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Research Article

PREVALENCE OF HYPERTENSION AMONG THE ADULTS IN VARAKAVIPUDI VS KAKUPALLI

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ABSTRACT

Background: Elevated blood pressure is rising nearly 30 percent in teens, and by 2025, hypertension will affect 1.56 billion adults worldwide. This is a growing health concern; untreated high blood pressure may damage organs in the body and increase the risk of heart attack, stroke, and brain hemorrhage.

Aim: to assess the prevalence of hypertension

Setting and Design: The study was conducted in Varakavipudi (coastal area) and Kakupalli (non coastal area) by using a descriptive design.

Materials and Methods: A total of 500 samples were included in this study. Among this, 250 samples belongs to coastal area and 250 samples belongs to non coastal area by using convenience sampling technique.

Statistical Analysis Used: The collected data was organized, tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the objectives of the study.

Results: In Varakavipudi, Out of 250 samples, With regard to the category of the blood pressure 28(11.2%) had stage-I hypertension, 10(4%) had stage-II hypertension, 0(0.00%) had stage-III hypertension, 35(14%) had grade-I isolated systolic hypertension, and 5(2%) had grade-II isolated systolic hypertension. Known Hypertensive cases are 50(20%), Newly diagnosed cases are 28(11.2%). With regard to BMI, among 250 samples 36(14.4%) were overweight and 13(5.2%) were obese. in Kakupalli, among 250 samples, 83(33.2%) had stage-I hypertension, 26(10.4%) had stage-II hypertension, 4(1.6%) had stage-III hypertension, 61(24.4%) had grade-I hypertension, and 5(2%) had grade-II hypertension. Known Hypertensive cases are 127(50.8%). Newly diagnosed cases are 52(20.8%). With regard to BMI among 250 samples 20(8%) were overweight and 10(4%) were obese.

Conclusion: The above results shown that blood pressure values are high in the Kakupalli (non coastal area) than Varakavipudi (coastal area).

INTRODUCTION

Blood pressure is the pressure exerted by circulating blood upon the walls of blood vessels, and is one of the principal vital signs[1].Globally, the overall prevalence of hypertension in adults aged 25 years & over was around 40% in 2008. The number of people with hypertension rose from 600 million in 1980 to 1 billion in 2008[2]. The increasing prevalence of hypertension is attributed to population growth, ageing and behavioral risk factors, such as unhealthy diet, harmful use of alcohol, lack of physical activity, excess weight and exposure to persistent stress[3] . Hypertension is a major risk factor for NCDs like stroke, cardiovascular disease and chronic kidney disease. Complications of hypertension account for 9.4 million deaths worldwide every year [4]. Hypertension is responsible for 45% of deaths due to heart disease and 51% of deaths due to stroke[5]. In India, 23.10% of men and 22.60% of women over 25 years suffer from hypertension [6].

One in three adults worldwide has high blood pressure. Hypertension increases the risk of heart attack, stroke, kidney failure and much other associated co morbidity. Treating raised blood pressure and maintaining it below 140/90 mmHg is

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associated with a reduction in cardiovascular complication. The theme for World Health Day (WHD) 2013 is "high blood pressure". The goal of WHD 2013 is to reduce heart attacks and strokes. Keeping in line with the WHO, Government of India, Country Cooperation Strategy, the WHO 2013 events in India are aimed at raising the awareness amongst national policymakers, program managers and other stakeholders on the need to strengthen the Indian health system to make it competent enough to respond to hypertension and related co morbidities[1].

Kantha, K and Indira, A. (2015) conducted a cross sectional study on prevalence of hypertension among the adults in coastal and non coastal areas. A total of 5000 samples were included in the study. In that 2500 samples belongs to coastal areas and 2500 samples belongs to non coastal areas. The prevalence of stage-I hypertension in coastal areas is 460(18.4%) but in non coastal areas it is 1413(56.50%). The results indicate that there is high prevalence of hypertension in non coastal areas than coastal areas[7].

Arumugam Indira *et.al*. (2015) conducted a study on prevalence of prehypertension among the adults in coastal and non coastal areas. The study results shown that regarding prehypertension in SBP, in coastal areas 1129(45.16%) and in non coastal areas 971(38.84%). The results indicate that there is high prevalence of pre hypertension in coastal areas than non coastal areas. Further studies are needed to find out the reasons and measures to control high blood pressure is necessary[8].

Even today there is scarcity of the studies in coastal and non coastal areas of India. With this background, present study has been undertaken to study the prevalence of hypertension.

Objectives of the Study

- To assess the prevalence of hypertension among adults of coastal and non coastal areas.
- To identify the risk factors of hypertension among adults of coastal and non coastal areas.
- To compare the prevalence of hypertension between coastal and non coastal areas.
- To find association between the prevalence of hypertension with selected socio demographic variables.

Detailed Research Plan

Research Approach: Quantitative Approach.
Research Design: Descriptive design.
Research Setting: The study was conducted in Varakavipudi (coastal area) and Kakupalli (non coastal area) by using a descriptive design.
Coastal area means areas within 2km from mean low water mark (MLWM) or mean high water mark (MHWM).
Non coastal area means areas far 2km from mean low water mark (MLWM) or mean high water mark (MHWM).
Sampling Technique: Convenience sampling technique
Sample Size: A total of 500 samples were included in this study. Among this, 250 samples belongs to Varakavipudi (coastal area) and 250 samples belongs to Kakupalli (non coastal area).

RESULTS AND DISCUSSION

Comparison of Blood Pressure in Varakavipudi and Kakupalli

Table 1 Comparison of Blood Pressure in Varakavipudi and Kakupalli. (N=250)

Blood Pressure Category	Varakavipudi		Kakupallli		Correlation coefficient	Standard deviation
	(f)	(%)	(f)	(%)		
Optimal	50	20%	2	0.8%		
Norma	61	24.4%	7	2.8%		
High Normal	61	24.4%	62	24.8%		
Stage-I	28	11.2%	83	33.2%	0.22	27.89
Stage-II	10	4%	26	10.4%		
Stage-III	0	0.00%	4	1.6%		
Grade-I	35	14%	61	24.4%		
Grade-II	5	2%	5	2%		

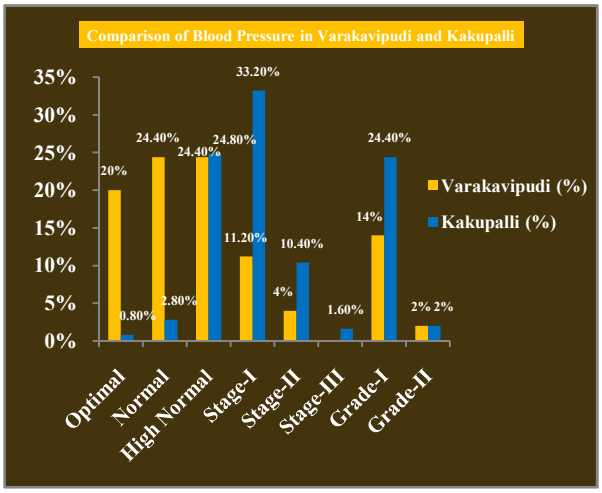

Fig. 1 Comparison of Blood Pressure in Varakavipudi and Kakupalli

The prevalence of stage-I BP in coastal area is 28(11.2%) but in non coastal areas it is 83(33.2%). The correlation coefficient value is highly significant (0.22) and the standard deviation is 27.89.

Comparison of Body Mass Index In Kothakoduru and Vidavaluru

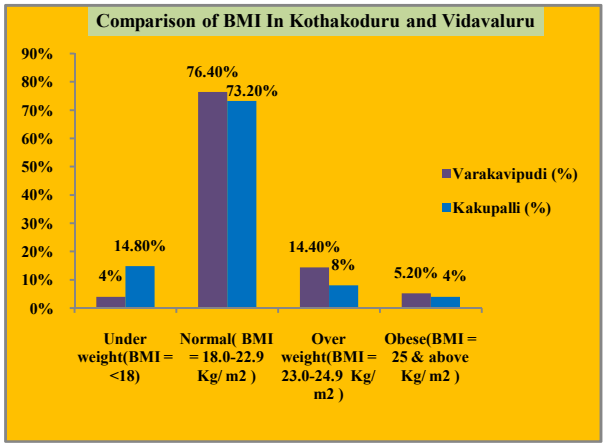

Fig. 2 Comparison of Body Mass Index in Varakavipudi and Kakupalli

The prevalence of overweight samples in coastal area is 36(14.4%), obesity is 13(5.2%) but in non coastal areas it is 20(8%) and 10(4%). The correlation coefficient value is highly significant (0.97) and the standard deviation is 77.60.

Association of Socio Demographic Data with the Blood Pressure in Varakavipudi

There is a significant association of demographic variables with Age, family, income, Working members in family, type of ventilation, sleeping hours, sleeping pattern, exercise, food pattern, type of salt used, use of fast food, use of Biriyani, hotel food and worship of god, are you a known hypertensive and remaining are non significant.

Association of Socio Demographic Data with the Blood Pressure in Kakupalli

There is a significant association of demographic variables occupation, Amount of oil used for per day, Entertainment, Use of Biriyani and remaining are non significant.

CONCLUSION

- The above results shown that stage-1 and stagee-2 isolated hypertension values are higher in the Kakupalli (non coastal area) than in the Varakavipudi(coastal area).
- The variables like Age, exercise, Type of oil used for cooking, Type of salt used, habits, intake of fish, are you having stress and are you a known hypertensive are the influencing risk factors for the development of hypertension among the adults.

References

Anchala, R.K.N. (2014) Hypertension in India: a systematic review and meta-analysis of prevalence, awareness, and control of hypertension. *J Hypertens , 32*, 1170-7.

World Health Organization. (2013) Global status report on noncommunicable diseases 2010. Geneva, World Health Organization, 2011.

http://www.who.int/nmh/ publications /ncd_report_full_en.pdf. Accessed on June 16,.

WHO. (2013) A global brief on hypertension 2013. Geneva: World Health Organization;

http://apps.who.int/iris/bitstream/10665/79059/1/WHO_DCO_WHD_2013.

Lim, S.S., Vos, T., Flaxman, A.D., Danaei, G., et al (2012) A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010 : a systematic analysis for the Global Burden of Disease Study 2010. 380 , 2224-60.

World Health Organization, Geneva. (2013) Causes of Death 2008 [online database].

http://www.who.int/healthinfo/global_burden_disease/cod_2008_

WHO. World Health Statistics. Geneva: World Health Organization; (2013).

Katari Kantha and Arumugam Indira, Prevalence of hypertension among the adults in coastal and non coastal areas *International Journal of Development Research*, Vol. 05, Issue, 01, pp. 3134-3139, January, 2015.

Arumugam Indira *et.al*, Prevalence of Pre Hypertension among the Adults Aged 20-60 Years in Coastal and Non Coastal areas *International Journal of recent scientific research*.6(11),pp.7166-7170, November,2015.

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