



**Prevention & Control Efforts
Non-Communicable Diseases (PTM); Hypertension**

Dian Wahyuni^{1*}

¹Department of Nursing, Faculty of Medicine, Sriwijaya University

Email : * dianwahyuni@fk.unsri.ac.id

Citations : Wahyuni, D. Prevention & Control Efforts Non-Communicable Disease (PTM); Hypertension. Conference of Medical Sciences Dies Natalis Faculty of Medicine Universitas Sriwijaya. Vol 2. No.1.2020

ABSTRACT

BALITBANG KEMENKES in 2020 release data in the form of tendency of non-communicable diseases (PTM) starting from the age of 10-14 years including increasing heart pressure. The purpose of this avenue is describing the prevention and control of hypertension. The method used by the online education seminar on health cadres in Sakatiga village, FK UNSRI fostered village since 2014. Finally, it is hoped that the community (cadres) can understand and implement efforts to prevent and control hypertension in the form of routinely measuring blood pressure, taking hypertension medication regularly and using complementary therapies.

Keywords: foster village, health cadres, heart pressure, hypertension drugs, complementary therapy.

INTRODUCTION

Hypertension is a non-communicable disease (PTM) which is the cause of premature death in the world. The World Health Organization (WHO) estimates the prevalence of hypertension globally at 22% of the world's total population. However, only <1/5 made efforts to control blood pressure. The prevalence of hypertension in Southeast Asia is in the 3rd position with the highest 25% of the total population. Proportion of hypertension sufferers in the world based on gender; 1 in 4 men experience hypertension, 1 in 5 women experience hypertension.¹ meanwhile the results of Riskesdas 2019 show the prevalence rate of hypertension in people > 18 years old based on national measurements of 34.11%, while the prevalence in South Sumatra Region is 30.44%, an increase compared to the Riskesdas year 2007.¹.

Director of Prevention of Non-Communicable Diseases, Ministry of Health Cut Putri Ariane said that before the pandemic, Non-Communicable Diseases (PTM) was a catastrophic disease with the highest cause of death in Indonesia. This



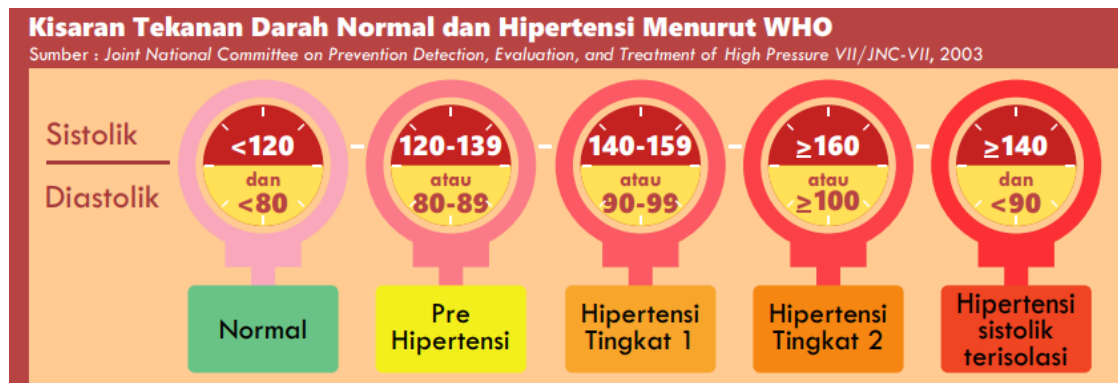
causes loss of productive days for sufferers and companions. PTM is very concerned about, because in the past the assumption was on parents, but now the trend starts to increase at the age of 10 to 14 years, " said Cut at Graha BNPB, Jakarta (4/7).² This threat will have a big impact on human resources and Indonesia's economy in the future because, in 2030-2040, Indonesia will face a demographic bonus where the productive age is far more than the non-productive age group

Based on the results of the Sakatiga Village Community Communication Forum, on October 13 2014, which was attended by 32 people, who were representatives of civil service, religious leaders, community leaders and health cadres, stated that many adults and the elderly have hypertension. Hypertension is one of the Non-Communicable Diseases (PTM). Not all hypertension sufferers are aware of the disease they are suffering from, this is what makes hypertension a "silent killer".¹

In rural areas, in general, they have lower access to health information and education than urban residents. Therefore it is important for cross-sectoral cooperation, in this case universities (UNSRI) to empower health cadres that have been formed in the Village Community Conference in the context of public health efforts in the form of seminars, training, or *group discussions*.

LITERATURE REVIEW

Hypertension is an increase in systolic > 140 mmHg and diastolic > 90 mmHg on two measurements with an interval of five minutes at rest. Hypertension is a world health problem with a prevalence in Indonesia of 25.8%. Hypertension can cause coronary heart disease, heart failure, stroke, chronic kidney disease, retinal damage and peripheral vascular disease. Hypertension is divided into two primary hypertension (essential) and secondary hypertension. Primary hypertension is hypertension where the etiology is unknown with a prevalence of 90% of hypertensive patients.³



The general goal of hypertension treatment is to reduce mortality and morbidity through non-pharmacological and pharmacological approaches. Nonpharmacological therapy includes weight reduction for obese individuals, adopting the *Dietary Approach to Stop Hypertension* (DASH) diet, a low sodium diet, physical activity and moderate alcohol consumption. Pharmacological therapy using antihypertensive drugs which can be started with one drug or a combination of drugs until reaching the target of reducing blood pressure. The main complication of hypertension is cardiovascular disease, which can include coronary heart disease, heart failure, stroke, chronic kidney disease, damage to the retina of the eye, and peripheral vascular disease.³

Elevated blood pressure (BP) is associated with an increased risk for coronary heart disease, stroke, heart failure, renal insufficiency, and peripheral vascular disease. Various interventions are very effective in preventing hypertension, such as weight control, reducing sodium chloride intake, increasing physical activity, reducing alcohol consumption, and stress management. The main goal of pharmacological treatment for hypertension is to prevent cardiovascular complications such as stroke. The four most widely used anti-hypertensive drugs for adult patients are diuretics, beta-blockers, calcium antagonists, and angiotensin-converting enzymes (ACE) inhibitors. Clinical studies using control, giving hypertension drugs hydrochlorothiazid, atenolol, nitrendipine, and enalapril in patients aged 21-70 years showed that the new drug was not superior. The main determinant of treatment response is patient age. Age easily responsive to ACE



inhibitors, angiotension receptors blockers (A), and beta blockers (B). The elderly are more responsive to calcium antagonist (C) and diuretic (D) drugs.

Lifestyle changes that are part of the management of hypertension can lower blood pressure, increase the effectiveness of antihypertensive drugs, and reduce cardiovascular risk. Modification of daily food intake patterns is one component of lifestyle changes that has the greatest role in lowering blood pressure. The modification of dietary intake is to follow general guidelines for balanced nutrition as well as in accordance with *the dietary approach to stop hypertension* (DASH), which is high in vegetables and fruit, high-fiber food ingredients, low-fat milk, meat, and nuts. It should also be noted that energy intake, amount and type of protein, and components of fat and carbohydrates. In addition, food ingredients rich in minerals and vitamins, as well as specific nutrients, such as omega-3 unsaturated fatty acids have a role in the prevention and management of hypertension.⁵

Control hypertension with PATUH¹ consists of regular health checks and follow doctor's recommendations; Overcome the disease with proper and regular treatment; Stick to a nutritionally balanced diet; Strive for safe physical activity; Avoid cigarette smoke, alcohol, other carcinogenic substances.

In this study, there were 108 doctors as respondents in 11 Centers for Development and Application of Traditional Medicine (SP3T) where doctors gave herbal medicine as medicine. All doctors practicing herbal medicine use herbal medicine for themselves and their families.⁶ Plants that are widely used are cat whiskers, sambiloto, turmeric, ginger, gotu kola, jahu, kencur rice, puttih, celery, Echinacea. The reason the doctor gave herbal medicine as a complementary therapy was 89% and 80% as alternative medicine. Meanwhile, the reasons for most patients to seek treatment using herbal medicine are 61% confidence and 60% dissatisfaction with conventional treatment. For hypertension, the benefits of herbal medicine have only been felt for about 12 days. Some medicinal plants that can lower blood pressure; gotu kola, meniran, cat's whiskers, celery leaves.⁶

WHO recommends the administration of traditional drugs in degenerative diseases. Most doctors use medicinal plants in a row; ginger (arthritis), sambiloto



(hyperglycemia), celery (hypertension), Dutch teak (dyslipidemia & obesity), sidaguri (hyperuricemia). Services with traditional herbs / medicines by doctors in the community have become the choice of patients⁷.

Traditional or alternative complementary medicine has become one of the strategic plans of the Ministry of Health in 2010-2014 Minister of Health Decree No. HK / 03.01 / 160/2010 with the hope of increasing guidance and supervision of alternative traditional or complementary health efforts. In addition, in the Minister of Health Decree No. HK.02.02 / MENKES / 148/2010 concerning Licensing and Implementation of Nursing Practices is stated in article 8 paragraph 3 (c) that complementary therapy is part of nursing practice. Herbal medicines that can be used as an alternative treatment for hypertension include cucumber (*Cucumis sativus*)⁸, ginger (*Zingiber officinale Roscoe*), garlic, celery⁹, mulberry, rosella, and others.

Another complementary therapy to train emotional control in a way is the Spiritual Emotional Freedom Technique, which has been carried out in previous community service activities in Sakatiga village. The steps are as follows:

1. The Set-Up

"The Set-Up" aims to ensure that the body's energy flow is properly directed. This step is to neutralize "Psychological reversal" or "psychological resistance" (usually in the form of spontaneous negative thoughts or the belief that negative awareness).

Examples of Psychological Reversal include:

- I can't achieve my dreams
- I cannot speak in public confidently
- I was the unfortunate victim of sexual harassment
- I cannot avoid the guilt that continues to haunt my life
- I am angry and disappointed with my wife / husband because he is not what I expected
- I get annoyed with kids, because they are unruly
- I can't get away from my cigarette addiction
- I'm not motivated to learn, I'm lazy



- I can't possibly win this match
- I gave up, I couldn't do it.
- I... I... I...

If negative beliefs or thoughts like the example above occur, then pray with *khushu'*, sincerely and surrender: "O Allah ... even though I _____ (your complaint), I sincerely, I surrender to You completely"

Here's the remedy: the words above are called The Set-Up Words, which are some words you need to say with great feeling to neutralize Psychological reversal (negative beliefs and thoughts). In religious language, the set-up words are our "prayer of submission" to Allah SWT. That whatever problems and pain we are experiencing at this time, we sincerely accept it and we leave the healing to Allah SWT.

"The Set-Up" actually consists of 2 activities, the first is saying the sentence like the one above with a special feeling, sincerely and surrender 3 times. And the second is while saying it with feeling, we press our chest, to be precise in the "Sore Spot" (pain point = the area around the upper chest which feels a bit painful when pressed) or tap with two fingertips on the "Karate Chop" . (see fig)

After pressing the pain point or tapping the karate chop while saying the Set-Up sentence as above, continue with the second step, "the Tune-In".

2. The Tune-In

For physical problems, we tune-in by feeling the pain we are experiencing, then directing our mind to the place of pain and while continuing to do these 2 things, our hearts and mouths say, "I am sincere, I surrender ... O Allah. . "

For emotional problems, do a "Tune-In" by thinking about certain specific things or events that evoke the negative emotions we want to get rid of. When



there is a negative reaction (anger, sadness, fear, etc.) our hearts and mouths say, O Allah .. I sincerely ... I surrender...

Simultaneously with this Tune-In perform step 3 (Tapping). It is in this process (accompanied by tapping Tune-In) that we neutralize negative emotions or physical pain.

3. The Tapping

Tapping is tapping lightly with two fingertips at specific points on our body while continuing to Tune-In. These points are the key points of "The Major Energy Meridians", which if we tap several times will have an impact on the neutralization of emotional disturbance or pain. Because the body's energy flow runs normally and returns to balance.

METHOD

This community service activity is carried out in the form of an online educational seminar through the *Zoom conference* application on Saturday, November 14, 2020. The participants of this online educational seminar are health cadres with their families totaling 30 people.

CONCLUSION

After being conducted in the form of an online educational seminar through the *Zoom conference* application, an evaluation through question and answer results was obtained: as many as 100% of cadres experienced an increase in knowledge about the definition of non-communicable diseases, risk factors, types of hypertension and their management.

REFERENCES

1. <https://pusdatin.kemkes.go.id/resources/download/pusdatin/infodatin/infodatin-hypertension-si-pemb Killer-senyap.pdf>
2. <https://www.kemkes.go.id/article/view/20070400003/penyakit-tidak-menular-kini-ancam-usia-muda.html>



3. <http://juke.ked mal.unila.ac.id/index.php/majority/article/view/1526>
4. Budisetio, Muljadi. Prevention and treatment of hypertension in adult patients. Department of Medicine in the Faculty of Medicine, Trisakti University https://univmed.org/wp-content/uploads/2011/02/Vol.20_no.2_6.pdf
5. Kumala, Meilani. The role of diet in the prevention and therapy of hypertension. <http://ojs.atmajaya.ac.id/index.php/duludamianus/article/view/208>
6. Dd Delima, et al. 2014. An overview of the practice of using herbal medicine by doctors in six provinces in Indonesia. *Bul. Researcher. Health*, Vol. 40, No.3, 2014; 109-122
7. Dd Widowati et al. 2014. Evaluation of Doctor Practices prescribing herbal medicine for patients with degenerative diseases in 12 provinces. *Media Litbangkes* Vol. 24 No.2, June 2014, 95-102
8. Xx Lebalado, Princess Lovindy. 2014. Effect of cucumber juice (*Cucumis sativus* L) on systolic and diastolic blood pressure in hypertensive patients
9. Iswari, PA., Ni Komang Ari Sawitri, Ika Widi Astuti. Giving Celery (*Apium Graveolens* L.) Boiled Water Against Decreasing Blood Pressure of the Elderly with Hypertension in the Work Area of Puskesmas Iv Denpasar Selatan
10. Wahyuni, dian. 2019. Spiritual emotional freedom technique (SEFT) as a promotive and prevailing effort in palliative care in Sakatiga village. <https://ejournal.unsri.ac.id/index.php/jpsriwijaya/article/view/9777>