elderly couples<sup>16</sup>.

There were differences in ranking between the lifestyle related disease and RA groups (Figure 4). The RA group had a higher preference for communication related items than the overall ranking. It suggests that they need more communication with other people to overcome their disease and their difficulties in life. The data is a useful input for managing support for patients with RA. It will be useful to extend communication opportunities for the RA group with other patients in their group. It would also be useful for them to exchange information on how to cope with their difficulties in life, feasible activities and cooking.

# CONCLUSION

Promoting healthy aging contributes to individual quality of life and also supports local communities as a whole. Health includes not only treatment for physical disease conditions, but also various social and mental aspects. This study identified several practical ideas for supporting the elderly such as encouraging physical activity for seniors 73 years old and over, everyday communication for male seniors and more opportunities for physical activity for female seniors. Communication has the power to help overcome difficulties of disease in RA. For all elderly, it could be useful to provide information on healthy foods and cooking.

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