Waist circumference is strong predictor of hypertension in male

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Background: Hypertension is one of the cardiovascular variables raised state, systolic and diastolic blood pressure are its parameters that can be easily measured, alteration of blood pressure is commonly observed in different condition, but persistent elevated state is one of the alarming remark of the cardiovascular biology, therefore status of blood pressure in the adult in different anthropometric measures are adopted but especial focus is given to waist circumference at different anatomical site said to be one of the indicator of adiposity depots that is associated with cardio metabolic risk.

Aims: Hence, this study aims to find whether addition of waist circumference (WC) to body mass index (BMI; kg/m2) play additive or strong independent role in predicting health risk than does BMI alone.

Methods: A community based cross sectional study was conducted by incorporating total of substantial number (more than 100) of subjects in the data who were male only older than 25 years, non smokers, non alcoholic, didn't have history of taking any type of medication, non vegetarian with normal physical activity and were residents in the urban and rural areas throughout, were included in the present study. Waist circumference referenced to umbilicus measured by non tensile and non flexible measuring tape and at the mean time height and weight were also recorded by standard device in order to calculate BMI and blood pressure was measured by Aneroid sphygmomanometer of the respective subject subsequently data analysis was made by using SPSS to compare the BMI and Waist circumference relationship with blood Pressure independently to identify their relationship with hypertension.

Results: Keeping few exceptional aside, Both BMI and Waist Circumference exhibited positive association with blood pressure, while the waist circumference was more strongly associated with hiking of blood pressure and also BMI is not always the relating parametric tool to metabolic disease as was conventionally considered.

Conclusion: The result and analytical data showed that (P<0.05) there is significant strong correlation of blood pressure with waist circumference comparatively more than BMI thus WC alone can significantly predict the co-morbidity therefore this study approach to suggest and hints to follow as a routine task for measuring Waist circumference while taking inference for diagnosing hypertension risk at least in male.

Key words: Hypertension, cardiovascular variable, waist circumference, Body mass Index (BMI), Cardio-Metabolic risk.

Biography
Niraj Khatri Sapkota has completed his PhD in Molecular Physiology applications to pharmacology at the age of 32 years from Zhejiang University, China, one of the Thomson Reuters and Elsevier best ranked university of the world; he is now working as an Associate Professor in the Department of Physiology in Chitwan Medical College affiliated to Tribhuvan University, Nepal. He is an active researcher and academician of his country, Nepal. He has published more than 50 papers both original and review papers as a single author or with collaboration in reputed international journals and is serving as a reviewer, advisory and editorial board member and Editor of more than 30 international reputed journals.

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