

Effectiveness of Interdisciplinary Homecare on Quality of Life of Long-Term Care Patients

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ABSTRACT

Background : Long-term care is the provision of assistance and support to patients who are unable to care for themselves for a long time, often because the effects of such treatment can affect the patient's quality of life to decrease so as to improve in providing long term care term care, collaboration between several health workers is needed which is carried out on a homecare basis. **Objective:** Investigate effect of interdisciplinary homecare on the quality of life of long term care patients. **Method:** this study used quantitative research and the method used was experimental. The sampling technique used purposive sampling of 15 respondents in Yogyakarta area. The data analysis technique were used the Wilcoxon test. **Results:** the results of this study state that there is an interdisciplinary homecare effect on the quality of life of long-term care patients ($p=0.001$ $r=-0.3426$). **Conclusions:** there was an effect of interdisciplinary homecare have positive impact for quality of life for patients who need long term care. It is hoped that patients and families can add to their understanding, and further researchers can develop homogeneous respondents from different disease points and use a control group for comparison.

Keywords: interdisciplinary, homecare, Long-term care, quality of life

Introduction

Long Term Care (LTC) or commonly called long-term care is the process of providing long-term assistance and support to patients who are unable to care for themselves either partially or totally because they have limitations in the physical or mental aspects provided by professional companions and informal companions (Vladimir , 2017). Most long-term care patients in Indonesia are elderly people suffering from chronic illnesses requiring long-term care (Agung & Meidiary, 2017).

Being older person, Physic and physiological functions decrease so that patterns of non-communicable (degenerative) diseases often appear in old age (Agung & Meidiary, 2017). This is what underlies the elderly to be susceptible to disease, not even a few elderly who experience several diseases simultaneously or are multi-pathological, progress progressively,

and develop into chronic (Candra, 2020). The results of data collection conducted on 300,000 households showed that the prevalence of chronic diseases in the elderly had increased when compared to Ministry of Health Indonesian Report data in 2013, including cancer, stroke, chronic kidney disease, diabetes mellitus and hypertension. (Ministry of Health, 2018). In carrying out long-term nursing at the hospital, this treatment can be carried out based on home care or care at home. The development of home care in Indonesia has progressed so much that many people know about home care and try to use home care services provided by both government and private hospitals.

Homecare services in Indonesia not only require staff from nurses to provide comprehensive services but also require services from other health professions (Nugroho et al., 2021). Patient-centered interdisciplinary health services at home are the provision of services by several health professionals to make joint decisions determined by an interdisciplinary team regarding health problems in patients carried out intermittently/part-time. Socially and economically, people with chronic diseases will experience limited activities and decreased productivity. This burden can reduce the quality of life of people with chronic diseases (Candra, 2020). Based on the results of a preliminary study conducted directly at Yogyakarta area, there is a percentage of long term care as high as 15% hypertension, 13% diabetes and 1% stroke and for homecare services there are 15 long term care patients with diabetes mellitus, stroke, and hypertension. Based on the background of the problems above and the lack of research using interdisciplinary homecare methods, researchers are interested and feel the need to conduct research related to how interdisciplinary homecare influences the quality of life of long term care patients.

Methods

Study Design

This is a quantitative longitudinal study (3 months) with a quasi-experimental one-group pretest–posttest design.

Sample

The participants were recruited using purposive sampling sample approach. Fifteen long term care patients in the Yogyakarta area were included during the 3-month follow-up of the interdisciplinary intervention program.

Inclusion and Exclusion Criteria

The inclusion criterion was being a long term care patients including Stroke, Diabetes Mellitus, Hypertension. Long term care patients with cognitive impairments were excluded from this study.

Ethical Consideration

The study obtained approval from the ethical committee (2703/KEP-UNISA/III/2023). All participants provided written informed consent before receiving usual care (interdisciplinary homecare).

Intervention

All respondents were received 3 months of interdisciplinary education regarding daily needs. Individual education was provided via leaflets and the demonstration basic need treatment by researchers. The interdisciplinary approach involved professionals from three fields: nursing, physiotherapy, and nutrition. All professionals participated in the daily need treatment process for 3 months; the education was provided twice a week for each caregiver via face-to-face interactions in the caregiver/patient's house (home-based education).

Data Collection and Instruments

The instrument used in this study was the European Quality of Live Dimension (EQ- 5D) Indonesian version questionnaire. Cronbach Alpha is > 0.70 which means the instrument is reliable (Santalia, 2021)

Statistical Analysis

The statistical Wilcoxon Test were used.

Results

Sample Characteristics

Characteristics according to gender, the majority of women were 11 respondents (73.7%). Based on age, most of them are elderly (60-74 years) as many as 12 respondents (80.0%). Then based on smoking status the majority did not smoke as many as 14 respondents (93.3). Furthermore, based on education, most were elementary school graduates with 7 respondents (46.7%) and the type of treatment the majority was continued treatment with 13 respondents (86.7%) (Summarized in table 1)

Table 1. Respondents Characteristic

Variable	Frequency	Percentage
Gender		
Male	4	73.3
Female	11	26.7
Age		
45-59 old years	2	13.3
60-74 old years	12	80.0
75-90 old years	1	6.7
Smoking		
Yes	1	6.7
No	14	93.3
Education		
Elementary School	7	46.7
Junior High School	1	6.7
Senior High School	6	40.0
Bachelor	1	6.7
Treatment		
Continued	13	86.7
Intensive	2	13.3

Table 2. Quality of life Pre-test and Post-test

	Frequency	Range	Minimum	Maximum	Mean	Std.Dev
Pre-Test	15	15	7	22	11.80	4.858
Post-Test	15	15	6	19	8.87	3.852
Wilcoxon Test						$P=0.001^*$

Based on table 2, the statistical description of the initial and post-test Quality of life measurements results with comparisons, namely for an average of 11.80, a minimum score of 7, a maximum score of 22, and a standard deviation of 4.858. Meanwhile, the results of the statistical description of the final test score were an average of 8.87, a minimum score of 6, a maximum score of 19, and a standard deviation of 3.852. A comparison of the average pre-test and post-test scores shows that the post-test scores are lower than the pre-test values, meaning they have decreased. The decreased value indicates that the patient's problems are reduced, whereas if it increases, it indicates an increase in the patient's problems. Then with that value, it shows a decrease of 2.93 which explains that after interdisciplinary homecare interventions, the fewer values that exist in patients indicate fewer or fewer problems in patients compared to the results of the initial test (pre-test). Health problems in this long-term care disease cause several more complex impacts and effects that can affect the quality of life. This complex problem can no longer be solved using only one discipline but a combination of various disciplines. The test results obtained using the Wilcoxon test showed a significance value (p) that was less than 0.05, which was 0.001. So it can be obtained that the significance

value is <0.05 , which means that there is an influence of interdisciplinary homecare on the quality of life of long term care patients.

Discussion

Based on a comparison of the average pre-test and post-test values, it was found that the post-test scores were lower than the pre-test scores. The questionnaire in this test discusses the 5 dimensions of quality of life, namely walking ability, self-care, normal activities, pain/discomfort, and anxiety, with an average pre-test (preliminary test) score of 11.80 while the post-test (final test) score of 8.87 which means it has decreased. The decreased value indicates that the patient's problems are reduced, whereas if it increases, it indicates an increase in the patient's problems. Then with that value, it shows a decrease of 2.93 which explains that after interdisciplinary homecare interventions, the fewer values that exist in patients indicate fewer or fewer problems in patients compared to the results of the initial test (pre-test). Health problems in this long-term care disease cause several more complex impacts and effects that can affect the quality of life. This complex problem can no longer be solved using only one discipline but a combination of various disciplines.

This study shows a significant increase in quality of life because the intervention using interdisciplinary home care consists of several health workers who will make the health services provided to patients more comprehensive. In addition, because it is done at home, the patient can more easily adapt to the surrounding environment and create a sense of security and comfort compared to a hospital. In addition, the problems that exist in patients can also be resolved because of collaboration between teams in accordance with their respective fields and in the provision of health services that are also adjusted to the conditions and needs of patients so as to speed up the recovery of patients which will affect the improvement of the quality of life in these patients.

Diane (2011) states that the assessment of the results of this interprofessional experience can be seen through an understanding of the attitude of health workers towards the collaboration of the health team, and each health worker can understand and understand the role of each health worker is a benchmark in the effectiveness of the interventions given to them. patients (Putriana & Saragih, 2020). Because as people get older, there will be more and more health declines in their lives, so degenerative diseases will appear and develop into chronic ones and even cause complications of the disease, causing the patient's quality of life to decrease. This disease requires further and comprehensive treatment so one of them is through this interdisciplinary approach.

Limitation of the study: Several limitations in this review study, such as a limited number of respondents and Heterogenic long-term care patients included in this study, may have reduced the validity of the findings.

Conclusion

Interdisciplinary homecare for long-term care patients is recommended as an alternative to providing support in order to increase the context of quality of life patients.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding Statement.

This study was funded by Lembaga Penelitian dan Pengabdian Masyarakat (LPPM) Universitas 'Aisyiyah Yogyakarta Research Funding internal program 2022-2023.

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