



ARTICLE RESEARCH

URL artikel: <http://jurnal.fkmumi.ac.id/index.php/woh/article/view/woh8023>**Support Groups Based on the Health Promotion Model Approach to Improving the Health of the Elderly with Gout**^CValensya Yeslin Tomaso¹, Feby Manuhutu², Junianto Tri Prasetyo³^{1,2,3}Faculty of Health, Indonesian Christian University Maluku, IndonesiaCorresponding Author Email(°): vallytomaso0212@gmail.comvallytomaso0212@gmail.com¹, nsfebymanuhutu@gmail.com², juniyanto.tp1@gmail.com³

ABSTRACT

The elderly are a vulnerable group to the problem of gout. The 2018 Riskesdas data in Indonesia showed a 45% increase in age prevalence. The prevalence of gouty arthritis in Indonesia is high at 65-74 years (51.9%) and ≥ 75 years (54.8%). Maluku Province has a prevalence of 18.6-47.6 %. Diseased joints (pain consequence) are highest in the Aru Islands (9.63%), and Ambon is in the top position (2nd, 7.15%). Recorded data from Air Salobar Health Center, a health center in Ambon City, indicates that the number of elderly individuals with Gout in 2023 was 83 people. There are efforts made to improve the health of the elderly, including promotional efforts such as Support Groups, which employ an approach based on the Health Promotion Model (HPM) as a first step to promote healthy behaviors and desires among the elderly. Research objectives. This is a see-influence support group-based approach to a health promotion model for addressing problems in elderly health behavior related to *gout*. Design Study: This is a one-group pre-test and post-test design. The total sample in the study consisted of 83 elderly individuals suffering from Gout, selected using a purposive sampling technique. Data analysis employed the Wilcoxon test because the data were not normally distributed. Research results demonstrate a difference before and after the given support group intervention, based on the Health Promotion model, for improving elderly health behaviors. The pre-test results of the intervention are 9.33, while the post-test results are 11.27, with an average difference of 1.94 and a P-value of 0.000. Therefore, we can conclude that a support group has an influence on the approach of the *Health Promotion Model* towards improving behavioral health in the elderly with *gout*. Research on topics considered important and relevant to the problem of elderly individuals with gout recommends examining the factors and appropriate interventions to improve the quality of life for elderly people experiencing gout.

Keywords: Support group; health promotion model; elderly health improvement; *gout*

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INTRODUCTION

The elderly are a group vulnerable to aging experience complaints, physical factors, and natural consequences of the changes that accompany it, in matter⁽¹⁾. This condition, geriatrics, like weakness, falls, and delirium, and trouble with health, namely disease No such as *Gout*⁽²⁾⁽³⁾. *Gout* is one of the oldest known forms of arthritis, the most common inflammation⁽⁴⁾⁽⁵⁾. Gout or also known as disease-sour arthritis, is a clinical condition resulting from the deposition of monosodium urate crystals in the joints, which often occurs in the elderly, associated with disease accompanying and disturbing Concomitant medication⁽⁶⁾. Known risk factors for gout include hyperuricemia, chronic kidney disease, genetic factors, alcohol consumption, dietary factors, diuretic use, hypertension, obesity, and metabolic syndrome. Patients with gout have an increased risk of death from all causes, particularly from cardiovascular disease, cancer, and infectious diseases. Gout is also associated with several complications, such as nephrolithiasis⁽⁷⁾.

The global prevalence of gout is 1–4%, and the incidence rate is 0.1–0.3%.⁵ Epidemiological studies show that the incidence and prevalence of gout increase with age⁽⁸⁾. The 2018 Riskesdas data in Indonesia showed a 45% increase based on age prevalence high at the age of 65-74 years (51.9%) and ≥ 75 years (54.8%)⁽⁸⁾. Therefore, the prevalence of gouty arthritis in Indonesia is reviewed from the prevalence of hyperuricemia in Indonesia of 18.6-47.6%⁽⁹⁾. Maluku Province prevalence diseases (pain consequence is the highest gout is in Aru Islands (9.63%), and Ambon is in the top position 2nd (7.15%), highest at age 65-74 years (16.47%), and Age > 75 years (20.3%)⁽¹⁰⁾. Record Data Air Salobar Health Center, which is a health center in Ambon City, with the number of elderly with *Gout* in 2023 was 83 people⁽¹¹⁾. Based on the data presented can concluded that gout disease in the elderly is very necessary for overcome elderly health problems This specifically *gout*, because without effective handling, conditions can develop become chronic gout, the formation of tofus, and even can result in disturbance function disturbance weight gain, and a decline in quality of life in the elderly⁽¹²⁾.

Efforts made for improving the health of the elderly, with do Health services such as free health care include inspection of health bases like pressure, blood, blood sugar, cholesterol, and acid veins, that can be carried out at the integrated health post for the elderly every month as a promotional effort⁽¹⁰⁾. In addition, Treatment for *Gout* in the elderly is a way pharmacological (NSAID, Allopurinol, Febuxostat, and other medications pharmacology others) and non-pharmacological therapy treatment without the use of medicines (medication pharmacology) for managing or overcome overcome problem health elderly⁽⁵⁾⁽¹³⁾. One of the treatment non-pharmacologic measures taken, like Therapy, *warm ginger compress* for the elderly with Gout pain, with test results obtained in a study. This is a p-value = 0.000, which means there is a significant influence of warm ginger compress therapy on the decline in pain due to gout^(14,15)

For carrying out improvement efforts, behavioral health elderly and treatment. This naturally needs attention and support from the closest people elderly as an action to the elderly. Policy: The world

government and Indonesia expect elderly people who remain in good health and maintain their health by involving people around them elderly in matters. This is a related *support group*. *Support group* for the elderly is Coordinator / Developer, offering help, hope, and inspiration⁽¹⁶⁾. *Support groups* for the elderly are supportive interactions that give support so that individuals feel empowered, increasing efficacy, and improve skills to overcome health problems⁽¹⁵⁾. An approach that can be done to *support* this group is to approach the *Health Promotion Model* (HPM) as an effort promotional from health improvement for the elderly with *gout* while still controlling their health before sick. This *health promotion* is seen as a process of community qualification aimed at improving life and health conditions, where the advantage of this approach is that this health promotion approach proposes a more accessible and popular integration of knowledge so that it can provide solutions to health problems and is easily accepted by individuals and communities⁽¹⁷⁾. These promotional actions are the result of a combination of state actions in their respective public health policies, community actions, individual actions, and interventions to develop their own abilities, as well as actions for change⁽¹⁸⁾. Previous research conducted by Aupia A in 2021 found that educational interventions aimed at improving health knowledge and compliance with an acidic diet in patients with gouty arthritis⁽¹⁹⁾.

Interventions carried out with the HPM approach, such as promoting health about gout, setting an elderly lifestyle, elderly diet management, and controlling health in the elderly, are routinely part of behavior in the elderly to increase health in individuals with gout. Approach-Based This *Health Promotion Model* (HPM) is expected can influence desire, and give influence on behavior to increase health⁽²⁰⁾. The purpose of this study is to examine the influence of Community-Based Support Groups on the Health Promotion Model Approach to improving Health Behavior of Elderly People with Gout.

METHOD

The types of research conducted include a quasi-experiment with a *pre-post test one-group design*. Research sample is elderly with *gout*, namely 83 elderly people sufferers *gout*, with retrieval technique *purposive sampling* with Criteria Inclusion namely elderly aged ≥ 60 years, confirmed gout diagnosis, living in the work area health centers that are studied and available participate and contribute *informed consent*, whereas criteria exclusion in study This is elderly with disturbance cognitive significant disturbing ability participation, have other diseases that are very serious and affecting ability follow intervention and not Can communicate in language used in study. This research was conducted in the Air Salobar Community Health Center working area, Ambon City. The data analysis used is univariate and bivariate, where the univariate analysis depicts characteristics of respondents, namely age, type Gender, and Education of the Elderly sufferers *gout*, whereas bivariate analysis uses the Wilcoxon test because the data is distributed abnormal, namely see the influence before and after done intervention *support group* based approach *health promotion model* against behavior improvement health elderly with *gout*. The independent research variable in this study is the behavior of elderly people with gout,

and the dependent variable is the *Support Group Approach based on the health promotion model* approach, in this case, health counseling.

This study is a health promotion intervention study that uses *health promotion media*, namely modules about gout, diet management by involving people around the elderly, namely elderly cadres and families (*Support Group*), to be involved in accompany the elderly during the intervention. In addition, the questionnaire used contains knowledge about gout, quality of life assessment, lifestyle programs, and uric acid examination sheets, where uric acid examinations use an *easy touch tool* and are carried out by medical personnel during the elderly posyandu. This study was conducted for 5 weeks. Before conducting the study, the researcher and the team submitted a research ethics protocol to the Health Research Ethics Commission (KEPK) of the Faculty of Public Health, Airlangga University, and obtained ethical approval No. 191 / EA / KEPK / 2024. During the study, the researcher explained the purpose of the study and asked for the willingness to become respondents to fill out informed consent, follow the intervention, and fill out the questionnaire.

RESULTS

Based on the characteristics of the sample, the study found the following data:

Table 1. Characteristics of Elderly Respondents with Gout

Respondent Characteristics	n	%
Age		
Elderly (60-75 Years)	63	75.9
Old Age (76-90 Years)	20	21.1
Gender		
Man	30	36.1
Woman	53	63.9
Last education		
No school	13	15.7
Graduated from elementary school	18	21.7
Graduated from junior high school	16	19.3
Graduated from high school	25	31.3
College	10	12.0
Amount	83	100

Based on Table 1, obtained distribution frequency of respondents in the study was obtained. This is based on categorical Most of the age respondents were aged 60-75 years (75.9%). Whereas for respondents based on type, the most common gender namely women (63%), and men, as many as 30 people (36.1%). Apart from that, based on last education, most graduates School Upper Middle 25 people, 31.3%).

This study used 83 samples. Therefore, the researcher used the Kolmogorov-Smirnov normality test because the sample size was >50.

Table 2. Results of the Data Normality Test

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	df	Sig	Statistics	df	Sig
Pre-Post Test Results	0.383	83	0.000	0.676	83	0.000

Based on Table 3, the results of the normality test obtained a significance value of 0.383 for the Pre and Post Test ($P < 0.05$). Data are normally distributed if $p > 0.05$. The results of the data normality test obtained $p < 0.05$, meaning the data are not normally distributed, so it was continued with the Wilcoxon test.

Bivariate analysis of the variables studied was then conducted using the Wilcoxon test to determine the effect of the health promotion-based support group intervention on improving health behaviors in elderly people with gout. The intervention consisted of health education using a support group approach to improve health behaviors in elderly people to address gout issues.

Table 3. Results of the Analysis of the Influence of Health Promotion-Based Support Groups on Improving Health Behavior in Elderly People with Gout

Improvement of Elderly Health Behavior	Intervention Support Group-Based Health Promotion		
	Mean	Elementary School	Mark
Pre	9.33	4,140	0.000
Post	11.27	4,535	

In Table 3 above, the results of the Wilcoxon test show improvement in elderly health behavior before and after the given Support Group-based intervention approach, Health Promotion model, which has a significant *P-Value* 0.00 (< 0.05), with an average score improvement in elderly health behavior with gout before and after. Where to get it pre-test results intervention 9.33, while post results are given intervention is 11.27, with the average difference being 1.94. So can be concluded that the *Support Group* is a significant approach *Health Promotion* model that has a significant influence on improving the health behavior of the elderly. For treating gout in the elderly.

DISCUSSION

Aging is a life process that cannot be avoided. Aging is a process of reduced performance and independence as well as increased disease and needs, will care very necessary, which of course makes the elderly prone to Health problems⁽¹⁸⁾. Risk factors for gout occur due to increasing age increase age so the level sour the tendon experiencing abnormality. This is due to the network's body already starting to be damaged or because of existence accumulation of harmful substances body⁽⁶⁾. In addition, Still is a disease dominated by men, with ratio type sex ratio of at least 3:1. However, the difference in sex type prevalence narrows along with improvement rapidly incidence sour veins in women after menopause⁽²¹⁾⁽²²⁾⁽²³⁾. Education influences human behavior. If reception behavior is based on knowledge,

awareness, and positive attitude, then the behavior lasts long, so that Promotive efforts are needed, namely, health promotion⁽²⁴⁾.

Health promotion is very important for anyone, regardless of age, even as they enter the aging process. This research proves the difference before and after the given support group intervention based on the Health Promotion model for improvement of elderly health behavior with *gout*, with a marked *P-value* of 0.000, meaning there is a significant influence from interventions provided. In research focused on improving behavioral health elderly with *gout* through a Support group approach, where it is done in the form of giving promotional health care for the elderly carried out by those closest to them to elderly with a focus element Diet and *lifestyle* management for the elderly. Research results. This is in line with studies regarding the positive and direct impact of social support on health promotion behavior in the elderly. This study shows that the path coefficient related to the influence of social support on health promotion behavior in the elderly is positive and significant⁽¹⁸⁾. As well as with Research shows that *support groups* have a positive effect, leading to improvements in feelings of loss and failure, concerns about aging, trying new directions, and confusion and conflict, thus contributing to the well-being of older adults⁽²⁵⁾.

Support Group with an approach to *Health promotion* for the elderly with *gout*, stimulating change through feelings, behavior, and attitudes, to increase behavioral health and maintain their overall well-being. This can be seen in the results, with an average score improving elderly health with *gout* before and after. Where to get it mark before obtained mark before done intervention 9.33, while mark after given intervention is 11.27, with the average difference is 19.4, meaning there is improvement in behavioral health elderly against *gout*. Promoting health is a process that can enhance someone's overall well-being. Promoting health can be applied to all targets, but it must use the right method so that the information provided can be accepted effectively. Media is a tool for distributing messages from the sender to the recipient, stimulating thoughts, feelings, attention, and interests in someone, such as their appearance, thereby initiating a process of change. This process can be utilized in Health promotion through various media, including modules, leaflets, and sheets.⁽²⁶⁾ Research Results: This finding aligns with a study conducted by Aupia A (2021), which examined the impact of educational health interventions on knowledge and compliance regarding an acidic diet in patients with *gouty arthritis*. This is proof that education on health in the form of promoting health brings a good influence for increasing health among the elderly with *gout*, as they can manage their health so that *gout* can be treated⁽¹⁹⁾.

Health promotion is a preventive approach to health that focuses on self-actualization, guiding individuals to maintain or improve their health and actively develop new, positive behaviors⁽²⁷⁾. Support groups are needed to support this approach, providing opportunities for people to share personal experiences and feelings, coping strategies, or direct information about illness or treatment. Health promotion and well-being are significant responsibilities, especially for all healthcare providers who care for older adults and their loved ones. The support provided is an important factor that influences

the welfare of an individual⁽²⁶⁾. Everyone has a support system. Group is a dimension for testing the ability to adapt to social interactions, including the health of the elderly⁽²⁸⁾. Support provided to the elderly can increase the level of maintenance, improve the quality of life for the elderly, and enhance their health status, especially in cases of gout⁽²⁹⁾. Supporting social interaction in the elderly can be considered one of the sources of cheap power and a source to generate social capital, improving the quality of Life and Health⁽²⁹⁾. A support group is provided to the elderly through various approaches, including the Health Promotion approach, which aims to improve the health of the elderly, especially those with gout.

Researchers assume that this approach prioritizes Health Promotion by involving the closest people elderly. An approach that can be implemented is a support *group* for the elderly. This approach, the Health Promotion Model (HPM), is an effort to maintain and improve the health of elderly individuals with gout by monitoring their health on a monthly basis. Support that is given naturally can help and encourage the elderly to improve their welfare through optimal health, gained through improved knowledge, learning methods to regulate their diet and control health on a daily and monthly basis at Posyandu.

CONCLUSIONS AND RECOMMENDATIONS

The research results yielded conclusions regarding the characteristics of the respondents in the study. This is generally a type aged 60-75 years. The most common gender is female, and the highest level of education is mostly graduate school above medium. In addition, Happen improved elderly health behavior with *gout* indicators in his assessment, namely knowledge elderly and post-operative diet management, given intervention in the form of Health Promotion using modules, leaflets, and sheets, which has back proven with statistical test results, *P-Value* 0.000 with an average score improvement in elderly health behavior with gout before and after. Where to get it mark before done intervention 9.33, while mark after the given intervention is 11.27, with an average difference of 1.94. Research results. This needs special attention from various parties, namely party health centers, communities, and families, as a form of *support group* for still do approach Health promotion as evaluation sustainable and routine programs for the elderly to always control their health as a preventive measure to prevent the occurrence of relapse disease *gout* and maintain the health of the elderly.

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