

Original Research

The Effectiveness of Support Group Therapy on Depression and Anxiety Levels Among the Elderly in The Halim Subdistrict of East Jakarta

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ABSTRACT

Aging is often accompanied by physiological, psychological, and social changes that increase the risk of mental health problems, particularly depression and anxiety. Effective psychosocial interventions are needed to help older adults manage these challenges and improve their well-being. This study aimed to determine the effect of Support Group Therapy on reducing depression and anxiety levels among older adults in Halim Village, East Jakarta. This study employed a quantitative quasi-experimental design with a pre-test–post-test approach. The sample consisted of 34 older adults selected using purposive sampling based on predetermined inclusion criteria. The intervention was delivered through 10 structured sessions, each focusing on specific topics related to emotional well-being and peer support. Data normality was tested using the Kolmogorov–Smirnov test, while statistical analysis was conducted using paired t-tests and independent sample t-tests. The results showed a significant difference ($p < 0.001$) in depression and anxiety levels before and after the intervention, indicating that Support Group Therapy is effective in reducing depression and anxiety among the elderly. These findings contribute to nursing practice, particularly in mental health nursing, by supporting Support Group Therapy as an effective psychosocial intervention to improve the mental health of older adults. This intervention may be implemented sustainably in community settings and health care facilities that provide services for the elderly.

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INTRODUCTION

Older adults are commonly defined as individuals aged 60 years and above, a standard widely used in many developing countries, including Indonesia (Sari et al.,

2025). The global aging population continues to increase rapidly due to improvements in life expectancy and declining fertility rates. According to the United Nations World Population Prospects (2022), the number of people aged 65 and older is projected to rise from 761 million in

2021 to 1.6 billion by 2050, meaning that one in six people worldwide will be aged 65 years and older. Approximately 80% of this population will reside in low- and middle-income countries, including Indonesia (United Nations, 2024). Indonesia is experiencing the same demographic shift. Based on recent national demographic projections, the proportion of older adults in Indonesia is experiencing a similar demographic transition. Based on recent national demographic projections, the proportion of older adults in Indonesia is expected to reach approximately 19.9% of the total population by 2045, placing the country within the category of an aging society (Yudhistira et al., 2024). As the proportion of older adults grows, the dependency ratio is expected to rise, and many elderly individuals continue to face challenges such as multimorbidity, limited social support, low socioeconomic status, and reduced functional capacity (Li et al., 2023; Puyan  et al., 2025). These combined physiological, psychological, and social changes increase vulnerability to mental health problems, particularly depression and anxiety. Mental health disorders remain a major global health concern and are projected to become one of the leading contributors to the global disease burden by 2030 (WHO, 2025).

Older adults are especially at risk due to factors such as bereavement, loneliness, reduced social interaction, loss of roles, and chronic illness, all of which may contribute to emotional distress and declining mental well-being. Data from the National Socio-Economic Survey (Susenas) collected in March 2023 indicate that 9.75% of older adults live alone (BPS, 2023). In terms of gender, the disparity remains significant, with 14.29% of older adults living alone being women, compared to 4.69% being men. Older adults whose spouses have passed away and who live far from their children are particularly vulnerable to loneliness. The proportion of older adults living alone remains higher in rural areas (10.87%) than in urban areas (8.92%).

Psychological disorders among older adults can lead to both physical and mental health deterioration. Research has demonstrated associations between psychological disorders and limited social interaction with conditions such as hypertension, cardiovascular disease, obesity, impaired immune function, depression, cognitive decline, Alzheimer's disease, and increased mortality (Kemenkes, 2016; van Marwijk et al., 2015). A study by Puspawati and Rekawati involving older adults in Jakarta found that 57.4% of 101 respondents experienced depression (Puspawati & Rekawati, 2017). Similar findings were reported among 40 older adults in Bali, with 50% experiencing depression and poor quality of life (Mahadewi & Ardani, 2018). Likewise, a study conducted in Padang reported that 50% of 100 older adult respondents experienced depression (Utami et al., 2018).

Meanwhile, research conducted in Manado revealed that among 36 respondents, 75% experienced mild depression and 25% experienced severe depression (Manafe & Berhimpun, 2022). Other studies have confirmed the high prevalence of depression and anxiety among older adults, both of which negatively affect quality of life and increase mortality risk (Perkovic et al., 2018; Puspawati & Rekawati, 2017). This is in line with previous research revealing that depression and anxiety in the elderly are significantly associated with an increased risk of heart disease and a high risk of death (van Marwijk et al., 2015). Additional evidence suggests that factors such as retirement, loneliness due to weakened social relationships, financial insecurity, and limited family and community support contribute to depression and anxiety in older adults (Musavi et al., 2017).

A large-scale study using data from the Indonesian Family Life Survey (IFLS-5), involving 4,236 individuals aged 60 years and older, reported a depression prevalence of 16.3%. Factors associated with depression included moderate to low subjective economic status, poor perceived health, dependence in activities of daily living, insomnia, a history of falls, and other related factors (Handayani et al., 2022). Another study involving 1,381 older adults aged 60 years and above from 15 community health centers reported a relatively high prevalence of depressive symptoms, with approximately 60.03% of respondents affected. Associated factors included gender, previous employment status, health conditions, and loneliness (Susanty et al., 2024). These findings highlight the need for effective non-pharmacological community-based interventions to address mental health problems among older adults (Larsen et al., 2025; Tao et al., 2023).

The increasing number of older adults and the complexity of their health problems require comprehensive government efforts to promote elderly well-being. A systematic review and meta-analysis by Holvast and Massoudi found that non-pharmacological interventions, including support group therapy, effectively reduce depression among older adults and can be implemented in community settings. This approach is particularly important because pharmacological treatments, such as antidepressants, may increase the risk of polypharmacy in older populations (Holvast et al., 2017). Supporting evidence indicates that support group therapy improves quality of life among older adults with hypertension across physical, psychological, environmental, and social domains (Tobing & Novianti, 2019). In addition, supportive therapy provided to families has been shown to reduce caregiver burden and anxiety, as demonstrated by significant differences before and after intervention in treatment groups (Harkomah & Saswati, 2021).

Support group therapy developed by Shu and Lung (2005),

consisting of 10 structured sessions, has been previously implemented and evaluated in Taiwan. However, despite the growing elderly population and increasing prevalence of mental health problems in Indonesia, evidence regarding the effectiveness of structured support group therapy for older adults remains limited. To date, no studies have examined the implementation of Shu and Lung's structured support group therapy model among elderly populations in Indonesia. The Halim Perdanakusuma sub-district in Jakarta represents a relevant community setting, characterized by a high proportion of older adults and limited access to non-pharmacological mental health interventions at the primary care level. Therefore, this study aimed to address this research gap by examining the effectiveness of support group therapy in reducing depression and anxiety among older adults in this community.

METHOD

This study employed a quantitative quasi-experimental design using a one-group pretest–posttest approach, which measured levels of depression and anxiety before and after the Support Group Therapy intervention. The study was conducted in Halim Perdanakusuma Village, East Jakarta. The population of this study comprised older adults residing in Halim Perdanakusuma Village. Initial identification of respondents with depression and anxiety was conducted through a screening process using the Depression and Anxiety subscales of the DASS questionnaire. Older adults who screened positive for depression and/or anxiety were invited to participate in the study.

A total of 40 eligible respondents were recruited through purposive sampling. During the intervention, six respondents withdrew due to personal and health-related reasons, resulting in 34 respondents completing the study and were included in the final analysis. The inclusion criteria were: willingness to participate, ability to read and write, being *compos mentis*, and experiencing depression and/or anxiety based on DASS screening results. The exclusion criterion was uncooperative behavior during the intervention. Participants were not receiving antidepressant or anxiolytic medications during the study period, as confirmed through self-report during the initial assessment.

This research instrument used the standardized DASS-42 (Depression, Anxiety, Stress Scale) questionnaire developed by Lovibond and Lovibond (Lovibond & Lovibond, 1995). The DASS-42 questionnaire was translated into Indonesian by Damanik and consists of four response options for each item. The DASS is considered suitable for use in large non-clinical

populations. In this study, only the depression and anxiety subscales were utilized, each comprising 14 items. Depression severity was classified as normal (0–9), mild (10–13), moderate (14–20), severe (21–27), and extremely severe (≥ 28), while anxiety severity was categorized as normal (0–7), mild (8–9), moderate (10–14), severe (15–19), and extremely severe (≥ 20). These classifications are consistent with the original DASS-42 manual and previous validation studies of the Indonesian version.

The depression subscale consisted of items 3, 5, 10, 13, 16, 17, 21, 24, 26, 31, 34, 37, 38, 42, while the anxiety subscale consisted of items 2, 4, 7, 9, 15, 19, 20, 23, 25, 28, 30, 36, 40, 41. The Indonesian version of the DASS was validated using two sample groups ($N = 144$): participants residing in Yogyakarta and Bantul who had experienced a disaster, and participants residing in Jakarta and surrounding areas who had not experienced a disaster. Reliability testing using Cronbach's alpha demonstrated excellent internal consistency. The overall reliability coefficient was $\alpha = 0.95$, with Cronbach's alpha values of 0.90 for the depression subscale and 0.85 for the anxiety subscale (Damanik, 2011). Ethical approval for this study was obtained from Universitas Dirgantara Marsekal Suryadarma (Number BLP2M44XI2025). The study was conducted in August 2025. All participants received written information explaining the purpose, procedures, risks, and benefits of the study, and written informed consent prior to data collection.

The intervention followed the Support Group Therapy model developed by Shu and Lung (2005), which consists of 10 structured sessions covering key topics: (1) knowing each other, (2) caring for myself, (3) my interpersonal relationships, (4) my family, (5) interaction, (6) my selfness (selfishness), (7) coping strategies, (8) social networks, (9) community resources, and (10) perspective on death. Each session serves as a guide for discussion and self-disclosure, while participants were also encouraged to raise additional issues affecting their mental health. The therapy emphasized the “here-and-now” principle, focusing on participants' current experiences. A standardized therapy module and participant workbook were used to ensure intervention consistency.

The intervention was conducted in small groups of up to five participants, with two trained facilitators per group. Facilitators underwent a Training of Trainers (TOT) program prior to data collection, which aimed to standardize understanding of the therapy protocol, questionnaire administration, and knowledge related to depression and anxiety in older adults. Facilitators were psychiatric nursing lecturers with expertise in geriatric and community nursing and extensive experience in elderly mental health interventions. Although formal inter-rater

reliability testing (e.g., Kappa analysis) was not performed, consistency in intervention delivery was ensured through structured discussions and protocol review during the TOT. The therapy was implemented over a single day for each group, with each session lasting approximately 60–90 minutes, divided into two phases: (i) Term 1: Sessions 1–5, focusing on introductory topics and personal/social relationships (ii) Term 2: Sessions 6–10, focusing on coping strategies, social networks, community resources, and perspectives on death. Pre-tests were conducted before the first session of Term 1, and post-tests were conducted after the completion of Term 2, allowing evaluation of the intervention’s effect on depression and anxiety levels. Of the initial participants, 34 completed all sessions, while six participants withdrew before completion and were excluded from the posttest analysis.

Data analysis was conducted using IBM SPSS Statistics version 20.0. Data normality was tested using the Kolmogorov-Smirnov test ($p > 0.05$). Univariate analysis was performed to describe demographic characteristics using frequencies and percentages, while bivariate analysis was conducted using the paired t-test to examine differences in depression and anxiety levels before and after the intervention ($p < 0.05$).

RESULT

Table 1 shows that more than half of the respondents were female (64.7%), approximately one-third had completed senior high school education (38.2%), and a similar proportion were aged 65–69 years (38.2%).

Table 1. Respondent Characteristics: Gender, Education, and Age (n= 34)

| Variable | n | % |
|------------------|----|------|
| Gender | | |
| Male | 12 | 35.3 |
| Female | 22 | 64.7 |
| Education | | |
| Elementary | 7 | 20.6 |
| Junior | 10 | 29.4 |
| High | 13 | 38.2 |
| Diploma | 2 | 5.9 |
| University | 2 | 5.9 |
| Age | | |
| 60-69 | 22 | 64.7 |
| 70-79 | 8 | 23.5 |
| ≥80 | 4 | 11.8 |

Table 2 presents the distribution of depression and anxiety severity among respondents prior to the Support Group Therapy intervention. The highest proportion of respondents experienced

moderate depression (47.1%), followed by severe and extremely severe depression (38.2%). With regard to anxiety, the majority of respondents were classified as having extremely severe anxiety (67.6%), followed by severe anxiety (29.4%). No respondents were categorized as having mild anxiety prior to the intervention.

Table 2. Frequency Distribution of Depression and Anxiety in Elderly People Before Support Group Therapy Intervention (n=34)

| Depression | n | % |
|----------------|----|------|
| Normal | 1 | 2.9 |
| Mild | 2 | 5.9 |
| Moderate | 16 | 47.1 |
| Severe | 13 | 38.2 |
| Very severe | 2 | 5.9 |
| Anxiety | | |
| Moderate | 1 | 2.9 |
| Severe | 10 | 29.4 |
| Very severe | 23 | 67.6 |

Table 3 presents the distribution of depression and anxiety severity among respondents after the Support Group Therapy intervention. Most respondents were classified as having normal depression levels (94.1%), followed by mild depression (5.9%), with no respondents remaining in the severe or extremely severe categories. Similarly, the highest proportion of respondents demonstrated normal anxiety levels (73.5%), followed by moderate anxiety (6.0%). No respondents were classified as having severe or extremely severe anxiety following the intervention.

Table 3. Frequency Distribution of Depression and Anxiety in Elderly People Post Support Group Therapy Intervention (n= 34)

| Depression | n | % |
|----------------|----|------|
| Normal | 32 | 94.1 |
| Mild | 2 | 5.9 |
| Anxiety | | |
| Normal | 25 | 73.5 |
| Mild | 3 | 8.8 |
| Moderate | 6 | 17.6 |

Table 4 shows the results of the paired t-test correlation analysis, which revealed a statistically significant difference in depression and anxiety scores before and after the Support Group Therapy intervention ($p < 0.001$). These findings indicate that Support Group Therapy significantly reduced depression and anxiety levels among older adults.

Table 4. The Relationship Between Depression and Anxiety Levels in Elderly People Pre and Post Support Group Therapy Intervention (n= 34)

| Variable | Pre intervention (Mean ± SD) | Post intervention (Mean ± SD) | Difference (Δ) | t | p-value |
|------------|---------------------------------|-------------------------------------|-------------------|-------|---------|
| Depression | 3.38±0.81 | 1.06±0.23 | 2.32 | 16.07 | <0.0001 |
| Anxiety | 4.65±0.54 | 1.44±0.78 | 3.20 | 20.45 | <0.0001 |

Table 5 further demonstrates significant differences in mean depression and anxiety scores before and after the intervention ($p < 0.001$), confirming that Support Group Therapy was effective in reducing both depression and anxiety among the participants.

Table 5. The Effect of Supportive Group Therapy Intervention on Reducing Levels of Depression and Anxiety in the Elderly (n= 34)

| Variable | t | df | P value |
|-----------------------------|------|----|---------|
| Depression Pre vs Post test | 9.84 | 34 | <0.0001 |
| Anxiety Pre vs Post test | 8.15 | 34 | <0.0001 |

DISCUSSION

Before the Support Group Therapy intervention, respondents generally exhibited moderate to severe levels of depression and anxiety, indicating a substantial baseline burden of psychological distress among participants. This condition illustrates that most of the elderly in this study experienced quite high psychological pressure, both in the form of depression and anxiety. High levels of depression and anxiety among older adults have been widely reported in previous studies. Factors such as spousal loss, limited social activities, declining physical health, loneliness, and reduced family support are known to contribute to psychological disorders in older populations (Putri Dewi, 2023; Wisanti et al., 2024).

After being given Support Group Therapy intervention, there was a significant decrease in depression and anxiety levels. Most respondents were in the normal category for both depression and anxiety. The paired t-test results demonstrated statistically significant differences in depression and anxiety scores before and after the intervention ($p < 0.001$), indicating that Support Group Therapy was effective in reducing psychological distress among older adults. These findings are consistent with previous studies reporting that group-based interventions can reduce depression among older adults by enhancing emotional support and fostering a sense of belonging (Amri et al. 2025; Hidayati et al., 2021).

Within a group setting, older adults have opportunities to share experiences, express emotions, and exchange coping strategies, thereby creating an atmosphere of mutual support and reducing feelings of social isolation (PRA, 2014). According to Stuart, Support Group Therapy emphasizes open communication, empathy, and interpersonal connection among participants. These interactions promote a sense of belonging, self-esteem, and self-efficacy, which are closely associated with reductions in depressive and anxiety symptoms (Stuart, 2012). Previous research has also shown that support group therapy can significantly enhance self-esteem, optimism, and overall psychological well-being among older adults (Banon et al., 2022; Wahab, 2014).

From a physiological perspective, the observed reduction in depression and anxiety may be partially explained by decreased sympathetic nervous system activation resulting from relaxation and feelings of acceptance within the group. Enjoyable social activities have been shown to lower cortisol levels and increase dopamine and serotonin hormones, which play an important role in mood regulation (Mikhaline, 2015; Ruqaiyah et al., 2023).

Support group therapy utilizes the social support systems surrounding older adults, enabling them to recognize and mobilize coping resources to manage stress more effectively. Through group interaction, participants gain opportunities to discuss personal problems, receive feedback, and identify sources of emotional and practical support that contribute to adaptive coping mechanisms. The working concept of supportive group therapy is believed to play an important role in enabling older adults to identify stressors and the resources they have to anticipate dealing with these problems. Research on psychological disorders has proven that anxiety, stress, and depression occur because of uncontrollable emotional pressure. Previous studies have shown that anxiety, stress, and depression often arise from uncontrolled emotional pressure, and that recognizing stressors is a critical step in managing psychological disorders (Lisnawati et al., 2018). According to Yalom and Leszcz (2020), therapeutic factors such as universality (the awareness that other people also face similar problems), altruism (giving and receiving support), and instillation of hope are key elements that contribute to the success of group therapy. Older adults who perceive that they

are not alone and receive emotional support from others are more likely to develop a positive outlook on life and greater optimism about the future. (Yalom & Leszcz, 2020).

This study has several limitations that should be considered when interpreting the findings. First, the relatively small sample size (34 participants) may limit the generalizability of the results to the broader elderly population. Consequently, future studies involving larger samples and participants from diverse social backgrounds and health conditions are needed.

Second, the use of a single-group pretest–posttest design without a control group limits causal inference, as changes in depression and anxiety levels may have been influenced by external or uncontrolled factors. Future studies employing randomized controlled or comparative designs are therefore recommended. Third, the study was conducted in a single community setting, and context-specific social, cultural, and environmental factors may have influenced participants' responses to the intervention. Multicenter studies across different regions and cultural contexts would provide a more comprehensive understanding of the effectiveness of Support Group Therapy among older adults. Fourth, the limited duration of the intervention and the absence of long-term follow-up restricted the ability to assess the sustainability of the therapeutic effects. Longitudinal studies with medium- and long-term evaluations are warranted to determine whether reductions in depression and anxiety are maintained over time. Fifth, although validated and reliable instruments were used, the reliance on self-reported measures may have introduced subjective bias. Finally, this study did not examine other potential influencing factors, such as family support, spirituality, or the quality of social relationships outside the therapy group, which may moderate the effectiveness of Support Group Therapy. Considering these limitations, future studies should adopt more rigorous experimental designs, including control or comparison groups, expand the range of variables examined, and extend the duration of intervention and follow-up to provide a more robust evaluation of Support Group Therapy for older adults.

CONCLUSION

The findings of this study indicate that Support Group Therapy is effective in reducing depression and anxiety among older adults. Overall, this intervention has a positive impact on mental health as well as psychosocial well-being, as it encourages healthy social interaction, enhances feelings of acceptance, and supports the development of adaptive coping mechanisms to manage life stressors experienced in older age. Therefore, Support Group Therapy may be considered an effective, feasible, and easily implemented group-based nursing intervention in various healthcare settings and community-based elderly programs. Overall, Support Group Therapy demonstrates a positive impact on both the mental

health and psychosocial well-being of older adults. This intervention promotes healthy social interaction, enhances feelings of acceptance, and supports the development of adaptive coping mechanisms to manage life stressors experienced in later life. These findings suggest that Support Group Therapy is a feasible and effective group-based nursing intervention that can be implemented across various healthcare and community settings for older adults.

Beyond clinical practice, the findings of this study also have important implications for nursing education. Nursing education institutions play a crucial role in integrating evidence-based interventions into the curriculum, particularly within gerontic and mental health nursing courses. Practical strategies may include training students to design and facilitate Support Group Therapy, incorporating group-based approaches into clinical and community field practice, and encouraging further research on the application of Support Group Therapy for diverse psychological conditions among older adults. In addition, collaboration between educational institutions, nursing homes, and community-based elderly organizations can support the implementation of group-based support programs as part of community service initiatives. Taken together, these findings contribute to the improvement of elderly nursing care quality and reinforce the role of nursing education in mental health promotion and prevention among older adults.

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