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Increasing Knowledge Through Health Education About Early Detection Of Systemic Lupus Erythematosus (SLE)

Zahrotul Jannah[1], Anie Trie Indiartinie[2], Imamatul Faizah[3], Firnanda Erindia[4]
[1,2]Master of Nursing, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya, Jalan SMEA No.57, Surabaya, East Java, Indonesia 60243, [3]Nursing Department, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya, Jalan SMEA No.57, Surabaya, East Java, Indonesia 60243, [4]Master of Nursing Study Program, Faculty of Nursing, Universitas Airlangga, Surabaya,East Java, Indonesia

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ABSTRACT

Lupus is not widely known in the community. The number of people affected by lupus is higher than those affected by AIDS. However, the high number of lupus patients is related to the public's knowledge about lupus. The implementation of this community service activity aims to educate patient families about early prevention of systemic lupus erythematosus (SLE). The method used in this community service activity is providing health education. This activity was conducted in March 2023 and was attended by 20 families of SLE patients in Az-Zahra 1 room at Jemursari Hospital, Surabaya. The research results show that the activity has achieved success according to the predetermined success indicators, which include enthusiastic participation of the attendees and a significant increase in knowledge among the patient families after the education. In conclusion, this community service activity can be conducted in the vicinity of the hospital to increase awareness and knowledge regarding SLE.

Email :
1130016076@student.unusa.ac.id

1. INTRODUCTION

Systemic lupus erythematosus (SLE) is a chronic autoimmune inflammatory disease with diverse clinical manifestations, disease course, and prognosis [1]. The term 'lupus' (Latin for wolf) was first used to describe erosive skin lesions ('wolf's chomp'). Moriz Kaposi was the first to introduce lupus as a systemic disease with various clinical manifestations. SLE is characterized by the loss of self-tolerance due to abnormal immune function and excessive production of autoantibodies, leading to the formation of immune complexes that can affect healthy tissues. The etiological mechanisms of SLE are not fully understood. There is speculation that factors such as genetics, hormones, immunological factors, and even the environment play a role in SLE pathogenesis [2]. Women are at a higher risk of developing SLE compared to men, especially women of reproductive age. The female-to-male risk ratio for SLE is 9-14:1. The annual incidence of SLE in Europe is 3.3 per 100,000 population in Iceland and 4.8 cases per 100,000 population in Sweden. In the United States, the incidence of SLE has been studied in various research, ranging from 2.0 to 7.6 cases per 100,000 population. In Onikawa, Japan, a study identified 566 new cases with a diagnosis of SLE, equivalent to 3.0 cases per 100,000 population. The prevalence of SLE in the United States ranges from 14.6 to 50.8 cases per 100,000 population.

In the process of adapting to the disease, individuals with SLE require social support from their environment. Social support is assistance, care, or help provided to individuals by others that provides physical and psychological comfort [3]. This statement is supported by Uchino [4], who describes social support as concern, appreciation, or assistance provided to individuals by others or even by a group. In reality, the environment may not fully serve as a source of social support for individuals with SLE because they still face negative reactions. For example, [5] experience, where her friends mocked, ridiculed, gossiped about, laughed at, and even distanced themselves from her because of her lupus. The continued negative reactions towards individuals with SLE may be due to lupus being

relatively unknown in Indonesia. Research conducted by Judha, [6] indicates that a lack of information about lupus leads to stigma in society. This stigma originates from both the community and healthcare providers, resulting in discrimination against individuals with SLE. Knowledge can be a guiding factor for individuals to understand the feelings and thoughts of others in distress and can guide them in helping others overcome the distress they experience. The implementation of this community service activity aims to educate Cadres and the community on how to detect SLE early. Increase community knowledge about early detection of SLE.

2. METHOD

The implementation method is planned systematically, starting from the pre-activity stage, the activity implementation stage, and the evaluation stage of the conducted activities. The pre-activity stage includes the following steps: 1) a strategy meeting is held involving the head of Az-Zahra 1 room and the CI room at Jemursari Hospital Surabaya to discuss the strategies and planning for the education that will be conducted, 2) preparing learning media and arranging the necessary facilities and infrastructure such as videos about SLE, leaflets, etc., and 3) conducting a problem analysis in Az-Zahra 1 room related to previous cases of SLE in order to prepare and organize the equipment used during the activity.

The research design used in this study is pre-experimental with a Quasi-Experimental approach. The population in this study is SLE patients receiving outpatient care at Jemursari Hospital Surabaya. Purposive sampling is used, which means the samples are selected among the population based on the researcher's criteria, representing the known characteristics of the population. The sample size is 20 individuals, selected based on predetermined inclusion and exclusion criteria. The education will be conducted in March 2023. The community service team will provide education on early detection of SLE, divided into two sessions as follows:

Education Session:

The core activity of this community service is education or material presentation on SLE using lecture methods to the families of SLE patients, aiming to increase their knowledge and understanding of SLE prevention. The education or material presentation will be delivered by the community service team members as speakers using lecture methods and interactive discussions.

Figure 1: Education or Material Presentation on Early Detection of SLE

Pre-test and Post-test:

The pre-test is conducted to assess the participants' baseline knowledge regarding the material that will be presented, specifically the knowledge about SLE prevention through lectures. This activity is carried out before the presentation by the speakers. The knowledge level is assessed using a questionnaire containing questions related to the material, which will be filled out by the participants according to their understanding.

The post-test is conducted to evaluate the participants' knowledge after receiving the educational presentation. This activity aims to measure the increase in knowledge among the families of SLE patients after listening to the educational presentation delivered by the speakers.

Figure 2: Evaluation of Pre-Post Test

3. RESULTS AND DISCUSSION

Community service activities with the theme "Health Education as an Early Prevention Effort for SLE" received enthusiastic responses from patient families with the participation of 20 individuals. Based on Table 1, it is evident that almost all respondents (50%) are in the age group of 46-55 years, which falls under the category of early elderly. This is consistent with the findings of Sukrayasa et al. (2018), which state that as individuals mature, their thinking process also becomes more developed. Age influences individuals' perceptions and thought patterns. In early elderly age, if they acquire knowledge, they can actively contribute to society and community life. The majority of respondents (50%) have completed junior high school education, indicating the need for further education.

Table 1. Frequency Distribution of Respondents' Characteristics

Variable	Respondents N (15)	
	F	**%**
Late adulthood (36-45 years)	5	25%
Early seniors (46-55 years)	10	50%
Late elderly (56-65 years)	5	25%
Education		
Elementary school	5	25%
Junior high school	10	50%
SENIOR HIGH SCHOOL	5	25%

Discussion

The education session took approximately 100 minutes and began with a pre-test to assess the respondents' knowledge. Knowledge transfer was then conducted through prepared learning media, including a video on SLE prevention. This was followed by a post-test session to measure the level of understanding of the material and to facilitate discussions, serving as a gauge of the team's success in delivering educational content. The education session conducted as an early prevention effort for SLE, as evidenced by the pre-test and post-test questionnaires, is shown in Table 2.

Table 2. pre-test and post-test questionnaires

Knowledge	Category	N	%
Pre Test	Low	10	50%
	Enough	5	25%

	Good	5	25%
Post-test	Low	0	0%
	Enough	10	50%
	Good	10	50%

According to Table 2, respondents' knowledge levels before the pre-test showed that 50% had low knowledge about SLE. However, their knowledge improved to a good (50%) and average (50%) level after the post-test. The increase in knowledge can be influenced by age and education [7] as higher knowledge correlates with better individual responses to the disease.

Health education refers to a set of experiences that positively influence habits, attitudes, and knowledge related to individual, community, and national health [8]. Therefore, through the influence of health education, knowledge and beneficial independent actions can be developed for individuals, groups, hospitals, with the most significant impact being the reduction of SLE development [9]. Health education plays a crucial role in SLE prevention [10]. One of the health education methods employed is the lecture method used by the community service committee. This method was chosen to provide health education and increase the knowledge of outpatient SLE patients and their families about SLE and the SALURI concept to prevent other family members from being affected by SLE.

This method is considered the most effective in educating patient families and increasing their knowledge. The higher the education level, the easier it is for individuals to accept information [11]. With a good educational background, individuals' acceptance of information and motivation are enhanced. They also become responsible in implementing the teachings, able to change patient and family behavior in maintaining a healthy lifestyle, and actively participate in self-care, empowering their abilities during and after illness.

4. CONCLUSION

The community service activity aimed at preventing SLE through educational methods in Az-Zahra 1 room at Jemursari Hospital Surabaya was successfully carried out and well-received by the participants throughout the event. This activity serves as a solution to the existing problem.

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