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# A Comparative Study on Hypertension during Adolescent and Awareness on Stress Management Techniques

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**Abstract:** *The major problem in achieving better control of hypertension in a community is based on the fact that hypertension is a silent asymptomatic disease. Ignorance of the general population as to the nature of elevated blood pressure, its morbid effects and the methods of maintaining its control is widespread and contributes to the large percentage of undetected and untreated hypertensive subjects in a community. It is suggested that community screening programs combined with simplified diagnostic evaluation and intense patient education and follow-up may greatly increase the percentages under continuous treatment and control. ACC and the AHA do not provide clear direction on how to treat and manage younger hypertensive patients who are most affected by the updates. Out of 127 hypertensive patients aged 12 to 40 investigated by intravenous pyelography, abdominal aortography, and renal biopsy an underlying cause was found in 57%. The proportion with secondary hypertension was higher in young patients and in those with severe hypertension. Primary arteritis of the aorta was an important cause of Reno vascular hypertension in an Asian population. Thus, it was concluded by our study that hypertension is present in adolescent age groups and a brief explanation on stress management techniques were given.*

## I. INTRODUCTION

A condition in which the force of the blood against the artery walls is too high.

The systolic reading refers to the pressure as the heart pumps blood around the body. The diastolic reading refers to the pressure as the heart relaxes and refills with blood.

(<https://www.medicalnewstoday.com>)

High blood pressure is a common condition in which the long-term force of the blood against your artery walls is high enough that it may eventually cause health problems, such as heart disease.

Blood pressure is determined both by the amount of blood your heart pumps and the amount of resistance to blood flow in your arteries. The more blood your heart pumps and the narrower your arteries, the higher your blood pressure.

You can have high blood pressure (hypertension) for years without any symptoms. Even without symptoms, damage to blood vessels and your heart continues and can be detected. Uncontrolled high blood pressure increases your risk of serious health problems, including heart attack and stroke.

High blood pressure generally develops over many years, and it affects nearly everyone eventually. Fortunately, high blood pressure can be easily detected. And once you know you have high blood pressure, you can work with your doctor to control it.

## II. MATERIALS AND METHOD

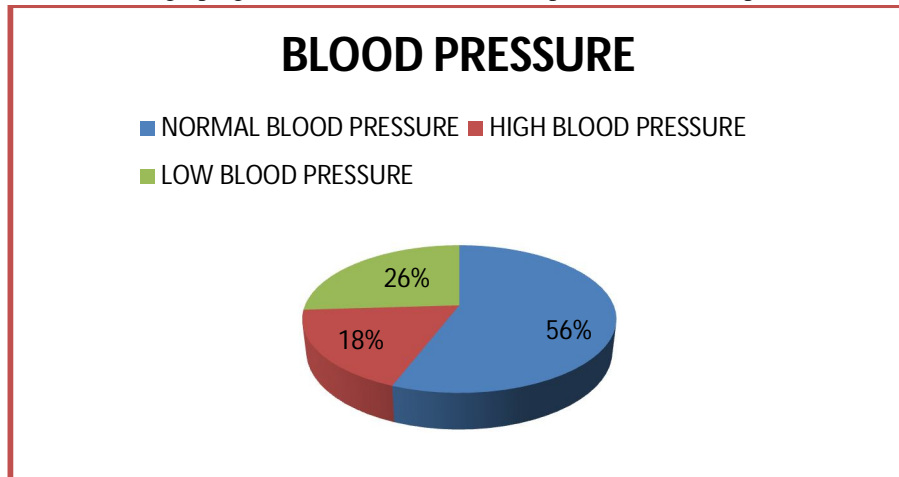
A brief survey including Awareness on Stress Management Techniques and Hypertension was conducted on Adolescent age group. The sample data size selected was 75 subjects which included girls between 16-19 years of age.

The data was collected by visiting different colleges in Hyderabad like M.S. Junior College and Madina Junior College, Mehdiapatnam. An interview cum questionnaire method with flash cards, posters, weighing machine, height tape and electronic Sphygmomanometer was used to collect the data from the respondents, who were questioned about their Anthropometric Information, Dietary Information, Lifestyle Information and Awareness Questions.

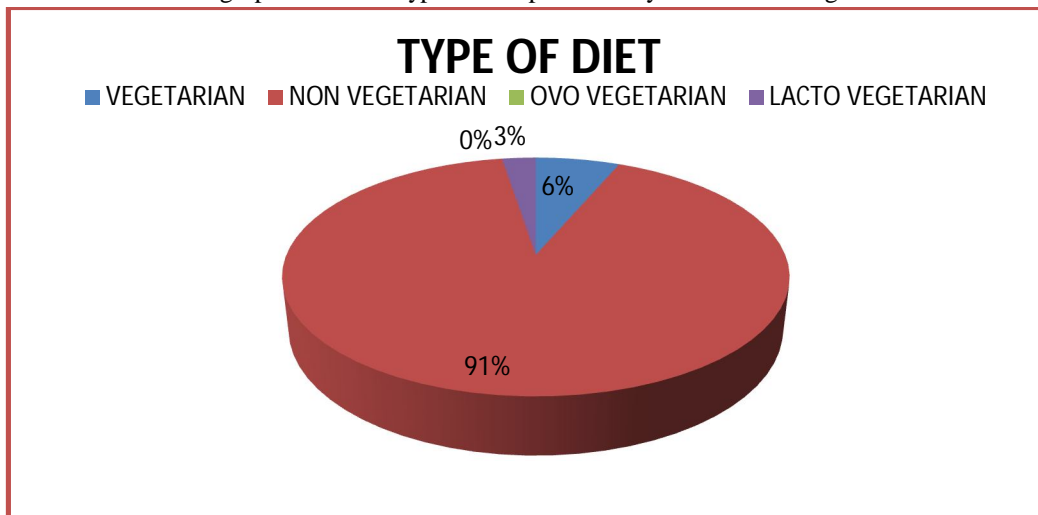
Statistical analysis using graphical representation was applied.

### III. RESULTS AND DISCUSSION

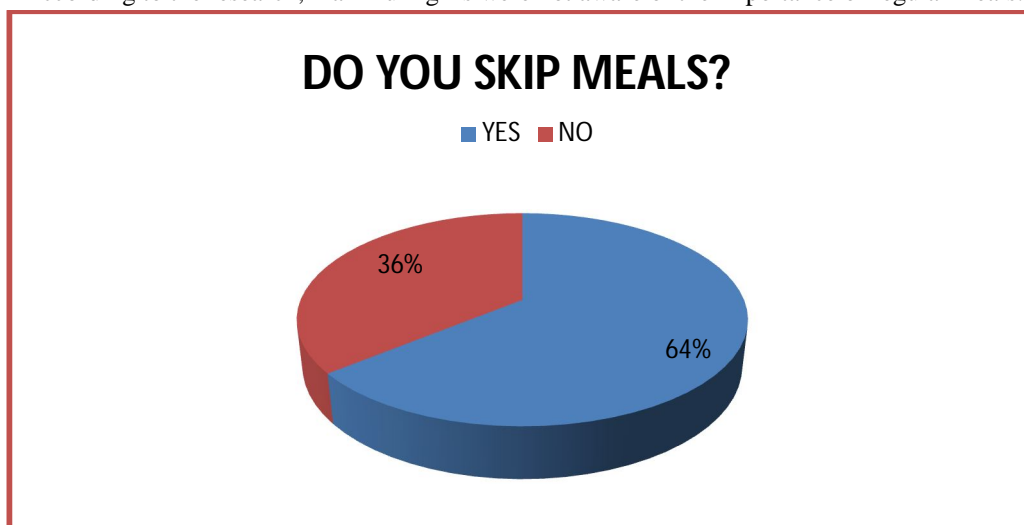
1) *Anthropometric Information:* The graph given below shows the blood pressure of the respondents (Adolescent girls).



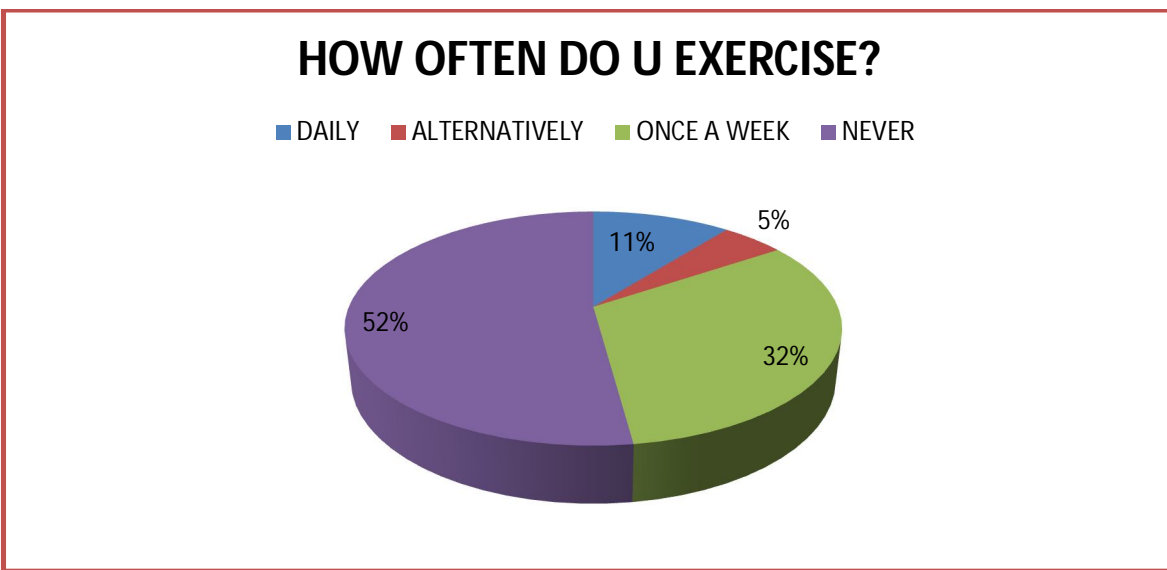
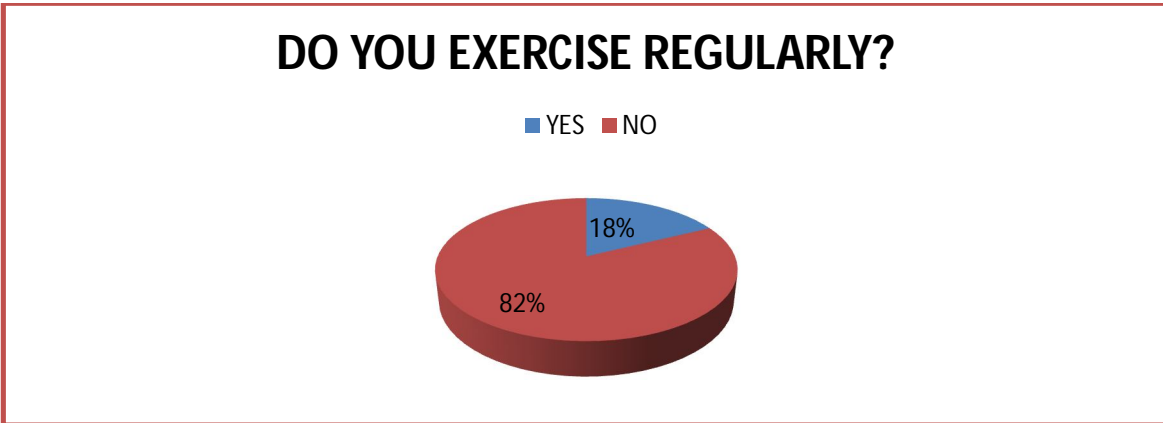
2) *Dietary Information:* The below graph shows the type of diet preferred by the adolescent girls.



According to the research, maximum girls were not aware of the importance of regular meals.



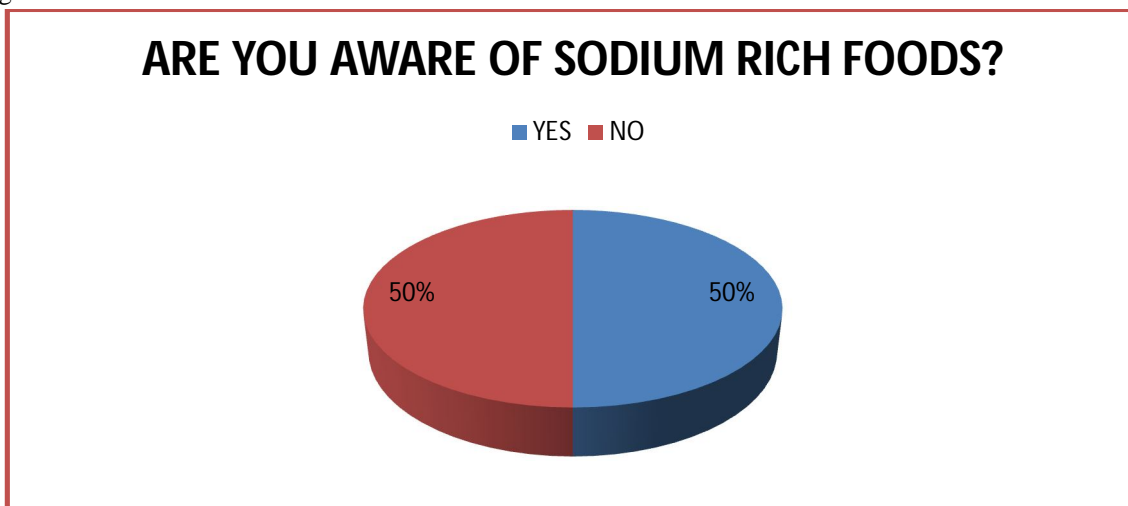
3) *Lifestyle Information:* The girls are usually so busy to complete their work that they do not get time to exercise regularly.



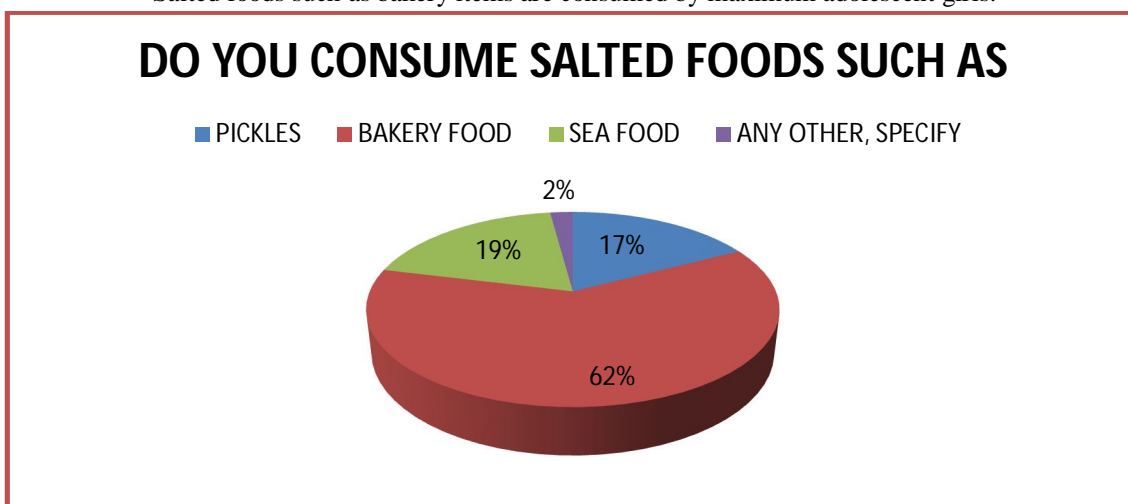
Loss of appetite is seen during stress conditions.



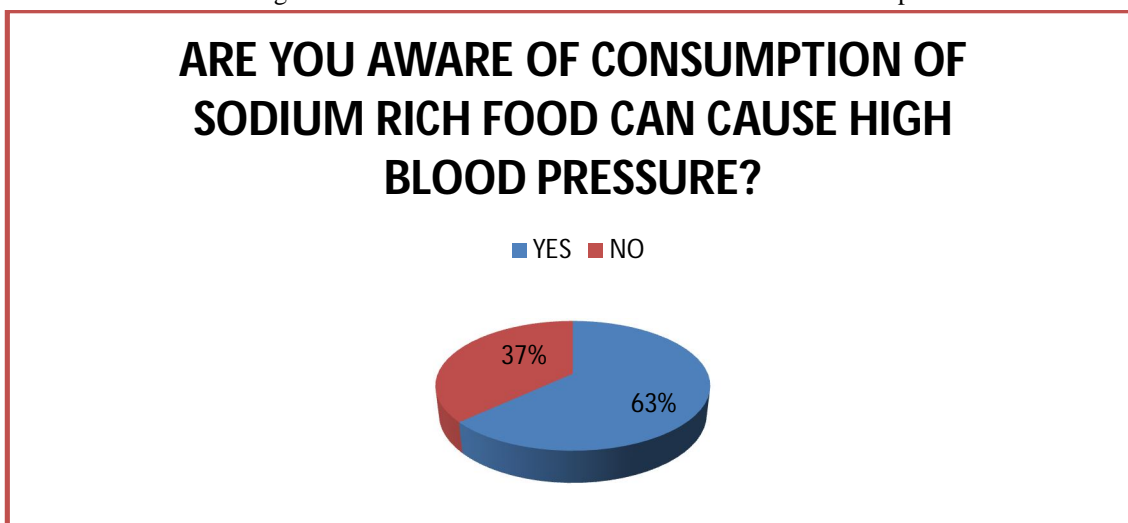
4) *Awareness Questions:* Few awareness questions were asked to the respondents related to sodium rich foods and blood pressure, 50% of girls were aware of sodium rich foods.



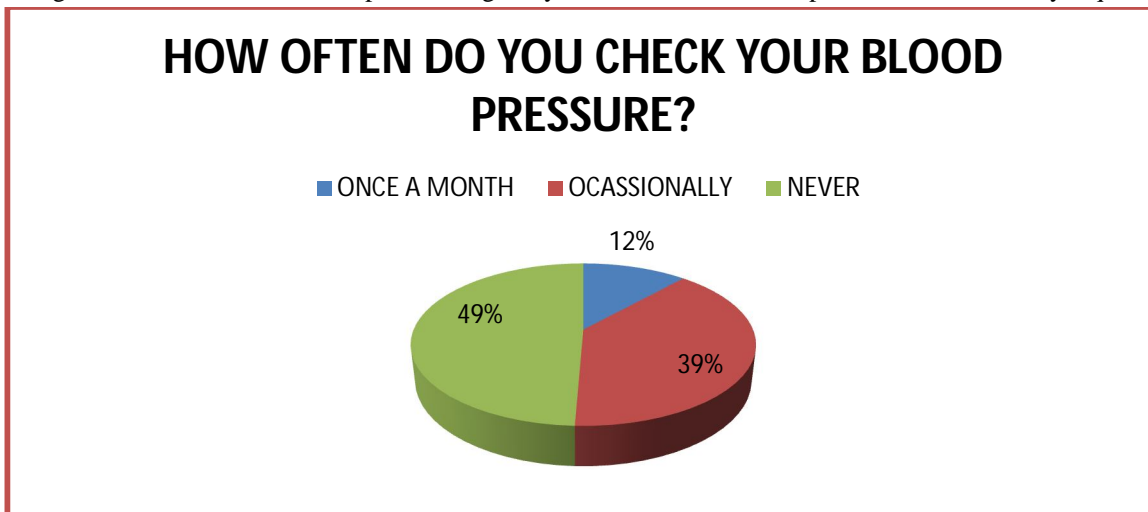
Salted foods such as bakery items are consumed by maximum adolescent girls.



Maximum girls are aware of sodium rich foods which increase blood pressure.



The girls either check their blood pressure regularly or do not check blood pressure unless actually required.



#### IV. CONCLUSION

The purpose of this survey was to create awareness on Stress Management Techniques and Hypertension due to faulty eating habits and less physical activity and poor stress management techniques. The survey helps to understand the various views of adolescent girls on Stress and their ways to overcome stress included loss of appetite and over eating and many other ways. They were interested in the awareness programme conducted, stress was common in all the students causing unhealthy eating habits, we found 18% of students with hypertension, 26% students with low blood pressure (hypotension), and 56% of students were normal.

The awareness was created by the stress management techniques:

- A. Time management
- B. Anger management
- C. Being active
- D. Being positive
- E. Indulge in exercise and physical activity
- F. Any pastime to avoid stress
- G. Lastly, being happy.

#### V. ACKNOWLEDGEMENT

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#### REFERENCES

- [1] B.Srilaxmi, 7<sup>th</sup> edition, 2014, principles of diet and dietary management during hypertension, new age international publishers, page no. 280 – 284.
- Links to internet sources:
- [2] <https://www.medicalnewstoday.com>
- [3] <https://www.mayoclinic.org>



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