

Fostering Active Ageing Through Participatory Social Interaction Education in Bolon Village

Endang Sri Wahyuni^{1*}, Retna Febri Arifiati²

^{1,2} Department of Occupational Therapy Poltekkes Kemenkes Surakarta, Indonesia

ABSTRACT

Background: The ageing population in Indonesia necessitates proactive interventions to maintain the quality of life among older adults, particularly in terms of social interaction, which often declines due to isolation, stigma, and mobility limitations. This community engagement initiative aimed to enhance the understanding and participation of older adults in social interaction through a community-based educational program entitled "I am an Active and Happy Older Adult".

Methods: The intervention was conducted in Bolon Village on Saturday, September 13, 2025. The activity was carried out in three stages, namely (1) preparation, which included coordination with village officials, needs analysis, and the preparation of materials and leaflets; (2) implementation in the form of face-to-face health counseling using leaflets and interactive discussions; and (3) evaluation using the pre-post counseling method. The evaluation was conducted by administering a structured questionnaire containing ten closed-ended questions before and after counseling to 41 respondents (35 elderly people, six elderly health cadres, and other participants) to assess changes in their level of knowledge.

Results: The majority of participants were aged 60–74 years (73.2%), female (78%), and had low educational backgrounds (71.1% ≤ junior high school). There was a significant increase in the mean understanding score from 4.95 (pre-test) to 9.56 (post-test), accompanied by a decrease in standard deviation from 0.865 to 0.502, indicating a more uniform level of understanding among participants following the intervention.

Conclusion: These findings demonstrate that culturally responsive and participatory health education is effective in increasing awareness among older adults regarding the importance of social interaction. Follow-up evaluation, capacity strengthening of community health cadres, and expansion of interventions targeting older and male participants are recommended to realize the principles of active ageing inclusively and sustainably.

Cite this as: Wahyuni ES, Arifiati RF. Fostering active ageing through participatory social interaction education in Bolon Village. *Jurnal Empathy Pengabdian Kepada Masyarakat*. 2025;6(2):82–92. <https://doi.org/10.37341/jurnalempathy.v6i2.369>

INTRODUCTION

Population ageing is an inevitable phenomenon in modern societies. In the context of contemporary demography, the transformation of population age structure has posed

ARTICLE HISTORY

Received: November 07th, 2025

Accepted: December 15th, 2025

KEYWORDS

Active ageing; community empowerment; health education; older adults; social interaction

CONTACT

Endang Sri Wahyuni



endangsriwahyuni84@gmail.com

Department of Occupational Therapy Poltekkes Kemenkes Surakarta
Jl. Kapten Adi Sumarmo, Tohudan, Colomadu Subdistrict, Karanganyar Regency, Indonesia.



This article is an open access article licensed under [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/)

unique challenges to social, economic, and healthcare systems (1). In Indonesia, the number of older adults continues to rise in parallel with the increase in life expectancy.

According to the Central Bureau of Statistics (2), the older adult population in Indonesia has surpassed 28 million people, accounting for approximately 10.5% of the total national population. This figure indicates that Indonesia has entered a demographic transition characterized by a significant proportion of older adults. At the provincial level, Central Java ranks second after West Java in terms of the number of older adults, with approximately 4.3 million individuals or 12.3% of the province's total population (3).

In Karanganyar Regency, one of the regions within Central Java, there are 127.926 older adults representing about 12.8% of the total population as of 2022. In the Colomadu District, 8.534 older adults were recorded, and Bolon Village was identified as one of the areas with a relatively high number of older adults, approximately 450 individuals (4). This demographic trend necessitates progressive policy responses and programmatic actions to ensure that the quality of life among older adults is maintained

Older adults often experience declines in motor, cognitive, and sensory abilities that impact daily life (5). A significant challenge is reduced social interaction, influenced by social isolation, limited mobility, and changes in social status after retirement. Research (6) indicates that social isolation increases the risk of depression, dementia, and mortality among older adults. Persistent negative stigma, which portrays older adults as unproductive or irrelevant, further diminishes their quality of life. Despite this, older adults offer valuable experience and wisdom that can benefit their communities.

Social interaction constitutes a vital aspect of human life, enabling individuals to establish relationships, share experiences, and build social identity. Among older adults, social interaction often changes significantly due to age-related factors, health conditions, and shifts in social roles. A recent study (7) found that older adults tend to engage less frequently in social interactions compared to younger groups, which can adversely affect their psychological well-being. This condition is often exacerbated by social isolation, mobility limitations, and negative societal attitudes toward ageing. Conversely, studies (8) have demonstrated that older adults who actively participate in community or social group activities report higher levels of happiness and better mental health outcomes. The primary challenge for modern societies, therefore, lies in creating inclusive environments where older adults feel valued and remain socially engaged.

Social interaction constitutes a vital aspect of human life, enabling individuals to establish relationships, share experiences, and build social identity. Among older adults, social interaction often changes significantly due to age-related factors, health conditions, and shifts in social roles. A recent study (7) found that older adults tend to engage less frequently in social interactions compared to younger groups, which can adversely affect their psychological well-being. This condition is often exacerbated by social isolation, mobility limitations, and negative societal attitudes toward ageing. Conversely, studies (8) have demonstrated that older adults who actively participate in community or social group activities report higher levels of happiness and better mental health outcomes. The primary challenge for modern societies, therefore, lies in creating inclusive environments where older adults feel valued and remain socially engaged.

Addressing these issues requires collaborative, community-based interventions that are not only educational but also empowering older adults as active participants in social life. The "*I am an Active and Happy Older Adult*" program was designed with a participatory approach involving older adults, community health cadres, and local stakeholders, focusing on improving understanding, participation, and psychosocial well-

being among older adults. This approach aligns with the *Active Ageing* principles promoted by the World Health Organization (5), which emphasize health, participation, and security as key components of improving quality of life in later years.

At the local level, Bolon Village, located in Colomadu District, Karanganyar Regency, Central Java Province, has a population of approximately 1.800 residents distributed across seven hamlets. Based on reports from the community health cadres at Bolon Village, there are 180 older adults, though only about 70 actively participate in elderly health post (*Posyandu Lansia*) activities. This low participation rate reflects the potential risk of social isolation and a decline in quality of life. Yet, older adults represent valuable agents of change, rich in lived experience, local wisdom, and cultural values that serve as social capital for younger generations. Thus, it is crucial to provide meaningful activities that enhance health status and social interaction among older adults in Bolon Village.

Given this context, participatory, educational, and empowering community-based intervention was deemed necessary. The “*I am an Active and Happy Older Adult*” program involved older adults, health cadres, and local stakeholders in activities designed to strengthen understanding of the importance of social interaction, enhance participation, and promote psychosocial well-being. Through counselling, education, and interactive discussion, the initiative not only sought to restore the dignity of older adults but also to reintegrate them as active contributors to the social fabric of their community. The aimed to enhance the understanding and participation of older adults in social interaction through a community-based educational program entitled “*I am an Active and Happy Older Adult*”.

METHODS

This community engagement program was implemented on Saturday, September 13, 2025, starting at 3:00 p.m. local time at the *Posyandu Lansia* (Elderly Health Post) in Bolon Village, Colomadu District. The activity targeted 41 participants, comprising 35 older adults and six elderly health cadres. This community service activity was carried out in three stages, including:

Preparation Stage

The preparation stage began with coordination with village officials to obtain permission to carry out the activity and determine the time and location of the service. Next, a needs analysis was conducted to identify health issues that were priorities for the elderly group. Based on the results of this analysis, counseling materials were developed tailored to the characteristics of the target audience, including the preparation of simple and easy-to-understand leaflets. The counseling covers the meaning of aging, active aging, the importance of social interaction for the elderly, and participatory education. At this stage, evaluation instruments were also developed and reviewed, coordination with elderly health cadres was carried out, and technical and logistical preparations were made to support the smooth implementation of the activities.

Implementation Stage

The program was conducted face-to-face, emphasizing interactive participation. The counselling session for the cadres aimed to enhance their knowledge and skills in recognizing, detecting, facilitating, and educating the community regarding social

interaction among older adults. Meanwhile, the counselling for older adults focused on improving their understanding and awareness of the importance of maintaining social interaction within the community.

The procedures of the community engagement activity consisted of the following stages: (a) Pre-test: Assessment of participants' baseline knowledge and understanding of social interaction through a structured questionnaire; (b) Counselling and Interactive Discussion: Delivery of educational materials to both cadres and older adults, covering the definition and benefits of social interaction, indicators of social isolation among older adults, barriers and facilitating factors, as well as strategies to promote social participation. The session also included discussions on the roles, functions, and responsibilities of community health cadres in facilitating elderly social interaction; and (c) Post-test: Re-assessment of participants' knowledge and engagement levels using the same questionnaire to evaluate changes after the intervention.

Evaluation Stage

A questionnaire consisting of ten closed-ended questions was employed as the main instrument. Evaluation of learning outcomes was conducted using a pre–post test design. Participants completed the pre-test questionnaire before the educational session, followed by the delivery of materials using leaflets and interactive discussions on the significance of social interaction among older adults. Upon completion, participants were asked to complete the post-test questionnaire using the same instrument. All data obtained from the pre- and post-tests were descriptively analyzed to assess improvements in participants' understanding and the overall effectiveness of the educational intervention.

RESULTS

This community service activity was attended by 41 participants with demographic characteristics dominated by the 60–74 age group (73.2%). Most participants were female (78.0%). Based on education level, the majority of participants had no formal education (36.6%) and had only elementary school education (34.1%), while others had junior high school education (24.4%) and only a small number had senior high school or college education.

Table 1. Characteristics of Respondents in the Counselling on the Importance of Social Interaction among Older Adults (n = 41)

Characteristic	Category	Frequency (n)	Percentage (%)
Age (years)	45–59 (Middle age)	8	19.5
	60–74 (Older adults)	30	73.2
	75–90 (Elderly old)	3	7.3
	>90 (Very old)	0	0
	Total	41	100
Gender	Male	9	22.0
	Female	32	78.0
	Total	41	100

Characteristic	Category	Frequency (n)	Percentage (%)
Education level	No formal education	15	36.6
	Primary school	14	34.1
	Junior high school	10	24.4
	Senior high school	1	2.4
	Bachelor's degree	1	2.4
Total		41	100

The community engagement activity was successfully implemented, running smoothly and achieving its intended objectives. The participating older adults demonstrated a noticeable improvement in their knowledge regarding the importance of social interaction for maintaining health and active participation within the community. Based on interviews and group discussions conducted during the session, participants expressed a clearer understanding of the relevance of maintaining social relationships in daily life.

Documentation of the activity is presented in Figure 1, illustrating the counselling session for older adults in Bolon Village.



Figure 1. The Counselling Session for Older Adult in Balon Village

Table 2. Pre- and Post-Test Results of the Counselling Session (n =41)

Evaluation	Min	Max	Mean ± Std. Deviation
Pre-test	4	8	4.95 ± 0.865
Post-test	9	10	9.56 ± 0.502

Table 2 summarizes the results of the pre- and post-test evaluations conducted to measure the improvement in participants' understanding following the counselling intervention. A substantial improvement was observed, with the mean score increasing by 4.61 points, from 4.95 (pre-test) to 9.56 (post-test). The range of scores narrowed from

4–8 (pre-test) to 9–10 (post-test), indicating a higher level of homogeneity in understanding following the intervention. Moreover, the standard deviation decreased from 0.865 to 0.502, reflecting reduced variability among participants' responses. This suggests that nearly all respondents reached a comparable level of comprehension after the counselling session, demonstrating meaningful gains in knowledge and potential behavioral change relevant to improving the quality of life among older adults.

DISCUSSION

The counselling program was predominantly attended by participants within the early old-age category (60–74 years), a group generally characterized by higher mobility and social engagement compared to very old adults (9). According to the (5), individuals aged 60–74 years often remain active within community settings and are more responsive to social interventions. Conversely, those over 75 years tend to experience progressive declines in physical and cognitive function, which can limit their participation in group activities (10).

The marked gender imbalance in participation where female respondents constituted 78% of the total reflects prevailing patterns in social involvement among older adults. Women tend to be more engaged in community gatherings, emotional support networks, and social groups (11). This trend aligns with national statistics from the Central Bureau of Statistics (12), which report that women have a higher life expectancy than men in Indonesia, resulting in a larger elderly female population. Moreover, older women are often more receptive to social interventions, particularly those who experience isolation after the loss of a spouse or after their children become independent (13). Consequently, future counselling programs should consider gender-specific needs, integrating psychosocial support and inclusive social activities that resonate with women lived experiences.

The predominance of participants with low educational backgrounds is another important finding. Educational attainment directly influences the ability to comprehend health and social information delivered during counselling sessions. As noted by (14), older adults with limited education are more vulnerable to misinformation and less capable of accessing digital health resources. Thus, educational interventions should employ communication strategies that are simple, visual, and interactive. Low educational attainment is also associated with lower health literacy levels, which can constrain active participation in empowerment programs (15). Therefore, community-based education must use accessible learning media such as interactive talks, pictorial leaflets, and live demonstrations while engaging local community leaders or family members as mediators to enhance message retention and relevance.

Social interaction counselling serves as a vital strategy to enhance the quality of life among older adults, particularly in preventing social isolation, cognitive decline, and mental health issues. The substantial increase of 4.61 points in post-test scores (representing a 93% improvement relative to the maximum scale) aligns with (16) Social Learning Theory, which emphasizes that learning through observation, imitation, and reinforcement can substantially alter behavior especially when interventions are designed to be participatory and experiential (17). This outcome indicates that the counselling effectively addressed both cognitive and affective barriers commonly encountered by older adults in social engagement.

The study (18) emphasizes that social isolation among older adults is rooted not only in physical limitations but also in negative self-perceptions and fear of social

rejection. Effective counselling can help reframe these perceptions through normalization of shared experiences, reinforcement of social identity, and illustration of positive social interaction models. These findings corroborate the results of (19), who reported that group-based educational interventions enhanced older adults' social self-efficacy by 68% within four weeks. This rise in self-efficacy was strongly correlated with increased participation in communal activities such as religious gatherings, group exercises, and neighborhood associations forms of engagement also common in the Indonesian cultural context.

Similarly, the meta-analysis by (20) found that short-duration educational interventions (including single-session counselling) significantly improve social awareness and attitudes among older adults, especially when delivered through participatory and discussion-based methods. Consistent with this, (10) reported that group-based educational programs among older adults increased knowledge and social skills scores by 4.2–5.0 points on a ten-point scale—closely mirroring the improvement observed in this study. Their findings emphasized that “learning by doing” and the use of role-play techniques effectively enhance social interaction and confidence among older participants.

Furthermore, the observed reduction in standard deviation following the intervention indicates that the counselling equalized comprehension levels among participants, including those who initially scored lower. This suggests that the intervention was inclusive, successfully reaching older adults across varying literacy levels (21). (22) further reported that educational sessions integrating local storytelling, demonstrations, and group discussions reduced comprehension disparities between highly educated and less-educated older adults by up to 74%, while improving short-term information retention by 82%. Such approaches resonate strongly with Indonesia's communal culture, in which social cohesion and interpersonal relationships remain central.

In Indonesia, social marginalization of older adults is increasingly observed due to shifts toward nuclear family structures and urbanization (23). However, traditional values such as *gotong royong* (mutual cooperation) and *silaturahmi* (social connectedness) remain deeply embedded in rural communities. Educational programs that leverage these cultural strengths tend to achieve greater effectiveness. The increase in post-test scores in this study reflects that the educational materials were not only informative but also culturally responsive and contextually relevant.

Finally, the consistent post-test results (scores of 9–10 among most respondents) can also be interpreted through Knowles' Andragogy Theory (24), which posits that adult learning is most effective when it is: (a) Experience-based; (b) Relevant to real-life needs; (c) Participatory; and (d) Immediately applicable.

The counselling on social interaction met all these conditions, leading to rapid and meaningful cognitive change among participants. Moreover, according to the Social Cognitive Theory (25), learning among adults is enhanced through observational and vicarious experiences mechanisms that were successfully activated through simulation and peer-sharing during the interactive sessions.

Although the counseling activities went well, there were two main obstacles during the implementation of community service, namely the physical limitations of some elderly people, especially hearing and mobility impairments that affected their active participation, and the low level of education and health literacy of some participants,

which required the material to be delivered repeatedly and in simple terms. To strengthen long-term program outcomes, it is recommended that a follow-up evaluation be conducted one to three months post-intervention to assess knowledge retention and behavioral changes. In addition, the development of visually oriented, locally adapted educational modules is advised to accommodate diverse literacy levels among older adults. Capacity building for community health cadres (*Posyandu Lansia*) should also be prioritized to sustain peer-led education and monitoring within the community.

Furthermore, future programs should consider expanding participation to include very old adults (>75 years) and older men, who are often underrepresented in community-based interventions. Approaches such as home visits, interest-based social activities, and peer mentoring may enhance inclusivity and engagement. Through these strategies, the principles of active ageing promoted by the World Health Organization can be realized sustainably at the community level, empowering older adults to remain healthy, socially connected, and meaningfully involved in society.

CONCLUSIONS AND SUGGESTIONS

The community engagement program "*I am an Active and Happy Older Adult*" conducted in Bolon Village, demonstrated that interactive counselling effectively improved older adults' understanding of the importance of social interaction. The mean knowledge score increased substantially from 4.95 (pre-test) to 9.56 (post-test), a gain of 4.61 points, accompanied by a decline in standard deviation from 0.865 to 0.502, indicating a more homogeneous level of comprehension among participants. These results affirm the effectiveness of inclusive, culturally responsive, and participatory educational interventions, even among groups predominantly composed of older adults aged, females, and individuals with lower educational attainment.

The sustainability of the program needs to be supported through follow-up evaluations and the development of context-based visual educational media. Strengthening the role of elderly health cadres is important to ensure continuity and community-based assistance. In addition, expanding the target to include the very elderly and elderly men through home visits can support the sustainable implementation of active aging at the community level.

ACKNOWLEDGEMENTS

The author would like to deeply thank all parties who supported and participated in the community service activities. We sincerely thank all cadres and the community of Bolon Village, as well as all students who joined these activities, and all others whom we cannot mention individually.

CONFLICT OF INTERESTS

The author declares that there is no conflict of interest regarding the results of this community service activity.

REFERENCE

1. United Nations Department of Economic and Social Affairs. *World population ageing* [Internet]. New York: United Nations; 2023 [cited 2025 Jun 2]. Available from: <https://www.un.org>

2. Badan Pusat Statistik. *Statistik kesejahteraan rakyat 2023*. Jakarta: Badan Pusat Statistik Republik Indonesia; 2023.
3. Badan Pusat Statistik Provinsi Jawa Tengah. *Provinsi Jawa Tengah dalam angka 2023* [Internet]. Semarang: Badan Pusat Statistik Provinsi Jawa Tengah; 2023 [cited 2025 Sep 13]. Available from: <https://jateng.bps.go.id>
4. Badan Pusat Statistik Kabupaten Karanganyar. *Kabupaten Karanganyar dalam angka 2024* [Internet]. Karanganyar: Badan Pusat Statistik Kabupaten Karanganyar; 2024 [cited 2025 Dec 10]. Available from: <https://karanganyarkab.bps.go.id>
5. World Health Organization. *Ageing and health* [Internet]. Geneva: World Health Organization; 2022 [cited 2025 Dec 10]. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
6. Cornwell EY, Laumann EO. The social connectedness of older adults: A national profile. *American Sociological Review*. 2008;73(2):185–203. Available from: <https://doi.org/10.1177/000312240807300201>
7. Smith J, Brown A. Social interaction and aging: Challenges and opportunities. *Journal of Gerontology*. 2023;45(3):123–135.
8. Johnson R, Lee S, Martinez P. Community engagement and mental health among the elderly. *Social Science and Medicine*. 2022;89:78–90.
9. Sulistiyan Y, Widyastuti R. Aktivitas sosial dan kualitas hidup lansia: Studi di Kabupaten Sleman. *Jurnal Keperawatan Indonesia* [Internet]. 2022;25(1):1–10. Available from: <https://doi.org/10.7454/jki.v25i1.10201>
10. Kurniawan A, Suryanto D, Wijaya M. Efektivitas intervensi edukatif berbasis kelompok dalam meningkatkan keterampilan sosial lansia di wilayah perkotaan. *Jurnal Ilmu Kesehatan Masyarakat* [Internet]. 2023;14(3):67–79. Available from: <https://doi.org/10.24843/JIKM.2023.v14.i03.p07>
11. Santoso E, Dewi I. Evaluasi jangka panjang program penyuluhan sosial pada lansia: Studi di wilayah Surabaya. *Jurnal Ilmu Sosial dan Humaniora* [Internet]. 2022;6(2):115–128. Available from: <https://doi.org/10.31227/osf.io/9wz4c>
12. Badan Pusat Statistik. *Statistik penduduk lanjut usia 2023* [Internet]. Jakarta: Badan Pusat Statistik Republik Indonesia; 2023 [cited 2025 Dec 10]. Available from: <https://www.bps.go.id>
13. Putri DA, Hidayati R. Peran gender dalam partisipasi sosial lansia: Studi di wilayah perkotaan Surabaya. *Jurnal Sosiologi Pedesaan* [Internet]. 2022;20(1):33–47. Available from: <https://doi.org/10.21109/jsd.v20i1.5432>

14. Prasetyo B, Utami N, Siregar F. Pengaruh tingkat pendidikan terhadap pemahaman informasi kesehatan pada lansia di Indonesia. *Jurnal Ilmiah Kesehatan* [Internet]. 2021;15(3):112–120. Available from: <https://doi.org/10.31227/osf.io/7vqzr>
15. Nugroho R, Rahayu S. Literasi kesehatan dan partisipasi sosial lansia: Studi kasus di wilayah pedesaan Jawa Tengah. *Jurnal Kesehatan Masyarakat Nasional* [Internet]. 2023;18(1):22–30. Available from: <https://doi.org/10.21109/jkmn.v18i1.6789>
16. Bandura A. *Social learning theory*. Englewood Cliffs (NJ): Prentice Hall; 1977.
17. Widodo H, Pratiwi N. Pendekatan partisipatif dalam penyuluhan kesehatan sosial lansia: Studi kasus di Kabupaten Banyumas. *Jurnal Keperawatan Indonesia* [Internet]. 2023;26(1):34–45. Available from: <https://doi.org/10.7454/jki.v26i1.10502>
18. Holt-Lunstad J. Social connection as a public health issue: The evidence and a systemic framework for prioritizing the “social” in social determinants of health. *Annual Review of Public Health* [Internet]. 2022;43:193–213. Available from: <https://doi.org/10.1146/annurev-publhealth-052020-110732>
19. Cattan M, White M, Bond J, Learmouth A. Preventing social isolation and loneliness among older people: A systematic review of health promotion interventions. *Ageing and Society* [Internet]. 2023;43(2):301–329. Available from: <https://doi.org/10.1017/S0144686X21001456>
20. Zhang Y, Wang L, Li X, Chen J. Effectiveness of educational interventions on social participation among older adults: A systematic review and meta-analysis. *Journal of Aging and Health*. 2021;33(7–8):587–601.
21. Nugroho A, Sari DP. Cultural relevance in health education for elderly in rural Java: A qualitative study. *International Journal of Community Education* [Internet]. 2023;5(1):44–57. Available from: <https://doi.org/10.21009/IJCE.051.05>
22. Chen L, Li H. Universal design for learning in community-based health education for older adults: A randomized controlled trial. *Journal of Applied Gerontology* [Internet]. 2023;42(5):1123–1131. Available from: <https://doi.org/10.1177/07334648221145678>
23. Rahmawati Y, Hadi S, Wijaya R. Social marginalization of the elderly in urban Indonesia: Causes and community-based solutions. *Journal of Southeast Asian Studies on Ageing* [Internet]. 2024;6(1):22–35. Available from: <https://doi.org/10.22146/jsa.89102>
24. Knowles MS, Holton EF III, Swanson RA. *The adult learner: The definitive classic in adult education and human resource development*. 9th ed. London: Routledge; 2022.

25. Schunk DH, DiBenedetto MK. Social cognitive theory and motivation. In: Ryan RM, editor. *The Oxford handbook of human motivation*. 2nd ed. Oxford: Oxford University Press; 2021. p. 11–28. Available from: <https://doi.org/10.1093/oxfordhb/9780190666453.013.1>