The Affecting Factor's Job Incidence of Hypertension at Interna Polyclinic Regional Public Hospital Merauke Sub Province Merauke

Lodevikus Charles Oktin[1], A.L. Rantetampang[2], Bernard Sandjaja[3] and Anwar Mallongi[4]

Abstract

Background: Hypertension is high blood pressure disease above normal which represent disease sality killing. There is risk factor's to occurence of hipternsi incidence, including Polyclinic interna Jayapura regional public hospital and represent first disease at 10 is big disease, so that the intention of this research is to know the affecting factor's job incidence of hypertension at interna polyclinic regional public hospital Jayapura

Materials and Method: Analytic by using approach of conducted by cross sectional study in October 2017 with amount of sampel counted 100 people. Data approach used questioner and analysed to use chi square.

Result of research : obtained that factor incidence of hypertension in interna polyclinic disease Jayapura regoional public hospital is age (p-value 0,006; RP= 2,333; CI95%=1,193 - 4,563), family history disease (p-value 0,000; RP= 4,444; CI95 = 2,788 - 7,085), physical activity (p-value 0,000; RP= 3,340; CI95%= 1,987 - 5,616) and obesity (p-value 0,000; RP = 2,583; CI95%= 1,696 - 3,936). While factor which not have an effect of hypertension incidence in interna Polyclinic Jayapura public hospital is gender (p-value 0,533; RP= 0,843; CI95% (0,559 - 1,272), ethnic (p-value 1,000; RP= 1,032; CI95%= 0,683 - 1,560), smoking (p-value 0,391; RP= 0,797; CI95%= 0,518 - 1,227), drunk alcohol (p-value 1,000; RP = 0,965; CI95%= 0,584 - 1,592) and usage of contraception (p-value 0,883; RP = 1,078; CI95%= 0,715 - 1,626).

Conclusion: Age, family history, physical activity and obesity is dominan factor to occurence [of] hypertension.

Keywords: Hipertension incidence, That Risk, Merauke Hospital

I. INTRODUCTION

Based on data from World Health Organization (WHO, 2016) reported there were 28.6% of adults aged> 18 years suffering from hypertension. Current lifestyle patterns are increasingly leading to increased incidence of hypertension in the community. It is estimated that about 20% of adult population suffers from hypertension, especially in people with advanced age over 60 years and 50% of elderly people suffering from hypertension, worldwide there are estimated 1 billion people suffering from hypertension, which contributes 7.1 million deaths per year

The prevalence of hypertension incidence in Indonesia based on Basic Health Research (Riskesdas) data in 2013 at age> 18 years reached 25.8% and incidence of hypertension in Papua 3.3%. Merauke District Health Office (2016) reported the incidence of hypertension reached 1.65%.

Lifestyle is the pattern of everyday behavior of a society in society. Lifestyle shows how people manage their private lives, public life, public behavior, and differentiate their status from others through social symbols. Lifestyle or life style can be interpreted also as anything that has the characteristics, specificity and ordinance in the life of a particular society (Handayani, 2010). These risky behaviors are one of the factors causing hypertension. Increasing the prevalence of cardiovascular disease every year becomes a major problem in every country, which is about 50% of the cardiovascular disease is due to hypertension (Anggraini, 2009).

Unhealthy lifestyles can be the cause of hypertension such as physical activity, alcoholism drinking stress, coffee drinking habits at risk of increased incidence of hypertension (Sount, 2014).

Merauke Regency is one of the districts in Papua Province with a high level of urbanization that influences lifestyle changes. Based on data from 10 major diseases in Polyclinic of Merauke Hospital in 2015, hypertension is the second ranking disease after tuberculosis counted 348 cases (6,72%) from visit number and 2016 hypertension was ranked first in 10 disease 501 cases (8, 14%). This indicates an increase in cases of hypertension is increasing.

Based on this, the underlying researchers interested in conducting research on factors - factors that affect the incidence of hypertensia clinic Internal Medicine Merauke Hospital 2017.

II. MATERIALS AND METHODS

Types of Research

This research is an analytical research that aims to determine the influence between two or more variables (Sugiyono, 2013). This research explains the influence and influence relationship of the variables to be studied. Using a cross sectional study approach with data taking is done simultaneously at one time (Sastroasmoro, 2010).

Place and Time of Research

This research was conducted in Merauke District Hospital of Merauke District Hospital conducted in October 2017.

Population and Sample

1. Population

Population is the whole subjects studied (Notoatmodjo, 2012). The population in this study were all patients who came from the Poly of Internal Medicine Merauke Hospital Merauke District in 2016 amounted to 6614 people and cases of hypertension as much as 501 people (8.15%).

2. Sample

The sample is part of the population that is considered to represent (Notoatmodjo, 2012). n = 93.22 rounded to 100. Sampling technique used in this research with systematic sampling technique. Systematic sampling is a sampling technique in which the first unit is selected with the help of a random number and to get the remaining sample selected automatically according to a pre-determined interval.

III. RESULTS

a. Effect of Age on Hypertension

Table 1. Influence of Age to Incidence of Hypertension in Polyclinic of Internal Disease at Merauke Hospital of Merauke Regency of 2017

No	Age	Hypertension Occurrence				n	%
		Hypertension		Not Hypertension			
		n	%	n	%		
1	> 35 age	42	58,3	30	41,7	72	100
2	≤35 age	7	25	21	75	28	100
Total		49	49	51	51	100	100
p-value = 0,006; RP = 2,333; CI95% (1,193 – 4,563)							

Table 1 shows that of 72 respondents aged> 35 years as many as 42 people (58.3%) suffer from hypertension and not hypertension as many as 30 people (41.7%). While 28 respondents aged less than 35 years as many as 7 people (25%) and not hypertension as many as 21 people (75%). The result of chi square statistic test at significance value 95% (□ = 0,05) obtained p-value 0,006 or p <α (0,05), thus there is influence of age to incidence of hypertension in RSUD Merauke. When viewed from the value of RP = 2.333; CI95% (1,193 - 4,563) interpreted that age> 35 years risk of hypertension 2,333 times greater with incidence of hypertension compared with respondents <35 years old.

b. Influence of Sex on Hypertension Occurrence

Table 2. Influence of Sex on Hypertension Incidence at Polyclinic of Internal Disease of Merauke Hospital of Merauke Regency of 2017

No	Sex	Hypertension Occurrence				n	%
		Hypertension		Not Hypertension			
		n	%	n	%		
1	Male	20	44,4	25	55,6	45	100
2	Female	29	52,7	26	47,3	55	100
Total		49	49	51	51	100	100
p-value = 0,533; RP = 0,843; CI95% (0,559 – 1,272)							

Table 2 shows that out of 45 male respondents as many as 20 people (44.4%) suffer from hypertension and not hypertension as many as 25 people (55.6%). Whereas from 55 respondents who female gender as much 29 people (52,7%) and not hypertension counted 26 people (47,3%). The result of chi square statistic test at significance value 95% (α = 0,05) obtained p-value 0,533 or p> α (0,05), thus there is no significant effect of gender on hypertension occurrence at RSUD Merauke.

c. Influence of Family History on Hypertension Occurrence

Table 3. Effect of Family History on Hypertension Incidence in Internal Medicine Clinic at Merauke Hospital of Merauke Regency in 2017

No	Family Histrory	Hypertension Occurrence				n	%
		Hypertension		Not Hypertension			
		n	%	n	%		
1	Exist	35	97,2	1	2,8	36	100
2	Not Exist	14	21,9	50	78,1	64	100
Total		49	49	51	51	100	100
p-value = 0,000; RP = 4,444; CI95% (2,788 – 7,085)							

Table 3 shows that of 36 respondents who have family history with hypertension counted 35 people (97,2%) suffer from hypertension and not hypertension as much as 1 person (2,8%). Whereas from 64 respondents that there is no family history of family with hypertension as many as 14 people (21,%) and not hypertension as many as 50 people (78.1%). The result of chi square statistic test at significance value of 95% (α = 0,05) obtained p-value 0.000 or p <α (0,05), thus there is influence of family history to hypertension event at RSUD Merauke. When viewed from the value of RP = 4.444; CI95% (2,788 - 7,085) interpreted that respondents with a family history of hypertension were at risk of hypertension 4.44 times higher with the incidence of hypertension compared with respondents who had no family with hypertension.

d. Influence of Tribe on Hypertension

Table 4. The Effect of Tribe on the Incidence of Hypertension in the Policlinic of Internal Medicine Merauke Merauke Hospital in 2017

No	Tribe	Hypertension Occurrence				n	%
		Hypertension		Not Hypertension			
		n	%	n	%		
1 2	Papua Non Papua	18 31	50 48,4	18 33	50 51,6	36 64	100 100
Total		49	49	51	51	100	100
p-value = 1,000; RP = 1,032; CI95% (0,683 – 1,560)							

Table 4 shows that of 36 respondents who come from tribe of Papua with hypertension as much as 18 people (50%) suffer from hypertension and not hypertension as much as 18 people (50%). While from 64 respondents who are non-Papers with hypertension as many as 31 people (48.4%) and not hypertension as many as 33 people (51.6%). Result of chi square statistical test of Papua value of 95% significance (□ = 0,05) obtained p-value1,000 or p> α (0,05), thus there is no significant influence between rates on the incidence of hypertension in RSUD Merauke. When viewed from the value of RP = 1.032; CI95% (0.683 - 1,560) had a risk of 1,032 times the incidence of hypertension in the Papuan tribe, but not significant.

e. Effect of Physical Activity on Hypertension Occurrence

Table 5. Influence of Physical Activity on Hypertension Incidence in Internal Medicine Policlinic of Merauke Hospital of Merauke Regency in 2017

No	physical activity	Hypertension Occurrence				n	%
		Hypertension		Not Hypertension			
		n	%	n	%		
1 2	Less Enough	37 12	77,1 23,1	11 40	22,9 76,9	48 52	100 100
Total		49	49	51	51	100	100
p-value = 0,000; RP = 3,340; CI95% (1,987 – 5,616)							

Table 5 shows that from 36 respondents from physical activity less with hypertension counted 37 people (77,1%) and not hypertension counted 11 people (22,9%). While from 52 respondents with enough activity with hypertension as many as 12 people (23,1%) and not hypertension counted 40 people (76,9%). The result of chi square statistic test with significance value 95% (α = 0,05) obtained p-value0,000 or p <α (0,05), thus there is significant influence between physical activity to hypertension occurrence at RSUD Merauke. When viewed from the value of RP = 3,340; CI95% (1.987 - 5,616) interpreted that respondents whose physical activity was less at risk of hypertension 3.340 times higher with the incidence of hypertension compared with respondents who had adequate physical activity.

f. The Influence of Smoking Habits on Hypertension Occurrence

Table 6. The Influence of Smoking Habit to Hypertension Incidence in Internal Medicine Clinic of Merauke Hospital of Merauke Regency in 2017

No	Smoking Habbit	Hypertension Occurrence				n	%
		Hypertension		Not Hypertension			
		n	%	n	%		
1 2	Smoker Not a Smoker	17 32	42,5 53,3	23 28	57,5 46,7	40 60	100 100
Total		49	49	51	51	100	100
p-value = 0,391; RP = 0,797; CI95% (0,518 – 1,227)							

Table 6 shows that of 40 respondents smokers with hypertension as many as 17 people (42.5%) and not hypertension as many as 23 people (57.5%). While from 60 respondents nonsmokers with hypertension as many as 32 people (53.3%) and not hypertension as many as 28 people (46.7%). The result of chi square statistic test with significance value 95% (α = 0,05) obtained p-value0,391 or p> α (0,05), hence no significant influence between smoking habit toward hypertension occurrence at RSUD Merauke.

g. The influence of drinking alcohol habit against hypertension

Table 7. Influence of drinking alcohol habit to hypertension occurrence in polyclinic of internal disease of Merauke Hospital of Merauke Regency of 2017

No	Drinking alcohol	Hypertension Occurrence				n	%
		Hypertension		Not Hypertension			
		n	%	n	%		
1 2	Risk No risk	10 39	47,6 49,4	11 40	52,4 50,6	21 79	100 100
Total		Total	49	51	51	100	100
p-value = 1,000; RP = 0,965; CI95% (0,584 – 1,592)							

Table 7 shows that of 21 respondents at risk of drinking alcohol with hypertension as many as 10 people (47.6%) and not hypertension as many as 11 people (52.4%). While from 79 respondents did not risk drinking alcohol with incidence of hypertension as many as 39 people (49,4%) and not hypertension counted 40 people (50,6%). The result of chi square statistic test with significance value of 95% (α = 0,05) was obtained p-value1,000 or p> α (0,05), hence no significant influence between alcohol drinking habits on hypertension occurrence at RSUD Merauke .

h. The Effect of Obesity on Hypertension

Table 8. The Influence of Obesity to Hypertension Incidence in Internal Medicine Policlinic of Merauke Hospital of Merauke Regency in 2017

No	Obesity	Hypertension Occurrence				n	%
		Hypertension		No Hypertension			
		n	%	n	%		
1	Obesity	31	77,5	9	22,5	40	100
2	No Obesity	18	30	42	70	60	100
Total		49	49	51	51	100	100
p-value = 0,000; RP = 2,583; CI95% (1,696 – 3,936)							

Table 8 shows that from 40 respondents with obesity as many as 31 people (77.5%) with hypertension and not hypertension as much as 9 people (22.5%). While from 60 respondents are not obese with the incidence of hypertension as many as 18 people (30%) and not hypertension as much as 42 people (70%). The result of chi square statistic test with significance value of 95% (α = 0,05) obtained p-value0,000 or p <α (0,05), thus there is significant influence between obesity to hypertension occurrence in RSUD Merauke. When viewed from the value of RP = 2,583; CI95% (1,696 - 3,936) interpreted that respondents with obesity risk of hypertension 2,583 times higher with incidence of hypertension compared with non obese respondents.

i. Contraceptive Influence on Hypertension Occurrence

Table 9. Influence of Contraceptives on Hypertension Incidence at Polyclinics of Internal Medicine Merauke Merauke District Hospital in 2017

No	Contraception	Hypertension Occurrence				n	%
		Hypertension		No Hypertension			
		n	%	n	%		
1	Risk	18	51,4	17	48,6	35	100
2	No risk	31	47,7	34	52,3	65	100
Total		49	49	51	51	100	100
p-value = 0,883; RP = 1,078; CI95% (0,715 – 1,626)							

Table 9 shows that of 35 respondents with risk contraception as much as 18 people (51.4%) with hypertension and not hypertension as many as 17 people (48.6%). Whereas from 65 respondents no risk contraception with hypertension incidence 31 people (47,7%) and not hypertension counted 34 people (52,3%). The result of chi square statistic test with significance value of 95% (α = 0,05) obtained p-value0,883 or p> α (0,05), hence no significant influence between contraception use to hypertension occurrence at RSUD Merauke. When viewed from the value of RP = 1.078; CI95% (0.715 - 1.626) interpreted that respondents with contraceptives were at risk of hypertension 1.078, but not significant.

IV. DISCUSSION

1. Effect of Age on Hypertension Occurrence

The result showed that there was influence of age to hypertension occurrence at RSUD Merauke (p-value 0,006). The results of research in line with research conducted Umami & Priyanto (2013), in general, hypertension in men occurs over age 35 years while in women occur after the age of 45 years.

Age is the length of one's life to date that is calculated from the date of birth (Handayani, 2010). Increased age can affect the occurrence of hypertension, this is proposed by Sutanto (2010) with increasing age, the possibility of someone suffering from hypertension is also getting bigger. Hypertension disease is a disease that arise due to the interaction of various risk factors for the emergence of hypertension.

The results of the analysis showed that respondents aged> 35 years as many as 42 people (58.3%) suffered from hypertension and not hypertension as many as 30

people (41.7%). While 28 respondents aged less than 35 years as many as 7 people (25%) and not hypertension as many as 21 people (75%). This indicates that the higher the age the more likely to risk the incidence of hypertension. RP test result = 2,333; CI95% (1,193 - 4,563) interpreted that age> 35 years risk of hypertension 2,333 times greater with incidence of hypertension compared with respondents <35 years old.

This is in accordance with the theory put forward by Dalimartha (2008), that hypertension most dominant disease in the age group 31-55 years. This is because with age, blood pressure will tend to increase. Hypertensive disease generally develops at the age of a person reaching middle age that tends to increase, especially those aged over 40 years even at the age of more than 60 years and over. In general, hypertension attacks men in the age above 35 years, while in women occurs after age 45 years (menopause).

2. Influence of Sex on Hypertension Occurrence

The result showed that there was no influence of sex on hypertension occurrence at RSUD Merauke (p-value 0,533). The results of this study are in line with the research Sulityowati (2010) that there is no influence of gender to the incidence of hypertension. Sex is the difference in sexuality of the reproductive organs that distinguishes between men and women (Aryani, 2010). The result of analysis obtained that from respondents who suffer from male hypertension as many as 20 people (44,4%) suffer from hypertension and not hypertension counted 25 people (55,6%). While 55 female respondents (52,7%) and not hypertension were 26 (47,3%). This indicated that women and men were equally at risk of hypertension.

According to Sutrasni (2004), one in five men aged between 35-44 years has high blood pressure. The prevalence of hypertension in men will be doubled at the age of 45-55 years. This is due to hormonal changes, stressful state, fatigue, and uncontrolled eating patterns. Whereas in women, above the age of 55 years they have a greater chance of getting hypertension. This is because in women increased with age where in women premenopausal women tend to have higher blood pressure than men.

Nowadays women get equal opportunity in work. According Nurmalina (2011), work is something that does not activity and cause stress. Thus, opportunities in both men and women are equally at risk for the incidence of hypertension.

This is in line with the opinion of Sutanto (2010), that men and women have relatively equal chances of suffering from hypertension, which is likely to be that the majority of women are currently employed, thus affecting psychological states, such as stress. With these conditions will increase the risk of hypertension. As people get older, a person's blood pressure increases.

3. The Influence of Family History on Hypertension Occurrence

The result showed that there was a genetic influence on the incidence of hypertension in RSUD Merauke (p-value 0,000). The results of this study are in line with the research Sulistyowati (2010), that family history with hypertension effect on the incidence of hypertension.

Heredity or genetics is the inheritance of the genetic traits of parents If one has a parent one of whom is suffering from hypertension, then the person has a greater risk of getting hypertension than in both normal parents (not suffering from hypertension). However, it does not mean that all who have hypertensive offspring will definitely suffer from hypertension (Sutanto, 2010).

The result of the analysis showed that the respondents who have family history with hypertension as many as 35 people (97,2%) suffer from hypertension and not hypertension as much as 1 person (2,8%). Whereas from 64 respondents that there is no family history of family with hypertension as many as 14 people (21,%) and not hypertension as many as 50 people (78.1%). This indicates that respondents who have hypertension experience from their family tends to risk to the happening of hypertension. RP test result = 4,444; CI95% (2,788 - 7,085) interpreted that respondents with a family history of hypertension were at risk of hypertension 4.44 times higher with the incidence of hypertension compared with respondents who had no family with hypertension.

This is in accordance with the theory proposed by Gunawan (2001), that from statistical data proved someone will have greater possibility to get hypertension if her parents are hypertension sufferers. Cases of essential hypertension 70-80% passed down by his parents. If the history of hypertension is found in both parents then the assumption of essential hypertension is greater or in monozygotic twins (one egg) and one of them suffering from hypertension then the person is likely to suffer from hypertension (Dalimartha, 2008).

4. Influence of Tribe on Hypertension Occurrence

The result of the research showed that there was no significant influence between the tribes and the incidence of hypertension in RSUD Merauke (p-value1,000). of the test result of the prevalence ratio of ethnic differences had a risk of 1,032 times the incidence of hypertension in the Papuan tribe, but not significant. this is also revealed by Gray (2005), that there are abnormalities in the

angiotensinogen gene but the mechanism may be poly-genic in nature (Gray, 2005).

The result of analysis that came from tribe of Papua with hypertension as many as 18 people (50%) suffer from hypertension and not hypertension as much as 18 people (50%). While from 64 respondents who are non-Papers with hypertension as many as 31 people (48.4%) and not hypertension as many as 33 people (51.6%). This suggests that each tribe is at risk of hypertension caused by the individual's own habits in preventing hypertension.

The absence of influence between the tribes in Merauke district is due to the fact that most of the respondents have long lived in Merauke District and adapt to the local community, thus affecting the habits and patterns of living and eating patterns of local people and family history that affect health on offspring.

5. Effects of Physical Activity on Hypertension Occurrence

The result of this research shows that there is influence of physical activity to hypertension event in RSUD Merauke (p-value 0,000). The result of this research is in line with research of Rabaity & Sulchan (2012), that there is influence of fiscal activity to the happening of hypertension.

According Mannan et al (2012), physical activity is a movement performed by the muscles of the body and its supporting system. While Nurmalina (2011), divide physical activity classified activity light, medium and heavy.

The results obtained that 52% of physical activity done fairly by respondents. Physical activity done such as cleaning the home environment, farming and sports. Activity of this activity is often done this causes the maintenance of the ideal weight balance. Respondents who did not perform activities such as watching television, sleeping, following extracurricular activities, tutoring lessons plus eating lots of sweet and high energy and low in nutrients can lead to obesity and have a 30-50% tendency to develop hypertension rather than those who are active.

The result of analysis showed that physical activity less with hypertension was 37 people (77,1%) and not hypertension was 11 people (22,9%). While from 52 respondents with enough activity with hypertension as many as 12 people (23,1%) and not hypertension counted 40 people (76,9%). This shows the proportion of hypertensive incidence in respondents who lack physical activity. RP test result = 3,340; CI95% (1.987 - 5,616) interpreted that respondents whose physical activity was less at risk of hypertension 3.340 times higher with the incidence of hypertension compared with respondents who had adequate physical activity.

Lack of physical activity increases the risk of suffering from hypertension because it increases the risk of being overweight and has a higher heart rate frequency so that the heart muscle must work harder pumping and greater pressure on the arteries. During physical activity, the muscles need energy outside the metabolism to move, while the heart and lungs require additional energy to deliver nutrients and oxygen throughout the body and to remove the remains from the body (Mannan et al., 2012).

6. The influence of smoking habit on hypertension

The results obtained that there is no influence of smoking habits on the incidence of hypertension in RSUD Merauke (p-value 0.391). The results of this study are not in line with research Mannan (2012) reported that smoking ≥ 20 cigarettes / day and duration of smoking ≥10 years at risk 2.32 times to suffer from hypertension. While Oroh (2012), smoking habits have 6 times greater chance of suffering from hypertension compared with respondents who do not have a habit of smoking.

Cigarettes are tobacco replicas wrapped in paper that are 7-20 cm in length. cigarettes contain approximately 4000 elements, 200 of which are harmful to health. The main toxins in cigarettes are tar, nicotine, and carbon monoxide (CO), but in a cigarette also contains other chemicals that are highly toxic (Kusmiran, 2012). The result of analysis was found that from 40 respondents smokers with hypertension as much 17 people (42,5%) and not hypertension counted 23 people (57,5%). While from 60 respondents nonsmokers with hypertension as many as 32 people (53.3%) and not hypertension as many as 28 people (46.7%). This suggests a high risk of smoking with the incidence of hypertension.

This is Sheldon (2005), with someone smoking two sticks then the systolic and diastolic pressure will increase 10 mmHg. Blood pressure will remain at this altitude for up to 30 minutes after stopping cigarette smoking. As for heavy smokers blood pressure will be at high levels throughout the day.

Cigarettes inhaled can result in an increase in blood pressure. Smoking will result in vascular constriction of peripheral blood vessels and vessels in the kidney resulting in an increase in blood pressure. By smoking a cigarette it will have a major influence on the rise in blood pressure or hypertension. This can be caused by CO gas produced by cigarette smoke can cause blood vessels "cramp" so that blood pressure rises, and the walls of blood vessels become torn (Kusmiran, 2012).

7. The influence of drinking alcohol habits against the incidence of hypertension

The results obtained that no influence of drinking alcohol consumption to the incidence of hypertension in RSUD Merauke (p-value 1,000). The results of this study are not in line with research conducted by Oroh (2012), revealed that there is the influence of drinking alcohol with the incidence of hypertension.

Alcohol is an active substance contained from various types of liquor substances containing ethanol is working to suppress the central nervous system. However, if used in low doses of alcohol it actually makes the body feel fresh (stimulating). Alcohol is the most widely used and abused substance because it is socially acceptable. This is understood because our society has certain types of beverages that contain alcohol. Effects of its use depends on the amount consumed, the physical size of the user, and the user's personality. The result of analysis showed that from 21 respondents risked to drink alcohol with hypertension as many as 10 people (47,6%) and not hypertension as many as 11 people (52,4%). While from 79 respondents did not risk drinking alcohol with incidence of hypertension as many as 39 people (49,4%) and not hypertension counted 40 people (50,6%). This suggests that the incidence of hypertension is equally at risk for respondents who do not drink alcohol and drink alcohol.

SThe absence of the influence of drinking alcohol on the Papuan community can be due to the fact that respondents who risk drinking alcohol are not routinely drunk in every week although done every month. In addition, respondents who do not consume alcohol are at risk from other factors such as salt consumptions and smoking habits.This is in accordance with Dalimartha (2008), that alcohol can trigger blood pressure. Therefore 90 millimeters per week is the highest limit that can be consumed. The size is equal to 6 cans of beer = 360 milliliters or 6 glasses of wine = 120 milliliters (Sustrani, 2004 :). Secure limits may range from 2 units a day (1 unit can be either a liquor seloki, a glass of wine, or a quarter liter of beer). But it would be better if people with hypertension do not consume alcohol at all.

8. Effect of Obesity on Hypertension Occurrence

The results obtained that there is an influence of obesity on the incidence of hypertension in RSUD Merauke (p-value 0.000). The results of this study in line with research Budiono (2015), that there is the influence of obesity on the incidence of hypertension. Obesity is overweight as a result of excessive body fat accumulation (Nurmalina, 2011). Meanwhile, according to WHO (2007) in Supariasa (2012) to measure body fat such as body mass index (BMI).

The result of analysis showed that from 40 respondents with obesity were 31 people (77,5%) with hypertension and not hypertension as much as 9 people (22,5%). While from 60 respondents are not obese with the incidence of hypertension as many as 18 people (30%) and not hypertension as much as 42 people (70%). This suggests that the incidence of hypertension is risky in obesity. RP test result = 2.583; CI95% (1,696 - 3,936) interpreted that respondents with obesity risk of hypertension 2,583 times higher with incidence of hypertension compared with non obese respondents.

It is also revealed by Alamsyah, et al (2013), that excess body mass index (IMT) has pre-hypertensive (40%) and obesity BMI tends to have stage I and stage II blood pressure (7%) and a risk of 1,112+ large have hypertension than patients who have normal BMI.

Although it is not known exactly the effect between hypertension and obesity, it is proven that the heart pump power and blood circulation of obese people with hypertension is higher than those with normal weight (Sutanto, 2010).

V. CONCLUSION

1. There is influence of age to the happening of hypertension in Polyclinic of Internal Disease RSUD Merauke (p-value 0,006; RP = 2,333; CI95% = 1,193 - 4,563).
2. There is no significant effect of sex on the incidence of hypertension in the Polyclinic of Internal Medicine Merauke Hospital (p-value 0,533; RP = 0,843; CI95% (0,559 - 1,272).
3. There is a significant effect of family history on the incidence of hypertension in the Polyclinics of Internal Medicine Merauke Hospital (p-value 0,000; RP = 4,444; CI95% = 2,788 - 7,085)
4. There is no significant effect between rates on the incidence of hypertension in the Merauke Internal Medicine Clinic (p-value 1,000; RP = 1.032; CI95% = 0.683 - 1,560)
5. There was a significant effect of physical activity on the incidence of hypertension in the Merauke Internal Medicine Clinic (p-value 0,000; RP = 3.340; CI95% = 1.987 - 5.616).
6. There is no significant influence between smoking habit on hypertension incidence in Internal Medicine Polyclinic of Merauke Hospital (p-value 0,391; RP = 0,797; CI95% = 0,518 - 1,227).
7. There is no significant influence between alcohol consumption on hypertension occurrence in Polyclinic of Internal Medicine of RSUD Merauke (p-value 1,000; RP = 0,965; CI95% = 0,584 - 1,592)

8. There is a significant effect between obesity on hypertension occurrence in Internal Medicine Polyclinic of Merauke Hospital (p-value 0,000; RP = 2,583; CI95% = 1,696 - 3,936).

VI. SUGGESTION

1. For the Community

a. Changing an unhealthy lifestyle becomes healthy by maintaining a dietary pattern of eating so as not to be overweight or obese, as well as reducing salt intake to prevent rising blood pressure.

b. Perform physical activity with exercise regularly to keep the ideal weight and dispose of excess nutrients in the body for health to stay awake.

2. For Institution RSUD Merauke

To educate through health counseling for hypertensive patients with diet, exercise and hygiene behavior.

3. For Further Researchers.

For Further Research It is expected that there is a deeper research by extending the sample and pay more attention to the related variables.

REFERENCES

[1] Almatsier, S, 2011. *Prinsip Dasar Ilmu Gizi*, PT. Gramedia Pustaka Utama, Jakarta

[2] Anggraini, AD, Waren, A, Situmorang, E, Asputra, H, Siahaan, SS, 2009, *Faktor-faktor yang berhubungan dengan kejadian hipertensi pada pasien yang berobat di polikliniklinik dewasa puskesmas Bangkinang periode januari sampai juni 2008.*, Files of DrsMed_ FK UNRI, Juni 2008, hlm.1-41.

[3] Alamsyah, Soemardini dan Yudha, 2013 *Pengaruh Antara Berat Badan Berlebih Dan Kejadian Hipertensi Pada Pasien Di Wilayah Puskesmas Mojolangu Kecamatan Lowokwaru Kota Malang*. http//www.fk.ub.go.id. diakses 20 Juli 2017.

[4] Azam Mahalul, 2004, *Patologi Umum*, Semarang: UNNES.

[5] Cahyono, Suharjo, 2008. *Gaya Hidup dan Penyakit Modern*, Kanisius, Jakarta.

[6] Dalimartha, Setiawan, 2008, Care Your Self, Hipertensi, Penebar Plus, Jakarta. Data Puskesmas Kedungmundu Kota Semarang, Tahun 2014

[7] Dinas Kesehatan Kabupaten Merauke 2015. *Profil Kesehatan Kabupaten Merauke*.

[8] Dinas Kesehatan Provinsi Papua 2015. *Profil Kesehatan Provinsi Papua*.

[9] Fitriani D, 2015. Hubungan Lama Penggunaan Kontrasepsi Oral Dengan Kejadian Hipertensi Pada Akseptor KB Pil Wanita Usia Subur Diwilayah Kerja Puskesmas Benda Baru Tangerang Tahun 2015. Stikes Widya Dharma Husada Tangerang, Indonesia.

[10] Girsang, 2013. *Hari Kesehatan Dunia 2013*: *Kampanye PAPDI Melawan Hipertensi*. http//www.infohealth.com. diakses 2 Juli 2017.

[11] Gray, Huon, 2005, *Kardiologi* Edisi IV, Erlangga, Jakarta.

[12] Gunawan Lany, 2010. *Hipertensi*, Kanisius, Yogyakarta.

[13] Hengli, 2013. *Pengaruh Antara Merokok Dan Aktivitas Fisik Dengan Kejadian Hipertensi Pada Pria Di Wilayah Kerja Puskesmas Siantan Hulu Kecamatan Pontianak Utara*. http//www.fk.untan.co.id. diakses 2 Juli 2017.

[14] Japi Serliana Zazariani, 2012. Pengaruh Antara Aktivitas Fisik Dan Obesitas Dengan Kejadian Hipertensi Pada Umur 20-44 TahunDi Puskesmas Depok I Maguwoharjo Kabupaten Sleman. http//www.unres.co.id. diakses 2 Juli 2017.

[15] Kemenkes RI (2013). *Lanjut Usia*. http://www.kemenkesri.go.id. diakses 2 Juli 2017

[16] Kemenkes RI (2014). *Riset Kesehatan Dasar Nasional*. http://www.kemenkesri.go.id. diakses 2 Juli 2017.

[17] Kemenkes RI, (2015). 75% *Kasus Hipertensi Belum Terjangkau Pelayanan Kesehatan*. http://www.kemenkesri.go.id. diakses 2 Juli 2017.

[18] Karyadi. 2006. *Hidup Bersama Penyakit*. Jakarta: PT Intisari Mediatama Emma

[19] Kurniawati, H. 2010. *Hubungan Pemakaian Kontrasepsi pil KB Kombinasi dengan Tekanan Darah Tinggi pada Wanita Usia Subur di Puskesmas Kecamatan Grogol Petamburan Jakarta Barat Tahun 2010*. Tesis, Program Pascasarjana, Fakultas Kesehatan Masyarakat, Universitas Indonesia, Depok.

[20] Mannan, . 2012.*Faktor Risiko Kejadian Hipertensi Di Wilayah Kerja Puskesmas Bangkala Kabupaten Jeneponto Tahun 2012*. http//www.unhas.co.id. diakses 2 Juli 2017.

[21] Martiani Ayu, 2012. *Faktor Risiko Hipertensi Ditinjau Dari Kebiasaan Minum Kopi (Studi Kasus di Wilayah Kerja Puskesmas Ungaran pada Bulan Januari-Februari 2012)*. http//www.undip.co.id. diakses 2 Juli 2017.

[22] Mubarak, W. I., Nurul, C., & Bambang, A. S. (2010). *Ilmu keperawatan komunitas: Konsep dan Aplikasi*. Vol. 2. Jakarta: Penerbit Salemba Medika

[23] Nur, R., and Mallongi, A., 2016. Impact of Violence on Health Reproduction Among Wives in Donggala. Pakistan Journal of Nutrition Volume 15, Number 11, 980-988.

[24] Nurmalina, 2011. *Pencegahan & Manajemen Obesitas. Panduan Untuk Keluarga*. Elex Media komputindo, Jakarta.

[25] Nurkhalida, 2003, *Warta Kesehatan Masyarakat*, Departemen Kesehatan RI, Jakarta.

[26] Notoatmodjo S, 2012 *Metode Penelitian Kesehatan*, Jakarta: Rineka Cipta.

[27] Nurrahmani, U 2011, *Stop hipertensi*, Familia, Yogykarta.

[28] Oroh Diyan, 2012. *Pengaruh Antara Kebiasaan Merokok Dan Konsumsi Alkohol Dengan Kejadian Hipertensi Pada Pasien Polikliniklinik Umum di Puskesmas Tumaratas Kecamatan Langowan Barat Kabupaten Minahasa. Available from*: http//www.unsrat.co.id. diakses 2 Juli 2017.

[29] Pangaribuan L (2013). Hubungan Penggunaan Kontrasepsi Pil Dengan Kejadian Hipertensi Pada Wanita Usia 15-49 Tahun Di Indonesia Tahun 2013. Media Litbangkes, Vol. 25 No. 2, Juni 2015, xx - xx

[30] Prasetyaningrum, YI 2014, *Hipertensi bukan untuk ditakuti*, Fmedia (Imprint AgroMedia Pustaka), Jakarta.

[31] Rabaity & Sulchan, 2012. *Konsumsi Gula Sederhana Dan Aktifitas Fisik Sebagai Faktor Risiko Kejadian Hipertensi Obesitik Pada Remaja Awal*. http//www.fk.undip.co.id. diakses 20 Juli 2017.

[32] Rahajeng &*Tuminah, 2009. Prevalensi Hipertensi dan*

Determinannya di Indonesia. Pusat Penelitian Biomedis dan Farmasi Badan Penelitian Kesehatan Departemen Kesehatan RI, Jakarta. http//www.kemenkesri. go.id. diakses 2 Juli 2017.

[33] Riset Kesehatan Dasar Nasional tahun 2007. http://www.kemenkesri.go.id. Diakses 2 Juli 2017.

[34] Riset Kesehatan Dasar Nasional tahun 2013. http://www.kemenkesri.go.id. Diakses 2 Juli 2017.

[35] Rochmah N, 2014. *Kejadian Hipertensi Berhubungan Dengan Pola Makan*. http://www.stikesharapanbangsa.co.id. Diakses 2 Juni 2017.

[36] Sastroasmoro, 2010. *Metode Penelitian Klinis*. Jakarta: Rineka Cipta.

[37] Septya S.K. (2014) Hubungan antara Penggunaan Kontrasepsi Pil dengan Kejadian Hipertensi Pada Wanita Usia Subur di Wilayah Kerja Puskesmas Bahu Kota Manado. http://www.fkm.unsrat.ac.id. diakses 3 Oktober 2017.

[38] Stefanhy E, 2014. *Hubungan Pola Makan, Gaya Hidup, Dan Indeks Massa Tubuh Dengan Hipertensi Pada Pra Lansia Dan Lansia Di Posbindu Kelurahan Depok Jaya*. http://www.fk_ui.co.id. diakses 2 Juni 2017.

[39] Shea S,, 2003, *Uncontrolled Hypertension in an Inner-City Minority* Population, N Engl J Med.

[40] Sheldon G,Sheps,, 2005, Mayo Clinic Hipertensi, Mengatasi Tekanan
Darah Tinggi, PT Intisari Mediatama, Jakarta.

[41] Stang Abdul Rahman, Amran Rahim and Anwar Mallongi. 2017. Forecasting of Dengue Disease Incident Risks Using Non-stationary Spatial of Geostatistics Model in Bone Regency Indonesia. J. Entomol.,14: 49-57.

[42] Sulistiyowati, 2010.*Faktor-Faktor Yang Berpengaruh Dengan Kejadian Hipertensi Di Kampung Botton Kelurahan Magelang Kecamatan Magelang Tengah Kota Magelang Tahun 2009.* Htttp:///www.unnes.co.id. diakses 2 Juli 2017.

[43] Sunardi, Y 2012, *Sehat itu pilihan gaya hidup sehat tanpa repot*, ANDI, Yogyakarta.

[44] Supariasa, 2012. *Penilaian Status Gizi*. EGC, Jakarta.

[45] Sustrani Lany, Alam Syamsir, Hadibroto Iwan (Tim Redaksi Vitahealth), 2004, Hipertensi, Gramedia, Jakarta.

[46] Sutanto, 2010. Cekal (Cegah dan tangkal) Penyakit Modern: Hipertensi, Stroke, Jantung,Kolesterol, dan Diabetes (gejala – gejala, pencegahan dna pengendalian), Andi: Yogyakarta.