

Metabolic syndrome in Children: An emerging Epidemic

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Metabolic syndrome (MetS) is a cluster of various cardiometabolic risk factors like central obesity, hypertension, impaired fasting glucose and low levels of High density lipoprotein.¹ It has a direct impact on increasing the future risk of developing cardiovascular disease (CVD) and type 2 diabetes mellitus (T2DM).² It is important to know that the foundation of MetS is laid during early childhood.^{3,4} Studies from different parts of the world including Pakistan have reported an estimated prevalence of MetS among children and adolescents, reaching from 1.2% to 22.6% with rates of up to 60% in the obese.⁵⁻⁷ MetS starts with the early onset of obesity leading to early beta cell dysfunction and increased insulin resistance.⁸ In the recent years, obesity and MetS has gained attention of medical experts due to its potential detrimental effects in children and adolescents.⁹ Worldwide data has shown that different components of MetS, which become sub-normal in early childhood and adolescence, often continue into adulthood and thus increasing the risk of cardiovascular disease and diabetes mellitus at a young age.¹⁰ Among children with obesity and insulin resistance Sinaiko A et al observed a steady rise in prevalence of MetS from 3% to 9% when followed longitudinally.¹¹ According to International Diabetes Federation our current generation of children and adolescents are at high risk for diabetes and cardiovascular related mortality and morbidity which makes them the first generation where children may die before their parents.⁴ This is an alarming statement by IDF which will have an enormous impact on global health with an increase in socio-economic burden.¹²

Therefore, preventive strategies against MetS should begin during childhood. These measures should include inculcating health dietary habits and active lifestyle among children and adolescents. Awareness sessions in schools and colleges should be conducted regarding healthy lifestyle. Our medical and public health experts should involve members of civil society to help in disseminating

the required information through group discussions, lectures / debates and mass media campaigns. Timely action and interventions are needed to save our next generation from this epidemic and its grave consequences.

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