
UPAYA PEMERIKSAAN TEKANAN DARAH MELALUI PROGRAM PELAYANAN KESEHATAN GRATIS DI AMAHAMI, KOTA BIMA, NTB

BLOOD PRESSURE SCREENING EFFORTS THROUGH THE FREE HEALTH SERVICE PROGRAM IN AMAHAMI, BIMA CITY, NTB

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Abstrak: *Tekanan darah adalah salah satu parameter klinis yang paling sering diukur. Salah satu langkah preventif yang dilakukan adalah dengan melakukan pemeriksaan gratis. Kegiatan ini merupakan implementasi dari tri dharma perguruan tinggi dalam bentuk pengabdian masyarakat yang dilakukan oleh program studi gizi fakultas kesehatan Universitas Muhammadiyah Bima. Tujuan dari kegiatan ini adalah untuk mendiagnosa dan mendeteksi secara dini gejala kesehatan pada tekanan darah masyarakat untuk menjamin sumber daya manusia yang unggul dan Sustainable Development Goals (SDGs). Kegiatan Pemeriksaan Gratis ini diikuti oleh 55 orang. Metode kegiatan terdiri dari 3 tahap yaitu tahap persiapan, tahap pengumpulan data, tahap pemeriksaan dan konsultasi. Harapannya dengan adanya program seperti ini dapat mengurangi dan meminimalisir resiko gangguan tekanan darah pada masyarakat Kota Bima. Diharapkan dengan adanya program seperti ini dapat mengurangi dan meminimalisir resiko gangguan tekanan darah pada masyarakat Kota Bima, terbentuknya perilaku hidup sehat, dan terpenuhinya gizi seimbang yang mendorong kualitas sumber daya manusia yang unggul.*

Kata Kunci: Pemeriksaan Kesehatan Gratis, Pelayanan Masyarakat, Tekanan Darah.

Abstract: *Blood pressure is one of the most commonly measured clinical parameters. One of the preventive steps that data takes is to carry out free checks. This activity is an implementation of the tri dharma of higher education in the form of community service carried out by the nutrition study program, faculty of health, Bima Muhammadiyah University. The aim of the activity is to diagnose and detect early health symptoms in people's blood pressure to ensure superior human resources and Sustainable Development Goals (SDGs). The Free Examination Activity was attended by 55 people. The activity method consists of 3 stages including the preparation stage, data collection stage, inspection stage and consultation. The hope is that with a program like this, it can reduce and minimize the risk of blood pressure disorders in the people of Bima City. It is hoped that programs like this can reduce and minimize the risk of blood pressure disorders in the people of Bima City, the formation of healthy living behaviors, and the fulfillment of balanced nutrition that encourages the quality of superior human resources.*

Keywords: *Free Health Checkup, Community Service, Blood Pressure.*

INTRODUCTION

Blood pressure is one of the most commonly measured clinical parameters. Systolic blood pressure is the pressure caused by the heart contracting and pushing blood out, while diastolic blood pressure is the pressure when the heart is relaxed and filled with blood (Simanjuntak and Situmorang 2022; Sugiritama et al. 2020; Wiryanto, Nasution, and ... 2021). Blood pressure is divided into several conditions, namely Low blood pressure (hypotension), Normal blood pressure, and High blood pressure (Hypertension). High blood pressure (hypertension) is one of the causes of cardiovascular and kidney diseases. Basically, blood pressure is the force that pushes blood against the artery walls as it circulates throughout the body (Andayani 2023; Anggreani 2020; Atti and Purnawinadi 2023; FEBRIANTARA 2022; Martani, Kurniasari, and ... 2022).

Normally, blood pressure increases and decreases several times a day in response to body functions. High blood pressure occurs when blood vessels are constantly under high pressure (Cahyaningrum and Cita 2022; Rahmawati and Idealistiana 2023; Rahmiati and Zurijah 2020; Safitri, Elen; Aminah 2023). As stated by WHO (2013, 17), blood is carried from the heart to every part of the body through blood vessels. Every time the heart beats, blood is pumped through the blood vessels. The incidence of hypertension increases with age. Currently, hypertension cases in Indonesia are still a major challenge. This is because hypertension is a common condition found in primary health care. Hypertension is a health problem with a high incidence rate that is a major determinant of therapeutic decisions (Alfiah 2022; Kardi, Widayati, and Wahyuni 2019; Riskiyah and Rachmawati 2021; Sari, Masriadi, and Sitti Patimah 2023).

Non-communicable diseases (NCDs), also known as chronic diseases, tend to be long-lasting and result from a combination of genetic, physiological, environmental and behavioral factors. The main types of NCDs are cardiovascular diseases (such as heart attack and stroke), cancer, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma), and diabetes. These conditions are usually associated with older age groups, but data shows that >15 million NCD-related deaths occur between the ages of 30 and 69 (Rosdiana, A. Rizki Amelia AP 2022; Wimpy and Puspitasari 2021).

Based on WHO 2013 data, it is found that 79% of people are at risk of hypertension, and 67% of people in the world are positive for hypertension with relatively high blood pressure. While the results of the examination of hypertension cases in the city of Bima are still relatively high (Kardi et al. 2019; Sari et al. 2023). According to WHO data (2018), approximately 972 million people or 26.4% worldwide suffer from high blood pressure, and this number is expected to increase to 29.2% by 2021 (Susanto and Wibowo 2022). It is possible that the increase in the number of high blood pressure patients will experience a significant increase both among toddlers, children, adolescents, and the elderly. Therefore, it is necessary to make special efforts and attention through examination and early diagnosis.

Given the importance of blood pressure symptoms, it is necessary to make basic efforts to minimize hypertension by enforcing pillars including implementing clean and healthy living behavior (PSHB) through free health service programs. The purpose of this activity is to realize

superior and healthy human resources (HR) to encourage sustainable development Goals (SDGs).

METHODS

The free health check is an annual program of the nutrition study program, faculty of health, Muhammadiyah University of Bima, in collaboration with the Muhammadiyah Association Assembly of Bima City Region. The free health check program was held in amahami, Bima City, NTB on October 15, 2023 at the Care Free Day (CFD) event in ambalawi, Bima City, NTB. The implementation of the free examination program received enthusiasm from the local community from all ages (teenagers, adults, parents, and the elderly). The free health check program method consists of several stages including; Preparation stage, this stage involves active participation from students, lecturers, muhammadiyah regional leaders, and health workers in the working area of Bima city. Registration and data collection stage, at this stage where the service team collects data on patients who take part in the free health check program. The examination stage, at this stage, a blood pressure examination is carried out which includes blood pressure by considering systolic and diastolic. The purpose of checking blood pressure (Blood Pressure) is a preventive measure to detect and diagnose symptoms of health problems in the city of Bima, especially for people with hypertension.

RESULTS AND DISCUSSION

1. Preparatory Stage

At the examination stage, the team implementing the free health examination activities carried out several preparatory activities including:

- a. Coordination: At this stage, internal and external coordination was carried out. Internal coordination included lecturers and students of the nutrition study program at Muhammadiyah Bima University. While external coordination involved Nursing Lecturers of AKBID Harapan Bunda, Regional Leadership Council of Muhammadiyah of Bima City, PKU Muhammadiyah Health Workers.

- b. Preparation of tools and materials: At this stage the preparation of tools and materials including Tensimeter, stationery, and documentation tools.
- c. Documentation of activities: at this stage, documentation of activities using cameras and cellphones (HP).

2. Patient Registration and Data Collection Stage

At this stage, the free health service team of Universitas Muhammadiyah Bima conducted open registration and data collection of participants in free medical check-up activities which included aspects of gender and age. The following are the results of data collection of participants in free medical check-up activities, in the table below:

Table 1. Data of Free Health Check Participants

Aspects		N
Gender	Male	38
	Female	17
Total		55
Age	Teens (16-25 Years)	13
	Adults (26-35 Years)	24
	Parents (36 -45 Years)	14
	Elderly (>45 Years)	4
Total		55

The following is documentation of patient data collection activities in the free health examination program held by Muhammadiyah Bima University, as shown below:



Figure 1. Data Collection of Free Health Check Patients in Ambalawi, Bima City, NTB

3. Examination and Consultation Stage

The free health checks were carried out by lecturers of the Nutrition Study Program, Muhammadiyah Bima University and Lecturers of the Nursing Study Program, Akbid Harapan Bunda. The following is a documentation of a series of free health check activities, as in the picture below:



Figure 2. Blood Pressure Check

Figure 2 shows the process of checking a patient's blood pressure during the free health check-up. This activity invites attention from the community to control health.



Figure 3. Blood Pressure Check and Consultation Process

At this stage, it aims to determine the normal blood pressure of the people of Bima city. In addition, the purpose of checking blood pressure is also as a preventive effort to diagnose and detect early symptoms of hypertension (high blood pressure). Low or high blood pressure can cause health problems. This effort is made to be able to provide intensive service to the community about the importance of maintaining a healthy lifestyle.

Through the free health check program, emphasis on basic understanding of normal blood pressure conditions, high blood pressure, low blood pressure, causes that affect high and low blood pressure, symptoms caused, and how to overcome and treat can be conveyed coherently to the community. Basically, normal blood pressure for most adults is defined as a systolic pressure of less than 120 and a diastolic pressure of less than 80 (Aziz 2020). High blood pressure is defined as a systolic pressure between 120 and 129 with a diastolic pressure less than 80 (Sammeng and Lestaluhu 2021). Whereas low blood pressure, or hypotension, is a systolic blood pressure lower than 90 or a diastolic blood pressure lower than 60 (Nugrawati 2022). Symptoms of low blood pressure include dizziness, weakness or even fainting. This can be caused by lack of fluids, blood loss, certain medical conditions, or medications, including those prescribed for high blood pressure.

Some medical conditions, such as metabolic syndrome, kidney disease and thyroid problems, can cause high blood pressure. Age factor The chances of developing high blood pressure increase with age, especially isolated systolic hypertension. Before the age of 55, men have

a greater chance of developing high blood pressure. Women are more likely to develop high blood pressure after menopause.

At the consultation stage, officers provided insights into maintaining health by paying attention to the pillars of balanced nutrition. The first pillar is to consume a healthy and diverse diet. The second pillar is doing physical activity. The third pillar is implementing clean and healthy living behavior (PHBS). The fourth pillar is to control normal body weight.

The activity of checking blood pressure through the free health check program is a preventive step taken to encourage sustainable development (SDGs). The SDGs pillars that can be fulfilled through free health checks include SDGs point 3: healthy and prosperous life. The role of free health checks carried out by the nutrition study program, bima muhammadiyah university is an initial and preventive step in encouraging the achievement of sustainable development by providing healthy guarantees through free health check programs.

CONCLUSION

This activity is an implementation of the tri dharma of higher education in the form of community service carried out by the Nutrition Study Program, Faculty of Health, Muhammadiyah Bima University. The purpose of the activity is to diagnose and early detect health symptoms in community blood pressure to ensure superior human resources and Sustainable Development Goals (SDGs). The free health examination activity consists of 3 stages including the preparation stage, data collection stage, examination and consultation stage. The implementation of this free activity received enthusiasm and attention from the people of Bima City, NTB. The hope is that with a program like this, it can reduce and minimize the risk of blood pressure abnormalities in the people of Bima City. The formation of healthy living behavior, and the fulfillment of balanced nutrition that encourages superior SMD quality. Activities like this need attention from related agencies periodically and quantitatively. So that this program can become a flagship program in Bima City.

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