

## Types of Social Participation among the Elderly in Bandung City, Indonesia

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### Abstract

Elderly individuals are at increased risk of experiencing various health problems associated with isolation and loneliness. Social participation with family, friends, neighbors, and engagement in community activities has been proven to reduce these risks. This study aimed to identify the types of social participation activities undertaken by elderly residents in Bandung City, Indonesia. A quantitative descriptive study was conducted involving 100 elderly individuals who visited Community Health Centers in Bandung City, using multistage purposive convenience sampling. The study variables were respondent characteristics and types of social participation at the family, friend, neighbor, and community levels. The most common forms of social participation with family and neighbors involved direct conversations. Religious activities and cleaning up the neighborhood (*kerja bakti* in local language) were the most frequently reported types of social participation with neighbors and the broader community. Based on these findings, it is necessary to develop various structured and easily accessible community activities to provide the elderly with more opportunities for meaningful social participation.

**Keywords:** Elderly, religious activities, social participation, neighborhood cleaning activities

### Introduction

The world is experiencing continuous changes in population structure due to declining fertility rates and increasing life expectancy. Indonesia, as one of the most populous countries in the world, is witnessing an increase in the proportion of elderly people, from 10.7% in 2020 to 19.9% in 2045.<sup>1</sup> This demographic change will be accompanied by physical, physiological, psychological, and social changes experienced by the elderly.<sup>2</sup> One consequence of these changes is the emergence of geriatric syndromes.

The term *geriatric syndrome* refers to “multifactorial health conditions that occur when the impairments across multiple physiological systems accumulate, rendering older adults vulnerable to situational challenges.<sup>3</sup> Manifestations of geriatric syndromes include frailty, falls, urinary incontinence, depression, sensory impairment, cognitive decline, and social isolation.<sup>3</sup> Although geriatric syndromes cannot

be completely prevented, their progression can be slowed through appropriate interventions..

In 2020, the World Health Organization (WHO) introduced the concept of *healthy aging* to replace earlier terms such as *active aging* and *successful aging*. Healthy aging is defined as the process of developing and maintaining the functional ability that enables well-being in older age. Functional ability refers to the capabilities that allow individuals to meet their basic needs, learn and make decisions, maintain mobility, build and sustain relationships, and contribute to society.<sup>4,5</sup> One important form of contribution among older adults is participation in social environments, commonly referred to as social participation.

The contribution of the elderly to the social environment is known as “social participation.” Various other terms are also used to describe social participation, such as social connection, social engagement, social capital, community involvement, community engagement, and civic engagement.<sup>6,7</sup> Social participation can be described as “a person’s involvement in activities that provide interaction with others in society or the community.”<sup>8</sup> Studies across different settings have consistently underscored the role of social participation in promoting well-being among

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older adults. Evidence from Bandung discovered this relationship, with logistic regression analysis identifying social participation as the most influential risk factor for dementia (OR =2.703; 95% CI=1.491–4.902).<sup>9</sup> A study in China found that greater social participation was associated with lower average levels of depression.<sup>10</sup> Similarly, research in Iran reported significant correlations between engagement in social activities and improvements in both appetite and psychological well-being ( $r=0.542$  and  $r=0.485$ , respectively).<sup>11</sup> In addition, participation in at least one socially productive activity was shown to be positively associated with quality of life (QoL) at a two-year follow-up (Average Causal Effect, ACE=0.474; 95% CI=0.361–0.587), with stronger effects observed among women and those aged 75 years and above.<sup>12</sup> Social interactions with neighbors and involvement in group activities were also positively linked to higher QoL scores.<sup>13</sup>

Beyond its influence on health outcomes, social participation has also been associated with social connectedness and reduced social isolation. Social isolation is defined as an objective condition in which an individual has few close relationships, social ties, or interactions within the community.<sup>14</sup> Research conducted in Japan demonstrated that engagement in social activities reduced the likelihood of future social isolation among older adults.<sup>14</sup> In addition, evidence from the United States showed that social disconnectedness predicted higher levels of perceived isolation ( $\beta=0.09$ ;  $p<0.0001$ ), which subsequently increased symptoms of depression ( $\beta=0.12$ ;  $p<0.0001$ ) and anxiety ( $\beta=0.12$ ;  $p<0.0001$ ).<sup>15</sup>

Social participation may occur in various forms, including conversations, shared activities, community involvement, assisting others, and contributions to society.<sup>16</sup> Social participation also encompasses diverse areas both informal and formal interactions such as social and recreational activities, informal support networks within families, friends and neighborhoods, and participation in groups like sports clubs, hobby groups, religious institutions, political organizations, and local community events such as neighborhood associations and senior citizen clubs.<sup>6,7,17,18</sup> Social participation may occur in various forms, including conversations, shared activities, community involvement, assisting others, and contributions to society.<sup>16,19</sup>

Despite the importance of social participation, publications examining this issue among elderly in Indonesia remain limited. Existing

studies in rural and urban areas have reported various forms of social participation, including traditional ceremonies, neighborhood cleaning activities, working together to build community infrastructure, credit rotation (*arisan*), village meetings (PKK, *Dasawisma*), neighborhood watch, religious activities, elderly community meetings, and attending integrated service posts (*Posyandu*) for the elderly.<sup>20,21</sup>

Bandung City, one of the nine cities in West Java and serving as the provincial capital, represents one of the Indonesian cities with a comparatively large elderly population. Data from the Central Statistics Agency in 2024 recorded a total of 330,930 older adults residing in the city.<sup>22</sup> Considering the increasing proportion of older individuals, understanding the types of social participation among older adults is important because social participation influences physical health, psychological well-being, and quality of life. Therefore, this study aimed to identify the types of social participation among older adults in Bandung City, focusing on their interactions with family members, neighbors, friends, and the broader community.

## Methods

A descriptive study was conducted in Bandung City, West Java, Indonesia from April to May 2024. The sampling technique employed was multistage purposive sampling. The municipality was divided into six regions and from each region, one sub-district with the highest elderly population was selected. In those sub-districts, there were 2 or 3 primary health centers (*Puskesmas*). Therefore, the *Puskesmas* with the highest number of elderly was chosen as the location of the study, resulting in a total of 6 *Puskesmas*.

Respondents from the selected *Puskesmas* were recruited using consecutive sampling. The inclusion criteria were: age  $\geq 60$  years, visiting the *Puskesmas* for treatment or consultation, male or female, and absence of dementia as assessed using the Mini-Cog test. The exclusion criterion was elderly individuals who did not complete the study procedures. The required sample size was calculated using a descriptive categorical formula, yielding a minimum sample of 97 participants. For the purposes of this study, the sample size was rounded to 100 participants.

Eligible respondents were provided with information about the study, and those who consented, signed an informed consent form.

Data collection utilized an instrument with two sections. The first section gathered respondent characteristics, including age (60–64, 65–74, ≥75 years), gender (male or female), religion (muslim or non-Muslim), marital status (unmarried, married, widowed), education (elementary school, junior high school, senior high school, higher education), occupation (working or not working), living arrangements (with spouse and children, with children, with other family members, or living alone), and diseases (hypertension, diabetes mellitus, hypertension and or diabetes and other disorders). The second section of the instrument examined social participation activities over the past month, drawing from various references. It included 4 domains and a total of 22 items with binary response options (“yes” or “no”). It included 7 open-ended items for detailing specific activities undertaken by the respondents as well. The domains were as follows: participation with family (4 items), participation with friends (6 items), participation with neighbors (6 items), and participation with the community (6 items). Ethical approval for this study was obtained from the Ethics Committee of the National Eye Center Cicendo Hospital Bandung (approval number: DP.04.03/D.XXIV.16/4591/2024). Data processing and analysis were performed using statistical software.

**Results**

A total of 100 respondents were successfully recruited in this study. The largest proportion of respondents was aged of 65–74 years, while the oldest participant was 83 years old. Most respondents were female and Muslim, with only one respondent being Christian. The majority of respondents were married or had a partner. Most had completed junior high school and were not currently employed. There were 16 respondents who were still working, with the majority running their own businesses (10 respondents). Other occupations included working for someone else (3 respondents), a preschool teacher (1 respondent), and others (2 respondents). Of the respondents over 75 years old still run their own businesses, two were 77 and 83 years old. Most respondents lived with their spouses and children.

Four respondents living alone were aged 60, 67, 69, and 83 years. All four were female; the respondent aged 83 years remained employed, while the others were not working.

**Table 1 Respondent’s Characteristics (n=100)**

Characteristics	n	Percentage (%)
Age (years)		
60–64	40	40
65–74	53	53
≥75	7	7
Sex		
Male	37	37
Female	63	63
Religion		
Muslim	99	99
Christian	1	1
Marital Status		
Married	67	67
Widowed	33	33
Education		
Elementary School	24	24
Junior High School	34	34
Senior High School	30	30
Higher Education	12	12
Occupation		
No	84	84
Yes	16	16
Type of Work		
Teacher	1	1
Self-employed	10	10
Employee	3	3
Other	2	2
Living Arrangement		
Other family members	2	2
Spouses and children	67	67
Children only	27	27
Alone	4	4
Chronic Diseases		
Hypertension	59	59
Diabetes Mellitus	19	19
Hypertension and or Diabetes mellitus and other diseases	25	25

**Table 2 Patterns of Social Participation Across Various Domains**

<b>Types of Social Participation (n=100)</b>	<b>Percentage (%)</b>
Interaction with Family	
Virtual interaction (chatting with mobile phone or social media)	56
Direct conversation	96
Engaging in activities together indoors	54
Engaging in activities together outdoors	14
Recreational activities	12
Physical activity/sports	2
Religion studies	1
Interaction with Friends	
Virtual interaction (chatting with mobile phone or social media)	30
Direct conversation	39
Religious activities	15
Shared recreational activities	11
Neighborhood cleanup	8
Engaging in hobbies together	
Sports	3
Embroidery	1
Interaction with Neighbors	
Virtual interaction (chatting with mobile phone or social media)	0
Direct conversation	100
Religious activities	88
Shared recreational activities	3
Neighborhood cleanup	48
Engaging in hobbies together:	
Sports	3
Gardening	1
Community and Organizational Participation	
Religious activities	93
Membership in community organizations	3
Neighborhood cleanup	53
Neighborhood watch	2
Participating in sports activities organized by a club:	
Senior exercise	21
Tai Chi	2
Volunteering	
Education sector	4
Religion	19
Health sector	3
Humanitarian	1

**Table 3 Social participation Activities with Family based on Respondent's Characteristics**

Characteristics of Respondents (n=100)	With Family							
	Chatting via mobile phone or social media calling features		Talking in person		Engaging in activities together indoors		Engaging in activities together outdoors	
	Yes	No	Yes	No	Yes	No	Yes	No
Age (years)								
60-64	23	17	38	2	23	17	9	31
65-74	29	24	51	2	19	34	5	48
≥75	4	3	7	0	4	3	2	5
Sex								
Male	28	9	37	0	15	22	6	31
Female	28	35	59	4	31	32	10	53
Religion								
Moslem	55	44	95	4	45	54	15	84
Christian	1	0	1	0	1	0	1	0
Marital Status								
Married	43	24	66	1	33	34	10	57
Widowed	13	20	30	3	13	20	6	27
Education Level								
Elementary School	9	15	23	1	11	13	2	22
Junior High School	14	20	31	3	15	19	2	32
Senior High School	23	7	30	0	13	17	9	21
Higher Education	10	2	12	0	7	5	3	9
Occupation								
No	44	40	80	4	37	47	11	73
Yes	12	4	16	0	9	7	5	11
Living Arrangement								
Other family members	0	2	2	0	1	1	1	1
Spouses and children	43	24	66	1	34	33	11	56
Children only	11	16	27	0	11	16	4	23
Alone	2	2	1	3	0	4	0	4
Chronic Diseases								
Hypertension	31	25	54	2	26	30	7	49
Diabetes mellitus	9	10	19	0	9	10	3	16
Hypertension and or Diabetes mellitus and other diseases	16	9	23	2	11	14	6	19

Hypertension was the most frequently reported chronic condition among respondents, followed by diabetes mellitus (Table 1).

The study revealed that respondents' types of participation varied across activities with family, friends, neighbors, and within the community

**Table 4 Social participation Activities with Friends based on Respondent's Characteristics**

Characteristics of Respondents (n=100)	With Friends											
	Chatting Via Mobile Phone or Social Media Calling Features		Talking In Person		Religious Activities		Recreational Activities Together		Cleaning Up The Neighbor-Hood		Engaging In Hobbies Together	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Age (years)												
60-64	13	27	16	24	5	35	3	37	1	39	1	39
65-74	16	37	20	33	8	45	7	46	3	50	3	50
≥75	1	6	3	4	2	5	1	6	0	7	0	7
Sex												
Male	16	21	18	19	2	35	4	33	0	37	0	37
Female	14	49	21	42	13	50	7	56	4	59	4	59
Religion												
Moslem	29	70	38	61	14	85	11	88	4	95	4	95
Christian	1	0	1	0	1	0	0	1	0	1	0	1
Marital Status												
Married	25	42	24	42	9	58	9	58	2	65	2	65
Widowed	5	28	14	19	6	27	2	31	2	31	2	31
Education Level												
Elementary School	3	21	9	15	4	20	1	23	1	23	1	23
Junior High School	4	30	9	25	6	28	2	32	0	34	0	34
Senior High School	14	16	14	16	3	27	4	26	2	28	2	28
Higher Education	9	3	7	5	2	10	4	8	1	11	1	11
Occupation												
No	25	59	31	53	14	70	9	75	3	81	3	81
Yes	5	11	8	8	1	15	2	14	1	15	1	15
Living Arrangement												
Other family members	0	2	1	1	0	2	0	2	0	2	0	2
Spouses and children	26	41	26	41	9	58	10	57	2	65	2	65
Children only	3	24	12	15	6	21	1	26	2	25	2	25
Alone	1	3	0	4	0	4	0	4	0	4	0	4
Chronic Diseases												
Hypertension	16	40	17	39	9	47	7	49	2	54	2	54
Diabetes mellitus	6	13	8	11	0	19	0	19	1	18	1	18
Hypertension and or Diabetes mellitus and other diseases	8	17	14	11	6	19	4	21	1	24	1	24

**Table 5 Social participation Activities with Neighbors based on Respondent's Characteristics**

Characteristics of Respondents (n=100)	With neighbors											
	Chatting via mobile phone or social media calling features		Talking in person		Religious activities		Recreational activities together		Cleaning up the neighborhood		Engaging in hobbies together	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Age (years)												
60-64	0	40	40	0	36	4	2	38	1	39	1	39
65-74	0	53	53	0	47	6	1	52	3	50	3	50
≥75	0	7	7	0	5	2	0	7	0	7	0	7
Sex												
Male	0	37	37	0	26	11	1	36	0	37	0	37
Female	0	63	63	0	62	1	2	61	4	59	4	59
Religion												
Moslem	0	99	99	0	88	11	3	96	4	95	4	95
Christian	0	1	1	0	0	1	0	1	0	1	0	1
Marital Status												
Married	0	67	67	0	57	10	1	66	2	65	2	65
Widowed	0	33	33	0	31	2	2	31	2	31	2	31
Education Level												
Elementary School	0	24	24	0	23	1	1	23	1	23	1	23
Junior High School	0	34	34	0	31	3	0	34	0	34	0	34
Senior High School	0	30	30	0	26	4	2	28	2	28	2	28
Higher Education	0	12	12	0	8	4	0	12	1	11	1	11
Occupation												
No	0	84	84	0	76	8	2	82	3	81	3	81
Yes	0	16	16	0	12	4	1	15	1	15	1	15
Living Arrangement												
Other family members	0	2	2	0	2	0	1	1	0	2	0	2
Spouses and children	0	67	67	0	58	9	2	65	2	65	2	65
Children only	0	27	27	0	24	3	0	27	2	25	2	25
Alone	0	4	4	0	4	0	0	4	0	4	0	4
Chronic Diseases												
Hypertension	0	56	56	0	51	5	1	55	2	54	2	54
Diabetes mellitus	0	19	19	0	16	3	1	18	1	18	1	18
Hypertension and or Diabetes mellitus and other diseases	0	25	25	0	21	4	1	24	1	24	1	24

(Table 2). Face-to-face or direct conversations were the most common form of interactions with family and neighbors (96% and 100%, respectively). Respondents rarely engaged in other activities with family members, both inside (46%) and outside their homes (14%), only 12% of the respondents participate in recreational activities with family. Interviews indicated that many respondents are unable to participate in activities with family due to various reasons, including family members being busy with their work and those who work preferring to rest during their free time.

Interactions with friends were also infrequent. Only 39% engaging in face-to-face conversations, 11% participating in recreational activities together, and just 4% engaging in hobbies together. The reason they could not engage with their friends was that many had passed away, and they had lost contact with those who remain.

The second most common social participation with neighbor and the most common social participation with the community was through religious activities (88% and 93%, respectively). Interviews found that many respondents only interact with neighbors when necessary or during religious gatherings. Other findings in this study was community service activities, such as cleaning up the neighborhood, were frequently undertaken by both male and female respondents with their neighbors and local community. Sports activities organized by clubs or organizations were attended only by 23% of respondents. A total of 21% of respondents actively participated in aerobics activities held by clubs or organizations, and 2% of respondents were members of Tai Chi clubs. Other community activities, such as neighborhood watch, were rarely performed. Only 2 respondents under 75 years old and male participating in these activities. The study also discovered that volunteering was uncommon activities among the respondents, hence, the most common volunteering focused on religion. Furthermore, despite having illnesses, respondents were still able to participate in various activities with family, friends, neighbors and community.

Other findings were respondents rarely use phones or social media to interact with family, friends, and neighbors. Nevertheless, phones or social media was still used for chatting with family and friends (56% and 30%, respectively). This study revealed that respondents aged 75 and older still utilized these technologies.

Based on respondent characteristics, social

participation activities carried out with family varied greatly. However, direct conversation and engaging in indoor activities together were the most frequently performed activities (Table 3). Interestingly, indoor activities with family were more commonly conducted by respondents aged 60–64 years and ≥75 years, female respondents, and those who still had a spouse.

Similar to participation with family, *talking in person* was the activity most frequently performed by respondents with friends. This was followed by *chatting via mobile phone* or social media calling features across all age groups, more commonly done by male respondents, those who still had a spouse, and at least a high school education. Female respondents were more likely to participate in religious activities with friends compared to male respondents (Table 4).

In interactions with neighbors, direct face-to-face conversation was the most frequently reported activity across all respondent characteristics. Religious activities were also commonly reported, particularly among female respondents, although participation occurred across various demographic groups (Table 5).

In the community, the most frequently conducted activity was religious activities, regardless of respondent characteristics. Other common activities include cleaning up the neighborhood and sports. Cleaning up the neighborhood was performed regardless of respondent characteristics but was more commonly carried out across all age groups and by male respondents. Sports or elderly exercise activities were more frequently conducted by respondents aged ≤75 years and female respondents (Table 6).

## Discussion

Participation of older adults in social activities has been shown to reduce the prevalence of cognitive impairment, depression, dementia, falls, and to lower morbidity and mortality rates.<sup>6,16,18,19,23</sup> This study identified several forms of social participation among older adults involving interactions with family members, friends, neighbors, and the broader community. The most common activity with family members was direct face-to-face conversations. Shared activities, with family members, either indoors or outdoors, were relatively infrequent for various reasons. The results of this study were similar to those of a study which discovered that elderly individuals rarely engage in activities with their





families, either inside or outside the home.<sup>24</sup> Hence, evidence showed that having high levels of social support from family and partner was related to good health, life satisfaction. Having high support from children was also related to less depression and improved quality of life.<sup>25,26</sup>

Another finding of this study was the limited level of social participation with friends among the elderly. Many respondents reported that several of their friends had passed away and that contact with remaining friends had gradually diminished. These findings differ from those reported in a study conducted in Texas, United States, which found that older adults frequently socialized with friends. Encounters with friends were reported to be more pleasant and were more likely to involve discussions about stressful experiences, which contributed to improved mood throughout the day compared with interactions with other social or intimate partners.<sup>27</sup> A positive and supportive friendship can mitigate the adverse effects of social stress caused by relationships with a spouse, partner, or family members on the life satisfaction of older adults.<sup>26</sup>

Activities commonly carried out with neighbors and the community was religious activities. These findings were similar to some studies in rural and urban Indonesia.<sup>20,21</sup> Religion is often associated with the concept of the transcendent and includes specific beliefs, rituals, and behavioral guidelines. While it is often structured and practiced within a community, it can also be observed in private settings. Religion is often regarded as frameworks through which individuals perceive, comprehend, assess, and navigate their life experiences, providing them with a sense of meaning and purpose.<sup>28</sup> The religious activities are among the preferred pursuits of Muslim elderly individuals, serving as a significant source of emotional support as they age. For them, the natural return to Allah SWT is seen as a positive transition, accompanied by a growing awareness of mortality and the fleeting nature of worldly life due to their declining abilities and competencies. As a result, spiritual practices become their central focus, allowing them to spend their remaining years in devotion and obedience to Allah The Almighty.<sup>29</sup> Religion was found to serve various purposes in the daily lives of older adults, offering strength, comfort, and hope during challenging times, as well as fostering a sense of community and belonging.<sup>28</sup> The association between religiosity or spirituality and health has also been widely acknowledged.<sup>30</sup>

Religious involvement may play a protective role in health by helping to prevent complications, aiding in the adaptation to or recovery from health issues, and serving as a supportive factor in managing chronic conditions and their associated impairments.<sup>28</sup> A previous study also found that religious activities are positively associated with the preservation of cognitive function.<sup>30,31</sup>

The research had several limitations that should be considered. First, elderly individuals suspected of having dementia based on the Mini-Cog test were excluded from the study. Consequently, future research should include elderly individuals with dementia to gain a more comprehensive understanding of social participation among those with and without dementia. Additionally, Indonesia's unique geographical and demographic conditions—comprising islands with diverse environments such as mountainous regions, coastal areas, urban areas, rural areas, and remote regions along with its ethnicity diversity, make generalization challenging. Since this study was conducted exclusively in urban areas, the findings cannot be extended to other regions. Future research should therefore examine social participation among older adults across diverse geographical and cultural settings. Additionally, this study focused only on identifying the types of social participation among older adults without analyzing factors that promote or hinder participation. Future studies should investigate these determinants to support the development or targeted interventions. Furthermore, the relationship between social participation and the health conditions of the elderly was not analyzed in this study, highlighting the need for further research on this topic. Despite these limitations, this study provides valuable insights into patterns of social participation among older adults in an urban Indonesian setting.

In conclusions, social participation among the elderly is relatively limited. Although mobile phones and social media were used for communication, direct face-to-face conversations remained the most common form of interaction, particularly with family members, friends, and neighbors. Participation in joint activities with family members, both indoors or outdoors, was uncommon, largely due to family members' work commitments. Social intercatations with friends were also limited because many friends had passed away or lost contact. Religious activities conducted with neighbors and the community members represented the most common form

of social participation among the elderly. These findings may assist health professionals and community organizations in designing interventions that promote meaningful social participation to support physical and mental well-being and also improve quality of life in older adults.

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