



INCREASING CAREGIVER KNOWLEDGE ABOUT LONG-TERM CARE WITH INTERACTIVE EDUCATIONAL METHODS

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ABSTRACT

The growing number of elderly individuals requiring long-term care (LTC) necessitates caregivers enhancing their understanding of this care through interactive educational methods. As the elderly population grows, caregivers play a crucial role in providing long-term care (LTC) to the elderly and meeting their basic needs, including medical care, psychosocial support, and daily living skills. Interactive educational methods can enhance caregiver knowledge about LTC, enabling them to provide more effective and efficient care, especially for those lacking medical or health knowledge. The purpose of this study is to examine how interactive educational techniques have increased caregivers' understanding of long-term care. The research sample consisted of 11 health cadres in the Ngemplak Community Health Center working area with a purposive sampling technique. Researchers conducted a pre-test and post-test to measure knowledge before and after interactive education about long-term care. Wilcoxon's test results showed a p value of 0.004. There's a meaningful difference in knowledge between pre-interactive education and after interactive education. Caregivers can continue to follow a variety of training or education related to long-term care, be able to identify or screen elderly persons who need long-term care, learn about long-term care for parents on a sustainable basis, and provide long-lasting care to elders that focuses on meeting the basic needs of the elder.

Keywords: caregiver; interactive educational; knowledge; long-term care

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INTRODUCTION

Increasing caregivers' knowledge about long-term care (LTC) with interactive educational methods is important because the number of elderly people who need long-term care is increasing. According to data from the Central Statistics Agency in 2020, the number of elderly people in Indonesia reached 29.35 million, or around 10.77% of the total population. It is estimated that the number of elderly people will continue to increase along with the increase in people's life expectancy. However, LTC not only requires medical personnel but also the important role of caregivers in meeting the basic needs of the elderly, including medical care, psychosocial needs, and the skills needed to help the elderly in living their daily lives. In this case, caregiver knowledge about LTC is very important to ensure the quality of care for the elderly. Caregivers have a very important role in providing LTC to sick or elderly people who need intensive care. The elderly are a group vulnerable to chronic health problems (Miller, 2012). The elderly are those aged 60 years and over who have a higher risk of chronic disease, disability, and mental health problems (World Health Organization, 2023). Elderly people can experience various chronic health problems, such as diabetes, cancer,

cardiovascular disease, osteoporosis, dementia/alzheimer's, and osteoarthritis are common chronic conditions in the population aged 85 and over (Jaul & Barron, 2017; Miller, 2012). Efforts that can be made to address problems among the elderly include long-term care, which can be carried out by the family or community (Amigo & Nekada, 2019).

Long-term care for the elderly involves various aspects, such as medication, rehabilitation, and ongoing care to treat chronic health problems (Doornebosch et al., 2022; Ellis & Sevdalis, 2019). Long-term care for the elderly also includes aspects of preventing and treating complications, as well as providing physical, psychological, and social support in an effort to improve the quality of life of the elderly (Butler, 2022). Long-term care of the elderly by a caregiver involves a series of actions aimed at ensuring optimal health, comfort, and quality of life for those who are elderly (Hakobyan et al., 2020). This treatment can include physical, emotional, social, and cognitive aspects (Hakobyan et al., 2020). Long-term care for the elderly needs to pay attention to individual needs and preferences and ensure coordination and collaboration between health and care workers (Welch et al., 2022). Long-term care must also involve family and community as part of social support for the elderly (Bethell, O'Rourke, et al., 2021; Kan & Chui, 2021). Informal caregivers are an important part of their social network (Hakobyan et al., 2020).

Long-term care of the elderly by a caregiver involves a series of actions aimed at ensuring optimal health, comfort, and quality of life for those who are elderly. This treatment can include physical, emotional, social, and cognitive aspects. (Yustisia et al., 2023). Many caregivers do not have a medical or healthcare background, and therefore, they may not fully understand long-term care. In this case, interactive educational methods can help them understand appropriate care concepts and practices. LTC often requires significant resources, both in terms of time, effort, and finances. In this case, increasing caregivers' knowledge about LTC can help them optimize available resources and avoid mistakes that can harm patients. Interactive educational methods, such as group discussions, demonstrations, and simulations, can increase caregivers' knowledge and skills in long-term care. Therefore, this research can explore the potential of using interactive educational methods to increase caregivers' knowledge about LTC. The aim of this research is to analyze the increase in caregiver knowledge about long-term care using interactive educational methods.

METHOD

This type of research is quantitative. Research is carried out on a group of cases with the aim of solving the problem. The population in this study were elderly caregivers. The population size based on data from health cadres is 11 cadres in each hamlet in the working area of the Ngemplak Community Health Center. The sampling technique used was purposive sampling. The inclusion criteria are caregivers who care for and live with elderly people who complain of chronic health problems. Pre-intervention phase: Participants completed a pre-intervention survey to assess respondents' basic knowledge of long-term care concepts, guidelines, and strategies. The survey includes multiple-choice questions. Intervention Phase: Respondents attend a series of interactive education sessions covering various aspects of long-term care, including medical needs, emotional support, communication strategies, and self-care for caregivers. Interactive education uses role-playing, case discussions, multimedia presentations, and group activities to actively engage participants. Post-Intervention Phase: After completing interactive education, respondents are asked to complete the same post-intervention survey as the pre-intervention survey to assess changes in the respondent's knowledge. To gauge participants' understanding before and after interactive long-term care education, researchers administered pre- and post-tests.

RESULTS

Table 1.
Caregiver Knowledge Before and After Interactive Education 2023 (n=11)

Knowledge	Median (Minimum-Maximum)	p value
Before Interactive Education (n=11)	86.96 (78.26-95.65)	0.004
After Interactive Education (n=11)	95.65 (95.65-100)	

Wilcoxon test, one subject knowledge remains, and 10 subjects knowledge increase. Based on the research results, it shows that there was 1 subject with constant knowledge before and after interactive education and 10 research subjects who experienced an increase in knowledge after and after interactive education. The Wilcoxon test results show that p value = 0.004. P value is < 0.05 statistically, there is a significant difference in knowledge between before interactive education and after interactive education.

DISCUSSION

Based on the research results, it shows that there is a significant difference between knowledge before interactive education and after interactive education. This shows that there is an influence of long-term care education on caregiver knowledge. Theory shows that education or upbringing is a process that can help nurses convey health messages and has a significant impact and chance of success (Allender et al., 2014; Hannawa et al., 2022). Based on theory and research results, health messages conveyed by nurses about long-term care to caregivers can have a significant impact and provide beneficial opportunities for them to successfully carry out long-term care. Education can help people gain general health skills, knowledge, and abilities, increasing people's understanding of preventative care and healthy behavior (Raghupathi & Raghupathi, 2020). The results of health education techniques for self-care that make use of technology and community-based care are regarded as foundational. Among the findings, the pedagogy's relevance—that health education procedures necessitate enhancements in post-pandemic program efficacy—stands out (Ruiz-Ramírez et al., 2021). The results of previous research and the results of research that has been conducted show that community-based educational methods and technological tools can help caregivers in the learning process so that they can receive and understand the training material well.

In our review, 133 studies were included. 61 studies were located that examined the relationship between social support and a mental health result. Based on 72 observational and intervention research, we identified 12 tactics that could support staff, relatives, and residents in long-term care facilities in establishing and preserving social ties (Bethell, Aelick, et al., 2021). Based on the results of this research, caregivers in the form of family or health cadres in the community are expected to be able to build and maintain good social relationships with the elderly who are included in long-term care. Results of previous research on public health education using case-based learning and video conferencing to connect specialists with service providers in underserved areas show that there was a significant increase in knowledge ($p < 0.0001$) and increasing knowledge with public health education (Furlan et al., 2019). This shows that education given to anyone using various educational methods has a significant impact on increasing knowledge and has an influence on knowledge. A lifestyle that promotes health and self-efficacy were significantly correlated with well-being. Students' lifestyles were related to their age, gender, educational attainment, place of residence, work status, self-efficacy, and general well-being (Amiri et al., 2019). Research that has been conducted and previous research shows that the process of education or health education about long-term care for the elderly aims to educate caregivers about the characteristics of long-term care for the elderly, the factors that cause the elderly to need long-term care, and disorders or problems related to older people. Research indicates that 47% of interventions

were successful in improving behavioral outcomes when efficacy was assessed using the conclusions of the included research (Karran et al., 2023). Previous research shows that health education, or education given to health cadres or caregivers, is a way to help them avoid dependence on daily activities due to their older age. Research that has been conducted also emphasizes that health cadres or caregivers must have a good attitude, will, and desire to help patients.

The two pillars of clinical mentors' responsibilities and competencies were building strong rapport and acting as a professional role model (Kung et al., 2023). Based on previous research, caregivers, as a team or working partner of health workers in the community, have a good ability to receive information. This shows the role of the caregiver, being able to use IADL and ADL media, tools, and instruments to determine elderly people who need long-term care, and being able to use them to determine long-term care or long-term care for elderly people in the community. Education, or health education, influences participant behavior, which is characterized by the knowledge score was dramatically raised by 155.2% ($p < 0.001$) after receiving health education. A significant improvement of 138.2% ($p < 0.001$) was observed in the sampled student behavior score for respiratory infectious illnesses following health education (Wang & Fang, 2020). Studies that have been carried out with previous studies show that health cadres or caregivers who are involved in health education or instruction regarding long-term or long-term care for the elderly have a positive impact, namely that health cadres can assess and understand IADL and ADL screening or measurement in care settings for the elderly.

According to research, caregivers need knowledge and training on how to care for and care for patients at home (Mollica & Kent, 2021). Previous research and research that has been conducted shows that nurses or health workers need a variety of information about the conditions and situations of elderly people in the community, especially those that occur in families who need long-term care, so that caregivers can meet the needs of the elderly. Previous research shows that through the process of empowering and leading or mentoring, nurses help with long-term care for the elderly (Lukitasari et al., 2021). Previous research processes and research that have been conducted show that the process of empowering nurses involves caregivers or families who need long-term care so that caregivers can contribute simply to long-term care for the elderly. In addition, the research process that has been carried out includes direction or guidance given to health cadres, such as providing instructions on elderly care so that health cadres have the basic ability to identify elderly people who need long-term care.

CONCLUSION

Most/almost all caregivers' knowledge about long-term care has increased; there is a significant difference in knowledge between before and after interactive education. Caregivers can continue to participate in various training or education related to long-term care, are able to identify or screen elderly people who need long-term care, can learn about long-term care for elderly people on an ongoing basis, and can provide long-term care to elderly people that focuses on meeting their basic needs.

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