STUDENTS' CORNER
LETTER TO THE EDITOR

The association between age of onset of obesity and the rising risk of hypertension a cause of concern for young adults

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Dear Madam, Living a sedentary lifestyle can lead to being overweight or obese in young adults. These conditions are characterized by excessive fat accumulation, which can threaten health. A body mass index (BMI) of over 30 indicates obesity and is linked to comorbidities such as Type 2 Diabetes Mellitus and Hypertension. Obesity accounts for around 65-78% of cases of primary hypertension, and the mechanisms behind this include sympathetic nervous system overactivation, stimulation of the renin-angiotensin aldosterone system, changes in adipose-derived cytokines, insulin resistance, and renal changes.[1]

In 2016, 39% of adults aged 18 or older were overweight or obese worldwide. In most high-income countries, almost two-thirds of adults are overweight or obese. In South Asia and Sub-Saharan Africa, approximately 20% of adults have a BMI greater than 25.[2] A recent study in China suggests that overweight or obese participants with an onset age of less than 38 years had a higher risk of hypertension than those who were not overweight or obese.[3] According to the latest population-based National Health Survey of Pakistan (NHSP), nearly 18.9% of Pakistanis over the age of 15 were hypertensive, with a higher prevalence in urban populations than in rural areas where men were more affected than women.[4] Studies have shown that with these increased early age of onset of hypertension more young adults have become prone to late life cardiovascular diseases like myocardial infarction and ischaemic or haemorrhagic strokes and hypertension end organ damage as young people tend to overlook health consequences related to hypertension as there is less awareness regarding these in such an age group as compared to middle aged and elderly. New evidence suggests that the rate of hypertension treatment and control vary with age making it more important for earlier detection.[5]

Tackling the root causes, such as high-calorie food intake, sedentary lifestyle, work stress, and lack of access to healthier food options, is necessary to overcome this severe issue. Introducing physical activities in universities for at least an hour a day can keep people active and relieve students of various stressors. Food cafeterias should offer healthier food options and reduce the high-calorie fast food availability. Seminars can help increase awareness of health-related issues with obesity, encouraging students and teachers to adopt a better lifestyle. In conclusion, to prevent hypertension, healthcare providers and physicians must stress how crucial it is to determine the age at which obesity could occur. Additionally, they ought to collaborate with companies and educational institutions to support and facilitate routine physical and mental health examinations for young adults.

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