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## Research Article

# Family Caregiver Support Program to Increase Quality Care Among the Geriatric Population

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### Abstract

**Aims:** This study aimed to determine the effect of providing support programs to family caregivers on the quality of care for the elderly with chronic diseases in Pandansari Village, Poncokusumo District, Malang Regency.

**Methods:** The study used a pre-experimental with one group pretest-posttest research design approach in 7 weeks from July-September 2022. The total sample size was 50 respondents using purposive sampling technique. The selected sample must fulfill criteria's, includes: 1) an informal caregiver who lives with the elderly, 2) takes care of the elderly with chronic diseases, and 3) not suffering from chronic diseases itself. The WHO-QOL BREF questionnaire was used to collect data on the quality of life before and after the provision of support programs. Analysis includes univariate and bivariate. Bivariate using the Wilcoxon test.

**Results:** In this study, the caregivers are all women (100%) and most of the elderly are women (60.0%), the chronic diseases are Hypertension 66% and Gout Arthritis 34%. The results of this study indicate a significant effect of providing family caregiver support programs on the quality of care for the elderly with chronic diseases based on the quality of life indicators (p: 0.0001).

**Conclusion:** Family support programs influence the quality of care in terms of improving the quality of life of the elderly.

**Discussion:** In caring for the elderly with chronic diseases, family caregivers can take advantage of family support programs. Furthermore, this research is expected to provide insights and ideas for further research especially the development of support programs for caregivers of families with other chronic diseases.

### Keywords:

Chronic illness, quality of life, supporting family caregiver

## INTRODUCTION

The increase in health services and facilities plays a role in increasing life expectancy and reducing mortality rates, making the number of the elderly continue to grow. WHO(1) reports the number of elderly people around the world, in 2020 reached 1 billion. By 2030, the number of elderly is estimated to reach 1.4 billion, of which 1 in 6 people in the world are elderly or will be 60 years old/more. By 2050, it is estimated to be 2 billion elderly people. Various studies have revealed that although there is an increase in life expectancy, the elderly are in poor health conditions. The elderly live longer but with impaired body function which affects their ability to fulfill daily activities independently.(2) The indigence of the elderly make them dependent on the family and result in the need for care by the family or also known as informal care. Family caregivers or informal (unpaid) caregivers are the backbone of long-term care provided for the elderly at home. Family caregivers play an important role in supporting and caring for the elderly with chronic diseases including the provision of emotional, financial, and functional support, active involvement in home medical care, control appointments with physicians, and coordination of care(3).

Family caregivers are an important part of the care team, with about 60% providing care at home. Studied by van Ryn *et al.* shows family caregivers treat patients with metastatic disease, severe comorbidities, or are undergoing treatment in health facilities. Family caregivers assist the elderly in meeting the needs of daily activities, providing special care such as monitoring the side effects of treatment, helping to cope with pain, nausea, or fatigue, administering medications, and making decisions on whether to call a doctor, making decisions on whether medications are needed, and changing bandages. Long-lasting parenting affects the caregiver's life in various aspects including her ability to work, social interaction, and

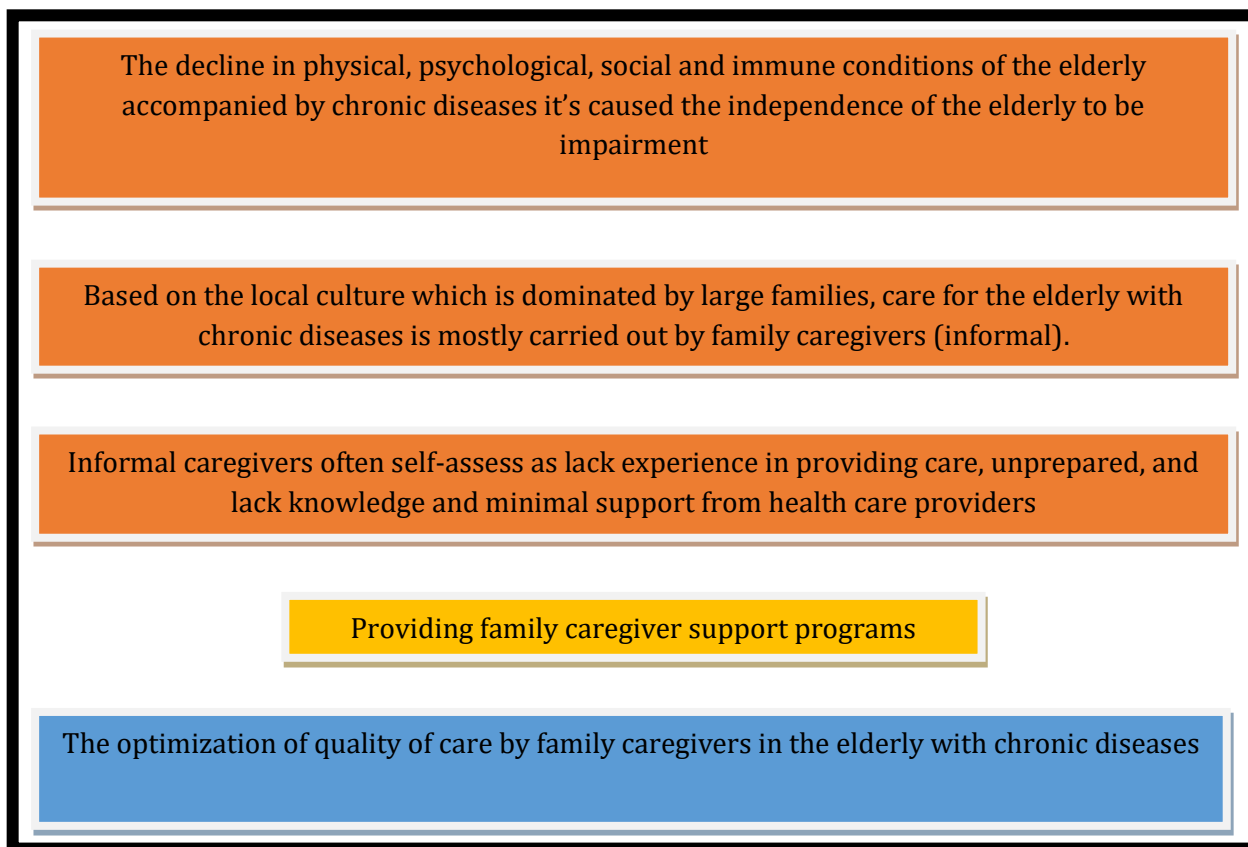
her mental and physical health. However, family caregivers did not get the debriefing needed to deal with the changes. In addition, family caregivers report suboptimal health. One in four family caregivers considers the quality of care they provide to the elderly to be low.(4)

Many of the interventions that family caregivers provide to the elderly without being equipped with the necessary debriefing with limited resources, so support actions are highly needed to minimize this. Study results by Putri *et al.* indicate that psychoeducation has a considerable influence on family caregivers.(5) The provision of psychoeducation according to Stuart & Sundeen can improve understanding of the development of the disease, help control the disease so as to prevent complications, and increase the role & function of the family caregiver.(6) Many research studies on caregiver burdens but the research that discusses support programs for family caregivers are limited. We are interested in providing family caregiver support programs by providing psychoeducation through the family caregiver support module.

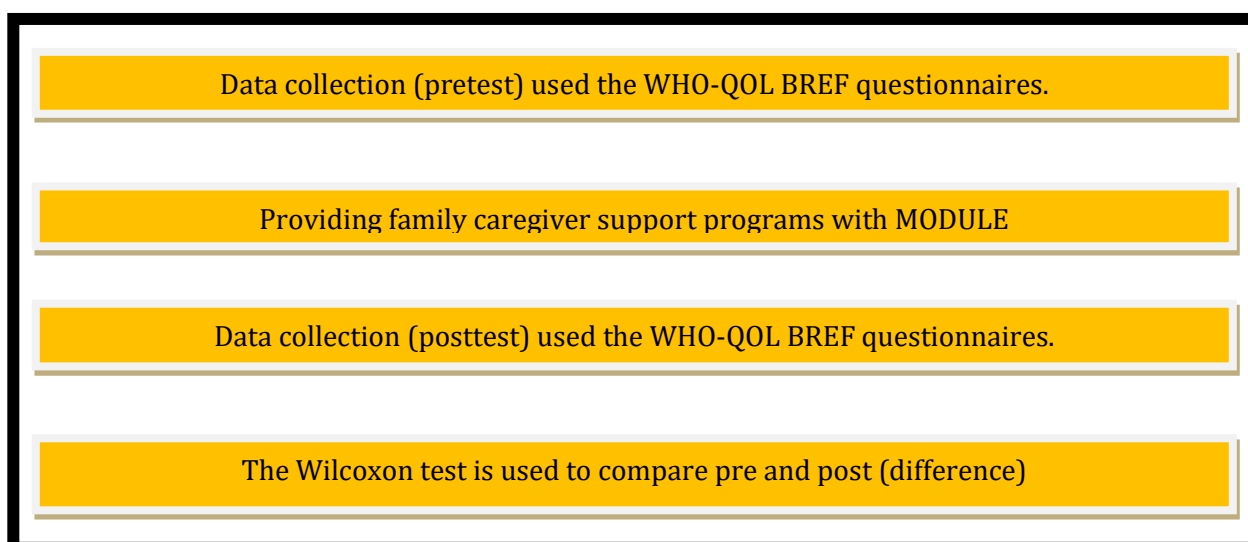
This study aims to see the effect of the family caregiver support program to increase quality care among the geriatric population with chronic diseases in Pandansari Village, Poncokusumo District, Malang Regency.

## METHODS

Data collection (pretest and posttest) used the WHO-QOL BREF questionnaire. The researcher conducts the research permit process on the relevant parties. We approached village nurses, health cadres, and local community leaders. By assisted representatives of local residents, we carried out the research process. It took us about 2 weeks to collect pretest data considering the remote location (30 kilometers).



**Chart 1. Conceptual framework**



**Chart 2. Research Design**

The provision of a family caregiver support program uses the family caregiver support module. After receiving inputs, the researcher conducted an initial intervention by gathering family caregivers at the residents' meeting house. The family caregiver is provided with the family caregiver support module and explained its contents and how to use it.

Then a question and answer discussion was held with the family caregivers. on that occasion, the researcher made 5 small groups consisting of 10 family caregivers and the research team members continued the intervention per group of family caregivers. Activities carried out for 4 weeks. Data collection (posttest) used the WHO-QOL BREF questionnaire. Data collection was carried out by visiting the elderly caregiver's house by the research team for about 2 weeks.

The statistical test used Wilcoxon to see if there was an effect on the quality of care by family caregivers in the elderly with chronic diseases after receiving a family caregiver support program. This study used a one-group pretest-posttest research design approach. The study was conducted for 7 weeks in Pandansari Village, Poncokusumo District, Malang Regency. The total sample amount was obtained by 50 respondents using purposive sampling techniques. The selected sample must fulfill the criteria, including being informal caregivers living together, caring for the elderly with chronic diseases, and not suffering from chronic diseases.

This research has received ethical recommendations from the Health Research Ethics Commission (KEPK) Baptist Kediri

Hospital School of Health Sciences. The study was conducted for 7 weeks including 3 meetings for data collection pre-intervention, 3 meetings for intervention, and 2 meetings for data collection post-intervention.

Each intervention activity has a duration of approximately 30-45 minutes per session. Session 1: informal caregivers recount the problems experienced in caring for the elderly with chronic diseases, such as hypertension, diabetes, and gout; Session 2: administration of psychoeducation about the support of family caregivers; Session 3: gout; Session 4: diabetes mellitus disease; Session 5: hypertension.

This study uses instruments WHO-QOL BREF. This instrument was created by the World Health Organization (WHO) to measure the quality of life. The WHO's official website has released an Indonesian version of this questionnaire. According to (7), the validity and reliability the Indonesian version of WHOQOL-BREF for measuring quality of life showed the r table value  $>0.361$  and the value of Cronbach's Alpha = 0.880. (7) Differences in quality of life pre and post-intervention in elderly caregivers were measured using the Wilcoxon Test. (8)

## RESULTS

Based on table 1 shows that the caregivers of the elderly in this study are all women (100%), most are in junior high school (58.0%), almost entirely married (96.0%), most are unemployed (60.0%), and are not earning (60.0%), and the average allocation of time used to take care of the elderly is less than 4 hours (50%).

**Table 1. Frequency Distribution Based on Characteristics of the Caregivers**

Characteristics of Respondents		Total	
		N	(%)
Gender	▪ Female	50	100.0
	▪ Male	0	0.0
Education	▪ Diploma / Bachelor	1	2.0
	▪ High school	11	22.0
	▪ Middle school	29	58.0
	▪ Elementary school	9	18
Marital Status	▪ Married	48	96.0
	▪ Divorce	1	2.0
	▪ Single	1	2.0
Employment Status	▪ Occupied	20	40.0
	▪ Not occupied	30	60.0
Total income	▪ No income	30	60.0
	▪ <1 million rupiah	17	34.0
	▪ 1-3 million rupiah	3	6.0
Caring hours	▪ ≤ 4 hours	25	50.0
	▪ 5-10 hours	24	48.0
	▪ >10 hours	1	2.0

Based on table 2. it can be seen that most of the elderly are women (60.0%), independent (50.0%), married (50.0%), almost entirely employed (70.0%) and have an income of < 1 million (70.0%), have their own income (58.0%), and have a history of hypertension (66.0%), and most are junior high school educated (58.0%), almost entirely married (96.0%), most are unemployed (60.0%), and have no income (60.0%), and the average allocation of time used to care for the elderly is less than 4 hours (50%).

**Table 2. Frequency Distribution Based on Characteristics of the Elderly**

Characteristics of Respondents		Total	
		N	(%)
Gender	▪ Female	31	62.0
	▪ Male	19	38.0
Level of independence	▪ Independent	25	50.0
	▪ Partially	24	48.0
	▪ Total	1	2.0
Marital Status	▪ Married	25	50.0
	▪ Divorce	25	50.0
Employment Status	▪ Occupied	35	70.0
	▪ Not occupied	15	30.0
Total income	▪ No income	15	30.0
	▪ <1 million rupiah	35	70.0
Source of income	▪ Son/daughter	21	42.0
	▪ The elderly itself	29	58.0
Past illness history	▪ Hypertension	33	66.0
	▪ Gout Arthritis	17	34.0
Present illness	▪ Hypertension	33	66.0
	▪ Gout Arthritis	17	34.0



Bivariable analysis in this study used the Wilcoxon test. Based on table 3, it shows that a Pvalue of 0.0001 means that it is smaller than 0.05 so it can be concluded that there is a significant influence of providing family caregiver support on the quality of care for the elderly with chronic diseases based on quality of life indicators. In addition, the results of the analysis also showed that the negative value of ranks or the difference (negative) between the quality of life of the elderly before being given the support program and after being given the support program was 10 which showed that there was no decrease in the level of quality of life of the elderly before being given the support program and after being given the support program. The Ties value indicates the number 2 means that there are 2 elderly people who have not increased or decreased the level of quality of life between before being given a support program and after being given a support program.

**Table 3. Wilcoxon test results from the influence of the family caregiver support program to increase quality care among the geriatric population with chronic diseases is based on indicators of the elderly's quality of life**

	<i>Neg. Ranks</i>	<i>Pos. Ranks</i>	<i>Ties</i>	<i>P-Value</i>
Quality of life	10	38	2	0.0001

The Wilcoxon test is used to compare pre and post (difference) so that the result that comes out is only 1 in the form of the difference between pre and post values. The results are: 1) *positive ranks* containing how many increments there are, 2) *negative ranks* containing how many decreases in difference, and 3) *ties* containing fixed values or no change.

## DISCUSSION

The increase in the number of elderly people who have chronic diseases in the community makes there a need for development, application, and at the same time evaluation to support family caregivers caring for the elderly with chronic diseases. When family caregivers have the capacity to take care of, the elderly with chronic diseases will get a better quality of care that will minimize the recurrence or uncontrolled condition of the elderly.(9)

An informal caregiver or family caregiver is someone who helps with physical and psychological care for people (the elderly) who need help. Family caregivers provide a wide range of assistance with daily life activities, including bathing, toileting,

dressing, moving, cooking, eating, medicine and taking care of the house. Family caregivers become an important part of the care and well-being team of caregivers with regard to the quality of care that the elderly with chronic diseases feel. Informal caregivers who are involved as part of the care team and carry out ongoing risk stratification screening and interventions to optimize the health of the elderly with chronic diseases can improve the quality of care felt by the elderly. As healthcare providers it is our job to prepare caregivers and help them build a network of resources that can provide an important element of support.(10)

Care for at least 20 hours per week and over a long period of time. Family caregivers will be presented with new roles for dependent caregiving needs that were not presented before. Limited or almost unavailable sources of support assist in taking responsibility for the emotional, physical, psychological, and financial challenges faced.(11)

The family support module caring for the elderly with chronic illness was created with the aim of carers understanding their rights as caregivers, understanding the importance of taking time for themselves,

learning how to combat “care fatigue”, finding ways to take better care of their health, learn how to tips on juggling work and parenting, learn about chronic diseases in gout, diabetes, and hypertension. The modules are structured with fields that focus on the objectives of the modules that have been described previously. Supporting families is becoming important for healthcare systems that depend on them to provide the lion's share of care for older adults with chronic illnesses.

Based on table 3, there is a significant change in the provision of family caregiver support for the quality of care for the elderly with chronic diseases based on indicators of the quality of life of the elderly after being given a family caregiver support program.

Quality of life reflects a person's perception of their well-being. The quality of life and the quality of upbringing both focus on the patient or in the context of this study the elderly with chronic diseases. The quality of upbringing emphasizes the quality of care required of the elderly with their chronic disease conditions, while the quality of life looks at a personal perspective and the results are related to the quality of care that has been provided by the family caregiver.(12)

A study by Schulz et al. identifies structural and process barriers that limit caregivers' ability to provide effective care to caregivers of all older adults with illnesses and disabilities, including those with serious illnesses. They argue that addressing these barriers will require fundamental changes in the way we (1) identify and assess caregivers; (2) support them, and (3) train healthcare and long-term service and support providers to effectively engage caregivers.(13)

Family caregivers are spouses, and relatives, who provide care and support to the elderly who have limitations in physical, mental, or cognitive functions. Family caregivers help meet personal hygiene needs, oversee medication administration

schedules, arrange appointments, and participate in the daily life of the elderly being cared for. Family members are the main source of support and assistance for elderly family members who are sick or who cannot be independent. In the last few decades, there has been a shift in responsibilities from family caregivers to become more complex and durable in the long term due to advances in health technology that supports longevity for the elderly with any disease.(13,14)

## CONCLUSION

The family caregiver support program provided to caregivers has proven to have a significant effect on the quality of care in the elderly with chronic diseases based on indicators of the quality of life of the elderly. It is hoped that this family caregiver support program can be used to help informal caregivers in improving the quality of care provided to the elderly with chronic diseases, especially gout, hypertension, and diabetes mellitus. Furthermore, this research is expected to provide insights and ideas for further research, especially the development of support programs for caregivers of families with other chronic diseases.

## REFERENCES

1. Organization WH. Ageing. 2020;
2. Vinsur E, Nurwiyono A. Pemberdayaan Pengasuh Lansia dalam Meningkatkan Kualitas Hidup Lansia dalam Mencegah atau Menurunkan Depresi menggunakan Terapi Reminiscence pada Lansia di Lembaga Kesejahteraan Sosial Lanjut Usia (LKS-LU) Pangesti Lawang Kabupaten Malang Indonesia. *Jurnal Suaka Insan Mengabdi (JSIM)*. 2021;3(1):1-8.
3. Council NR. The role of human factors in home health care: Workshop summary. 2010;
4. van Ryn M, Sanders S, Kahn K, van Houtven C, Griffin JM, Martin M, et al.



- Objective burden, resources, and other stressors among informal cancer caregivers: a hidden quality issue? *Psychooncology*. 2011;20(1):44-52.
5. Putri TARK, Ramadita W, Supriatin E, Hayati SN. Psychoeducational Intervention for Family Caregiver Burden in Stroke Patients Care. *Risenologi*. 2022;7(1a):21-5.
  6. Stuart GW, Sundeen SJ. Principles and Practice of Psychiatric Nursing ed 5. Missouri: Mosby-Year Book. Inc; 2007.
  7. Anisah SN, Djuwita R. Reliability and Validity of WHOQOL-BREF into Indonesian Version as a Measure of Quality of Life of Tuberculosis Patients. *Indian J Public Health Res Dev*. 2019;10(12).
  8. Supardi S. dan Surahman. Metodologi Penelitian untuk Mahasiswa Farmasi. Jakarta: CV. Trans Info Media. 2014;
  9. Balvert SCE, Milders M v, Bosmans JE, Heymans MW, van Bommel S, Dröes RM, et al. The MOMANT study, a caregiver support programme with activities at home for people with dementia: a study protocol of a randomised controlled trial. *BMC Geriatr*. 2022;22(1):295.
  10. Sullivan AB, Miller D. Who is taking care of the caregiver? *J Patient Exp*. 2015;2(1):7-12.
  11. Ejem DB, Drentea P, Clay OJ. The effects of caregiver emotional stress on the depressive symptomatology of the care recipient. *Aging Ment Health*. 2015;19(1):55-62.
  12. Alonazi WB, Thomas SA. Quality of care and quality of life: convergence or divergence? *Health Serv Insights*. 2014;7:HSI-S13283.
  13. Schulz R, Beach SR, Friedman EM, Martzolf GR, Rodakowski J, James III AE. Changing structures and processes to support family caregivers of seriously ill patients. *J Palliat Med*. 2018;21(S2):S-36.
  14. van Houtven CH, Smith VA, Lindquist JH, Chapman JG, Hendrix C, Hastings SN, et al. Family caregiver skills training to improve experiences of care: a randomized clinical trial. *J Gen Intern Med*. 2019;34:2114-22.