



**THE RELATIONSHIP BETWEEN KNOWLEDGE AND ATTITUDE OF FAMILIES
CARING FOR DEMENTIA PATIENTS AT HOME AND THE FREQUENCY OF
READMISSIONS**

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ABSTRACT

Dementia in elderly patients presents significant challenges for both individuals and their families, often leading to frequent hospital readmissions. Family caregivers play a critical role in patient management, and their knowledge and attitudes toward dementia care may influence patient outcomes. This study aimed to examine the relationship between family knowledge in caring for dementia patients and the frequency of hospital readmissions at RS Soeharto Heerdjan, Jakarta. A quantitative cross-sectional design was employed, with a total sampling method involving family members of dementia patients visiting the Psychogeriatric Outpatient Clinic and the Inpatient Geriatric Ward. Data were collected using the Indonesian versions of the Dementia Knowledge Assessment Scale (DKAS) and Dementia Attitudes Scale (DAS), both validated for reliability. The DKAS (Dementia Knowledge Assessment Scale) instrument is a measurement tool for assessing general knowledge about dementia. The latest version of DKAS has 25 items that include statements about dementia that can be judged as true or false, some of which are false statements and are judged in reverse. The Dementia Attitudes Scale (DAS) instrument is a measurement tool developed to measure a person's attitude towards dementia, covering affective (feeling), behavioural, and cognitive components related to people with dementia. The watershed consists of 20 items that show two main factors, namely knowledge of dementia and social comfort in interacting with people with dementia. Results indicated that 52.5% of respondents had low knowledge and 50.8% held negative attitudes toward dementia care. High patient readmission frequency (>1 time per year) was reported in 83.6% of cases. Statistical analysis using Pearson Chi-Square ($p = 0.865$), Fisher Exact ($p = 1.000$), and odds ratio ($OR = 0.889$) showed no significant association between family knowledge and readmission frequency, although a slight trend suggested that higher knowledge may reduce readmissions. Despite the lack of statistical significance, these findings highlight the importance of educating and supporting family caregivers to improve patient care and quality of life, potentially minimizing hospital readmissions. Interventions targeting caregiver knowledge and attitudes are recommended to enhance dementia management and reduce healthcare burden.

Keywords: attitude dementia; family; hospital readmission; knowledge

How to Cite (in APA Style)

Kristanti, P. S., Handayani, H., Narulita, S., & Sogirin, R. (2026). The Relationship Between Knowledge and Attitude of Families Caring for Dementia Patients at Home and the Frequency of Readmissions. *Indonesian Journal of Global Health Research*, 8(2), 673–678. <https://doi.org/10.37287/ijghr.v8i2.800>.

INTRODUCTION

Older adulthood is an inevitable stage of life that requires preparation to remain productive for oneself, family, and society. The aging process is physiologically characterized by a decreased ability to respond to stress, impaired tissue regeneration, and an increased risk of degenerative diseases such as Alzheimer's disease and dementia, which significantly affect cognitive, motor, and sensory functions (Rockwood, 2020; NIA, 2025; WHO, 2025). These conditions not only impact the individual but also affect family members, caregivers, and the community, particularly when patients experience chronic confusion or irreversible cognitive impairments.

Several studies have highlighted the prevalence and impact of dementia among older adults. According to WHO (2025), approximately 57 million people worldwide live with dementia, with a

significant proportion in low- and middle-income countries. In Indonesia, the elderly population reached 12% in 2024, with the number of dementia patients projected to increase from 1.2 million in 2016 to 4 million by 2050 (Alzheimer Indonesia, 2019; Statistics, 2024). A local study at RS Soeharto Heerdjan Jakarta found that among 596 elderly inpatients in the Psychogeriatric Unit, 74 were diagnosed with dementia, with an average readmission frequency of 2–4 times per year, reflecting the complexity of care and the significant role of family support (Medical Record RSSH, 2024–2025). Other studies have emphasized the importance of family caregivers in reducing dementia symptoms and improving patients' quality of life (BRIGHT Dementia Active Care, 2024).

Although previous research has identified the prevalence, impact, and role of family caregivers in dementia care, there remains a gap in understanding the dynamics of hospital readmissions among elderly dementia patients in Indonesia, as well as effective family-centered interventions to reduce readmission frequency. This study is unique in focusing on elderly dementia patients in a local psychogeriatric hospital setting, analyzing patients' quality of life.

This study assumes that family preparedness and education in caring for elderly dementia patients will influence the frequency of patient readmissions and the quality of life of older adults. This study also aims to find out the characteristics of respondents, find out the level of family knowledge about Dementia, find out the attitude of families in caring for dementia patients at home, find out the frequency of re-hospitalization of dementia patients within a period of 1 year, find out the relationship between the knowledge of families who care for dementia patients at home and the frequency of re-hospitalization, find out the relationship between the attitude of families who care for dementia patients at home and the frequency of re-treatment of dementia patients.

METHOD

This study employed a quantitative cross-sectional design, which is an observational approach that collects and analyzes data from variables at a single point in time or over a short period simultaneously. The population of this study comprised family members of dementia patients who had previously been hospitalized, those currently visiting the Psychogeriatric Outpatient Clinic, and those caring for patients in the inpatient geriatric ward at RS Soeharto Heerdjan, Jakarta. Primary data indicated an average of 61 dementia patients visiting the outpatient clinic every three months. The sample consisted of family members of elderly dementia patients who met the inclusion criteria. Total sampling was applied, meaning all members of the population who met the criteria were included as study participants, ensuring that the sample size equaled the population size.

Data were collected using two standardized questionnaires: the Dementia Knowledge Assessment Scale (DKAS) developed by Annear et al. (2015) and the Dementia Attitudes Scale (DAS) developed by O'Connor and McFadden (2010). Both instruments had been previously translated into Indonesian and tested for validity and reliability by Mulyani, Saifullah, Cahyani, Sukmawati, and Sunaryo (2023) in the study "Validity and Reliability of Dementia Knowledge Assessment Scale and Dementia Attitude Scale in the Indonesian Language among Nursing Students." The DKAS measures knowledge about dementia, while the DAS assesses attitudes towards individuals with dementia. Indonesian DKAS and DAS instruments have good validity and reliability values. The I-CVI result was 1.00 for DKAS and 0.98 for DAS, indicating a good construction validity index. In addition, the reliability test has good results, the alpha Cronbach of DKAS is 0.713, while the DAS is 0.779, which means it has an acceptable Alpha Cronbach value if the result is >0.60 .

RESULT

This section presents the main findings of the study regarding the knowledge and attitudes of family members toward elderly patients with dementia at RS Soeharto Heerdjan. The data showed that the majority of respondents were middle-aged adults (31–45 years) at 49.2%, female at 60.7%, and the majority of caregivers had a high school education at 44.2%.

Table 1.
Characteristics

Variable	f	%
Age		
Dewasa Muda (20-30 tahun)	14	23
Dewasa Madya (31-45 tahun)	30	49,2
Dewasa Akhir (>45 tahun)	17	27,8
Gender		
Man	24	39,3
Woman	37	60,7
Education		
SMP	2	3,2
SMA	27	44,2
D3	23	37,7
S1	9	14,9

Table 2.
Patient's Readmission

Variable	f	%
High	51	83,6
Low	10	16,4

The majority of respondents reported a high patient readmission frequency, defined as more than once per year (83.6%).

Table 3.
Family's Knowledge

Variable	f	%
Good	29	47,5
Enough	32	52,5

The majority of respondents had low knowledge (52.5%) regarding the care of dementia patients.

Table 4.
Family's Attitude

Variable	f	%
Positive	30	49,2
Negative	31	50,8
Total	100	100

The majority of respondents had a negative attitude (50.8%) toward the care of dementia patients.

Table 5.
The Relationship Between Family Knowledge in Caring for Dementia Patients and Readmission Frequency

Family's Knowledge	Readmission		Total	p Value	OR (Odds Ratio)				
	High	Low							
Family's Knowledge	Readmission		Total	p Value	OR (Odds Ratio)				
	f	%				f	%		
Good	24	47,1	5	50	29	82,8	0,865	1,000	0,889 (0,229-3,450)
Enough	27	52,9	5	50	32	17,2			

Results found found that among 32 respondents with low knowledge, 27 individuals (52.9%) experienced a high readmission frequency, while 5 individuals (50%) experienced a low readmission frequency. Meanwhile, among 29 respondents with good knowledge, 24 individuals (47.1%) experienced a high readmission frequency, and 5 individuals (50%) experienced a low readmission frequency.

DISCUSSION

The present study examined the relationship between family knowledge in caring for dementia patients and the frequency of patient readmissions. The findings showed that respondents with lower knowledge about dementia care tended to report a higher frequency of readmissions. Specifically, among respondents with low knowledge, 52.9% experienced high readmission frequency, whereas those with good knowledge had slightly lower rates of high readmissions (47.1%). Statistical analysis using Pearson Chi-Square ($p = 0.865$) and Fisher Exact test ($p = 1.000$) indicated no significant association between family knowledge and readmission frequency, with an odds ratio (OR) of 0.889. Despite the lack of statistical significance, these results suggest a potential trend whereby better caregiver knowledge may slightly reduce the likelihood of repeated hospital admissions.

The findings align with theoretical concepts of dementia care, which emphasize that adequate caregiver knowledge contributes to better patient management, improved adherence to care plans, and timely intervention in early signs of deterioration (Annear et al., 2015; O'Connor & McFadden, 2010). Respondents with insufficient understanding of dementia may struggle to recognize early warning signs, manage behavioral changes, or implement effective care routines, thereby increasing the likelihood of complications and hospital readmissions. This observation is consistent with previous research indicating that caregiver education and preparedness significantly reduce adverse outcomes and improve quality of life for both patients and families (BRIGHT Dementia Active Care, 2024).

The study also highlights the theoretical implication that caregiver knowledge not only influences patient outcomes but also serves as a mediating factor in reducing the burden on healthcare systems. Practically, these results underscore the necessity of structured education programs for family caregivers to enhance their understanding of dementia, equip them with practical skills, and foster positive attitudes toward patient care. Such interventions can potentially lower readmission rates, decrease hospital costs, and improve patient well-being.

However, this study has several limitations. First, the cross-sectional design only allows observation at a single point in time, which limits the ability to establish causality between caregiver knowledge and readmission frequency. Second, the sample size, while representing the target population at RS Soeharto Heerdjan, may not fully generalize to other settings or regions. Third, the use of self-reported questionnaires could introduce response bias, as participants may overestimate their knowledge or attitudes. Additionally, the statistical insignificance suggests that other factors beyond caregiver knowledge—such as patient comorbidities, social support, and healthcare access—may play a more dominant role in influencing readmissions.

Future research could adopt longitudinal or interventional designs to assess the impact of caregiver training programs on reducing readmissions over time. Moreover, expanding the study to multiple hospitals or community settings would strengthen generalizability. Finally, integrating qualitative methods could provide deeper insight into caregivers' experiences, challenges, and perceptions in managing dementia patients.

In conclusion, while statistical analysis showed no significant association between family knowledge and readmission frequency (Pearson Chi-Square $p = 0.865$, Fisher Exact $p = 1.000$, OR = 0.889), the study indicates that caregiver knowledge remains an important theoretical and practical factor in dementia care. Enhancing caregiver education and support can improve patient outcomes, reduce healthcare burden, and promote sustainable caregiving practices.

CONCLUSION

The study concludes that while statistical analysis showed no significant association between family knowledge in caring for dementia patients and readmission frequency (Pearson Chi-Square $p = 0.865$, Fisher Exact $p = 1.000$, OR = 0.889), caregiver knowledge remains an essential factor in dementia care. Most family caregivers had low knowledge and negative attitudes toward dementia care, and a high proportion of patients experienced frequent readmissions. These findings highlight the importance of educating and supporting family caregivers to enhance patient care, potentially reduce hospital readmissions, and improve the overall quality of life for both patients and their families.

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