

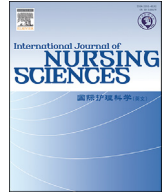
HOSTED BY



Contents lists available at ScienceDirect

# International Journal of Nursing Sciences

journal homepage: <http://www.elsevier.com/journals/international-journal-of-nursing-sciences/2352-0132>



## Research Paper

# Meaning of community activity participation for older adults in couple households

Yumie Kanamori<sup>\*</sup>, Ayako Ide-Okochi

School of Health Sciences, Kumamoto University, Kumamoto City, Japan

## ARTICLE INFO

### Article history:

Received 1 April 2023

Received in revised form

9 August 2023

Accepted 12 September 2023

Available online 14 September 2023

### Keywords:

Aged

Community activity

Community participation

Family characteristics

Qualitative research

## ABSTRACT

**Objective:** Currently, 65.3% of older adults in Japan live in couple households. If one partner dies, the other may be unable to reconstruct their lifestyles, have health problems, or become isolated. Participation in community activities helps them maintain physical, mental, and social health. This study aimed to clarify the meaning of participation in community activities among older adults in couple households.

**Methods:** Semi-structured individual interviews were used to collect data. In February 2019, six adults aged 65 and above who had lived with their spouses for at least one year and continuously participated in community activities were interviewed in Miyazaki City, Japan. Data were analyzed using the KJ method (a qualitative method that organizes ideas in a bottom-up fashion developed by Kawakita Jiro), supervised by a professional instructor.

**Results:** The results revealed seven symbols using this method: 1) building a cooperative relationship with a spouse: respect the willingness to work hard for members; 2) consideration for relationships with other organizations: pay attention to every detail; 3) proactive attitude: don't leave everything to others, 4) attitude of questioning one's way of being: myself in connection to others, 5) connection among participants: increased awareness directed toward others, 6) spiritual fulfillment: time, place, and opportunity for outings, 7) physical and mental self-control for continued community activities: growing awareness of health care.

**Conclusions:** For older adults in couple households, it is found that participation in community activities helps them receive support from their spouses and gain a proactive attitude, and the connection between participants contributes to physical and mental control and also improves their health.

© 2023 The authors. Published by Elsevier B.V. on behalf of the Chinese Nursing Association. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## What is known?

- The quality of life of those who participate in community activities is higher than those who do not.
- Those who participate in community activities are less likely to exhibit depressive tendencies than those who do not.
- Participation in community activities among frail individuals and older adults who live alone can help ensure opportunities for physical activity, expand relationships, and prevent dementia.

## What is new?

- Older adults in couple households built a cooperative relationship with their spouses through participation in community activities.
- Participation in community activities allows older adults in couple households to connect with others, question their ways of being, and contribute to spiritual fulfillment and physical and mental self-control.

## 1. Introduction

Currently, 65.3% of older adults in Japan live in couple households, the highest percentage of older adults aged 65 and over [1]. In case of the death of one spouse in a couple household, the other starts living alone. Currently, the average life expectancy in Japan is 81.47 years for men and 87.57 years for women, and one of the

<sup>\*</sup> Corresponding author.

E-mail address: [yumiek@kumamoto-u.ac.jp](mailto:yumiek@kumamoto-u.ac.jp) (Y. Kanamori).

Peer review under responsibility of Chinese Nursing Association.

older adults in the couple's household will probably become an older adult living alone in the future [2]. The difference in life expectancies between men and women in countries such as France, Switzerland, and Germany is similar to that in Japan [3]. There are scattered cases of older adults living alone after a spouse's death who cannot reconstruct their lifestyles due to mental depression [4] and who present health problems such as depression and become isolated [5].

Health promotion activities in Japan are performed in the form of community activities based on self-help and mutual assistance to enable more elderly people to continue to promote their health and prevent nursing care in their immediate surroundings based on mutual support among residents [6]. Community activities can help older adults living alone regain their lost health [7]. After bereavement, older adults living alone maintain their health by maintaining their place in the community [7]. Therefore, they need to participate in community activities and maintain ties to the community from when they live as couples with an eye toward the future.

In 2021, 17.7% of 70–74-year-olds in Japan participated in local events and community development activities, almost the same percentage as in the U.S. (17.2%). In contrast, 22.5% of the 75–79-year-olds were in Japan, and 27.0% were in the U.S., compared to 4.1% in Germany and 8.3% in Sweden [8]. Therefore, the situation is relatively better than in European countries. In Japan, the participation rate in 2021 was 7.2% lower than in 2013, with single-person households having the lowest rate at 25.0% [1]. The participation rate of older adults living alone in couple households was 27.7%, slightly higher than that of older adults in single-person households. However, the number of older adults living alone is expected to increase after 2025, when the baby boomer generation enters the later stages of aging [9]. This generally means that the current older adults in the couple's household may move to older adults living alone. Therefore, at this point, it is necessary to promote the participation of older adults in couple households in community activities. However, couple household older adults have a system to consult and cooperate with the couple for now [10]. Therefore, many older adults in couple households worry about their and their spouse's health but do not participate in community activities [1].

Studies on community activities have been reported in systematic reviews of the determinants of community participation [11] and the effects of community participation [12]. Additionally, participation in community activities helps maintain the physical and mental health of older adults, including lower fall rates [13], improved activities of daily living [14], reduced depression [15], and improved life expectancy [16] and quality of life [17]. In Oda's study on the relationship between changes perceived by participants in voluntary health promotion activities and their participation in community activities, more than 70% of the participants perceived an increase in friends, getting along better with friends, improved sociability, and increased independence as a result of their participation in community activities [18]. Webber also found that social participation helps increase and maintain an individual's social network, an important source of psychological and emotional support [19]. In summary, participation in community activities contributes to developing friendships and social networks among participants. For older adults, social networks are the foundation of their lives and health maintenance [20]. Therefore, it is important to encourage older adults to participate in community activities to promote their health. Previous studies have demonstrated that participation in community activities among older adults living alone [7] and the frail older adults [21] expands personal relationships, prevents dementia, and provides opportunities for physical activity, which can be used to promote health activities for these older adults [22]. Thus, we make meaning of participation in

community activities among older adults in couple households. In this way, we can better understand how they are trying to make the most of community activities within themselves. This is important for community nursing professionals who practice older adults-centered health activities.

Therefore, this study clarifies the meaning of participation in community activities among older adults in couple households. This will help encourage older adults in couple households to participate in community activities. In addition, when they live alone, participation in community activities will help them lead healthy lives.

## 2. Methods

### 2.1. Study design and participants

A descriptive qualitative study was conducted to understand the meaning of participation in community activities among older adults in couple households in Japan. By adopting the KJ method for analysis, we believed that we could seek universality and lawfulness while grasping the individuality and uniqueness of the life experiences and sense of comprehensiveness older adults possessed.

The proportion of older adults in couple households is 65.3% of the total older adult population [1]. Of these, 27.7% participated in community activities [1]. Fewer participants were involved in community activities for at least one year. Based on Kawakita's experiences, Yamaura noted that additional opinions tend to disappear around the sixth or seventh person in the analysis process [23]. Moreover, the number and variety of data (background and ideas) should be ensured for data saturation [23]. We considered the feasibility of recruiting participants based on these factors. Consequently, it was determined that approximately six participants would be realistic regarding the gender ratio and variety of respondents. With six respondents, a certain degree of variety and saturation could be expected owing to the discernment of the center's staff, who worked with participants daily during the candidate selection process. Participants were those who agreed to cooperate in the study. The participants were six adults aged 65 and above who had lived with their spouses for at least one year and continuously participated in community activities.

### 2.2. Recruitment and enrolment

We first commissioned a local comprehensive support center in Miyazaki City, Japan, to publicize the recruitment of participants for the study. This is a rural city with a population of approximately 300,000 of which older adults comprise 28%. The principal investigator (Y. Kanamori) made a written and oral commission to the Community Comprehensive Support Centre in City A and obtained written consent. The center's staff then provided a written explanation to the respondents who fulfilled the requirements for participation. Those who were willing to participate were contacted directly by the principal investigator. Then, the principal investigator explained to the potential participants, both orally and in writing, the purpose and methods of the research, handling, and protection of personal information, that participation in the research was voluntary, and that they could withdraw their consent even after agreeing to cooperate.

### 2.3. Ethical considerations

This study was approved by the Research Ethics Review Board of the Japanese Red Cross Kyushu International College of Nursing (approval no. 18–023, approved on 30 January 2019). We explained

to each participant the purpose and methods of the study, the protection of personal information, the fact that the participation in the study was voluntary, the protection of human rights, and the publication of the study results, using the Explanation of Ethical Considerations form. In addition, participants read the explanation of ethical considerations and signed a consent form if they agreed to participate. Informed consent was obtained from all subjects involved in the study.

#### 2.4. Data collection

The survey was conducted in February 2019. Data were collected through semi-structured interviews. One interview (47–55 min) was conducted with each participant. The interviews were recorded with the participants' consent using a voice recorder. The interview guide used for the semi-structured interviews was developed to achieve the objectives of this study. In previous studies on older adults living alone [20] and frail older adults [21], the interaction among participants in community activities was discovered to help maintain health. Therefore, an interview guide was created to include perspectives on these exchanges. The interview guide included basic information (age, gender, residential history, type of community activity, years of activity, frequency of activity, etc.) and questions such as what kind of community activities they participated in, how they started, who they had interacted with so far through their activities, and how their own lives and health were affected by their participation in the activity. The participants were asked not to talk about anything they did not want to talk about.

#### 2.5. Data analysis

This study used a qualitative descriptive design. The KJ method was used to analyze the data. This method, developed by Kawakita Jiro, is a qualitative method that organizes ideas in a bottom-up fashion [24]. The KJ method is used in comprehensive fields, including education, industry, nursing, etc [25]. The advantage of this method is that it allows the information collected from participants to speak for itself rather than being categorized according to the researcher's subjective or arbitrary interpretation. It is used for nursing in Japan [26]. In recent years, it has been used in the UK and other countries [27,28]. Older adults participated in the study. Since the developmental stage of older adults includes the integrative meaning of life, we decided that the KJ method was suitable for capturing the manifest and latent feelings of the participant. The KJ process employed in this study is as follows. 1) Creation of labels. We carefully read the transcripts created by transcribing recorded data. We separated each cluster of meanings into 80–130 characters to avoid detracting from the meaning of the original sentence. 2) Creation of the groups. We collected two to four labels with similar meanings. 3) Assignment of nameplates. We identified similarities in the group labels, extracted core concepts, and assigned them to groups as nameplates. The core concept on the nameplate is described descriptively in writing. 4) Integration. We repeated the creation of the groups by putting on new nameplates at each stage (A–G). We had no more than ten nameplates. 5) Spatial arrangements. We examined the interrelationships among the nameplates to find the most obvious placement. 6) Creating symbols. Once we decided on the placement of the nameplates, we decided on symbols. A symbol is a term in the KJ method that refers to a symbolic representation of the essence of the sentence. Symbols may be expressed in a single word or a dual structure with a table of contents and a brief description of the contents. In this study, a dual structure was used. Next, we completed our diagram by adding a mark to indicate the relationship between the symbols.

We first performed steps (1–3) for six cases (N1 to N6), resulting in 103 labels: 16 from N1, 28 from N2, 13 from N3, 11 from N4, 17 from N5, and 18 from N6. Steps (2, 3) were repeated for these 103 cards to obtain seven nameplates. The spatial arrangement of the seven nameplates was then created and diagrammed using symbols.

The diagrams created by symbols and signs provide clues to help third parties grasp the big picture while simultaneously guiding their understanding of the internal structure [24]. Holloway et al. demonstrated that in qualitative research, diagrams illustrate the relationships between themes or categories, and this graphic display can enhance the storyline and help convey its meaning [29]. In this study, the story was written based on the relationships between the symbols shown in the diagram.

#### 2.6. Rigor and trustworthiness

The rigor and reliability of the study were ascertained using criteria proposed by Lincoln and Guba [30]. The researcher (Y. Kanamori) focused intensively on data collection and analysis, becoming deeply familiar with what the data communicated and consciously synthesizing its larger meaning. The principal investigator (Y. Kanamori) received basic KJ method training to ensure data saturation in the analysis and to reduce individual researcher bias. In addition, a KJ method professional instructor supervised us on the content and methods of the analysis. Discussions were held with experts in qualitative research and public health nursing.

### 3. Results

#### 3.1. The demographic information of participants

The six participants (N1–N6) in this study consisted of three males and three females, and their ages ranged from 67 to 79 years, with a mean age of 72 years. They all lived in two-person households with their spouses and participated in community activities, such as salons for older adults, neighborhood associations, and volunteer activities to supervise older adults (Table 1).

#### 3.2. Extracted symbols

Symbols were attached to the final labels obtained after seven levels of group integration for 103 labels. The symbols were: 1) building a cooperative relationship with spouse: respect the willingness to work hard for members; 2) consideration for relationships with other organizations: pay attention to every detail; 3) proactive attitude: don't leave everything to others; 4) attitude of questioning one's way of being: myself in connection to others; 5) connection among participants: increased awareness directed toward others; 6) spiritual fulfillment: time, place, and opportunity for outings; 7) physical and mental self-control for continued community activities: growing awareness of health care. Table 2 presents the relationships between labels N1–N6, which served as the data for this analysis.

#### 3.3. Story and details of the meaning of the symbols

Subsequently, our story is as follows. For older adults in couple households, [building a cooperative relationship with their spouse] through participation in community activities led to [proactive attitude] in their activities. [Proactive attitude] helped them in [consideration of relationships with other organizations] and maintenance of their relationships to cope with difficulties in their activities, which led to [spiritual fulfillment]. At the same time, [proactive attitude] led to [attitude of questioning one's way of being] in the [connection among participants], such as enduring

**Table 1**  
Summary of study participants.

Participants	Age group	Gender	History of one's residence (years)	Roommate	Participating community activities	Activity number of years
N1	70s	Male	42	Spouse	Volunteer watchdog, senior citizen salon, volunteer watchdog	18
N2	60s	Female	32	Spouse	Salons for older adults, volunteer watchdog groups, community patrols	9
N3	60s	Female	36	Spouse	Community service committee members, senior citizens' salons, health and exercise classes	15
N4	70s	Female	50	Spouse	Senior citizens club, volunteer watchdog	15
N5	70s	Male	22	Spouse	Environmental beautification activities, senior citizens club	10
N6	70s	Male	40	Spouse	Community welfare committee members, residents' associations, senior citizens' clubs, senior citizen salons	6

**Table 2**  
The relationship between symbols and number of original labels per individual analysis.

Symbols	Number of original labels per individual analysis					
	N1 (M)	N2 (F)	N3 (F)	N4 (F)	N5 (M)	N6 (M)
Building a cooperative relationship with spouse	1	4	1	1	3	1
Consideration for relationships with other organizations	2	1	1	0	3	2
Proactive attitude	0	0	0	1	3	1
Attitude of questioning one's way of being	5	10	5	5	2	1
Connection among participants	5	1	2	1	0	5
Spiritual fulfillment	1	8	1	0	4	2
Physical and mental self-control for continued community activities	2	4	3	3	2	6
Total number	16	28	13	11	17	18

Note: M = male. F = female.

and making efforts to help others. As a result, older adults in couple households developed a sense of self-protection of their health and practiced [physical and mental self-control for continued community activities].

The symbols are explained by showing each final label and sublabel. The final label is indicated by < >, low labels by "", and (label No., participant N.) are shown at the end. The diagram of the relationship between the symbols is shown in Fig. 1.

3.3.1. Building a cooperative relationship with spouse: respect the willingness to work hard for members

The nameplates read, <My spouse has always been the best and most understandable person (E005), respecting my wishes, helping me with activities and household chores, and being my ally in my efforts to do my best for everyone>.

Older adults in couple households also recognized that "their spouses' positive acceptance of their participation in activities and their support through casual words and actions were a boost to continuing their activities." (C013, N2, N4, and N5)

"Spouses, even if they are dissatisfied with the activities of their husbands or wives in the community, eventually show understanding, cooperate in housework, etc., and at the root, they respect the will of each of them to be involved in community organization activities."(D010, N1, N2, N6)

"My husband has been a great support in every way, consulting with me to make salon guides, helping me prepare for activities, and sometimes taking over for me when I am not feeling well." (054, N3)

"My husband used to be a person who never did any housework, but after I became active, he started helping me by folding laundry, which was good for both of us." (024, N2). "My wife sometimes

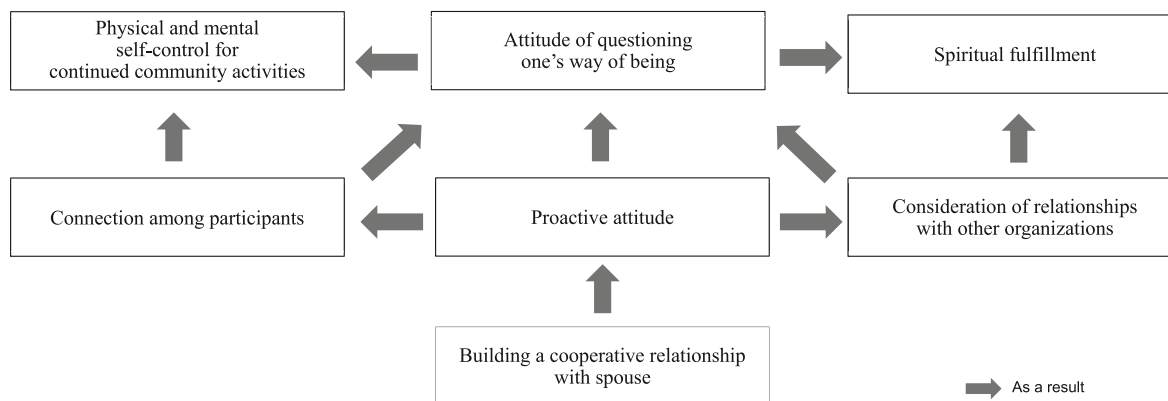


Fig. 1. Meaning of community activity participation for older adults in couple households.

complains and scolds me about my activities in the community, but at the end of the day, she understands my feelings.” (A006, N1, N6)

The stable support of their spouses was found to be why older adults in couple households could devote themselves to the activities of community organizations.

### 3.3.2. Consideration of relationships with other organizations: pay attention to every detail

The nameplates read, <When working in a community, it is necessary to be aware of the difficulties that arise to a greater or lesser extent, such as the lack of board members, dealing with people with dementia, maintaining relationships with the community association, and taking care of other details (F006).>

Participants stated, “When we are active in the community, we face some difficulties. Sometimes young people are unwilling to serve on the board, and sometimes we struggle to deal with people with dementia.” (E002, N1, N2, N5, and N6)

“When we are active in the community, we are required to maintain a relationship with the community association; however, we sometimes struggle with differences of opinion, and sometimes we appeal for cooperation with the results of our activities.” (C001, N3, N5, and N6)

“To revitalize activities such as networking in the community and continuing park maintenance, it is necessary to devise ways to easily seek cooperation from the community association, such as by playing the dual roles of community welfare volunteer and community association officer and by appealing to the community association for the results of activities.” (B021, N5, N6)

“During their activities, they meet people they would like to learn from and receive good stimulation, but they also struggle with relationships, such as disagreements with the community association or inability to understand their ideas.” (A009, N3, N5)

The participants were pleased with the variety of interactions they could have through their activities, which led to a sense of fulfillment.

### 3.3.3. Proactive attitude: don't leave everything to others

The nameplates read, <Participants in the community activities have their determination to continue the activities properly, and they feel that the local people should engage in maintaining the park by themselves rather than relying on the city to do so (E004).>

Participants are prepared to continue community activities. “We are prepared to continue our community activities by vowing never to be discouraged when things go wrong in our activities and by having strong internal rules to live each day in good spirits.” (D005, N4, N5, and N6)

“We feel that although the city arranges for cleaning, for the park to remain pleasant for people to use, it is ultimately up to the local people themselves to take on the maintenance of the park.” (B010, N5)

“He has a strong inner resolve to live each day well, such as not relying on his children to care for his wife unless he collapses or never turning his back on them even if they make him angry.” (C007, N4, N5)

“While I would like to see more community watchdogs and gatherings, it is not going well, but I am determined not to be discouraged and will die trying until the end.” (O97, N6)

“Although I started with a light heart at first, my sense of mission gradually grew as I began to feel the importance of keeping local parks clean locally, such as by feeling people's happy reactions to the cleanliness of the parks.” (O76, N5)

These results demonstrate that the participants considered it fundamental to respond on their own without leaving it up to others.

### 3.3.4. Attitude of questioning one's way of being: myself in connection to others

The nameplates read, <People who think about their attitude towards community board member expectations and activities are continually committed to helping others and contribute to community organizing activities emphasizing human connections (G002).> They knew their roles in the activities and their connections with other people.

Participants said, “We always try to fulfill the role expected of me as a board member, such as taking proactive and watchful actions for older adults in the community.” (E003, N1, N2, N3, and N4)

“Those who can envision their way of being in the community, such as feeling that they can contribute to the community and having a disposition to assist others, are able to engage in constructive activities, such as enjoying human connections and acting independently.” (E006, N1, N2, N3, N5, and N6)

“At salons, he always considers his actions with an awareness of his position, such as looking ahead to see how the older adults participating in the salon are doing, and as a board member, he wishes to be a conduit between everyone and the inclusive community.” (B009, N4)

“I think that the reason why they enjoy participating in activities and feel so compassionate toward people in the community that they feel as if they have more relatives is because they have the disposition to take the initiative and want to help others, such as being a meddling type by nature.” (C009, N1, N2).

### 3.3.5. Connection among participants: increased awareness directed toward others

The nameplates read, <Residents have become aware of the importance of caring for others in their daily lives and have developed close relationships to understand each other even without talking to each other, and through community organization activities, they have been able to form heartfelt connections (F002).> Participants were found to form connections with other participants through community activities.

Participants said, “We think that a sense of solidarity has been fostered among residents to live in the community while assisting each other, such as a tendency for residents to assist each other and a sense of the role that they do not leave local tasks to others.” (C004, N1, N2, N3, and N6)

“Some of the close ties established through community activities allow people to talk to each other daily, while others allow people to communicate with each other and continue with their work.” (D009, N1, N4, and N6)

“Everyone in our community gets along well with each other, especially my friend who is the community association president.” (O99, N6)

“In the community, we feel that people are building relationships of mutual support, such as inviting each other when they go to salons and creating opportunities for people who live alone to connect with their peers.” (A017, N1, N3)

### 3.3.6. Spiritual fulfillment: time, place, and opportunity for outings

The nameplates read, <Participation in community organizational activities can generate a sense of a rich and healthy life because it is a time, place, and opportunity to have a vibrant life and to feel contented and fulfilled (F004).> The participants experienced spiritual fulfillment through community activities.

Participants said, “We can add liveliness to their daily lives, such as the feeling that they are leading dense and enriched lives through community activities and living healthy by having a schedule of places and times to go.” (E001, N1, N3, N5, and N6)

“By participating in community activities, we can experience satisfaction in enriching our lives, such as having time for spiritual fulfillment and feeling that our lives are expansive and rich.” (D003,

N2, N5, N6)

*“Although there is an attachment to the park after years of activity, stepping out of one’s home and doing park maintenance gives one a sense of fulfillment, such as the exhilaration of a shower after an activity or the praise one gets from others.”* (B017, N5)

*“I think the key to avoiding dementia is not to dabble in work and home life, but to do things in the community, to worry about people with dementia, and to accentuate your days by thinking about how things are going.”* (O95, N6)

*“He sees volunteer gatherings as an opportunity for personal growth, such as being a place where he can observe many people and learn how to think and act from others.”* (A019, N2)

### 3.3.7. Physical and mental self-control for continued community activities: growing awareness of health care

The nameplates read, <Participants in community activities could maintain their health and continue participating as they became aware of the need to protect their health and exercise self-control over their bodies and minds to continue their activities for a long period (G001).> The participants exercised physical and mental self-control to prolong their activities.

Participants said that *“People who are feeling gloomy appear to be energized by attending gatherings, meeting their peers, getting to know each other, and feeling that their minds and hearts are healthy.”* (D007, N2, N4, and N6) and *“We are happy to hold lectures on the 2025 issue and have people attend voluntary gymnastics practice because we feel it is important for people to realize the importance of coming out for themselves, not for others.”* (C006, N3)

*“When I see people who have stopped coming to the salon die and those who continue to come to the salon are elderly and healthy, I realize that coming out to gatherings is important to stay healthy.”* (B025, N2, N6)

*“They are unknowingly taking strict control of their health to stay active in the community, such as asking doctors to give them injections to control the pain of their chronic illnesses or taking their blood pressure every morning.”* (A018, N3, N4)

*“Sometimes my back hurts or I feel sick, so I work through those times repeatedly to rest and regain my energy.”* (O84, N5)

## 4. Discussion

Although studies have been conducted on the impact of community activities on health among the frail older adults [21] and older adults living alone [20], few have focused on older adults in couple households. It was revealed that older adults in couple households respect the wishes of their spouse when engaging in community activities, such as cooperating with them in preparing for community activities and household chores. Koike noted that Japanese couples tend to rely on their spouses first for everything [31]. Older adults in the couple’s households were less involved in community resources than those living alone [10]. This may indicate that even though household resources are limited, those in a couple’s household are willing first to consult and cooperate to overcome the problem [10]. Sae et al. state that married couples have health benefits from healthy behaviors such as flu shots and cancer screenings [32]. Based on the above, Japanese older adults in a couple of households try to fulfill their lives by complementing and cooperating. Additionally, the cooperative relationship between a couple formed through their participation in community activities has spontaneously emerged from these characteristics. Considering the above, the understanding of spouses obtained from this study is an important factor in the participation of older adults in couple households in community activities.

The participants did not leave it to others. Still, they were prepared to continue with community activities even if things went

wrong and participated proactively in activities, paying attention to their relationships with other organizations, such as neighborhood associations. In a study comparing older adults’ community activities with those in Denmark [33], codes related to the significance of older adults’ activities, such as “self-initiative” and “self-determination” in conducting activities, were common in both countries, but “proactive activities are part of life,” such as “older adults being proactive is essential,” “the importance of going out,” and categories indicating “the need for activity,” were found only in Denmark. Community activities related to public health in Japan began in 1897 when the first sanitation self-governing body was stipulated as a sanitation association under the Infectious Disease Prevention Law. However, it is a subordinate government organization [34] established with the government’s initiative and involvement. This background makes it difficult to foster a sense of resident initiative [35]. The results of this study revealed that older adults in couple households were proactive in their activities, which was consistent with previous findings in Denmark. In addition, this proactive attitude was central to the relationships developed within the community activities, such as the connections between the participants, their relationships with other organizations, and their willingness to question their way of being. Moreover, it led to self-control and a sense of spiritual fulfillment to continue participation. Oda also found that older adults who participated in voluntary health promotion activities increased their frequency of participation in community activities, as did those who perceived an increase in their proactive activities [18]. This is consistent with the results of this study in that Proactive attitude leads to continuity of participation. This finding suggests that proactive attitudes are related to continued involvement in community activities, even among older adults in couple households.

Furthermore, the participants in this study formed emotional connections with others while questioning their ways of being involved in community activities. The sanitation administration of Japan has existed since 1872; however, even before that, there were village communities as living communities in rural areas [36]. Therefore, after 1897, residents’ organizations involved in community health, such as the Aikikai group, contributed to declining infant and other mortality rates. Still, these community health activities were established based on the original mutual assistance function of the community [37]. Resident organizations involved in community health include neighborhood associations and health promotion workers, but participants recognize their existence in mutually supporting relationships with others [7]. The results of this study show that they question their way of being involved in community activities. This may be influenced by the Japanese cultural background in which the community is a place of living community [36].

According to Komatsu et al., one of the roles of leaders in group-based community activities is to “create and foster a culture and environment of mutual assistance” [37]. Additionally, elderly people’s participation in community activities is believed to increase their number of friends, deepen their rapport, and improve their sociability [18]. Hashimoto stated that older adults need a sense of social solidarity when living in their community [38]. These previous findings are consistent with the results of this study, in which older adults formed a sense of emotional connectedness while questioning their state of being. Additionally, while older adults who live alone participate in activities in search of their place in the community [7], older adults in couple households participate in community activities, emphasizing their sense of self as members of society. Older adults in the couple’s household are less likely to have a relationship with the community because they can cope with their lives and health while living with their spouses [10,39].

However, when the life event of spousal bereavement occurs, they are left alone, making ties to the community essential [39]. Therefore, it is important from a future perspective for older adults in couple households, such as the participants in this study, to participate in community activities and build and maintain social relationships.

Older adults in couple households achieve spiritual fulfillment and continuity of activities through participation in community activities. According to Mass, social participation, contact with friends of the same age, and assisting each other promote functional health and well-being among older adults [40]. Lions also indicated a higher sense of well-being among community activity participants [41], and Berry further stated that community activity participants experienced less psychological distress [42]. This is consistent with the fact that the participants in this study acquired a sense of psychological fulfillment from participating in community activities and that the acquisition of psychological fulfillment led to the further continuation of activities. Additionally, the final label of the continuation of activities includes the development of an awareness of self-protection of one's health and self-control of physical and mental health to continue activities for a longer period through community activities. According to previous studies, community activity participants have a higher quality of life than the general elderly population regarding intellectual proactive attitude, self-esteem for activities of daily living, and social roles [43]. Participation in community activities is believed to create social roles, increase awareness of one's physical and mental health, and lead to active control of one's health. Therefore, it is crucial for older adults in couple households to participate in community activities to gain social health and control their physical and mental health. This can contribute to the super-aging Japanese society as a long-term health promotional activity focusing on older adults living alone.

## 5. Limitations

In this study, regardless of the type of organization (volunteers or community associations), we considered community activities to solve health problems from the perspective of public health nursing. Therefore, we needed to determine whether the results differed according to the type of community organization. There were six participants; their gender ratio and the differences in backgrounds and perspectives on the subject allowed us to capture various opinions and achieve a certain degree of saturation. However, a survey involving more participants could have further captured the phenomenon. Therefore, it is important to consider the need for additional surveys in the future. Further, these were limited to the residents of one city, and there is a possibility of bias owing to regional characteristics. Therefore, the target area should be expanded in the future, and the number of participants should be increased in conjunction with the expansion of the target area; if necessary, the group type should be changed.

## 6. Conclusion

This study clarified the meaning of participation in community activities among older adults living in couple households. We conducted semi-structured interviews with older adults living in couple households and employed the KJ method to analyze the data. We identified seven symbols using this method. Therefore, encouraging older adults in couple households to participate in community activities can help improve their health.

## Funding

This study was funded by a Grant-in-Aid for Scientific Research (18K17663) from the Japan Society for the Promotion of Science. This fund was spent for supplies, travel, collection of materials, and preparation of verbatim records in the design, implementation, and analysis of this survey.

## Data availability statement

The datasets generated during and/or analyzed during the current study are available from the corresponding author upon reasonable request.

## CRediT authorship contribution statement

**Yumie Kanamori:** Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data curation, Writing-original draft, Writing-review & editing, Visualization, Project administration, Funding acquisition. **Ayako Ide-Okochi:** Conceptualization, Methodology, Formal analysis, Writing-original draft, Writing-review & editing, Supervision.

## Declaration of competing interest

The authors declare that they have no conflict of interest.

## Acknowledgments

We would like to express our deepest gratitude to all the residents and Regional Comprehensive Support Center staff who cooperated with our interview survey in Miyazaki City.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijnss.2023.09.003>.

## References

- [1] Cabinet Office, Government of Japan. Results of the 2021 survey on older adults' daily life and community participation. [https://www8.cao.go.jp/kourei/ishiki/r03/zentai/pdf\\_index.html](https://www8.cao.go.jp/kourei/ishiki/r03/zentai/pdf_index.html). [Accessed 7 June 2023].
- [2] Ministry of Health, Labour and Welfare. Abridged life tables for Japan 2021, life expectancies at specified ages. Available from: <https://www.mhlw.go.jp/english/database/db-hw/lifetb21/dl/lifetb21-01.pdf>. [Accessed 21 March 2023].
- [3] Umezaki KK, Sokejima S, Sekine M, Naruse Y, Kagamimori S. Lifestyle differences between conjugal bereaved women and non-bereaved women in later life. *Nihon Koshu Eisei Zasshi* 2003;50(4):293–302. <https://pubmed.ncbi.nlm.nih.gov/12772609/>.
- [4] Mayumi F, Misako S, Mineko N, Tetsuya O. Adaptation to life after bereavement of a spouse—the relationship of confidence in life and roles viewed from a gender perspective, vol. 24. *Bulletin of Faculty of Health and Welfare Science, Okayama Prefectural University*; 2018. p. 25–32. <https://doi.org/10.15009/00002209>.
- [5] Kawai C, Sasaki M. Adjustment to spousal bereavement and successful aging: a 16-year longitudinal study. *Shinrigaku Kenkyu* 2004;75(1):49–58. <https://doi.org/10.4992/jjpsy.75.49>.
- [6] Ministry of Health, Labor, and Welfare of Japan. Establishing 'the community-based integrated care system'. [https://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/dl/establish\\_e.pdf](https://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/dl/establish_e.pdf). [Accessed 21 March 2023].
- [7] Kanamori Y, Morita T. Interactions of community organization activities participation for healthy older adults living alone. *Yamaguchi Med J* 2021;70(1):5–16. <https://doi.org/10.2342/ymj.70.5>.
- [8] Cabinet Office, Government of Japan. The 9th international comparative survey on the life and attitudes of older adults. <https://www8.cao.go.jp/kourei/ishiki/chousa/index.html>. [Accessed 21 March 2023].
- [9] Cabinet Office, Government of Japan. Annual report on the ageing society [Summary] FY2021. <https://www8.cao.go.jp/kourei/english/annualreport/2021/pdf/2021.pdf>. [Accessed 7 June 2023].
- [10] Uezono M, Kubota Y, Fukushima K, Yuko Ohara H. Perceptions of residents of

- the T-housing complex towards relationship with local children, neighbors and the autonomous association: comparison by the structure and life stage of the family of the respondents. *Health Sci Res* 2015;27:35–43. <https://nagasaki-u.repo.nii.ac.jp/records/5949>.
- [11] Talò C. Community-based determinants of community engagement: a meta-analysis research. *Soc Indic Res* 2018;140(2):571–96. <https://doi.org/10.1007/s11205-017-1778-y>.
- [12] Haldane V, Chuah FLH, Srivastava A, Singh SR, Koh GCH, Seng CK, et al. Community participation in health services development, implementation, and evaluation: a systematic review of empowerment, health, community, and process outcomes. *PLoS One* 2019;14(5):e0216112. <https://doi.org/10.1371/journal.pone.0216112>.
- [13] Jeon MY, Jeong H, Petrofsky J, Lee H, Yim J. Effects of a randomized controlled recurrent fall prevention program on risk factors for falls in frail elderly living at home in rural communities. *Med Sci Mon Int Med J Exp Clin Res* 2014;20:2283–91. <https://doi.org/10.12659/MSM.890611>.
- [14] Luoh MC, Herzog AR. Individual consequences of volunteer and paid work in old age: health and mortality. *J Health Soc Behav* 2002;43(4):490–509. <https://doi.org/10.2307/3090239>.
- [15] Li YQ, Ferraro KF. Volunteering and depression in later life: social benefit or selection processes? *J Health Soc Behav* 2005;46(1):68–84. <https://doi.org/10.1177/002214650504600106>.
- [16] Harris AHS, Thoresen CE. Volunteering is associated with delayed mortality in older people: analysis of the longitudinal study of aging. *J Health Psychol* 2005;10(6):739–52. <https://doi.org/10.1177/1359105305057310>.
- [17] Carr D. Volunteering among older adults: life course correlates and consequences. *J Gerontol B Psychol Sci Soc Sci* 2018;73(3):479–81. <https://doi.org/10.1093/geronb/gbx179>.
- [18] Oda H, Kikuchi M, Yamauchi N, Takenaka H, Abe H, Oichi M, et al. Relationship between changes perceived by participants in voluntary Health Promotion activities and their participation in community activities. *Publ Health Nurs* 2020;9:146–55. [https://doi.org/10.15078/jjphn.9.3\\_146](https://doi.org/10.15078/jjphn.9.3_146).
- [19] Webber M, Fendt-Newlin M. A review of social participation interventions for people with mental health problems. *Soc Psychiatr Psychiatr Epidemiol* 2017;52(4):369–80. <https://doi.org/10.1007/s00127-017-1372-2>.
- [20] Coll-Planas L, Nyqvist F, Puig T, Urrútia G, Solà I, Montserrat R. Social capital interventions targeting older people and their impact on health: a systematic review. *J Epidemiol Community Health* 2017;71(7):663–72. <https://doi.org/10.1136/jech-2016-208131>.
- [21] Kamegaya T, Araki Y, Kigure H. Long-Term-Care Prevention Team of Maebashi City, Yamaguchi H. Twelve-week physical and leisure activity programme improved cognitive function in community-dwelling elderly subjects: a randomized controlled trial. *Psychogeriatrics* 2014;14(1):47–54. <https://doi.org/10.1111/psyg.12038>.
- [22] Cabinet Office, Government of Japan. Chapter 3 measures for the ageing society in FY In: annual report on the ageing. Society; 2018 (Summary), <https://www8.cao.go.jp/kourei/english/annualreport/2018/pdf/c3.pdf>. [Accessed 21 March 2023].
- [23] Yamaura H. *Qualitative synthesis method (KJ method) Introduction: concept and procedure*. Tokyo, Japan: IGAKU-SHOIN Ltd; 2012. p. 92–3.
- [24] Yamaura H. Theory and practice of the qualitative synthesis method (KJ method) and “cosmos methodology” which creates conceptions. *Jpn J Nurs Res* 2008;41:11–32. <https://webview.isho.jp/journal/detail/pdf/10.11477/mf.1681100290>.
- [25] Fukuda R, Shimizu Y, Seto N. Issues experienced while administering care to patients with dementia in acute care hospitals: a study based on focus group interviews. *Int J Qual Stud Health Well-Being* 2015;10:25828. <https://doi.org/10.3402/qhw.v10.25828>.
- [26] Waki S, Shimizu Y, Seto N, Sugahara M, Yoshida Y. Insights into self-care behavior of patients with diabetes: support using a computerized self-evaluation system. *J Nurs Educ Pract* 2016;6(10):51–7. <https://doi.org/10.5430/jnep.v6n10p51>.
- [27] Iba T, Yoshikawa A, Munakata K. Philosophy and methodology of clustering in pattern mining: Japanese anthropologist Jiro Kawakita's KJ method. In: Proceedings of the 24th conference on pattern languages of programs. October 23 – 25, 2017, Vancouver, British Columbia, Canada. New York: ACM; 2017. p. 1–11. <https://dl.acm.org/doi/abs/10.5555/3290281.3290296>.
- [28] Wild D, Whiteman B, Biggerstaff D, McCarthy K, Szczepura A. Qualitative research approaches used in UK nursing studies: an overview with examples. *Jpn J Nurs Res* 2017;50:254–62. <https://pureportal.coventry.ac.uk/en/publications/qualitative-research-approaches-used-in-uk-nursing-studies-an-ove>.
- [29] Holloway I, Wheeler S. In: *Qualitative research in nursing*. second ed. 2002.
- [30] Lincoln Y, Guba E. *Naturalistic inquiry*. Beverly Hills, Calif: Sage; 1985.
- [31] Koike T. Family members living together and apart for older adults –Rethinking support for older adults in the context of family diversification. *Gerontology Res Papers* 2016;1:1–7. [http://www.ando-lab.ynu.ac.jp/andolab/wp-content/uploads/20161130\\_al\\_rp\\_01.pdf](http://www.ando-lab.ynu.ac.jp/andolab/wp-content/uploads/20161130_al_rp_01.pdf).
- [32] Han SH, Kim K, Burr JA. Social support and preventive healthcare behaviors among couples in later life. *Gerontol* 2019;59(6):1162–70. <https://doi.org/10.1093/geront/gny144>.
- [33] Zenimoto T. Study of the elderly person-centered local activity in the integrated community based care system – comparing with Japan and Denmark. *Jpn Coll* 2020;6:91–103. <https://cir.nii.ac.jp/crid/1520290884892734336>.
- [34] Nakamura Y. *Public health nursing skills*. Tokyo, Japan: IGAKU-SHOIN Ltd.; 2023. p. 249–52.
- [35] Taguchi A, Murayama H, Takeda K, Ito K, Tonai S. Characteristics and challenges of health promotion volunteer organizations in Japan: findings from a national municipality survey. *Nihon Koshu Eisei Zasshi* 2019;66(11):712–22. [https://doi.org/10.11236/jph.66.11\\_712](https://doi.org/10.11236/jph.66.11_712).
- [36] Kenzo H. Traditional organisation in the Japanese farm village. *Law Soc* 2003;59:90–106. [https://www.jstage.jst.go.jp/article/jsl1951/2003/59/2003\\_59\\_90/\\_pdf](https://www.jstage.jst.go.jp/article/jsl1951/2003/59/2003_59_90/_pdf).
- [37] Komatsu H, Yagasaki K, Oguma Y, Saito Y, Komatsu Y. The role and attitude of senior leaders in promoting group-based community physical activity: a qualitative study. *BMC Geriatr* 2020;20(1):380. <https://doi.org/10.1186/s12877-020-01795-2>.
- [38] Hashimoto Y. A study on the relationship with the role in the family and in the community of the elderly, and mental health. *J Kansai Univ Welf Sci* 2005;9:117–30. <https://cir.nii.ac.jp/crid/1520853833242473344>.
- [39] Inaba Y, Fujiwara Y. *Social isolation solved with social capital: prospects for multilayered prevention measures and social business*. Kyoto, Japan: Minerva Shobo; 2013. p. 94–121.
- [40] Masse M, Swine C. Do the structure and functioning of the elderly's social network influence functional health: a preliminary study. *Geriatr Psychol Neuropsychiatr Vieil* 2015;13(2):215–24. <https://doi.org/10.1684/pnv.2015.0531>.
- [41] Lyons A, Fletcher G, Farmer J, Kenny A, Bourke L, Carra K, et al. Participation in rural community groups and links with psychological well-being and resilience: a cross-sectional community-based study. *BMC Psychol* 2016;4:16. <https://doi.org/10.1186/s40359-016-0121-8>.
- [42] Berry HL, Rodgers B, Dear KBG. Preliminary development and validation of an Australian community participation questionnaire: types of participation and associations with distress in a coastal community. *Soc Sci Med* 2007;64(8):1719–37. <https://doi.org/10.1016/j.socscimed.2006.12.009>.
- [43] Shimanuki H, Honda H, Ito T, Kasai T, Takato J, Sakamoto Y, et al. Relationships between volunteerism and social-physical health and QOL with community-dwelling elderly participating in a long-term care prevention programme. *Nihon Koshu Eisei Zasshi* 2007;54(11):749–59. <https://pubmed.ncbi.nlm.nih.gov/18186232/>.