

**ISSN 2597- 6052**DOI: <https://doi.org/10.56338/mppki.v7i8.5952>**MPPKI****Media Publikasi Promosi Kesehatan Indonesia**  
*The Indonesian Journal of Health Promotion***Research Articles****Open Access****Analysis of Hypertention Prevention Behavior Based on Health Belief Model at Pulau Nasi, Pulo Aceh****Putroe Aliya Ricinta<sup>1\*</sup>, Farrah Fahdhienie<sup>2</sup>, Putri Ariscasari<sup>3</sup>**<sup>1</sup> Faculty of Public Health, Universitas Muhammadiyah Aceh | email [putroealiyaricinta@gmail.com](mailto:putroealiyaricinta@gmail.com)<sup>2</sup> Faculty of Public Health, Universitas Muhammadiyah Aceh | email [farrah.fahdhienie@unmuha.ac.id](mailto:farrah.fahdhienie@unmuha.ac.id)<sup>3</sup> Faculty of Public Health, Universitas Muhammadiyah Aceh | email [putri\\_ariscasari@yahoo.co.id](mailto:putri_ariscasari@yahoo.co.id)\* Corresponding Author: [putroealiyaricinta@gmail.com](mailto:putroealiyaricinta@gmail.com)**ABSTRACT**

**Introduction:** Non-communicable diseases (NCDs) are one of the leading causes of disease worldwide and are a significant public health problem. One of the non-communicable diseases is Hypertension. Hypertension is the leading cause of premature death worldwide with 1.28 billion sufferers out of a total population of 8.05 billion or 16% of people worldwide suffering from Hypertension.

**Objective:** This study aims to examine the relationship between Hypertension prevention behavior based on the concept of a person's Health Belief Model of susceptibility, seriousness, benefits, barriers and cues to action in the Pulau Nasi community at Pulo Aceh sub-sub-sub-district.

**Method:** This cross-sectional study uses quantitative methods using univariate analysis to assess the magnitude of the problem and bivariate analysis to see the relationship between dependent and independent variables tested using the chi-square test. This study was conducted on Pulau Nasi, Pulo Aceh sub-sub-sub-district with a population of 81 respondents who did not have Hypertension.

**Result:** The results showed that Hypertension prevention behavior among respondents on Pulau Nasi had a significant relationship between barriers and Hypertension prevention behavior in the Health Belief Model with a p-value of 0.045, and between cues to action with a p-value of 0.040. There was no significant relationship between perceived susceptibility (p-value 0.103), perceived seriousness (p-value 0.445), and perceived benefits (p-value 0.123).

**Conclusion:** There is a relationship between barriers and cues to action on Hypertension prevention behavior in Pulau Nasi, Pulo Aceh sub-sub-sub-district.

**Keywords:** Hypertension; Preventive Behavior; Health Belief Model

## INTRODUCTION

Hypertension is one of the most common health problems faced globally, with its prevalence continuing to rise each year. According to the latest data from the World Health Organization (WHO), in 2023, more than 1.28 billion people worldwide suffer from Hypertension, with over 700 million of them not receiving simply treatment. In Indonesia, the prevalence of Hypertension among the adult population reached 34.1% in 2022, with higher rates in rural areas compared to urban areas. This highlights the need for increased efforts in the prevention and control of Hypertension, especially in regions with limited access to healthcare services (1).

In Indonesia, the prevalence of Hypertension is also showing a concerning increase. The 2018 Basic Health Research (RISKESDAS) report indicated that the prevalence of Hypertension among the population aged  $\geq 18$  years reached 34.1%, and this figure has continued to rise in recent years. A report from the Indonesian Ministry of Health in 2021 showed that the prevalence of Hypertension had reached 36.9%, with many cases remaining undiagnosed or lessly controlled. In previous research, it was stated that coastal communities have a risk of developing Hypertension due to people who have a tendency to consume foods with high sodium content, as well as seafood that has high cholesterol levels. The proven risk factors include body mass index with obesity status, moderate stress levels, heavy smoking and exposure to cigarette smoke, lack of physical activity and poor diet. For this reason, efforts to prevent Hypertension are carried out starting from increasing public awareness and making changes to a healthier lifestyle. To understand and practice such a lifestyle, individuals and communities need to learn the right behavior in this case the Health Belief Model (HBM) is a theory in the field of health related to health behavior. (2–4).

Efforts to prevent and control Hypertension must begin with raising public awareness and promoting a shift towards healthier lifestyles. To understand and adopt the correct lifestyle and avoid disease, individuals and communities need to learn appropriate behaviors. The Health Belief Model, first introduced by Rosenstock in the 1950s, is a psychological theory that explains how an individual's health beliefs influence their health behaviors. The Health Belief Model (HBM) is one of the most widely used theoretical frameworks for understanding and analyzing disease prevention behaviors, including Hypertension. This model emphasizes individual beliefs about personal susceptibility to a disease, perceptions of the severity of the disease, the benefits of preventive actions, and the barriers that may be encountered in taking such actions. The model is used to explain and predict disease prevention behaviors, including the role of disease and health behaviors. Health behavior refers to all activities performed by an individual who believes they are healthy, with the aim of preventing illness (5,6).

Hypertension is often referred to as the "silent killer" because it frequently shows no clear symptoms but can lead to serious complications such as heart disease, stroke, and kidney failure if not properly managed. As time progresses, many studies have explored the application of the Health Belief Model (HBM) in the context of Hypertension prevention. Recent studies show that a deep understanding of the components of the Health Belief Model (HBM) can help in designing more effective interventions to encourage individuals to take preventive actions, such as dietary changes, increased physical activity, and stress management. Several studies have tested the effectiveness of HBM in the context of Hypertension prevention. These studies indicate that perceptions of susceptibility and severity of the disease can enhance individuals' motivation to engage in preventive actions, such as modifying their diet, exercising, and regularly monitoring their blood pressure. On the other hand, perceptions of benefits and barriers play a crucial role in determining whether individuals will adhere to preventive recommendations provided by healthcare professionals. Self-efficacy, or an individual's belief in their ability to carry out preventive actions, has also been shown to be a strong predictor of compliance with health interventions (7–9).

In addition, Hypertension prevention can also be achieved by adopting a healthy lifestyle, such as maintaining a nutritious diet with daily consumption of fruits and vegetables, engaging in regular physical activity, exercising regularly, avoiding smoking and exposure to secondhand smoke, limiting salt and oil intake, abstaining from alcoholic beverages, and effectively managing stress (10). This research aims to analyze the preventive behaviors implemented to address the prevalence of Hypertension on Pulau Nasi, Pulo Aceh Sub-sub-district, Aceh Besar.

## METHOD

The research conducted in this study was quantitative with a cross-sectional approach, using the chi-square test to see the relationship between the independent variables of susceptibility, severity, benefits, barriers, and cues to action with the dependent variable of Hypertension prevention behavior. These variables were chosen because they are suitable to see people's behavioral perceptions. The sampling technique used was probability sampling. Probability sampling is a technique that gives each element (member) of the population the same opportunity to be selected as part of the sample. The type of probability sampling used is accidental sampling, which is used when respondents with certain criteria are sought and encountered for the first time. This research was conducted on Pulau Nasi, Pulo Aceh sub-district, Aceh Besar in 2023. The population of this study were residents of Pulau Nasi who did not suffer from Hypertension, with a total of 527 households that did not suffer from Hypertension based on the

Family Card (KK). The sample in this study is part of the population, consisting of 81 Family Cards from 5 villages on Pulau Nasi, Pulo Aceh sub-district, Aceh Besar.

The study was conducted by conducting a direct survey, distributing questionnaires to housewives in Pulau Nasi, Pulo Aceh. The questionnaire format used included open-ended statements regarding perceptions. Closed questions were used to determine characteristics such as age, education level, and occupation. Open-ended statements used a 4-point Likert scale. The data collected included primary and secondary data. Primary data was obtained from questionnaires distributed to the sample through interviews with selected respondents. Secondary data was not collected directly but was obtained from existing data and review of documents or archives in Dompot Dhuafa Aceh's health services.

Data processing includes editing, coding, entry, cleaning, and processing. Data analysis was carried out using two methods, namely univariate and bivariate analysis with the chi-square test. The data that has been analyzed has been validated from the reliability of the questionnaire which is then presented in tabular form, including frequency tables (one-way tabulation), cross tabulation (two-way tabulation) accompanied by narrative explanations that discuss the frequency, relationship between variables, and factors associated with Hypertension prevention behavior in the community of Pulau Nasi, Pulo Aceh.

## RESULTS

### Characteristics Analysis

Based on the research conducted, the results regarding the characteristics of the respondents are as follows:

**Table 1.** Respondent Characteristics

Description	Frequency	Percentage
<b>Age</b>		
Late Adolescence	4	4.9
Early Adulthood	35	43.2
Late Adulthood	31	38.3
Early Elderly	9	11.1
Late Elderly	2	2.5
<b>Total</b>	<b>81</b>	<b>100.0</b>
<b>Last Education</b>		
Higher	12	14.8
Secondary	47	58.0
Primary	22	27.2
<b>Total</b>	<b>81</b>	<b>100.0</b>
<b>Work</b>		
Housewife	72	88.9
Trader	2	2.5
Farmer	3	3.7
Midwife	1	1.2
Teacher	3	3.7
<b>Total</b>	<b>81</b>	<b>100.0</b>

Source: Primary Data (Processed in 2024)

Table 1 outlines the characteristics of the respondents in the study. In terms of age, the majority are in early adulthood (43.2%) and late adulthood (38.3%), with fewer respondents in late adolescence (4.9%) and the elderly age groups (13.6% combined). Regarding educational attainment, the largest proportion of respondents completed secondary education (58.0%), followed by primary education (27.2%), and fewer achieved higher education (14.8%). The predominant occupation among respondents is homemaker (88.9%), with very few working as traders, farmers, midwives, or teachers. Geographically, most respondents are from Alue Reuyeung (33.3%), followed by Rabo (23.5%), and other villages such as Deudap (16.0%), Pasi Janeng (14.8%), and Lamteng (12.3%). This distribution highlights the predominance of homemakers and those with secondary education among the respondents, as well as a varied geographic representation.

## Univariate Analysis

Table 2. Univariate Analysis

Distribution	Frequency (n)	Percentage (%)
<b>Hypertension Prevention Behavior</b>		
Less	76	93.8
Simply	5	6.2
Good	0	0.0
<b>Total</b>	<b>81</b>	<b>100.0</b>
<b>Susceptibility</b>		
Low	54	66.7
Moderate	27	33.3
High	0	0.0
<b>Total</b>	<b>81</b>	<b>100.0</b>
<b>Severity</b>		
Low	73	90.1
Moderate	8	9.9
High	0	0.0
<b>Total</b>	<b>81</b>	<b>100.0</b>
<b>Benefits</b>		
Low	56	69.1
Moderate	25	30.9
High	0	0.0
<b>Total</b>	<b>81</b>	<b>100.0</b>
<b>Barriers</b>		
Low	8	9.9
Moderate	54	66.7
High	0	0.0
<b>Total</b>	<b>81</b>	<b>100.0</b>
<b>Cues to Action</b>		
Low	30	37.0
Moderate	51	63.0
High	0	0.0
<b>Total</b>	<b>81</b>	<b>100.0</b>

Source: Primary Data (Processed in 2024)

Table 2 presents the distribution of respondents based on several factors related to health behavior and perception. Regarding Hypertension prevention behavior, the majority of respondents (93.8%) exhibited less behavior, with only a small percentage (6.2%) demonstrating simply behavior. None of the respondents were categorized as having good prevention behavior. In terms of susceptibility to Hypertension, most respondents (66.7%) fell into the moderate category, while a significant portion (33.3%) had low susceptibility. Similarly, the severity of perceived Hypertension among respondents was mostly categorized as low (90.1%), with a smaller percentage (9.9%) perceiving it as moderate. When considering perceived benefits of Hypertension prevention, a majority (69.1%) perceived the benefits as low, while 30.9% viewed them as moderate. Regarding barriers to Hypertension prevention, most respondents (66.7%) reported moderate barriers, whereas a small minority (9.9%) perceived low barriers. Finally, cues to action for Hypertension prevention were predominantly viewed as moderate (63.0%) among respondents, with 37.0% perceiving them as low. Overall, the data reflects a predominance of moderate perceptions across various dimensions related to Hypertension prevention behaviors and perceptions among the respondents surveyed.

## Bivariate Analysis

**Table 3.** Relationship Between Susceptibility and Hypertension Prevention Behavior on Pulau Nasi, Pulo Aceh Sub-sub-district, 2023

Susceptibility	Hypertension Prevention Behavior				Total		p-value
	Less		Simply		n	%	
	n	%	n	%			
Low	49	90,7	5	9,3	54	100,0	0,103
Moderate	27	100.0	0	0,0	27	100,0	
<b>Total</b>	<b>76</b>	<b>93,8</b>	<b>5</b>	<b>6,2</b>	<b>81</b>	<b>100,0</b>	

Source: Primary Data (Processed in 2024)

The statistical table shows that the perception of susceptibility with Hypertension prevention behavior is lower in the moderate category (0%) compared to the low category (6.2%). Meanwhile, the prevalence of deficient preventive behavior was higher in the low category (60.5%) compared to the moderate category (33.3%). The statistical test results showed a significance value of ( $0.103 > 0.05$ ) which indicates that there is no significant relationship between susceptibility and Hypertension prevention behavior. In this result, many respondents answered the questionnaire with low results on perceived susceptibility to Hypertension prevention behavior. Hypertension prevention behavior from the aspect of perceived susceptibility in the questionnaire includes the following things, experiencing high blood pressure if not consuming fruits and vegetables every day, consuming excessive salt every day, not doing physical activity every day, not exercising three times a week, being exposed to cigarette smoke every day and not checking blood pressure once a month.

**Table 4.** Relationship Between Seriousness and Hypertension Prevention Behavior on Pulau Nasi, Pulo Aceh Sub-sub-district, 2023

Seriousness	Hypertension Prevention Behavior				Total		p-value
	Less		Simply		n	%	
	n	%	n	%			
Low	68	93,2	5	6,8	73	100,0	0,445
Moderate	8	100.0	0	0,0	8	100,0	
<b>Total</b>	<b>76</b>	<b>93,8</b>	<b>5</b>	<b>6,2</b>	<b>81</b>	<b>100,0</b>	

Source: Primary Data (Processed in 2024)

The statistical table shows that the perception of seriousness regarding Hypertension prevention behavior is higher in the low seriousness category (6.2%) compared to the medium category (0%). The prevalence of insufficient preventive behavior was also greater in the low seriousness category (93.2%) compared to the medium category (100%). The statistical test results show a significance value of ( $0.445 > 0.05$ ), indicating that there is no significant relationship between the level of seriousness and Hypertension prevention behavior. Based on these results, many respondents answered the questionnaire with low results regarding the perception of the seriousness of Hypertension prevention behavior. Hypertension prevention behavior from the aspect of perceived seriousness seen in the questionnaire includes the following, experiencing high blood pressure if you don't eat fruit and vegetables every day, consuming excessive salt every day, not doing physical activity every day, not exercising three times a week, exposed to cigarette smoke every day and not checking blood pressure once a month.

**Table 5.** Relationship Between Benefits and Hypertension Prevention Behavior on Pulau Nasi, Pulo Aceh Sub-sub-district, 2023

Benefits	Hypertension Prevention Behavior				Total		p-value
	Less		Simply		n	%	
	n	%	n	%			
Low	51	91,1	5	8,9	56	100,0	0,123
Moderate	25	100.0	0	0,0	25	100,0	
<b>Total</b>	<b>76</b>	<b>93,8</b>	<b>5</b>	<b>6,2</b>	<b>81</b>	<b>100,0</b>	

Source: Primary Data (Processed in 2024)

The statistical table shows that the perceived benefits related to Hypertension prevention behavior are higher in the low benefit category (6.2%) compared to the medium benefit category (0%). Meanwhile, preventive behavior is more or less common in the low benefit category (91.1%) compared to the medium category (100%). The statistical

test results show a significance value ( $0.123 > 0.05$ ) which shows that there is no significant relationship between perceived benefits and Hypertension prevention behavior. Based on these results, many respondents answered the questionnaire with low results regarding the perceived benefits of Hypertension prevention behavior. Hypertension prevention behavior from the aspect of perception of benefits seen in the questionnaire includes the following, experiencing high blood pressure if you don't eat fruit and vegetables every day, consume excessive salt every day, don't do physical activity every day, don't exercise three times a week, exposed to cigarette smoke every day and not checking blood pressure once a month.

**Table 6.** Relationship Between Barriers and Hypertension Prevention Behavior on Pulau Nasi, Pulo Aceh Sub-sub-district, 2023

Barriers	Hypertension Prevention Behavior				Total	<i>p-value</i>
	Less		Simply			
	n	%	n	%		
Low	6	75,0	2	25,0	8	0,045
Moderate	51	94,4	3	5,6	52	
High	19	100,0	0	0,0	19	
<b>Total</b>	<b>76</b>	<b>93,8</b>	<b>5</b>	<b>6,2</b>	<b>81</b>	<b>100,0</b>

Source: Primary Data (Processed in 2024)

The statistical table shows that perceived barriers related to Hypertension prevention behavior are more common in the medium category (5.6%) than in the low category (25.0%) and high category (0%). The prevalence of less preventative behavior was lower in the low barrier category (7.4%) compared to the high barrier category (23.5%) and the moderate barrier category (7.4%). The statistical test results show a significance value ( $0.045 < 0.05$ ) which shows that there is a significant relationship between perceived barriers and Hypertension prevention behavior. In these results, in the questionnaire, many respondents answered their perception of barriers from moderate to high in Hypertension prevention behavior. This includes many respondents who do not consume fruit and vegetables every day because of availability, have difficulty controlling the use of salt in cooking, do not exercise because they are busy and find it difficult to avoid cigarette smoke because of the smoker's environment.

**Table 7.** Relationship Between Cues to Action and Hypertension Prevention Behavior on Pulau Nasi, Pulo Aceh Sub-sub-district, 2023

Cues to Action	Hypertension Prevention Behavior				Total	<i>p-value</i>
	Less		Simply			
	n	%	n	%		
Low	26	86,7	4	13,3	30	0,040
Moderate	50	98,0	1	2,0	51	
<b>Total</b>	<b>76</b>	<b>93,8</b>	<b>5</b>	<b>6,2</b>	<b>81</b>	

Source: Primary Data (Processed in 2024)

The statistical table shows that the perception of action cues related to Hypertension prevention behavior is more common in the low category (13.3%) compared to the medium category (2.0%). The prevalence of less preventive behavior is also higher in the low category (86.7%) than in the medium category (98.0%). The statistical test results show a significance value ( $0.040 < 0.05$ ) which shows that there is a significant relationship between perception of action cues and Hypertension prevention behavior. This suggests that higher barriers lead to lower prevention behavior, thus highlighting the importance of cues to action in increasing prevention efforts. In these results, many people answered that their perception of cues to action was moderate to low in Hypertension prevention behavior. This includes the large number of respondents who do not know information about the dangers of using excess salt, do not know further information that it is important to exercise at least three times a week so they do not exercise and do not avoid exposure to cigarette smoke after knowing the education that has been provided.

## DISCUSSION

Perception of susceptibility involves personal assessment of potential health risks. Individuals who believe they have a low risk of illness are more likely to engage in unhealthy behaviors, while those who perceive themselves as at high risk are more likely to take action to reduce their risk of disease. Table 3 shows that the perception of susceptibility to Hypertension prevention behavior is less prevalent in the moderate category (0%) compared to the low category (6.2%). Meanwhile, the less prevention behavior is more common in the low category (60.5%) compared to the moderate category (33.3%). The statistical test results indicate a significance value of ( $0.103 > 0.05$ ).

This result suggests that the null hypothesis is accepted because the  $p$ -value  $> 0.05$ , indicating that there is no significant relationship between perceived susceptibility and Hypertension prevention behavior in the community of Pulau Nasi, Pulo Aceh Sub-sub-district. Prevention actions for a disease can be influenced by the perception of vulnerability, as individuals are more likely to take preventive, reducing, or controlling actions if they perceive themselves as vulnerable to the condition. This study's findings do not align with the Health Belief Model, which posits that individuals are motivated to adopt healthy behaviors if they feel threatened by a potential health condition. Perceived susceptibility is crucial as it is a primary determinant for individuals to engage in health-promoting behaviors (4,11).

Table 4 shows that the perception of severity related to Hypertension prevention behavior is more prevalent in the low category (6.2%) compared to the moderate category (0%). Meanwhile, less prevention behavior is more common in the low category (84%) compared to the moderate category (9.9%). The statistical test results indicate a significance value of  $(0.445 > 0.05)$ . This result suggests that the null hypothesis is accepted and the alternative hypothesis is rejected because the  $p$ -value  $> 0.05$ , indicating that there is no significant relationship between perceived severity and Hypertension prevention behavior in the community of Pulau Nasi, Pulo Aceh Sub-sub-district. This finding contradicts by previous research which reported a significant relationship between perceived severity and Hypertension prevention behavior at Bandarharjo health center ( $p$ -value = 0.010). Severity in prevention behavior is a key factor influencing individuals' decisions to take proactive steps in maintaining health and reducing risk. This is closely related to individuals' perceptions of the potential threats or dangers they might face. When someone perceives a condition or disease as having a significant potential for harm, they are more likely to take serious preventive actions. Additionally, awareness of one's own susceptibility to risks also plays an important role. If someone feels vulnerable to a condition, they are more likely to take serious actions to protect themselves (12–14).

Table 5 shows that the perception of benefits related to Hypertension prevention behavior is more prevalent in the low category (6.2%) compared to the moderate category (0%). Meanwhile, less prevention behavior is more common in the low category (63%) compared to the moderate category (30.9%). The statistical test results indicate a significance value of  $(0.123 > 0.05)$ . This result suggests that the null hypothesis is accepted and the alternative hypothesis is rejected because the  $p$ -value  $> 0.05$ , indicating that there is no significant relationship between perceived benefits and Hypertension prevention behavior in the community of Pulau Nasi, Pulo Aceh Sub-sub-district. In assessing individuals' perceptions of the benefits of engaging in behaviors to reduce disease risk, if an individual believes that a certain action will reduce susceptibility to health problems or decrease its severity, they are likely to engage in the behavior regardless of objective facts about the effectiveness of the action. This finding is inconsistent with previous research by previous research which reported a significant relationship between perceived benefits and Hypertension prevention behavior. In their study, respondents with good perception of benefits had better prevention behavior, while those with less perception of benefits showed lesser prevention behavior, with a significance value ( $p$ -value) of 0.035 (15,16).

Perceived barriers refer to an individual's views or assessments regarding the significance of obstacles to adopting or performing recommended actions. A person might not take action, even if they believe in the benefits of the action, due to the presence of these barriers. Table 6 shows that the perception of barriers to Hypertension prevention behavior is notably higher in the moderate category (3.7%) compared to the low category (2.5%) and the high category (0%). Meanwhile, preventive behavior is less in the low category (7.4%) compared to the high category (23.5%) and the moderate category (7.4%). The statistical test results indicate a significance value of  $(0.045 < 0.05)$ . This result indicates that the alternative hypothesis is accepted because the  $p$ -value  $< 0.05$ , suggesting a significant relationship between the perception of barriers and Hypertension prevention behavior in the community of Pulau Nasi, Kecamatan Pulo Aceh. This finding is consistent with previous research by previous research which concluded that perceptions of barriers in Hypertension prevention behavior showed that 63 respondents (87.5%) did not experience barriers and 9 respondents (12.5%) did. Respondents who engaged only in indoor activities or had no additional activities after campus accounted for 42 respondents (58%), while those who engaged in activities outside the home or campus numbered 30 respondents (42%). There are factors that can influence adolescents' perceptions in Hypertension prevention as an interpersonal health behavior. According to the Health Belief Model, there are five factors influencing health-related actions: perceived susceptibility (the perceived or known vulnerability), perceived severity (the perceived danger or severity), perceived benefit of action (the perceived benefit of taking action), perceived barrier to action (the perceived barriers to taking action), and cues to action (triggers to preventive action). These five factors are understood as elements that can influence adolescents to take positive actions for themselves. Additionally, individual readiness and environmental prompts for behavioral change can also influence a person's health behavior (17–19).

Cues to action, or action cues, are necessary to motivate individuals to engage in health-related behaviors. These cues can originate from internal or external sources. Physiological signals (such as pain or symptoms) are

examples of internal cues to action. External cues include events or information from close contacts, such as media or healthcare providers. Table 7 shows that the perception of cues to action for Hypertension prevention behavior is notably higher in the low category (4.9%) compared to the moderate category (1.2%). Conversely, preventive behavior is lower in the low category (32.1%) compared to the moderate category (61.7%). The statistical test results indicate a significance value of ( $0.040 < 0.05$ ). This result suggests that the alternative hypothesis is accepted because the  $p$ -value  $< 0.05$ . This finding aligns with research conducted by previous research which indicates a relationship between cues to action and adherence to Hypertension treatment, with a  $p$ -value of 0.0008. Additionally, the study by previous research supports these results, showing that cues to action are related to adherence to treatment ( $p = 0.149$  and  $p = 0.01$ ). The more action cues present, the better the adherence to Hypertension treatment. This is because reading and seeking information, consulting with healthcare professionals, and discussing Hypertension with relatives can enhance understanding and ultimately motivate adherence to prevention or treatment measures. Perception of cues to action can increase an individual's awareness of Hypertension risk and encourage them to take preventive actions. For example, if someone receives information from a doctor that their blood pressure is high and is advised to change their lifestyle by adjusting their diet or starting to exercise, they may be more motivated to follow these recommendations if they believe that such actions can reduce the risk of high blood pressure and related complications. Understanding the importance of cues to action within the Health Belief Model (HBM) allows for the development of more effective communication strategies to raise awareness of Hypertension risks and encourage positive behavioral changes. This involves providing clear and relevant information about the importance of Hypertension prevention and guiding individuals to take appropriate steps to reduce long-term health risks associated with the condition (20–25).

This research has differences from previous research. This research was conducted with Dompot Dhuafa Aceh in a remote coastal area where there is only "*Layanan Kesehatan Cuma-Cuma* (LKC)" from the philanthropic institution Dompot Dhuafa Aceh. The input for future interventions for rural areas such as Nasi Island is that the provision of the same health services and health facilities is applied on every island, not just in one of the central islands.

## CONCLUSION

Based on this research, it was found that there was no significant relationship between susceptibility, severity and benefits with preventive behavior, with  $p$ -values of 0.103, 0.445 and 0.123 respectively. This shows that these three factors do not influence preventive behavior among the people on Nasi Island. However, these three factors can also influence as in other studies. This study also identified a significant relationship between barriers and cues to action and prevention behavior, with  $p$  values of 0.045 and 0.040, respectively. This shows that the obstacles faced by the community and cues to action an important role in determining preventive behavior among the Pulau Nasi community.

## SUGGESTION

Based on the findings of an analysis of hypertension prevention behavior on Pulau Nasi, Pulo Aceh using the Health Belief Model approach, there are recommendations for concrete actions that can be taken so that health interventions carried out by related parties such as health officials and local governments focus more on efforts to prevent hypertension. actions in forming behavioral patterns to prevent hypertension. More intensive education regarding the importance of preventing hypertension, as well as providing health facilities and easy access or equal distribution of health services on remote islands, can increase community motivation to take preventive measures. In addition, involving community leaders and family members in health activities or programs is very important to ensure that prevention messages can be better received and implemented in everyday life. It is hoped that this effort can increase awareness and develop other activities and programs that can be carried out either by the Dompot Dhuafa Aceh philanthropic institution or other institutions so as to increase efforts to prevent Hypertension in residents of Pulau Nasi and other coastal areas.

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