

Community Service through Health Education on Mumps and Hypertension

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ARTICLE INFO

Keywords: Mumps, Hypertension, Health Education, Community Service

Received : 16, May

Revised : 18, July

Accepted: 20, September

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ABSTRACT

This Community Service (PkM) activity aimed to enhance residents' knowledge and awareness regarding mumps and hypertension, covering definitions, risk factors, signs and symptoms, complications, prevention, and the importance of regular health check-ups. The activity was conducted through health education sessions for residents of Jemah Village, Jatigede District, Sumedang Regency, West Java. The implementation methods included interactive presentations, discussions, and question-and-answer sessions. There were 20 participants, comprising 7 men (35%) and 13 women (65%). The educational material covered mumps transmission and prevention, as well as the risk factors, impacts, early detection, and management of hypertension through healthy lifestyle practices. The activity proceeded successfully, with participants actively engaging in discussions and the Q&A session.

INTRODUCTION

Public health is a crucial component of national development. Efforts to improve health status are pursued not only through curative and rehabilitative services but also through health promotion and disease prevention activities. Community health education is a vital strategy to increase knowledge, foster positive attitudes, and encourage healthy lifestyles and disease-prevention practices. Jemah Village, located in Jatigede District, Sumedang Regency, West Java, is an area where the community requires ongoing health education. Providing health information at the village level aims to empower residents to recognize disease risk factors, identify signs and symptoms, practice prevention, and understand when to seek medical attention. One disease addressed in this community service initiative is mumps (epidemic parotitis). Mumps is a viral infection that primarily affects the parotid glands, causing swelling in the cheeks and jaw. It is transmitted mainly through respiratory droplets and contact with an infected person's secretions. Although most cases resolve on their own, mumps can lead to complications, making public understanding of its prevention and management essential.

In addition to infectious diseases, the community also faces issues regarding non-communicable diseases, such as hypertension. Hypertension is a condition characterized by persistently elevated blood pressure (Gu et al., 2023; Mills et al., 2020; Reviani et al., 2023; Suling et al., 2018; Timur et al., 2025). Often lacking distinct symptoms, it is frequently referred to as a "silent killer." If not properly managed, hypertension can increase the risk of cardiovascular disease, stroke, kidney disorders, and various other complications.

Hypertension is associated with various risk factors, including excessive salt intake, an unhealthy diet, physical inactivity, obesity, alcohol consumption, smoking, stress, as well as age and genetic factors. Some of these factors can be modified through lifestyle changes. Therefore, education regarding hypertension must emphasize the importance of regular blood pressure checks, adopting a healthy diet, engaging in physical activity, managing weight, and adhering to treatment regimens for those already diagnosed with the condition (Brunström et al., 2023; *Global Report on Hypertension: The Race against a Silent Killer*, 2026; Mills et al., 2020).

The selection of mumps and hypertension as topics for this educational outreach reflects the importance of improving public understanding of two distinct disease categories: infectious diseases and non-communicable diseases. Through structured education, the community will not only gain knowledge about these conditions but also implement preventive measures in daily life (Grennan, 2019; Likhitha et al., 2026; Rajma & Arun, 2017).

The community service activity titled "Education on Mumps and Hypertension for Residents of Jemah Village, Jatigede District, Sumedang Regency, West Java" was conducted as a contribution toward improving public health knowledge and awareness. This initiative is intended to support broader health promotion and prevention efforts while encouraging the community to take a more active role in maintaining their own health, as well as the health of their families and environment.

IMPLEMENTATION AND METHODS

The activity was conducted on January 15, 2025, with the target participants being residents of Jemah Village, Jatigede District, Sumedang Regency, West Java. A total of 20 people participated in the activity, with the following distribution.

Table 1. Distribution of Participant

Gender	Quantity	Percentage
Male	7	35%
Female	13	65%
Total	20	100%

Based on this distribution, there were more female participants than male participants.

The activity was conducted in the form of a community health education session covering the following key topics:

1. Mumps;
2. Modes of mumps transmission;
3. Signs and symptoms of mumps;
4. Complications of mumps;
5. Prevention of mumps;
6. Definition of hypertension;
7. Risk factors for hypertension;
8. Signs and symptoms of hypertension;
9. Complications of hypertension;
10. Prevention and control of hypertension;
11. The importance of regular blood pressure checks.

The methods employed included interactive lectures, discussions, and question-and-answer sessions. The material was presented using simple language to ensure it was easily understood by the community.

Implementation Stages

The activity was carried out in several stages.

a. Preparation Stage

The preparation stage included:

1. Coordination with Jemah Village officials.
2. Scheduling and selecting the venue for the activity.
3. Identifying the target participants.
4. Developing the educational materials.
5. Preparing educational media.
6. Preparing the necessary facilities and equipment.
7. Assigning tasks to the implementation team.

b. Implementation Stage

The activity began with participant registration and an opening session. This was followed by the presentation of material on mumps and hypertension. The material was presented interactively so that participants could grasp the information and relate it to their daily health conditions. After the presentation, a discussion and question-and-answer session was held. Participants were given the opportunity to ask questions regarding the diseases discussed, risk factors, prevention, and actions to take if symptoms were observed.

c. Evaluation Stage

Evaluation was conducted directly through:

1. A question-and-answer session following the presentation;
2. Observation of participant engagement;
3. Assessing participant understanding through oral questioning;
4. Discussion on the adoption of healthy lifestyle behaviors. Media and Resources

The media used in the activity include:

1. Presentation materials.
2. Leaflets or educational materials.
3. Laptop.
4. Writing instruments.
5. Other supporting resources.

RESULTS AND DISCUSSION

Activity Implementation Results

The community service activity themed "Education on Mumps and Hypertension for Residents of Jemah Village, Jatigede District, Sumedang Regency, West Java" was successfully conducted with the participation of 20 individuals. Participants included 7 men (35%) and 13 women (65%). The activity took place in an interactive atmosphere, featuring two-way communication between the presenters and the participants. Information regarding mumps was provided to enhance the community's understanding of this infectious disease. Participants received explanations covering the definition of mumps, its causes, modes of transmission, signs and symptoms, complications, and preventive measures.

Information on hypertension was presented to raise community awareness regarding this non-communicable disease, which often presents no symptoms in its early stages. The material covered the definition of hypertension, risk factors, health impacts, the importance of blood pressure monitoring, and actionable steps to keep blood pressure under control (Ng et al., 2017; Unger et al., 2020). Overall, the activity proceeded successfully. Participants demonstrated active engagement throughout the educational session, particularly during the discussion and Q&A segments. The questions raised by participants reflected a keen interest in the material presented and highlighted the community's need for health information that is easy to understand and applicable to daily life.

Overview of Mumps

Mumps is a viral infectious disease that can cause swelling of the parotid glands. Transmission occurs primarily through respiratory droplets and contact with secretions from infected individuals (Droz & Kontzias, 2018; Gobe et al., 2026; Yuki et al., 2025). Symptoms may include fever, headache, muscle pain, fatigue, loss of appetite, and swelling and pain in the jaw or cheek area. Public education about these symptoms is crucial so people can recognize the illness early. Mumps prevention can be achieved by adopting clean and healthy living habits, avoiding close contact with infected individuals, and undergoing immunization in accordance with established programs (Gobe et al., 2026; *Mumps Virus Vaccines: WHO Position Paper, March 2024*, 2026; Sriram et al., 2025). The public should also be informed that anyone exhibiting symptoms suggestive of mumps should seek assessment by a healthcare professional, particularly if symptoms are severe or complications arise. Public education on mumps aims to raise awareness of infectious diseases and encourage preventive behaviors in both families and the wider community (CDC, 2026; Yuki et al., 2025).

Discussion on Hypertension

Hypertension is a significant health issue because it can persist without obvious symptoms. Consequently, individuals may remain unaware that their blood pressure exceeds normal levels unless they undergo regular check-ups. Uncontrolled hypertension over the long term can increase the risk of various complications, including heart disease, stroke, and kidney disorders (Al Saffar et al., 2013; Qawasmeh et al., 2020). Therefore, early detection and blood pressure control are crucial for preventing complications.

Lifestyle factors play a vital role in managing blood pressure. The public should be encouraged to consume a balanced diet, limit salt intake, engage in regular physical activity, maintain a healthy weight, avoid smoking, and effectively manage stress. For individuals diagnosed with hypertension, adhering to medical advice and taking prescribed medications are essential for blood pressure control. Regular blood pressure monitoring is also necessary to assess health status and the effectiveness of management efforts (Carey et al., 2018). Through health education, it is hoped that the public will understand that hypertension is not merely an issue of high blood pressure recorded during a single examination, but a condition requiring ongoing monitoring and management.

Participant Participation

Participant engagement during the activity was considered quite good. Participants attended the session from start to finish and were given the opportunity to ask questions. The total of 20 participants demonstrates public interest in health education activities. The composition of the group – comprising 7 men and 13 women – indicates that the activity successfully reached individuals of both genders. The discussion session was a key component, as it allowed participants to share their understanding, experiences, and questions regarding mumps and hypertension.

Activity Evaluation

The evaluation of the activity was conducted directly through interaction with the participants. Overall, the activity successfully achieved its educational objectives: providing information on mumps and hypertension and raising awareness regarding the importance of disease prevention.

Key indicators of the activity's success include:

1. The activity was attended by 20 participants.
2. Participants attended the presentation on mumps and hypertension.
3. Participants engaged in discussions and the question-and-answer session.
4. Participants gained information on risk factors and disease prevention.
5. Participants gained an understanding of the importance of regular health check-ups.
6. Participants received information on healthy lifestyle practices for disease prevention.

However, a single educational session cannot fully reflect long-term changes in community health behavior. Therefore, similar educational activities should be conducted on an ongoing basis and integrated with village health programs and public health services. Documentation of the activity is provided in Figure 1 below:



Figure 1. Documentation of Activity

CONCLUSIONS AND RECOMMENDATIONS

A community service activity titled "Education on Mumps and Hypertension for Residents of Jemah Village, Jatigede District, Sumedang Regency, West Java" was conducted with 20 participants, comprising 7 men and 13 women. The activity involved presenting information on mumps and hypertension, followed by a discussion and a question-and-answer session. The material on mumps covered its definition, causes, transmission methods, signs and symptoms, complications, and prevention. The material on hypertension addressed its definition, risk factors, complications, the importance of blood pressure checks, and prevention and control efforts through a healthy lifestyle. The activity garnered community participation and provided an opportunity for attendees to gain health information and discuss various aspects of mumps and hypertension. This educational initiative aims to enhance community knowledge and awareness regarding preventive measures and to encourage residents to

undergo regular health check-ups. Health education activities of this nature should be conducted on an ongoing basis, involving village authorities, health volunteers, healthcare facilities, and educational institutions, so increased knowledge can lead to behavioral changes and improved community health.

1. The public is encouraged to adopt a healthy lifestyle and maintain good hygiene to prevent mumps and other diseases.
2. People are advised to undergo regular blood pressure checks and manage risk factors for hypertension.
3. Individuals with hypertension are expected to adhere to the advice and treatment plans provided by healthcare professionals.
4. Village authorities and health workers are expected to continue providing education and conducting routine health screenings.
5. Similar health education activities should be conducted periodically, incorporating assessments of participants' knowledge both before and after the sessions.

ACKNOWLEDGMENT

Special thanks to the Faculty of Medicine, UKI for the financial support provided in the implementation of this Community Service activity

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