

Review Article

Hypertension: A global health crisis

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Abstract

Objective: This study discusses strategies to overcome hypertension patient compliance to manage self-care. The purpose of the study is to provide a summary of the importance of attention to managing hypertension.

Method: A review of literature relevant to hypertension, policies, and management, both pharmacological and non-pharmacological, through cross-programs or sectors.

Result: This study found that the ministry of health had compiled various policies to reduce the prevalence of hypertension, including technical guidelines for its implementation, but the strategy has not yet fully reached the minimum service standard, which is because it has not fully involved the relevant cross sectors.

Conclusion: Improve the coordination system by "Joint Decree" between the Ministry of Health and the Ministry of Villages, PDT and Transmigration, the Ministry of Social Affairs, Indonesian National Army, police, and NGOs to carry out activities simultaneously to the community.

More Information

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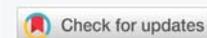
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Background

Globally, 17 million deaths per year are caused by cardiovascular disease, nearly one-third of total deaths. Complications from hypertension number are 9.4 million deaths worldwide each year. Hypertension is believed to be responsible for at least 45% of deaths due to heart disease and 51% of deaths due to stroke [1].

World Health Organization (WHO) explains that developing countries have hypertension by 40% while developed countries have 35%, Africa places the top position of hypertension sufferers, which is equal to 40% [1]. In Indonesia, it is 32% of the total population [2]. This disease kills 1.5 million people every year. This indicates one in three people suffer from hypertension. Since 2008, around 40% of adults aged 25 years and over around the world, have been diagnosed with hypertension [1]. As a result of a weak health system, so many people with hypertension are undiagnosed, untreated, and not well controlled. This is particularly common in low and middle-income countries [3]. The prevalence of hypertension by gender in men is 31.34% compared to women. Different based on age, but generally found hypertension in women is greater than in men [4].

Deaths due to non-contagious diseases tend to increase

including cardiovascular. Populations around the world are rapidly declining and the prevalence of hypertension gets increased over a while. The increasing life expectancy of Indonesia is getting higher at 72.2 years [5] is also a predictor of hypertension. If appropriate action is not taken, deaths of cardiovascular disease are predicted to increase further [1].

Nearly 80% of deaths of cardiovascular disease take place in low and middle-income countries. They are the countries that are least able to bear the social and economic consequences of ill health. The current standard mortality rate in low-income countries is higher than in developed countries [1].

The impact of hypertension can be early death, disability, personal and family disorders, loss of income, and health care expenses, which are very detrimental to the family, community, and national finance. Many people in developing countries do not look for treatment for hypertension because it is unaffordable. They often spend most of their earnings on hospitalization and care after hypertension complications, including heart attacks, strokes, and kidney illness. The patient will acquire large costs for health care, especially related to hypertension and its complications. In addition, it would be devastating when a family loses income due to death or disability.



Current health expense on cardiovascular disease reaches 20% of total health expenditure. During 2011-2025, the cumulative output lost due to non-contagious diseases is predicted to reach the US \$ 7.28 trillion. Annual losses around the US \$ 500 billion due to non-contagious diseases account for around 4% of gross-domestic-product for low and middle-income countries. Cardiovascular disease including hypertension accounts for almost half of these costs [1].

The increased incidence of non-contagious diseases will lead to greater dependence and increased care costs for patients and their families. The Political Declaration of the General Assembly High-Level Meeting on Prevention and Control of Non-Contagious Diseases, adopted by the General Assembly of the United Nations in September 2011, has recognized that the burden of non-contagious diseases is growing rapidly and harms health, socio-economic development and alleviation poverty. Consequently, the government needs to carry out a series of concrete actions. If no action is taken to overcome hypertension and other non-contagious diseases, economic losses are estimated to exceed public health expenditure.

Method

A review of literature relevant to hypertension, policies, and management, both pharmacological and non-pharmacological, through cross-programs or sectors.

Result

Framework and urgency in management of hypertension

Many studies have shown that hypertension sufferers are not compliant with their treatment, both medication and self-care including consumption of unhealthy foods, habits of inactivity, smoking and drinking alcohol, etc [6]. Many studies have been conducted to reduce the prevalence of hypertension, including slow deep breathing and sodium diet regulation [7]. However, it has not been able to suppress the incidence of hypertension. WHO (2014) states that hypertension will increase with the increase in the expected age of Indonesian people, which is 72.2 years [5]. The increasing life expectancy of the people of Indonesia, will also have an impact on the incidence of hypertension, supported again by the daily lifestyle, especially the instant lifestyle and lack of activity. Fast food patterns, alcohol, and cigarette consumption, and eating foods high in sodium will increase hypertension in the future.

The Ministry of the Republic of Indonesia has strived to reduce the prevalence of hypertension by 25%, this is still far from expectations. It is increasing [8,9]. The promotive and preventive efforts that have been launched. The program of CERDIK-PATUH and the Healthy Indonesia Program with a Family Approach (PIS-PK) are very useful to reduce the incidence of hypertension, but the incidence of hypertension is still difficult to stem. The increasing cases of hypertension did not rule out the possibility of complications in the form

of heart and blood vessel problems in the form of heart attack, heart failure, and also kidney failure, and other health problems. More and more strategies to reduce the prevalence of hypertension, but the cases are increasing. This is needed to be analyzed, what causes it? The extent to which patients adhere to the program that has been planned. Therefore, according to the authors, hypertension patient compliance for self-management becomes an important thing.

Many studies have found approaches to overcome hypertension, both pharmacological and non-pharmacological approaches, as well as patient compliance in the management of hypertension problems. Many non-pharmacological approaches can be used as evidence-based practice, but patients are still not well utilized. Actually, these strategies can be used to control or reduce hypertension faced by patients.

Policies on the management of hypertension

Some of the regulations and policies regarding hypertension that have been announced by the Ministry of Health include:

1. Regulation of the Minister of Health of The Republic of Indonesia Number 71 2015 Regarding the Management of Non-Contagious Diseases [10].
2. Regulation of the Minister of Health of The Republic of Indonesia Number 5 2017 Concerning the National Action Plan for the Management of Non-Contagious Diseases 2015-2019 [11].
3. Regulation of the Minister of Health of The Republic of Indonesia Number 4 2019 Concerning Technical Standards for Fulfillment of Basic Service Quality in the Minimum Service Standards in the Field of Health [12];
4. Regulation of the Minister of Health of the Republic of Indonesia Number 43 2016 Regarding Minimum Service Standards in the Field of Health [13].
5. Decree of the Minister of Health of the Republic of Indonesia Number 854/Menkes/SK/IX/2009 concerning Guidelines for the Control of Cardiovascular Diseases [14].
6. JNC 8: Evidence-based Guideline: management of adult hypertension patient [15]
7. Guideline of hypertensive crises from AHA for Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults [16].

The Ministry of Health has formulated policies and strategies for preventing and managing hypertension, which include 3 main components, 1) surveillance of hypertension; 2) promotion and prevention of hypertension; and 3) management of hypertension disease services. These policies and strategies cannot be implemented based solely on the ability of the government but must involve the full potential of the community [17].

The existing policies and regulations have not been sufficient to support the management of hypertension management programs. Cooperation in every sector, both health workers and health cadres and the community related to the Posbindu program has not been optimally utilized. There has not been increased cooperation between health workers, health cadres, and the community. Therefore, health workers come to Posbindu and just wait for the community and this seems to be a waste of time.

The form of cooperation is still very dependent on health workers and health cadres while the patient feels bored with every Posbindu activity that feels very monotonous, even the local government does not feel the importance of the existence of Posbindu. The people prefer to do their routine activities rather than come to Posbindu which is a waste of time [18].

The further findings explained that public awareness to utilize Posbindu and conduct health checks including hypertension control was only a routine and tedious activity. People say that coming to Posbindu will only waste time. This makes health workers face obstacles to suppress health problems including hypertension effectively. Until now there is no adequate hypertension management mechanism even though there is a PIS-PK (Healthy Indonesia Program with Family Approach). In its implementation, it is limited to pursuing performance reports on paper, without seeing the real achievements of overcoming the problem of hypertension and non-contagious diseases that should be following minimal standards.

Recommendation

The recommendations include

It is necessary to develop an adequate monitoring and evaluation system as a basis for improving the overall management of hypertension and non-contagious diseases;

The government can conduct research activities to overcome the problems in the management of hypertension, especially related to patient compliance in controlling blood pressure so that it can avoid all complications and can alleviate the problem of poverty; and

The Ministry of Health should coordinate across sectors including the Ministry of Villages, PDT and Transmigration, the Ministry of Social Affairs, the Army (TNI) and the police (Polri) as well as the private sector and NGOs so that they can carry out activities simultaneously to the community. The concrete form of coordination referred to is to make a "Joint Decree" between the Ministry of Health and cross-sectoral to work together to increase community involvement and empower the community's ability, especially in terms of compliance for the management of non-contagious diseases as a whole.

Conclusion

Improve the coordination system by "Joint Decree" between the Ministry of Health and the Ministry of Villages, PDT and Transmigration, the Ministry of Social Affairs, Indonesian National Army, police, and NGOs to carry out activities simultaneously to the community.

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