**Jurnal Info Kesehatan**
Vol. 23, No. 3, September 2025, pp. 531-539
P-ISSN 0216-504X, E-ISSN 2620-536X
DOI: *10.31965/infokes.Vol23.Iss3.2075*
Journal homepage: *https://jurnal.poltekkeskupang.ac.id/index.php/infokes*

RESEARCH Open Access

# Application of The Family Support Model to Increase Elderly Independence

**Tri Prabowo[1a*], Bondan Palestin[1b], Atik Badi'ah[1c], Muhammad Najib[2d]**

[1] Politeknik Kesehatan Kemenkes Yogyakarta, Yogyakarta, Indonesia
[2] Politeknik Kesehatan Kemenkes, Surabaya, East Java, Indonesia

[a] Email address: tp_prabowo@yahoo.com
[b] Email address: bondan.palestin@poltekkesjogja.ac.id
[c] Email address: atik.cahyo@yahoo.com
[d] Email address: najibchan2008@gmail.com

Received: 25 July 2025 Revised: 15 September 2025 Accepted: 19 September 2025

**Abstract**
Elderly independence is essential for maintaining quality of life and functional ability. Family involvement has been shown to support this independence, but evidence from quasi-experimental studies in Indonesia remains limited. This study aimed to evaluate the effect of the Family Support Model on elderly independence in selected Public Health Center areas of Yogyakarta and Central Java. A quasi-experimental design with pre-post-test control group was conducted from March to October 2022. A total of 96 elderly participants without chronic illness were purposively assigned to experimental (n=48) and control groups (n=48). The intervention applied the Family Support Model, which included family education, structured assistance with daily activities, weekly follow-ups, and joint problem-solving involving families and health personnel. Independence was assessed using a validated questionnaire based on the Katz Index, covering both Basic (BADL) and Instrumental Activities of Daily Living (IADL). Measurements were conducted at baseline, and at one, two, and three months post-intervention. Results showed a significant increase in self-care independence in the experimental group from 0% to 97.8%, and a decrease in self-care deficit from 63% to 2.2%. In contrast, the control group showed modest improvements, with independence increasing from 0% to 32.6%, and deficit decreasing from 78.3% to 67.4%. Repeated measures ANOVA revealed significant differences between groups over time ($p < 0.001$). The conclusion is the Family Support Model is effective in enhancing elderly independence. It can be adopted as a practical, community-based intervention to sustain daily functioning and improve the quality of life among older adults.

**Keywords:** Activities of Daily Living, Elderly, Family Support Model, Independence, Quasi-Experiment.

***Corresponding Author:***

Tri Prabowo
Politeknik Kesehatan Kemenkes Yogyakarta, Yogyakarta, Indonesia
Email: tp_prabowo@yahoo.com

©The Author(s) 2025. This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

## 1. INTRODUCTION

The elderly, defined as individuals aged ≥60 years, are a rapidly growing population worldwide (WHO, 2015). Aging involves physical, psychological, and social changes that often reduce functional independence and increase the risk of chronic illness and disability. Declines in independence, particularly in performing Activities of Daily Living (ADL), are consistently associated with lower quality of life among older adults (Anton et al., 2015; Fong, 2019; Noto, 2023; Feng, Li, Xie, & Chen, 2025; Yan et al., 2025).

Family support plays a crucial role in maintaining elderly health and independence. Active involvement in caregiving, emotional support, and health-related decision-making enhances the ability of older adults to manage daily activities and adapt to health challenges. Family functions—including affective, social, economic, reproductive, and health care roles—directly influence elderly well-being, with evidence showing that strong family engagement improves independence and quality of life (Kaakinen, et al., 2018; Solina, et al., 2024; Nurmadinah et al., 2025; Pradina, Marti, & Ratnawati, 2022).

Despite its importance, not all families can provide adequate support due to prolonged illness, lack of knowledge, or limited resources (Tarkar et al., 2023; Lindsay Smith, et al., 2017). Interventions to strengthen family support—such as emotional encouragement, active participation, and collaborative caregiving—have been shown to improve elderly adaptation, independence, and quality of life (Stanhope, & Lancaster, 2020; Rekawati, Sari, & Istifada, 2019). Structured family nursing models, including the Cordial Older Family Nursing Model, further demonstrate the positive impact of organized family involvement on elderly well-being (Rekawati et al,, 2020; Hidayat, & Elmaghfuroh, 2024; Semyonov-Tal & Davidov, 2025) .

Collaboration between family members and health professionals, especially nurses, is essential for promoting elderly independence. Families equipped with the necessary skills and knowledge can effectively participate in health programs and caregiving tasks, leading to better health outcomes, reduced dependency, and enhanced quality of life (WHO, 2020; Olsson, Berglöv, & Sjölund, 2020; (Ueshima et al., 2020). Preliminary surveys in four Public Health Centers in Yogyakarta and Central Java revealed that 78% of the elderly had low independence and poor quality of life, highlighting the need for targeted family support interventions.

Given these gaps, this study aims to examine the effectiveness of the Family Support Model in improving elderly independence and quality of life within community health center settings in Yogyakarta and Central Java. The intervention focuses on strengthening family involvement as a strategy to enhance elderly health, autonomy, and overall well-being, providing empirical evidence for the role of structured family support in primary health care.

## 2. RESEARCH METHOD

This study employed a quasi-experimental design with a pretest–posttest control group. The intervention was the application of the Family Support Model, with the main outcome being the level of independence of the elderly. The study was conducted from March to October 2022 at four Public Health Centers: Puskesmas Gamping II Sleman, Puskesmas Sentolo I Kulon Progo, and Puskesmas Jetis Yogyakarta City (Special Region of Yogyakarta), and Puskesmas Borobudur, Magelang (Central Java Province). The study population comprised all elderly in the four research locations (N = 148). The inclusion criteria were: (1) elderly aged ≥60 years, (2) living in the research area, and (3) willing to participate. The exclusion criteria were elderly with chronic or severe comorbid diseases. Based on these criteria, a sample of 96 participants was obtained. The sample size was calculated using Harry King's Nomogram (Sugiyono, 2007 dalam Metode Penelitian Kuantitatif, Kualitatif, dan R&D) with a population of 148, an error rate of 5%, with the calculation n = 62% × 148 = 91.76 rounded to 92. Finally, 92 participants were included (46 intervention, 46 control). Group allocation was carried out purposively.

The intervention group received the Family Support Model, which included: (1) family education sessions on the importance of elderly independence, (2) training family members to provide structured support in self-care activities, (3) regular follow-up and encouragement to reinforce positive behavior, and (4) collaboration with health workers to guide families in problem-solving when difficulties arose. The control group received standard health services only. Data on elderly independence were collected using a validated questionnaire covering three domains: self-care, self-care deficits, and nursing systems. Measurements were carried out at baseline (pre-test) and post-test at the end of the 1st, 2nd, and 3rd months.

Data were analyzed using SPSS version 16.0. The analysis used repeated measure ANOVA, with statistical significance set at $p < 0.05$ and a 95% confidence interval. This study obtained ethical approval from Ethics Committee of the Yogyakarta Ministry of Health Polytechnic, institution with number DP.04.03/e-KEPK.1/786/2023. All participants signed informed consent prior to data collection.

## 3. RESULTS AND DISCUSSION

Research location and respondent characteristics. The number of respondents in the experimental and control groups was the same, namely 46 people. The number of respondents from Puskesmas Gamping II and Puskesmas Borobudur was the same, both in the experimental and control groups, namely 28.26% while the number of respondents from Puskesmas Sentolo and Puskesmas. Puskesmas Borobudur has the same number, both in the experimental and control groups, namely 21.74%. Details can be seen in Table 1.

**Table 1**. Research location and Respondents.

| Research location Health Center | Respondents | | | |
|---|---|---|---|---|
| | Experimen Group (n1=46) | | Control Group (n2=46) | |
| | Frequency (f) | Percentage (%) | Frequency (f) | Percentage (%) |
| Gamping II | 13 | 28.26 | 13 | 28.26 |
| Sentolo | 10 | 21.74 | 10 | 21.74 |
| Jetis | 10 | 21.74 | 10 | 21.74 |
| Borobudur | 13 | 28.26 | 13 | 28.26 |
| Total | 46 | 100 | 46 | 100 |

***Source:*** *Primary data analysis (2022)*

The age of respondents in the experimental group was mostly in the 65-69 years group (28.3%), while in the control group, the age was mostly in the 60-64 years group (26.1%). The gender of respondents in the experimental group was female (56.5%), while in the control group, most were male (60.9%). The education of respondents in the experimental group was mostly high school (52.2%), as well as in the control group (58.7%). The occupation of respondents in the experimental group was mostly self-employed (45.7%), as well as in the control group (52.2%). The most comorbid elderly in the experimental group were DM (37.0%), as well as in the control group (39.1%). Details can be seen in Table 2.

**Table 2**. Characteristics of respondents in the experimental and control groups.

| Characteristics of Respondents | Experimental | | Control group | |
|---|---|---|---|---|
| | Frequency (n) | Percentage (%) | Frequency (n) | Percentage (%) |
| **Age (Years)** | | | | |
| 75 years more | 7 | 15.2 | 6 | 13.0 |
| 70-74 years | 9 | 19.6 | 10 | 21.7 |
| 65-69 years | 13 | 28.3 | 9 | 19.6 |

| Characteristics of Respondents | Experimental | | Control group | |
|---|---|---|---|---|
| | Frequency (n) | Percentage (%) | Frequency (n) | Percentage (%) |
| 60-64 years | 12 | 26.1 | 12 | 26.1 |
| 55-59 years | 5 | 10.9 | 9 | 19.6 |
| Gender | | | | |
| Male | 20 | 43.5 | 28 | 60.9 |
| Female | 26 | 56.5 | 19 | 39.1 |
| Education | | | | |
| Elementary school | 1 | 2.2 | 3 | 6.5 |
| Junior High School | 11 | 23.9 | 9 | 19.6 |
| Senior High School | 24 | 52.2 | 27 | 58.7 |
| College/University | 10 | 21.7 | 7 | 15.2 |
| Occupation | | | | |
| Government employees/Retired | 6 | 13.0 | 4 | 8.7 |
| Private Employees | 21 | 45.7 | 24 | 52.2 |
| housewife | 19 | 41.3 | 18 | 39.1 |
| Comorbid Elderly | | | | |
| Diabetes Mellitus (DM) | 17 | 37.0 | 18 | 39.1 |
| Hypertention | 13 | 28.3 | 12 | 26.1 |
| Heart Disease | 7 | 15.2 | 7 | 15.2 |
| Asthma | 9 | 19.6 | 9 | 19.6 |

***Sources:*** *Primary Data Analysis (2022)*

**Trends in the level of independence from pre-test (The initial)-Post-test (The first month, the second month, and the third month) in both experimental and control groups.**

In the experimental group, the level of independence (Self-care) tended to increase in percentage from the first month and continued in the second and third months. The level of independence (Self-care Deficit) tended to decrease in number from the initial condition, and continued to decrease in the first month and continued to decrease until the third month. The level of independence (Nursing System) continued to decline from the first month to the third month. The same pattern also occurred in the control group.

**Table 3.** Level of independence of the elderly at baseline, the first month, the second month, and the third month in the experimental and control groups.

| Independence level | Baseline (Pre-test) | | Post-test | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 1st Month | | 2nd Month | | 3rd Month | |
| | Exp | Control | Exp | Control | Exp | Control | Exp | Control |
| | f (%) | f (%) | f (%) | f (%) | f (%) | f (%) | f (%) | f (%) |
| Self-Care | 0 (0) | 0 (0) | 16 (34.8) | 1 (2.2) | 35 (76.1) | 4 (8.7) | 45(97.8) | 15 (32.6) |
| Self-Care Deficit | 29 (63) | 36 (78.3) | 28 (60.9) | 38 (82.6) | 11 (23.9) | 42 (91.2) | 1 (2.2) | 31 (67.4) |
| Nursing System | 17 (37) | 10 (21.7) | 2 (4.3) | 7 (15.2) | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Total | 46(100) | 46 (100) | 46 (100) | 46 (100) | 46 (100) | 46 (100) | 46 (100) | 46 (100) |

***Sources:*** *Primary Data Analysis (2022)*

On the level of Independence (Self-Care), the experimental group showed a consistent improvement in self-care independence from baseline through the third month, increasing from 0% to 97.8%. In contrast, the control group increased more slowly, reaching only 32.6% at the third month. This indicates that the intervention group experienced greater gains in independence compared to the control group. On the level of Independence (Self-Care Deficit), the proportion of elderly in the self-care deficit category decreased steadily in the experimental group, from 63.0% at baseline to 2.2% at the third month. In the control group, the decrease was smaller, from 78.3% at baseline to 67.4% at the third month. These findings demonstrate that the Family Support Model was more effective in reducing dependency than standard care. On the level of Independence (Nursing System), the nursing system category declined to 0% in both groups by the third month. However, the reduction occurred earlier and more sharply in the experimental group, which dropped from 37.0% at baseline to 4.3% by the first month, and then to 0% thereafter. In the control group, the decrease was more gradual, reaching 0% only at the second month. Details can be seen in Table 4.

**Table 4.** Comparison of Elderly Independence Across Time Between Experimental and Control Groups.

| Independence level | Group | Baseline (%) | 1st Month (%) | 2nd Month (%) | 3rd Month (%) | Test Statistic | p-value[a] |
|---|---|---|---|---|---|---|---|
| Self-Care | Experimental | 0.0 | 34.8 | 76.1 | 97.8 | F (3.135) | <0.001 |
| | Control | 0.0 | 2.2 | 8.7 | 32.6 | F (3.135) | <0.001 |
| Sel-Care Deficit | Experimental | 63.0 | 60.9 | 23.9 | 2.2 | F (3.135) | <0.001 |
| | Control | 78.3 | 82.6 | 91.2 | 67.4 | F (3.135) | <0.001 |
| Nursing System | Experimental | 37.0 | 4.3 | 0.0 | 0.0 | F (3.135) | <0.001 |
| | Control | 21.7 | 15.2 | 0.0 | 0.0 | F (3.135) | <0.001 |

*.[a] Repeated Measures ANOVA/ Mixed-Effects Model, significance p<0.05*
***Sources:*** *Primary Data Analysis (2022)*

**Differences in the Level of Independence of the Elderly Before and After Family Support Model Implementation**

**Before Family Support Model Implementation**

At baseline, most elderly in both groups were classified in the self-care deficit category, with 63.0% in the experimental group and 78.3% in the control group. This indicates that prior to intervention, the majority of elderly participants were still dependent on others for daily living activities. In this study, the Family Support Model was applied by involving family members in assisting, motivating, and monitoring the elderly to perform daily activities independently. The intervention included: (1) family education sessions regarding the importance of elderly independence, (2) training family members to provide structured support in self-care activities, (3) regular follow-up and encouragement to reinforce positive behavior, and (4) collaboration with health workers to guide families in problem-solving when difficulties arose.

The rationale is that independence in the elderly reflects their ability to carry out basic and instrumental activities of daily living (ADLs), such as bathing, eating, toileting, managing personal hygiene, cooking, and using transportation (Beard et al., 2016). Studies have shown that family support plays a crucial role in maintaining functional ability and quality of life among older adults (Friska et al., 2020; Susianti, Asnawati, & Polapa, 2022; Wang et al., 2020; Behrendt et al., 2023). Thus, the Family Support Model in this research was not only designed to improve the elderly's independence directly, but also to empower families as primary caregivers to sustain the improvements in daily life (Rekawati et al., 2019; Motamed-Jahromi & Kaveh, 2020).

**After Family Support Model Implementation.**

After the Family Support Model was implemented, there was a clear improvement in the experimental group. At the first month, most elderly were still in the self-care deficit category (60.9%), but by the second month, the majority had shifted to self-care (76.1%), and this proportion further increased to 97.8% at the third month. In contrast, the control group showed little improvement, as most respondents remained in the self-care deficit category (82.6% in the first month; 91.2% in the second month; 67.4% in the third month).

Independence in this study was assessed based on the ability to perform daily living activities, not merely past abilities. Independence is defined as the capacity to act without dependency on others, organizing oneself in health-related and daily functions (Putra, Muryani, & Artawan, 2024; Motamed-Jahromi & Kaveh, 2020). It reflects the ability of elderly persons to meet their own needs, and refusal to perform a function is considered dependence, even if physically capable (Makino et al., 2020; Tomioka, Kurumatani, & Hosoi, 2018) .

The level of independence of the elderly is closely related to their quality of life, which can be assessed through Activities of Daily Living (ADL), including both basic ADL (BADL) such as bathing, toileting, dressing, feeding, and mobility, as well as instrumental ADL (IADL) such as cooking, shopping, managing finances, and medication adherence (WHO, 2015; Chen et al., 2022; Slater & Hasson, 2018; Lowe et al., 2022). Several recent studies highlight the importance of maintaining ADL/IADL independence. For example, home-based supportive health-care interventions have been shown to strengthen elderly independence in Iran (Mobasseri et al., 2024), while systematic reviews confirm that reablement programs, multicomponent interventions, and family-based interventions are effective in improving functional independence among older adults (Cremer et al., 2023; Sya'diyah et al., 2022; Behrendt et al., 2023; Motamed-Jahromi & Kaveh, 2020).

**The significance of the application of the Family Support Model on the Level of Elderly Independence**

The findings of this study demonstrate that the Family Support Model significantly improved the independence of elderly participants. In the experimental group, the proportion of elderly in the self-care category increased markedly from the first (34.8%) to the third month (97.8%), while in the control group the increase was much smaller (2.2% → 32.6%). These results indicate that structured family involvement plays an essential role in supporting elderly independence (Wang et al., 2020; Behrendt et al., 2023). This improvement aligns with previous evidence that family engagement and caregiver empowerment are key factors in maintaining elderly functional ability (Sya'diyah et al., 2022) . In this study, families were trained to motivate, assist, and monitor elderly in performing self-care and instrumental activities. This structured support not only facilitated functional recovery but also encouraged self-efficacy and reduced dependency, thereby improving quality of life (Motamed-Jahromi & Kaveh, 2020).

In contrast, the control group showed slower progress, which may reflect the natural course of aging and the absence of systematic support. This finding is comparable to studies indicating that without targeted intervention, elderly individuals tend to maintain or even lose independence over time. Therefore, the Family Support Model can be considered an effective intervention strategy to prevent functional decline and promote active aging, particularly in community-based settings (Behrendt et al., 2023; Wang et al., 2020).

Research Limitations is at the time of the research, the time coincided with the Corona Virus 19 Pandemic outbreak, so that the cases of the elderly visiting the health center decreased so that the implementation of the research which should have been carried out in the health center building was continued with home visits to the homes of elderly residents.

## 4. CONCLUSION

The Family Support Model was proven to be effective in improving the independence of elderly participants. In the experimental group, the proportion of elderly achieving self-care independence increased steadily and reached almost full independence by the third month (97.8%), while the control group showed only modest improvements (32.6%). This finding indicates that family involvement through structured education, motivation, and assistance is a critical factor in supporting elderly independence.

## REFERENCES


Anton, S. D., Woods, A. J., Ashizawa, T., Barb, D., Buford, T. W., Carter, C. S., ... & Pahor, M. (2015). Successful aging: advancing the science of physical independence in older adults. *Ageing research reviews,* 24, 304-327. https://doi.org/10.1016/j.arr.2015.09.005

Beard, J. R., Officer, A., De Carvalho, I. A., Sadana, R., Pot, A. M., Michel, J. P., ... & Chatterji, S. (2016). The World report on ageing and health: a policy framework for healthy ageing. *The lancet,* 387(10033), 2145-2154. https://doi.org/10.1016/S0140-6736(15)00516-4

Behrendt, D., Spieker, S., Sumngern, C., & Wendschuh, V. (2023). Integrating social support into interventions among the elderly in nursing homes: a scoping review. *BMJ open*, 13(4), e071962. https://doi.org/10.1136/bmjopen-2023-071962

Chen, S. M., Wu, C. J. J., Devin, R., & Atherton, J. J. (2022). Effects of reablement programs for older people: A systematic review and meta-analysis. *Collegian*, 29(6), 894-903. https://doi.org/10.1016/j.colegn.2022.05.012

Cremer, S., Vluggen, S., Man-Van-Ginkel, J. M. de, Metzelthin, S. F., Zwakhalen, S. M., & Bleijlevens, M. H. C. (2023). Effective nursing interventions in ADL care affecting independence and comfort – a systematic review. *Geriatric Nursing*, *52*, 73–90. https://doi.org/10.1016/J.GERINURSE.2023.04.015

Feng, M., Li, J., Xie, F., & Chen, Z. (2025). The relationship between social support, cognitive function and activities of daily living in older people: a cross-sectional study. *Frontiers in Public Health*, 13, 1602466. https://doi.org/10.3389/fpubh.2025.1602466

Fong, J. H. (2019). Disability incidence and functional decline among older adults with major chronic diseases. *BMC Geriatrics*, *19*(1), 323. https://doi.org/10.1186/s12877-019-1348-z

Friska, B., Usraleli, U., Idayanti, I., Magdalena, M., & Sakhnan, R. (2020). The relationship of family support with the quality of elderly living in sidomulyo health center work area in Pekanbaru road. JPK: Jurnal Proteksi Kesehatan, 9(1), 1-8. Retrieved from: https://jurnal.pkr.ac.id/index.php/JPK/article/view/194

Hidayat, C. T. ., & Elmaghfuroh, D. R. (2024). Implementation of the Family Care Model for Elderly Healthy. *International Journal of Health Systems and Medical Sciences*, 3(3), 197–203. https://doi.org/10.51699/ijhsms.v3i3.3569

Kaakinen, J. R., Coehlo, D. P., Steele, R., & Robinson, M. (2018). *Family health care nursing: Theory, practice, and research.* Philadelphia: F.A. Davis.

Lindsay Smith, G., Banting, L., Eime, R., O'Sullivan, G., & Van Uffelen, J. G. (2017). The association between social support and physical activity in older adults: a systematic review. *International journal of behavioral nutrition and physical activity*, 14(1), 56. https://doi.org/10.1186/s12966-017-0509-8

Lowe, G., Dohrmann, J., Chapman, J., Stamford, L., & Driscoll, A. (2022). Older Persons Complex Care Nurse Practitioner model to reduce hospital readmissions: A pilot study. *Collegian*, 29(6), 822-827. https://doi.org/10.1016/j.colegn.2022.06.013

Makino, K., Lee, S., Bae, S., Shinkai, Y., Chiba, I., & Shimada, H. (2020). Predictive validity of a new instrumental activities of daily living scale for detecting the incidence of functional disability among community-dwelling older Japanese adults: A prospective

cohort study. *International Journal of Environmental Research and Public Health,* 17(7), 2291. https://doi.org/10.3390/ijerph17072291

Mobasseri, K., Matlabi, H., Allahverdipour, H., & Kousha, A. (2024). Home-based supportive and health care services based on functional ability in older adults in Iran. *Journal of Education and Health Promotion,* 13(1), 124. https://doi.org/10.4103/jehp.jehp_422_23

Motamed-Jahromi, M., & Kaveh, M. H. (2021). Effective interventions on improving elderly's independence in activity of daily living: a systematic review and logic model. *Frontiers in Public Health*, 8, 516151. https://doi.org/10.3389/fpubh.2020.516151

Noto, S. (2023). Perspectives on aging and quality of life. In Healthcare, 11(15), 2131; https://doi.org/10.3390/healthcare11152131

Nurmadinah, N., Mursid, A., Muzakkir, M., Irwan, M., Djalaluddin, N. A., Irfan, I., ... & Evidamayanti, E. (2025). Peran Keluarga Berhubungan dengan Kualitas Hidup Lansia: Studi Cross-Sectional. *Nursing News: Jurnal Ilmiah Keperawatan,* 9(1), 36-46. Retrieved from: https://publikasi.unitri.ac.id/index.php/fikes/article/view/3125

Olsson, A., Berglöv, A., & Sjölund, B. M. (2020). "Longing to be independent again"–A qualitative study on older adults' experiences of life after hospitalization. *Geriatric Nursing,* 41(6), 942-948. https://doi.org/10.1016/j.gerinurse.2020.07.007

Pradina, E. I. V., Marti, E., & Ratnawati, E. (2022). Hubungan antara dukungan keluarga dengan kualitas hidup pada lansia di Padukuhan Pranan, Sendangsari, Minggir, Sleman. *Jurnal Keperawatan Klinis dan Komunitas (Clinical and Community Nursing Journal),* 6(2), 112-124. https://doi.org/10.22146/jkkk.75227

Putra, I. G. Y., Muryani, N. M. S., & Artawan, I. K. (2024). Tingkat Kemandirian Lansia Dalam Melakukan Aktivitas Sehari-Hari Di Desa Tibubeneng Kuta Utara Kabupaten Badung. Jurnal Kesehatan Medika Udayana, 10(02), 162-171. Retrieved from: https://ejurnalstikeskesdamudayana.ac.id/index.php/jmu/article/view/484

Rekawati, E., Sari, N. L. P. D. Y., & Istifada, R. (2019). "Family support for the older person": Assessing the perception of the older person as care recipient through the implementation of the cordial older family nursing model. *Enfermeria Clinica*, 29, 205-210. https://doi.org/10.1016/J.ENFCLI.2019.04.055

Rekawati, E., Hamid, A. Y. S., Sahar, J., Kamso, S., & Kusumawardani, L. H. (2020). The Effectiveness of the Cordial Older Family Nursing Model in Order to Improve the Quality of Family Care for Older Persons. *Indian Journal of Public Health Research & Development*, 11(2), 1152–1156. https://doi.org/10.37506/v11/i2/2020/ijphrd/194975

Semyonov-Tal, K., & Davidov, E. (2025). Family involvement in geriatric hospitalization: a qualitative analysis of state regulations in Israel. *Israel Journal of Health Policy Research*, 14, 46. https://doi.org/10.1186/s13584-025-00709-0

Slater, P., & Hasson, F. (2018). An evaluation of the reablement service programme on physical ability, care needs and care plan packages. *Journal of Integrated Care,* 26(2), 140-149. https://doi.org/10.1108/JICA-11-2017-0042

Susianti, M., Asnawati, R., & Polapa, S. K. (2022). Relationship between family social support and quality of life for hypertensive elderly in Tenggela Village, Tilango District. *Journal of Community Health Provision,* 2(1), 93-104. https://doi.org/10.55885/jchp.v2i1.125

Solina, E., Wisadirana, D., Kuswandoro, W. E., & Chawa, A. F. (2024). Peran Keluarga Dalam Meningkatkan Kualitas Hidup Lansia Di Kota Tanjungpinang. Ganaya: Jurnal Ilmu Sosial dan Humaniora, 7(3), 319-329. https://doi.org/10.37329/ganaya.v7i3.3223

Stanhope, M., & Lancaster, J. (2020). *Community & Public Health Nursing* (10th ed.). Elsevier Ltd.

Sya'diyah, H., Nursalam, Mahmudah, & Efendi, F. (2022). Effectiveness of home care intervention on family ability to do caregiving at home and increase the independence

among elderly with dementia. *Journal of public health research,* 11(3), 22799036221115774. https://doi.org/10.1177/22799036221115774

Tarkar, P., Pandoi, D., Asif, M., & Johri, A. (2025). Family support and life satisfaction of older adults: the mediating and moderating role of leisure activities and health. *Leisure Studies,* 44(1), 79-95. https://doi.org/10.1080/02614367.2023.2277721

Tomioka, K., Kurumatani, N., & Hosoi, H. (2018). Association between stairs in the home and instrumental activities of daily living among community-dwelling older adults. *BMC geriatrics*, 18(1), 132. https://doi.org/10.1186/s12877-018-0830-3

Ueshima, H., Yozu, A., Takahashi, H., Noguchi, H., & Tamiya, N. (2020). The association between activities of daily living and long hours of care provided by informal caregivers using a nationally representative survey in Japan. *SSM - Population Health*, *11*, 100565. https://doi.org/10.1016/j.ssmph.2020.100565

Wang, L., Yang, L., Di, X., & Dai, X. (2020). Family support, multidimensional health, and living satisfaction among the elderly: A case from shaanxi province, china. *International Journal of Environmental Research and Public Health*, *17*(22), 1–18. https://doi.org/10.3390/ijerph17228434

WHO. (2015). *World report on ageing and health*. Geneva: WHO. Retrieved from: https://www.who.int/publications/i/item/9789241565042

WHO. (2020). *Decade of Healthy Ageing 2020–2030*. Geneva: WHO. Retrieved from: https://docs.un.org/en/A/RES/75/131

Yan, W., Wang, L., Li, C., Meng, Y., Guo, Q., & Li, H. (2025). Bidirectional association between ADL disability and depressive symptoms among older adults: longitudinal evidence from CHARLS. *Scientific Reports*, *15*, 7125. https://doi.org/10.1038/s41598-025-91680-y