

Joint Meeting on  
2<sup>nd</sup> Annual Conference on  
PEDIATRIC NURSING AND HEALTHCARE  
&  
23<sup>rd</sup> WORLD NUTRITION & PEDIATRICS HEALTHCARE CONFERENCE  
June 17-18, 2019 Dubai, UAE

## Hypertension in relation to overweight/obesity among adolescents in Mashhad, Iran (e-poster)

Khosro Shafaghi<sup>1</sup>, Zailah Mohd Shariff<sup>2</sup> and Mohd Nasir Mohd Taieb<sup>2</sup>

<sup>1</sup>Gonabad University of Medical Sciences, Iran

<sup>2</sup>Universiti Putra Malaysia, Malaysia

**Introduction & Aim:** Hypertension in adolescents is new concern in recent decades. Increasing cardiovascular risk factor such as hypertension is related to overweight and obesity among adolescents. Both obesity and hypertension as important public health challenges are increasing worldwide. An increase in both Body Mass Index (BMI) and Waist Circumference (WC) is linked to an increased risk of cardiovascular diseases. The aim of this study was to determine the prevalence of hypertension among the adolescents and investigate its relationship with overweight and obesity in Mashhad city.

**Method:** This cross sectional study was conducted among 1189 urban secondary school children who studied in 10 schools (over ally selected from 501 schools), in both low and high socio-demographic districts of Mashhad. Students' blood pressure was measured and categorized according to the standardized technique described by the American Heart Association (national high blood pressure education program working group on high blood pressure in children and adolescents).

**Results:** Prevalence of hypertension was 14.6% in terms of Diastolic Blood (DBP) and 4% in terms of Systolic Blood (SBP). SBP was more prevalent among males (5.2%), while DBP was more prevalent among females (15.1%), combined hypertension was doubled in males in comparison with females. In terms of SBP, about 58% of overweight/obese adolescents were hypertensive. The relationship between BMI and SBP was statistically significant. Also, 18.8% of central overweight/obese adolescents were hypertensive, while WC was significantly related to SBP. In terms of DBP about 56.8% of overweight/obese adolescents were hypertensive and the relationship between BMI and DBP was statistically significant. On the other hand 17.9% of central overweight/obese adolescents were hypertensive while WC was significantly related to DBP.

**Conclusion:** Childhood obesity is known as an increasingly health concern in Mashhad. Obesity as leading cause of pediatric hypertension threatens adolescents' health and life in this area. So, policies are needed on its control.

### Biography

Khosro Shafaghi is currently working as a Lecturer in Kashan University of Medical Sciences. He has completed his PhD in Community Nutrition in Universiti Putra Malaysia. His current research interest is on overweight/obesity and dietary patterns in adolescents.

dshafaghi@yahoo.com