Lifestyle of Hypertensive Patients in the Coastal Area of Indonesia
A Systematic Review

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Keywords: Hypertension, Lifestyle, Coastal area.

Abstract: Lifestyles for eating such as eating fish, preserving food with salt and high consumption of salt are characteristic of coastal communities in Indonesia. This lifestyle causes the risk of hypertension. Hypertension if it does not immediately treat, it will lead to 7 times greater chance of stroke, 6 times greater congestive heart failure and 3 times more affected by heart attack. The purpose of this systematic review is to reveal the unhealthy lifestyles of coastal communities that cause hypertension. The method used is electronic data base from journal which have been published through google scholer got 10 journals but according to the inclusion criteria just 9 journal stated that environment have a role to the happening of hypertension so that life style related to hypertension in coastal area is consumption of food high salt, sea fish, physical activity, smoking, obesity and stress and 1 journal stating that food consumption has no relationship in the incidence of hypertension in coastal areas. The conclusion that unhealthy lifestyles in coastal areas causes hypertension.

1 INTRODUCTION

Coastal communites in Indoensia have a life style that is classified as a risk to the occurrence of hypertention such habits as preserving food using salt, fish consumtion, smoking habits and lack of activity. Blood pressure commonly called hypertension has become a global health issue because it is the leading cause of death and disability. In developing countries the prevalence of hypertension is growing rapidly (Organization WH., 2013).

Indonesia became one of the world's 4th highest hypertension contributors after China, India and Russia based on data from 1990-2015 (Forouzanfar et al., 2017). According to data Sample Registration System (SRS) Indonesia 2014, hypertension with complications (5.3%) is the cause of death number 5 (five) at all age (Kemenkes.RI, 2017). In Research conducted Chobanian et al. (2003) revealed that uncontrolled hypertension caused a 7 times greater chance of stroke, 6 times greater congestive heart failure and 3 times more heart attack. Hypertension is a disease that can be sufferred by anyone from different age groups and socioeconomic groups (Arifin 2016). Lifestyle is one cause of the occurrence of hypertension. Based on the study that coastal communities have an unhealthy lifestyle so that people with hypertension in coastal areas is higher than mountainous areas (Rusliafa, Jusniar, Amiruddin, Ridwan, Noor, 2014). There have been many studies that reveal about factors causing hypertension in coastal areas so that researchers interested in conducting systematic review.

2 METHODS

The process used to perform systematic reviews is a reviewer looking for several research journal articles published through an electronic data base. The electronic data base used are: google schooler. Keywords (keywords) used is for journals in the indoneisa language is "hypertension in coastal areas". Search results found on. Journals found to be specified based on the inclusion criteria are 1) articles published officially both ISBN accreditation and in junal universities and in indonesian, 2) articles published in 2010-2018 timeframes, 3) quantitative research types and 4) articles that have content primary hypertension in coastal areas.

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Articles appearing 7030 and that fit the inclusion criteria are as many as 10 journals.

3 RESULTS

The results of Nelli's research (2016) showed experiment result that there were 3 risk factors which related to hypertension event that was physical activity (p = 0,000; OR = 13,47; 95% CI = 3.52-51,58), obecity (p = 0,002; OR = 6,46; 95% CI = 1,95-21,47) and stress (p = 0,016; OR = 0,196; 95% CI = 0,05-0,74). (Masengi, Palar and Rotty, 2013) revealed that the incidence of hypertension in the Malalayang Dua community is 6.3%, the most commonly consumed sea food commodity is the fish, especially the skipjack (Katsuwonus pelamis), and there is a significant relationship (p = 0.001) between seafood consumption and decreased incidence of hypertension in Malalayang Dua. This affects the rate of hypertension in this area ie, 6.3%. Other research results (Saputra and Anam, 2015) did not show the relationship pattern of consumption with the incidence of hypertension of young age in coastal lamongan. The average respondents consumed potassium and kallium in deficit, coffee consumption, activity load and exercise habits. Azhri research (2017) revealed that the results of this study obtained by using Ordinal Regression Test that there is influence of physical activity on the occurrence of hypertension with p value of 0.007 (p0.05). The conclusion in this research is physical activity on the respondent in RW 02 Kedung Cowek Surabaya Village have influence to hypertension incident whereas Body Mass Index (IMT) has no effect. Other research (Rusliafa, Jusniar, Amiruddin, Ridwan, Noor, 2014) result of bivariate research shows that there are differences of hypertension occurrence in coastal areas and mountains ie diet (intake of sodium p = 0,026), alcohol consumption p = 0,009, = 0.004, obesity p = 0.049, stress p = 0.046. Multivariate anaisis shows a family history (OR = 4.018; 95% CI = 1,813 - 8,906) most likely to have an incidence of hypertension. The result of statistical test showed that there was no significant relationship between risky food consumption behavior and hypertension (p = 0.079), there was no correlation between alcohol consumption and hypertension (p = 785). There is a relationship between stress with the incidence of hypertension (p = 0.001). Research from Kartikasari dkk 2012 The results of statistical tests indicate a risk factor for hypertension in the community of Kabongan Kidul village, Rembang Regency is the (p = 0,0026; OR = 11,340 and 95% CI = 1,346 - 95,553), family history (p = 0.000, OR = 14,378 and 95% CI = 4,027 - 51,332), smoking (p = 0,010; OR = 9,537 and 95% CI = 1,728 - 52,634), and obesity (p = 0,007; OR = 9,051 and 95% CI = 1,804 - 45,420), while the consumption of gender, salt consumption, fat consumption, and activity factor has no effect. Mubarik 2011. The results showed that the prevalence of primary hypertension in Port Jepara was 24.5%. Based on the analysis, there was an association between Body Mass Index (BMI) and the incidence of primary hypertension (p = 0.0001), there was a correlation between smoking habit and the incidence of primary hypertension (p = 0,02). there was a relationship between the rate of income and the incidence of primary hypertension (p = 0.0001), there was a relationship between caffeinated drinking habits and the incidence of primary hypertension (p = 0.0001), there was an association of alcohol consumption with the incidence of primary hypertension (p = 0, 0001).

4 DISCUSSION

The results of several research articles analyzed emphasize that hypertensive patients present in coastal areas are strongly influenced by lifestyle and environmental factors. Bad lifestyle if left unchecked will adversely affect the health condition itself. There are differences in hypertension in coastal and mountainous areas. Where lifestyle in coastal region is very risk of hypertension compared wiayah mountains. Lifestyle seen from physical activity, diet, smoking. Lifestyle of hypertension triggers such as high consumption of sodium, activity, obesity, stress, consumption of marine fish, alcohol consumption (nelli 2016, maski S 2013, Bariah 2009, Noer B 2014, Raihan NL 2014, sihotang U 2013, kartikasari 2012, mubarok 2011) and a study that is from non-existent BMI, consumption of salt, coffee, activity with hypertension. (jesicca j 2017).

5 CONCLUSIONS

Number of articles reviewed 10 articles. From the 10 articles there are 9 articles that get results that hypertension in coastal areas related degan lifestyle that includes Lifestyle seen from physical activity, diet, smoking. Lifestyle of hypertension triggers such as high consumption of sodium, activity, obesity, stress, consumption of marine fish, alcohol

consumption (nelli 2016, maski S 2013, Bariah 2009, Noer B 2014, Raihan NL 2014, sihotang U 2013, kartikasari 2012, mubarok 2011) and 1 study which states that there is no correlation between hypertension occurrence and coastal lifestyle such as BMI, salt consumption, coffee, activity with hypertension (Jesicca j 2017).

REFERENCES

Arifin, M. H. B. M. (2016) 'Faktor-Faktor Yang Berhubungan Dengan Hipertensi', *E-Jurnal Medika*, 5(7).

Chobanian, A. V. *et al.* (2003) 'Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure', *Hypertension*, 42(6), pp. 1206–1252. doi:10.1161/01.HYP.0000107251.49515.c2.

Forouzanfar, M. H. *et al.* (2017) 'Global Burden of Hypertension and Systolic Blood Pressure of at Least 110 to 115 mm Hg, 1990-2015', *Jama*, 317(2), p. 165. doi: 10.1001/jama.2016.19043.

Kemenkes.RI (2017) *Sebagian Besar Penderita Hipertensi Tidak Menyadarinya*, http://www.depkes.go.id/article/print/17051800002/.

Masengi, S., Palar, S. and Rotty, L. (2013) *'Pengaruh Konsumsi Makanan Laut Terhadap Kejadian Hipertensi Di Desa Malalayang Dua',* pp. 726–732. Available at: https://ejournal.unsrat.ac.id/index.php/ebiomedik/article/viewFile/4626/4154.

Organization WH. (2013) *A global brief on Hypertension: silent killer, global public health crises (World Health Day 2013)*, Geneva: WHO.

Raihan, L. N. and Dewi, A. P. (2009) *'Faktor-faktor Yang Berhubungan Dengan Kejadian Hipertensi Primer Pada Mayarakat Di Wilayah Kerja Puskesmas Rumbai Pesisir',* JOM PSIK Vol 1 No 2, 1, pp. 1–10.

Rusliafa, Jusniar ; Amiruddin, Ridwan ; Noor, N. (2014) *'Komparatif Kejadian Hipertensi pada Wilayah Pesisir Pantai dan Pegunungan di Kota Kendari'*, p. 6. Available at: http://pasca.unhas.ac.id/jurnal/files/d94f67a89af9dcb98fda87051cb39c6a.pdf.

Saputra, O. and Anam, K. (2015) 'Gaya Hidup sebagai Faktor Risiko Hipertensi pada Masyarakat Pesisir Pantai', *Majority*, 5(3), pp. 118–123.