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# Counselling on the correct use of antibiotics to prevent antibiotic resistance and the use of family medicinal plants (TOGA) for health

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#### **ABSTRACT**

A significant increase in the use of antibiotics in the community is often not matched by a proper understanding of their use, potentially leading to antibiotic resistance. This research aims to educate the community about the importance of proper antibiotic use and the utilization of Family Medicinal Plants (TOGA) as alternative medicine. Community service activities were carried out on November 24, 2024 in Salam Mulya Village, Pondok Salam District, Purwakarta Regency, in collaboration with Holistic Purwakarta Hospital. The methods used included education and discussion, with the distribution of brochures containing information on the use of antibiotics and TOGA. The results of the activity showed that the community showed high enthusiasm for the education provided, with 50 participants attending and actively participating in the discussion. The positive response from the community showed an increased understanding of the importance of the correct use of antibiotics and the utilization of herbal medicines. It is hoped that this activity can be continued and developed to increase public awareness about health.

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#### 1. Introduction

The effectiveness of antibiotics in treating and preventing infectious diseases is well established [1]. However, many antibiotics are used improperly or irrationally, even for conditions that do not require antibiotic treatment [2]. Additionally, there is a tendency for the public to purchase antibiotics without a doctor's prescription. This contributes to

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the emergence of antibiotic-resistant bacteria. Antibiotic resistance is becoming increasingly alarming, with incidence rates continuing to rise worldwide [3], [4].

Family Medicinal Plants (TOGA) are types of plants that can be easily cultivated in yards, home gardens, fields, or gardens for use as medicinal materials [5]. Despite various advancements in technology and science rapidly developing, the use of plants as traditional medicinal materials by the community continues to show significant growth [6]. This indicates that even with many modern innovations, public interest and trust in herbal medicine and the use of medicinal plants continue to grow and thrive. The community is becoming increasingly aware of the benefits of medicinal plants [7].

Community service activities were conducted on Sunday, November 24, 2024, in Salam Mulya Village, Pondok Salam District, Purwakarta Regency, in collaboration with RSU Holistic Purwakarta. This outreach was carried out to educate the local community about the importance of the Proper Use of Antibiotics to Prevent Antibiotic Resistance and the Utilization of Family Medicinal Plants (TOGA) for Health.

To prevent the increase in Antibiotic Resistance and to provide understanding regarding the Utilization of Family Medicinal Plants (TOGA) for health, education on the importance of the Proper Use of Antibiotics to Prevent Antibiotic Resistance and the Utilization of Family Medicinal Plants (TOGA) for Health was conducted [8], [9]. The aim of this Community Service is to explain the efforts made to prevent the increase in antibiotic resistance and to enhance public understanding of the utilization of Family Medicinal Plants (TOGA) in maintaining health.

The importance of education regarding the proper use of antibiotics is crucial to avoid resistance, as well as educating the community about the benefits and use of medicinal plants as alternative treatments [10]. Thus, it is hoped that the community can be more prudent in using antibiotics and further.

#### 2. Method

The methods used in implementing community service are education and discussion methods. The service team carries out community service programs by distributing brochures and educational explanations regarding the Appropriate Use of Antibiotics to Prevent Antibiotic Resistance and the Use of Family Medicine (TOGA) for Health. Preparation for the community service program was carried out on November 15 – November 23 2024 and the implementation of the activities was carried out on Sunday November 24 2024 at Salam Mulya Village, Pondok Salam District, Purwakarta Regency.

# 2.1. Preparation Stages

This preparation stage begins with determining the theme, place and time for the implementation of community service carried out by means of a discussion with the academic supervisor and internship supervisor. The results obtained from the discussion with the academic supervisor and internship supervisor were that the community service program was carried out on Saturday, November 24, 2024 in Salam Mulya Village, Pondok Salam District, Purwakarta Regency with a method of providing education on the Proper Use of Antibiotics to Prevent Antibiotic Resistance and the Utilization of Family Medicine (TOGA) for Health.

# 2.2. Survey Stages

The survey stage is carried out by looking at the condition of the place that will be used to implement the extension program.

# 2.3. Stages of Brochure Distribution

At this stage, the service team distributed brochures containing information on the Proper Use of Antibiotics to Prevent Antibiotic Resistance and the Utilization of Family Medicine (TOGA) for Health.



Figure 1. Distribution of brochures to residents attending the outreach activities







Figure 2. Providing education related to the proper use of antibiotics to prevent antibiotic resistance and the use of family medicine (TOGA) for Health

# 2.4. Stages of Socialization

At this stage, the service team provided education on the Proper Use of Antibiotics to Prevent Antibiotic Resistance and the Utilization of Family Medicine (TOGA) for Health and held discussions with residents who attended the outreach program and the service team asked questions related to the discussion that had been explained to residents who attended the activity.

# 2.5. Closing Stages

At this stage, before the closing, door prizes and thanks were given, as well as a documentation session.



Figure 3. Distribution of door prizes



Figure 4. Group photo of residents attending outreach activities in the village Salam Mulya, Pondok Salam District, Purwakarta Regency

#### 3. Results and Discussion

The initial stage carried out by the service team was the preparation process starting from determining the theme, time and place of implementation, based on information obtained that residents around the area needed to be educated on how to use antibiotics properly and correctly to prevent antibiotic drug resistance and seen from the area that is still beautiful, the service team raised the theme of Utilization of Family Medicine (TOGA) for health as an alternative for residents who believe more in herbal medicine.

This implementation was carried out on Sunday, November 24, 2024 which took place in Salam Mulya Village, Pondok Salam District, Purwakarta Regency. The next process is obtaining a permit for the location from the village, after the village gives permission, a survey and observation of the location is carried out to find out the condition of the location and the facilities and infrastructure that must be prepared.

The next stage is the implementation of activities that begin with the opening and introduction of the service team, distribution of brochures and filling in data of residents who attended the activity, providing education on the Proper Use of Antibiotics to Prevent Antibiotic Resistance and the Utilization of Family Medicine (TOGA) for Health, opening a discussion session and a question and answer session provided by the service team for residents who attended the activity.

The results obtained from the outreach activities were the distribution of brochures on the Proper Use of Antibiotics to Prevent Antibiotic Resistance and the Utilization of Family

Medicine (TOGA) for Health as many as 50 sheets, and there were 5 residents who had the opportunity to get door prizes that had been prepared by the community service team.





Figure 5. Distribution of brochures and filling in data of residents attending the program counseling



Figure 6. Proper use of antibiotics brochure



Figure 7. Family medicine utilization brochure

#### 4. Conclusion

In community service activities in Salam Mulya Village, Pondok Salam District, Purwakarta Regency regarding education on the Proper Use of Antibiotics to Prevent Antibiotic Resistance and the Utilization of Family Medicine (TOGA) for Health which was attended by approximately 50 people, it can be concluded that:

- 1. Based on the response from residents, many people think that antibiotics are the same as medicines in general, but after being given education about DAGUSIBU (Get, Use, Store and Dispose of) Antibiotics, seen from the enthusiasm of residents, they can be more accepting and understand the importance of paying attention to how to use antibiotics.
- 2. Judging from the residents' response regarding the Utilization of Family Medicine (TOGA) for Health, it turns out that residents in Salam Mulya Village, especially the elderly, often undergo treatment with herbal medicines found in the environment around their homes.

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