

## Socialization of ARI Towards Environmental Factors in Lorejo Village, Bakung District, Blitar Regency

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### ABSTRACT

Based on the results of Riskesdas (2018), the prevalence of ARI in Indonesia is 9.3%, of which 9.0% are male and 9.7% are female (Ministry of Health of the Republic of Indonesia, 2018). This understanding has not been fully understood by mothers and the elderly, so it is necessary to conduct socialization regarding the understanding and causes of people getting ARI. Selection of Dsn. Ngebruk Ds. Lorejo Kec. Bakung Kab Bitar, because the mobility of the community lacks knowledge about ARI and to increase insight regarding environmental factors that are at risk of ARI (Acute respiratory tract infection). The type of research used is descriptive analytical and the research design is cross-sectional. The objects of this study were mothers and elderly people studying in Ngebruk hamlet, Lorejo village, Bakung sub-district, Blitar regency. The results of ARI knowledge were obtained as much as 73.33% using the Gutman scale approach. With these results, it is stated that participants' knowledge of ARI is good, but participants still need to increase their knowledge in order to reduce the risk of contracting ARI. The results of ARI knowledge of 90%, with the results before and after the provision of community service materials increasing. It is important to have community service on preventing ARI in Lorejo Village, because this is very continuous with the priority of health problems in Lorejo Village, namely the counseling method that is less creative and innovative. By providing knowledge about understanding and also preventing ARI for mothers and the elderly, it is hoped that they can independently apply what they have learned to their families.

**Keywords:** ARI, Knowledge, Mothers and the Elderly

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### INTRODUCTION

Acute respiratory tract infection (ARI) is an infection of the upper or lower respiratory tract caused by an infectious agent that can cause complications and death, especially in children. Transmission between humans generally occurs through droplets, but can also occur through contact with hands or contaminated surfaces. The virus that causes the infection is rhinovirus. Acute respiratory tract infection (ARI) is the main cause of morbidity and mortality from infectious diseases in the world. Mortality rates are very high in infants, children, and the elderly, especially in countries with low and middle income per capita (RI, 2011).

This infection is caused by viruses, fungi and bacteria. ARI will attack the host if the body's resistance (immunology) decreases, groups that have immune systems that are susceptible to various diseases (Danusantoso, 2012). The root cause of environmental-based diseases is related to poor sanitation and environmental health problems. Therefore, if the eradication only focuses on curative and rehabilitative aspects, it certainly will not be optimal. In eradicating this disease, what needs to be done is to change the lifestyle and behavior of the community by intensifying promotive and preventive aspects (RI, 2017).

The elderly are a critical age group because they are more at risk of exposure to pathogens and their immune systems are weak. Clean and Healthy Living Behavior (PHBS) can be carried out as an effort to improve health levels and break the chain of disease transmission. Education is provided through interactive discussions. Activities are carried out by holding socialization in Ngebruk hamlet, Lorejo village, Bakung sub-district, Blitar district, consisting of mothers and the elderly.

## OBJECTIVE

1. Increasing public knowledge about the definition, symptoms and prevention of ARI.
2. Increasing public knowledge about how to properly prevent ARI.

## METHODS

The type of research used is descriptive analytical and the research design is cross-sectional. The objects of this study were mothers and elderly people studying in Ngebruk hamlet, Lorejo village, Bakung sub-district, Blitar regency. The socialization activity was carried out on October 13, 2023 at Post 2 of Ngebruk hamlet. The delivery of the material used a set of laptops, LCDs and Pre and Post test questionnaires.

## RESULTS

The results of this analysis are presented in the form of a table obtained from respondent questionnaire data consisting of 18 respondents in Lorejo Village.

**Table 1.** Pre-Post Test Questions

No.	Statement	Correct	Wrong
1	ARI is an infection that occurs in the respiratory Tract		
2	ARI stands for Acute Respiratory Tract Infection		
3	Transmission of viruses/bacteria that cause ARI can occur through contact with saliva droplets from an infected person.		
4	Fever is a symptom of ARI		
5	The main prevention of ARI is by implementing clean and healthy living behavior.		

**Table 2.** ARI Pre-Test Data

Question Items	Correct Answer	Wrong Answer
P1	18	0
P2	18	0
P3	7	11
P4	5	13
P5	18	0
Total	66	24
Average	13.2	4.8

Based on the table, the results of ARI knowledge were obtained as much as 73.33% using the Gutman scale approach. With these results, it is stated that participants' knowledge of ARI is good, but participants still need to increase their knowledge in order to reduce the risk of contracting ARI. Then from these data, an intervention was carried out to provide education in the form of material in community service, according to the contents of the questionnaire.

**Table 3.** ARI Post-Test Data

Question Items	Correct Answer	Wrong Answer
P1	18	0
P2	18	0
P3	18	0
P4	9	9
P5	18	0
Total	81	9
Average	16.2	1.8

The table above shows the results of ARI knowledge of 90%, with the results before and after the provision of community service materials increasing. This shows that participants understand the material that has been presented by the speaker.

## DISCUSSION

Research conducted by Wahyuningsih (2017) stated that from year to year, the prevalence of ARI in Indonesia remains high, which is around 21.6% in urban areas. The results of the Household Health Survey (SKRT) showed that the number of toddlers with pneumonia decreased from 804,937 in 1999 to 479,283 in 2000. However, from 2000 to 2003 the number of toddlers with ARI tended to remain at the same number even though the government had launched an ARI eradication program. The World Health Organization (2019) stated that globally, the infant mortality rate has decreased by 41%, from an estimated level of 87 deaths per 1000 live births in 1990 to 51 deaths per 1000 live births in 2011.

The implementation of community service at Post 2 of Ngebruk Hamlet was attended by mothers and elderly members of the pengajian totaling 18 participants. Before being given the material, participants were tested by conducting a pre-test to determine their knowledge before carrying out community service. From the results of the pre-test before the knowledge was obtained, the results were 13.2% correct in answering according to the theory and 4.8% incorrect in answering not according to the theory.

This shows that the participants' knowledge of ARI is good, but the participants still need to

improve their knowledge in order to reduce the risk of contracting ARI. Participants paid attention to the community service material presented. There were several questions from community service participants that were submitted to the community service presenter. This shows that the participants were very enthusiastic about holding community service about ARI delivered by IIK Strada Indonesia students. To determine the understanding of the material, a post-test was conducted.

From the results of the post-test data on ISPA knowledge obtained, 16.2% were correct in answering according to the theory with a good category, 1.8% answered incorrectly and did not match the theory. This shows that there is a change in knowledge before and after community service.

## CONCLUSION

Based on the results of observations that have been carried out, it can be concluded that it is important to have community service on preventing of ARI in Lorejo Village, because this is very continuous with the priority of health problems in Lorejo Village, namely the counseling method that is less creative and innovative. By providing knowledge about understanding and also preventing ARI for mothers and the elderly, it is hoped that they can independently apply what they have learned to their families. In addition, this community service shows that the participants are very enthusiastic and also understand the material that has been presented by the speaker.

It is also hoped that the public will be aware of the dangers of cigarettes, cigarette smoke, smoke from burning garbage and also vehicle exhaust fumes are one of the supporting factors in the occurrence of ARI.

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