JURNAL PENGABDIAN MASYARAKAT
DEDIKASI
EISSN: 2985-9654 / PISSN: 2964-4712
Volume 07 No. 01, July 2026
Page 31-34

Published by: Institut Kesehatan Karsa Husada Garut
Jurnal Pengabdian Masyarakat DEDIKASI
Homepage: https://dedikasi.lp4mstikeskhg.org/home

ENHANCING COMMUNITY CAPACITY TO MAINTAIN IMMUNITY TO PREVENT RHINITIS

ARTICLE INFO

Article history:

Received July 08th, 2026
Revised July 18th, 2026
Accepted July 28th, 2026

Keywords:
immunity, community, rhinitis,

ABSTRACT

Rhinitis is one of the diseases associated with immune instability. Efforts to prevent the recurrence of rhinitis include maintaining immunity, avoiding allergies, practicing good stress management, and eating a diet that is in accordance with healthy living guidelines. Rihinits can reduce the quality of life of sufferers; therefore, it is necessary to make efforts to prevent the disease through community capacity-building activities related to rhinits. We used a virtual talk show on the Zoom meeting platform for 60 minutes as the method. Forty participants attended the activity, achieving a pretest score of 84.7 and a posttest score of 89.4. Thus, the community's capacity to increase immunity and prevent rhinitis has increased. In order to improve the health status of people with immune disorders, especially rhinitis, we expect this activity to continue in different places and with different participants.

Keywords: *immunity, community, rhinitis.*

Corresponding Author*:
*Bambang Aditya Nugraha[1], Gusgus Ghraha Ramdhanie[2], Sulastini**
[1,2] Faculty of Nursing, Padjadjaran University, email: gusgus.ghraha.ramdhanie@unpad.ac.id
*[3] Karsa Husada Garut College of Health Sciences, email: sulastini26@gmail.com**

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1. INTRODUCTION

The immune system is the most important part of the body's defense system (Siregar et al., 2024). The immune system protects the body from the entry of various microorganisms, such as bacteria and viruses, which are abundant in the environment (Malik et al., 2022). Thanks to the immune system, the body is able to defend itself against infections caused by microorganisms, which are constantly seeking hosts to infect. A weakened immune system increases susceptibility to infection. One disease that can affect the immune system is rhinitis (Agnihotri & McGrath, 2019).

Rhinitis is a disease that affects the body's immune system, characterized by symptoms in the nasal mucous membranes caused by an inflammatory reaction (Ponda et al., 2023). Rhinitis is classified into two types based on its nature: acute rhinitis and chronic rhinitis. Chronic rhinitis is a recurrent nasal infection characterized by the presence of one or more clinical symptoms of rhinitis lasting for more than 12 weeks (Vizuete et al., 2019). Common symptoms of rhinitis include nasal congestion, sneezing, a runny nose, and nasal itching. Although not life-threatening, rhinitis can significantly impair a patient's quality of life if not properly managed. Understanding the causes and mechanisms of rhinitis is essential for accurate diagnosis and effective treatment (Bernstein et al., 2024).

According to various sources, the prevalence of allergic rhinitis in Indonesia is quite high and has shown an upward trend in recent years. According to the latest data, the prevalence of allergic rhinitis in Indonesia is approximately 53% of the population (Perceka et al., 2022). This figure is higher than previous estimates, which ranged from 10–20%. Other studies report that the prevalence of allergic rhinitis in Indonesia ranges from 1.5% to 12.4%. Among the college student population, the prevalence of allergic rhinitis was found to be 38.2%. Meanwhile, among children and adolescents, the prevalence of allergic rhinitis is estimated to be approximately 8.38% in children and 14.93% in adolescents (Muhammad et al., n.d.).

Although there is variation in the reported figures, these data indicate that allergic rhinitis is a significant health issue in Indonesia, with prevalence trends showing an increase over time. While allergic rhinitis is not life-threatening, it can have a significant impact on a person's quality of life.

It is essential to be aware of the importance of maintaining immunity to prevent allergic rhinitis; therefore, understanding its causes and mechanisms is crucial for accurate diagnosis and effective management (Kamal, 2021). Consequently, we aim to educate the public through health education initiatives about the importance of maintaining immunity to prevent various immune-related disorders, particularly allergic rhinitis.

2. METHODS

The implementation methods used were lectures and discussions, while for evaluation we used pre-tests and post-tests. The following methods were used (Maryani et al., 2021):

a. Lecture

The lecture method is a teaching-learning approach that emphasizes one-way communication from the instructor to the students; thus, this method is unidirectional. Although unidirectional, this method incorporates question-and-answer sessions to keep the class engaged and ensure the learning material delivered aligns with predetermined objectives. This method involves interaction between the instructor and students or among students themselves, in the form of lectures or question-and-answer sessions.

b. Discussion

The discussion method is a technique used to resolve issues of mutual concern. It is employed to examine a problem through the exchange of ideas, debate, and careful scrutiny. The purpose of this method is to motivate and stimulate students to think critically, express their opinions, and offer well-considered perspectives.

c. Evaluation Methods: Pre-test and Post-test

The pre-test and post-test methods are used to determine the extent of students' understanding of the material to be taught. A pre-test is administered before the material is presented, with the aim of determining how many students are already familiar with the subject matter. Meanwhile, a post-test is a test

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administered after the material has been presented, with the goal of assessing the students' success in understanding and mastering the material that was taught.

3. RESULTS AND DISCUSSION

The activity was held on May 29, 2023, from 1:00 PM to 2:45 PM WIB via a Zoom meeting attended by 40 participants. The activity received a positive response, with participants actively listening and asking questions about the material presented. This demonstrates the benefits of the activity. The event began with an opening by the MC, followed by remarks from the Program Officer and the course instructor.

Before the presentation began, a 10-minute pre-test was administered to assess the participants knowledge of the material to be covered, followed by the first presentation session, which lasted 23 minutes, and the second presentation session, which also lasted 23 minutes. An icebreaker was held between the first and second presentation sessions to refocus the participants' attention. After the presentation was completed, a question-and-answer session was opened for the participants; the questions were collected first and then answered by the presenter. After the Q&A session concluded, certificates were presented to the presenter, followed by a post-test to measure the participants' improved understanding after receiving the material. Three active participants and three participants who scored high on the post-test were awarded door prizes in the form of e-money. Following the door prize presentation, a photo session was held to capture the moment with the participants, and the event concluded with closing remarks by the MC.

The results of the pre-test showed that, out of all 40 participants, 6 answered all questions correctly, 11 got 1 question wrong, 14 got 2 questions wrong, 7 got 3 questions wrong, and 2 got 5 questions wrong. The average score on the pre-test was 84.7. Meanwhile, on the post-test, 9 participants answered all questions correctly; 6 participants answered one question incorrectly; 7 participants answered two questions incorrectly; 3 participants answered three questions incorrectly; 1 participant answered four questions incorrectly; 1 participant answered five questions incorrectly; and 1 participant answered six questions incorrectly. The results of the post-test yielded an average score of 89.4.

The activity, which targeted adolescents and adults, faced several technical challenges related to unpredictable internet connectivity during the event. The theme, "Health Education for Adult Patients with Immune System Disorders," was highly beneficial for the participants of this webinar-based health education program. This is because many adults are still unaware of what the immune system is, how to maintain it, and examples of immune system disorders. The hope is that participants will, at a minimum, understand the importance of maintaining a healthy immune system. This topic serves as the foundation for the core material we aim to convey: maintaining immune health.

4. CONCLUSION

This online health education program for adolescents and adults focused on efforts to boost immunity to prevent rhinitis aimed to educate this demographic on strategies to strengthen their immune systems and avoid rhinitis. The program proceeded smoothly and successfully as planned. Based on the details of the program, it is recommended to organize similar programs in different locations and with different participants to improve the health of individuals with compromised immunity, particularly those suffering from rhinitis.

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