# The Impact Of Family Assistance On The Reduction Of Elderly Depression In Rural Communities

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#### **Abstract**

Due to their limitations, adult family members have the responsibility and task of supporting the elderly in their daily lives. Family members who accompany older people who are depressed will help them recover quickly and improve their quality of life. The purpose of this study was to identify the role of family members in supporting the elderly who were depressed. The study's benefits include ensuring that the elderly stay productive in old age, independent, and happy in their everyday activities. The research approach was a quantitative study employing a quasi-experimental design with a pre-post test and no control group design. The participants in this study were all older persons suffering from depression in a rural village in Banyumas Regency. The sampling technique used was simple random sampling with a population of 245 senior persons. According to the inclusion criteria, respondents in this study got a total of 36 elderly. The Geriatric Depression Scale (GDS) was the tool used to assess the amount of depression in the elderly. The GDS questionnaire was used to obtain research data on elderly individuals attending integrated service post activities. The t-test was used to analyze the data, and the results produced with p=0.000 are p=0.05. The findings of this study suggested that family help had a substantial effect on the amount of depression experienced by the elderly. As a result, the family members must support the elderly in their daily activities.

**Keywords:** community, depression, elderly, family, rural areas.

### Introduction

The elderly's health concerns include not just physical ailments but also psychosocial issues, most notably depression, which has emerged in the middle of the current COVID-19 pandemic. One of the causes that can lead the elderly to feel depressed is the restriction on undertaking activities outside the home. Furthermore, during the COVID-19 pandemic, the elderly were a primary focus of healthcare services because they were one of the most vulnerable populations to severe diseases when exposed to COVID-19. As a result, they will impact improving health status, making people more independent, active, and productive. Community health volunteers should provide health education to the elderly's families, who are their primary support system in maintaining their health and independence. The incapacity of the family to meet the demands of the elderly due to financial constraints can have an impact on the formation of depression disorders. Previous research found a link between the amount of family poverty and depression in the elderly and that depression in the elderly might occur in both rural and urban populations (Umah, 2014; Pracheth, 2016). Another study found that the elderly in urban settings had more excellent rates of depression than those in rural regions (Chiu et al., 2005; Kim et al., 2002). The occurrence of these disparities in outcomes is very likely due to the influence of socio-cultural variables, economic capacity, and each family's ability to acquire access to health services for the elderly.

In 2020, there will be around 27.1 million senior persons in Indonesia, accounting for 10.7% of the total population. The number of seniors is expected to rise year after year, reaching 12.5% of the total population by 2025. The number of elderly people is expected to rise to 12.5% in the next five years. The percentage will then rise to 14.6% in 2030, 16.6% in 2035, and 18.3% in 2040. Data on the elderly in Indonesia will peak in the country's 100th year of independence, accounting for over 20% of the total population ((BPS), 2021). According to data on age, which is increasing year after year, the Indonesian population's life expectancy is 71.5 years, although the Healthy Life Expectancy is only 62.7 years (Kementerian Kesehatan RI, 2017). So there is an 8.8-year gap, indicating that they are in an unhealthy state, with the elderly being classified as being able to suffer from multiple ailments at the same time. The most common ailments among the elderly include hypertension, diabetes, stroke, and mental and emotional problems such as dementia and depression. Depression in the elderly requires prompt and accurate health therapies, including family members, so that the elderly's quality of life does not deteriorate in the future and they remain healthy and independent.

During the COVID-19 pandemic, the elderly are the most vulnerable. The decline in physical and physiological circumstances of the elderly requires substantial attention from the family in the form of proper nutritional food consumption, regular health checkups, and maintaining a healthy lifestyle. The elderly's physical health may be the most essential factor in everyday activities in their social environment; for example, they may be able to carry out routine activities such as healthy walking exercises with their community groups (Baert et al., 2011). Furthermore, attempts to maintain psychosocial health circumstances where the family has a role as a caretaker companion and keeping the elderly happy should not be overlooked. Elderly adults who have an intrinsic urge to be healthy and fit are more confident in their everyday activities ((Giuli et al., 2012), (Onya ON, 2013)). However, the elderly can become dissatisfied, uncomfortable, and even melancholy at times. As a result of this depression problem, the elderly's bodily and psychological health will suffer, including a decrease in the body's immune system, feeling quickly ill, and if there is a comorbid disease, which will worsen their physical and mental state. As a result, procedures and efforts to safeguard elderly from becoming physically and psychologically ill require preventive measures and, if necessary, treatment by involving social support, particularly close family and community health volunteers.

The active participation of the community and family in providing access to prevention and treatment services for the elderly with depression will be able to reduce morbidity.

To promote the health of the elderly, integrated service stations for the elderly placed in every community group in rural areas can be used. Family members must use the time and opportunity to help the elderly acquire access to physical and psychological health care, especially during the covid-19 pandemic (Huang & Zhao, 2020), Wang et al., 2021). Depressed senior persons will have the opportunity to interact with other older people in the neighbourhood. During the COVID-19 epidemic, elderly interactions must continue to adhere to health guidelines. The family's role must be to preserve the mental health of the elderly in order for them to avoid difficulties such as depression, loneliness, fear, worry, panic, and helplessness (Keliat et al., 2020). The presence of the COVID-19 pandemic epidemic may have an impact on the elderly's mental health, mainly despair and loneliness (Mukhtar, 2020b). Elderly persons with family support must become accustomed to coping with the effects of the COVID-19 epidemic (Mukhtar, 2020a). As a result, the family plays a crucial role in the physical and mental health of the elderly. As a result, individuals can improve their everyday functioning, usually and independently, in their social environment, as well as lower their chance of getting depression.

#### **Research Method**

This research was a quantitative study using a quasi-experimental method with a prepost-test design without a control group. The sampling technique used was simple random sampling according to the inclusion criteria and measured the level of depression using the Geriatric Depression Scale (GDS) before and after treatment. The population in this study was all elderly people who experienced depression in rural communities in Banyumas district, as many as 255 people. Furthermore, the simple random sampling technique involves selecting a sample randomly using an odd and even serial number lottery (lottery technique) that meets the following inclusion criteria: willingness to become a respondent (informed consent), experiencing symptoms of mood changes or depression, aged > 50 years, being able to follow the exercise, and not drinking alcohol. The exclusion criteria in this study are the elderly who have comorbid complications such as hypertension, diabetes mellitus, lung, kidney, and cancer.

Furthermore, the research sample obtained is composed of 36 elderly people who have participated in research activities with family assistance treatment in an effort to reduce their level of depression. Measurement of the level of depression in the elderly with the short form GDS instrument consisting of 15 question items with the following scoring: normal = 0-4, mild depression = 5-8, moderate depression = 9-11, and severe depression = 12-15. The short-form Geriatric Depression Scale (GDS) questionnaire contains 15 questions with answer choice categories Yes = 1 and No = 0. This questionnaire was not tested for validity and reliability because it already has a high sensitivity of 95% and a specificity of 89% and only requires 5-7 minutes to complete all questions. The questionnaire has been translated into Indonesian by Indonesian grammarians. Furthermore, the data collected was analyzed using a t-test to determine the effect of family assistance on reducing depression levels in the elderly before and after treatment.

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#### RESULTS

The research results that have been obtained are presented in the form of tables and brief descriptions.

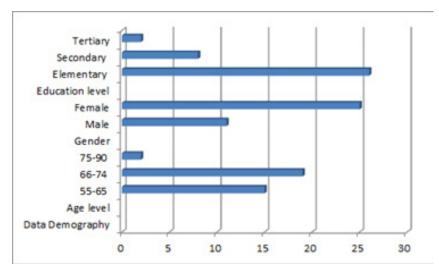


Figure 1. Data Demography

Figure 1 shows the demographic data of the elderly who participated in this research activity by age group, gender, and level of education. The age group ranges from 66 to 74 years old and 55 to 65 years old, with 19 and 15 elderly people, respectively. The older women who received assistance from their families in dealing with depression problems were more than men, with 25 (69%) and 11 (31%). Furthermore, the elderly who have primary education are more dominant than those with secondary education, with a total of 26 (72%) and 8 (28%). The demographic data of this study provide an overview of the characteristics of the elderly who have depression problems and who need assistance from their family members. Good and intense assistance that is carried out continuously is the role of the support system that must be carried out by family members to improve the mental health of the elderly. Thus, they will be able to maintain a pattern of daily activities independently in their family and social environment.

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Lavel of denuacion	Pre	-Test	Post	-Test
Level of depression —	n	%	n	0/0
No depression	-	-	20	55
Mild	20	55	10	28
Moderate	16	45	6	17
Amount	36	100	36	100

Table 2 indicates that the elderly who live in rural communities experience mild and severe depression in the pre-test results, amounting to 20 and 16 people, respectively. After the intervention with family assistance in carrying out daily activities, the elderly experienced a decrease in the level of depression. The post-test results were 20 people who did not experience depression, 10 people with mild depression, and 6 people with moderate depression. The results of this study recommend that elderly people who are still experiencing mild and severe depression problems should consult with health workers at the local community health center for counseling and treatment. The results of the study also identified the factors that caused them to experience depression related to external and internal sources. The problem of depression

experienced by the elderly is due to limitations in interacting, feeling alone at home, not having friends to communicate with, and also because of health problems related to comorbidities, namely hypertension, difficulty walking due to joint pain, and diabetes mellitus.

Table 3. Level of family assistence

Level of family	Pre	-Test	Post-Te	-Test
assistance	n	%	n	0/0
Good	4	12	14	39
Enough	16	44	18	50
Less	16	44	4	11
Amount	36	100	36	100

Table 3 shows that the results of the pre-test on the level of assistance carried out by family members for depressed elderly living at home are in the poor category. A total of 36 families who participated in this study were mostly sufficient and lacking in providing assistance to elderly people with depression, each consisting of 16 families. Furthermore, in the post-test results, there were 4 families who were still in the lower category for the level of assistance in providing assistance to depressed elderly people. They are provided with assistance by trained community health cadres to improve the quality of mental health assistance for the elderly. Therefore, the research intervention was carried out by providing health education to family members, both in theory about the form of mentoring and in direct practice about how to communicate with elderly people with depression. So that the family is the first mental health agent who can help the depressed elderly before they get help from the community mental health nurse at the nearest community health center.

**Table 4. Correlation** 

t-test	N	Correlation	Sig
Pre & Post test	36	0,400	0,016

In Table 4, it can be explained that the level of correlation between support, assistance, and family assistance in overcoming depression problems in the elderly is at a value of 0.400. This value indicates that there is a sufficient correlation between family assistance and improving the mental health of elderly, depressed people. The significance value obtained is 0.016, which means that the family has an important role in overcoming the problem of depression in the elderly.

#### **Discussion**

Depression is a prevalent mental health problem that is frequently observed among elderly individuals residing in rural settings, particularly in the context of the ongoing COVID-19 pandemic. There tends to be a higher level of social interaction among the elderly population residing in rural locations compared to their counterparts in urban areas. According to Lubis (2023), older individuals who suffer from depression frequently have challenges related to sleep quality and a diminished appetite. The older population's untreated depressive state has been found to havepotential implications for the deterioration

of their immune system (Dirgayunita, 2016). According to Suwistianisa et al. (2015), it is crucial for family members to provide increased support and attention to elderly individuals who have comorbidities such as diabetes mellitus, chronic kidney disease, and cardiovascular disease when they exhibit symptoms of depression. This is because depression can have detrimental effects on both their physical and psychological wellbeing. The prevalence of depression among older adults tends to rise with advancing age, leading to heightened mortality rates and diminished physical functioning, both of which contribute to the development of mental health issues, specifically depression

(van't Veer-Tazelaar et al., 2008). Hence, the involvement of family members plays a pivotal role in facilitating prompt access to necessary treatment and care for the elderly, thereby contributing to the improvement of their mental health status.

Comorbid variables such as hypertension and diabetes mellitus have been linked to depression in the elderly living in rural South Africa. Most older people with chronic conditions are also at high risk of depression (Kleinman & Ff, 2022; Green et al., 2003). The elderly are a vulnerable population in society owing to the COVID-19 epidemic, where they feel alone at home, lack connection and activities outside the home, and even withdraw (Yildirim et al., 2021). Families are asked to assist the elderly when they leave the house for activities and to follow rigorous health standards to prevent the spread of COVID-19. The elderly must minimize their interaction with the social environment during the COVID-19 pandemic phase in order to avert the spread of the COVID-19 epidemic. If they must leave the house, specific health precautions must be followed to minimize the danger of transmission.

The elderly are more vulnerable to severe, deteriorating health symptoms and even death from COVID-19 infection (Yildirim et al., 2022; Perrotta et al., 2020). As a result of these restricting restrictions, the elderly are at risk of developing mental health issues, specifically depression. The ability of the elderly to adjust to depression declines due to a deterioration in physical and cognitive abilities, as well as diminished function of other organs (Andrieieva et al., 2019; Pessoa et al., 2019). As a result, despite constraints on interacting with the social environment, social support, particularly aid from family members, can make the elderly feel less alone and happier (Shah et al., 2021; Schug et al., 2021). Family members have a vital role in identifying and overcoming the signs and symptoms of geriatric depression.

One of the consequences of the COVID-19 epidemic in the early age group was a sense of limited social activities in their surroundings, loneliness, and a decrease in their lives. The elderly have activities outside the home, such as participating in community health service activities, elderly

associations, and other activities that must be carried out and cause a prolonged sense of loneliness, which can lead to depression (Astiningsih, 2021; Bianca, 2021)). Family members can assist the elderly in conquering depression. Prolonged depression will impair the physical and mental health of the elderly, as well as their quality of life. Elderly adults with health issues are a compassionate group to depression (Ferreira et al., 2021). The assistance of families and partners in daily activities substantially aids the elderly in remaining independent and happy in life (Widiani et al., 2022). Furthermore, they will remain independent and productive in accordance with their talents, as well as have good mental health to adapt to changes brought about by the COVID-19 epidemic. As a result of the findings of this study, it is envisaged that nurses and families would serve as a support system to help the elderly overcome depression.

## **Conclusion**

During the COVID-19 epidemic, the elderly aged 66 to 74 years are at risk of developing depression difficulties in rural settings. Family aid in conquering depression difficulties in the elderly in rural locations is highly beneficial to the elderly's mental health. The problem of mild to moderate depression in the elderly necessitates the assistance of the family as the closest unit and the primary support system. There is a link between robust family support and lower rates of depression in the elderly. Family help will improve the elderly's physical and mental health, allowing them to keep a level of independence in carrying out daily duties. Families must create effective, sensitive, and compassionate contact with the elderly, particularly those exhibiting early indications and symptoms of depression. Early diagnosis of depressive problems by family members will significantly assist the elderly in quickly regaining their mental health.

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# References

(BPS), B. P. S. (2021). Jumlah Lansia Diproyeksikan Hampir Seperlima Penduduk Indonesia pada 2045. Databoks, 2045. https://databoks.katadata.co.id/datapublish/2021/12/22/jumlah-lansia-diproyeksikan-hampir-seperlima-penduduk-indonesia-pada-2045#:~:text=Badan Pusat Statistik (BPS) mencatat,10%252C7%2525 pada 2020.&text=Persentase tersebut diproyeksikan semakin meningkat

Andrieieva, O., Hakman, A., Kashuba, V., Vasylenko, M., Patsaliuk, K., Koshura, A., & Istyniuk, I. (2019). Effects of physical activity on aging processes in elderly persons. *Journal of Physical Education and Sport*, 19(4), 1308–1314. https://doi.org/10.7752/jpes.2019.s4190

Astiningsih, N. P. A. S. (2021). Tingkat depresi pada lansia dimasapandemik covid-19 di kelurahan banjar tengah, kecamatan negara.

Baert, V., Gorus, E., Mets, T., Geerts, C., & Bautmans, I. (2011). Motivators and barriers for physical activity in the oldest old: *a systematic review. Ageing Research Reviews*, 10(4), 464–474. https://doi.org/10.1016/j.arr.2011.04.001

Bianca, N. (2021). *Gambaran loneliness pada lansia di era pandemi covid-19*. 2021. http://repository.uph.edu/25113/

Chiu, H.-C., Chen, C.-M., Huang, C.-J., & Mau, L.-W. (2005). Depressive symptoms, chronic medical conditions and functional status: a comparison of urban and rural elders in Taiwan. International *Journal of Geriatric Psychiatry*, 20(7), 635–644. https://doi.org/10.1002/gps.1292

Dirgayunita, A. (2016). Depresi: Ciri, Penyebab dan Penangannya. *Journal An-Nafs: Kajian Penelitian Psikologi*, 1(1),

1–14. https://doi.org/10.33367/psi.v1i1.235

Ferreira, L. N., Pereira, L. N., da Fé Brás, M., & Ilchuk, K. (2021). Quality of life under the COVID-19 quarantine. *Quality of Life Research*, 30(5), 1389–1405. https://doi.org/10.1007/s11136-020-02724-x

Giuli, C., Papa, R., Mocchegiani, E., & Marcellini, F. (2012). Predictors of participation in physical activity for community-dwelling elderly Italians. *Archives of Gerontology and Geriatrics*, 54(1), 50–54. https://doi.org/10.1016/j. archger.2011.02.017

Green, R. C., Cupples, L. A., Kurz, A., Auerbach, S., Go, R., Sadovnick, D., Duara, R., Kukull, W. A., Chui, H., Edeki, T., Griffith, P. A., Friedland, R. P., Bachman, D., & Farrer, L. (2003). Depression as a risk factor for Alzheimer disease: the MIRAGE Study. *Archives of Neurology*, 60(5), 753–759. https://doi.org/10.1001/archneur.60.5.753

Huang, Y., & Zhao, N. (2020). Chinese mental health burden during the COVID-19 pandemic. *Asian Journal of Psychiatry*, 51, 102052. https://doi.org/10.1016/j.ajp.2020.102052

Keliat, B. A., Marlina, T., Windarwati, H. D., Mubin, F., Sodikin, A., Kristaningsih, T., Prawiro, A., Trihadi, D., & Kembaren, L. (2020). *Buku-DKJPS-COVID-19\_Keperawatan-Jiwa\_Edisi2-compressed-2.pdf.* 

Kementerian Kesehatan RI. (2017). *Profil Kesehatan Indonesia 2014* (Vol. 1227, Issue July). https://doi.org/10.1002/qj

Kim, J.-M., Shin, I.-S., Yoon, J.-S., & Stewart, R. (2002). Prevalence and correlates of latelife depression compared between urban and rural populations in Korea. International *Journal of Geriatric Psychiatry*, 17(5), 409–415. https://doi.org/10.1002/gps.622

Kleinman, A., & Ff, L. (2022). Kleinman *CV. Harvard Medical School*, 1–46.

Lubis, N. L. (2023). Lihat artikel Depresi:

tinjauan psikologis. 2016.

Mukhtar, S. (2020a). Pakistanis' mental health during the COVID-19. *Asian Journal of Psychiatry*, 51(April), 2018–2019. https://doi.org/10.1016/j.ajp.2020.102127

Mukhtar, S. (2020b). Mental Health and Psychosocial Aspects of Coronavirus Outbreak in Pakistan: Psychological Intervention for Public Mental Health Crisis. In *Asian journal of psychiatry* (Vol. 51, p. 102069). https://doi.org/10.1016/j.ajp.2020.102069

Onya ON, S. P. (2013). Risk Factors for Depressive Illness among Elderly Gopd Attendees at Upth. *IOSR Journal of Dental and Medical Sciences*, 5(2), 77–86.

Perrotta, F., Corbi, G., Mazzeo, G., Boccia, M., Aronne, L., D'Agnano, V., Komici, K., Mazzarella, G., Parrella, R., & Bianco, A. (2020). COVID-19 and the elderly: insights into pathogenesis and clinical decision-making. *Aging Clinical and Experimental Research*, 32(8), 1599–1608. https://doi.org/10.1007/s40520-020-01631-y

Pessoa, R. F., Neves, C. M., & Ferreira, M. E. C. (2019). Dance therapy in aging: A systematic review. *Journal of Physical Education and Sport*, 19(2), 1180–1187. https://doi.org/10.7752/jpes.2019.02171

Pracheth, R. (2016). Urban-rural comparison of depression among the elderly population: a cross-sectional study. International *Journal of Medical Science and Public Health*, 5(5), 866. https://doi.org/10.5455/ijmsph.2016.09092015144

Schug, C., Morawa, E., Geiser, F., Hiebel, N., Beschoner, P., Jerg-Bretzke, L., Albus, C., Weidner, K., Steudte-Schmiedgen, S., Borho, A., Lieb, M., & Erim, Y. (2021). Social Support and Optimism as Protective Factors for Mental Health among 7765 Healthcare Workers in Germany during the COVID-19 Pandemic: Results of the VOICE Study. *International Journal of Environmental* 

Research and Public Health, 18(7). https://doi.org/10.3390/ijerph18073827

Shah, S. A., Safian, N., Ahmad, S., Wan Ibadullah, W. A. H., Mohammad, Z. Bin, Nurumal, S. R., Mansor, J., Addnan, M. F., & Shobugawa, Y. (2021). Factors Associated with Happiness among Malaysian Elderly. International *Journal of Environmental Research and Public Health*, 18(7). https://doi.org/10.3390/ijerph18073831

Suwistianisa, R., Huda, N., & Ernawaty, J. (2015). Faktor-Faktor Yang Mempengaruhi Tingkat Depresi Pada Pasien Kanker Yang Dirawat Di Rsud Arifin Achmad Provinsi Riau. *Oktober*, 2(2), 1463.

Umah, K. & H. (2014). Faktor Kesepian, Kemiskinan, Dan Kehilangan Pasangan Dengan Tingkat Depresi Pada Lansia. *Ners Community*, 5(1), 36–47.

van't Veer-Tazelaar, P. J., van Marwijk, H. W. J., Jansen, A. P. D., Rijmen, F., Kostense, P. J., van Oppen, P., van Hout, H. P. J., Stalman, W. A. B., & Beekman, A. T. F. (2008). Depression in old age (75+), the PIKO study. *Journal of Affective Disorders*, 106(3), 295–299. https://doi.org/10.1016/j.jad.2007.07.004

Wang, Y., Di, Y., Ye, J., & Wei, W. (2021). Study on the public psychological states and its related factors during the outbreak of coronavirus disease 2019 (COVID-19) in some regions of China. *Psychology, Health & Medicine*, 26(1), 13–22. https://doi.org/10.1080/13548506.2020.1746817

Widiani, E., Hidayah, N., & Hanan, A. (2022). Depresi dan kesepian pada lanjut usia saat pandemi COVID-19. *NERS: Jurnal Keperawatan*, 18(1), 17–25.

Yildirim, H., Işik, K., & Aylaz, R. (2021). The effect of anxiety levels of elderly people in quarantine on depression during covid-19 pandemic. *Social Work in Public Health*, 36(2), 194–204. https://doi.org/10.1080/19371918.2020.1868372