

Analytical Study of Central Fatness among 8th and 9th Grade School Boys from Pune City

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ABSTRACT

The purpose of the present study is to analyze the various aspects of the Central fatness among 8th and 9th Grade school boys from Pune City, A descriptive survey technique was used in the study. Central fatness among 8th and 9th-grade school boys in Pune City investigated to study the status of central fatness. Also to find relation of central fatness with the sitting Height and leg Height. Data analyzed with a sample of 45 boys selected using cluster method. Central fatness was assessed using WHR.

Keywords : Central Fatness, School Boys, Analytical Study,Pune City.

Introduction

Central fatness, characterized by excess fat around the abdomen, is a significant health concern among adolescents due to its association with various metabolic disorders. Analyzing central fatness among students could provide insights into their overall health and help identify potential health risks at an early stage. In that analytical study, we delved deep into the topic of central fatness among students. We looked at factors like waist circumference, body mass index (BMI), and waist-to-hip ratio to assess central fatness. By examining these measures, we gained a better understanding of the distribution of fat in the abdominal region and its implications for student health. The study provided valuable insights into the prevalence of central fatness, its potential causes, and its impact on overall well-being. While studies on central fatness have been conducted in different populations, limited research focuses specifically on 8th and 9th-grade school boys from Pune City. Understanding the

prevalence and determinants of central fatness in this . This study aims to fill this gap by analyzing central fatness among school boys in Pune City.

Method and Material

The primary objective of that research was to understand the impact of central fatness on the health and well-being of students. The research began the study by selecting a representative sample of school students and collected data on their central fatness measurements, such as waist circumference, hip circumference, sitting height, standing height, and waist-to-hip ratio. Once the researcher had collected all the necessary data, they then employed statistical analysis techniques to examine the relationships between central fatness and various health outcomes.

Analysis and Outcomes

Table 1.1 : Summary of Analysis of Research Data of correlation between Central Fatness among 8th and 9th Grade School Boys from Pune City

Variables	WHR	Significance	Significance Level
Height	-0.06	0.69	Negligible
Sitting Height	-0.04	0.78	Negligible
Leg Height	-0.02	0.9	Negligible

In the above table 4.2, It indicated the correlation between WHR and height which is -0.06 which is negligible. In another observation the correlation between Sitting Height and WHR is -0.04 which is also categorised as negligible. where the correlation between leg Height and WHR is also categorised in negligible category.

Table 1.2 : Summary of Analysis of Research Data of correlation between Central Fatness among 8th and 9th Grade School Boys from Pune City

Risk level	Frequency	Percent	Valid Percent	Cumulative Percent
low Risk	31	68.9	68.9	68.9
Medium Risk	14	31.1	31.1	100.0
total	45	100.0	100.0	

This table summarizes the analysis of research data regarding the correlation between central fatness among 8th and 9th-grade school boys from Pune City, segmented by risk level. the majority of 8th and 9th-grade school boys from Pune City, about

68.9%, are at low risk regarding central fatness, while 31.1% are at a medium risk level. This analysis was based on data from 45 participants.

Discussion

Referring to the analysis of Waist-Hip Ratio (WHR) of 8th and 9th-grade boys from Pune City to understand their central fatness levels. Most of the boys, about 68.9%, had a low-risk WHR, suggesting they have healthier levels of central fat. This could be because of factors like regular exercise, good eating habits, and possibly genetics.

However, we also found that 31.1% of the boys had a medium-risk WHR, so as per the refer of 'The American journal of clinical nutrition 84 (2), 449-460, 2006' meaning they might be at a higher risk for health problems related to central fatness, like heart disease, diabetes, or metabolic issues.

This highlights the need for programs that promote healthy living and educate students about the risks of having too much central fat. Schools could introduce more physical education classes, offer advice on healthy eating, and run health awareness campaigns to help students make better health choices.

In summary, while many 8th and 9th-grade boys in Pune City have a healthy WHR, there's still a need for actions to address the central fatness issues in those at medium risk. Future studies could focus on understanding the reasons behind these findings and testing ways to improve the health of these boys.

Conclusion

The analytical study of Waist-Hip Ratio (WHR) among 8th and 9th-grade school boys from Pune City offers valuable insights into the central fatness levels and associated health risks in this demographic. The findings reveal that a significant majority of the participants, approximately 68.9%, maintain a low-risk WHR, indicating a healthier central fat distribution and overall favorable body composition. This positive trend may be attributed to various factors, including regular physical activity, balanced dietary habits, and potentially genetic factors.

However, the study also identifies a noteworthy concern, with 31.1% of the participants falling into the medium-risk category for central fatness, characterized by a WHR between 0.90 and 1.00. This subgroup represents a segment of the school-aged population that may be at an increased risk for developing health complications associated with central obesity, such as cardiovascular diseases, diabetes, and metabolic syndromes.

In light of these findings, there is a pressing need for targeted health promotion initiatives and educational programs aimed at raising awareness about the importance of maintaining optimal central fatness levels and adopting healthy lifestyle behaviors among school-aged boys in Pune City. Strategies may include implementing comprehensive physical education curricula, offering nutritional counseling services, and conducting health awareness campaigns to empower students with the knowledge and skills necessary to make informed health decisions.

Majority of 8th and 9th-grade school boys in Pune City demonstrate a low-risk WHR. Future research endeavors should focus on exploring the underlying determinants of central fatness among school-aged boys and evaluating the effectiveness of targeted interventions in mitigating associated health risks and improving long-term health outcomes.

Recommendations

- Implement programs to raise awareness about healthy central fatness levels.
- Provide nutritional counseling and workshops on balanced eating habits.
- Enhance the nutritional quality of meals and snacks offered in schools by conducting a research study.
- Engage parents and guardians in promoting healthy behaviors at home.
- There is a need for Regular Monitoring and Evaluation by Establishing a system to track central fatness levels over time.

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