

### **Diabesity — a future pandemic**

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In public health, the terms endemic, epidemic and pandemic have been widely used for communicable diseases. It is alarming that now these terminologies are also being used for non-communicable diseases like diabetes and hypertension. The rise of non-communicable diseases is rampant among all societies worldwide.

The estimated projection of diabetes globally is stated to increase from 171 million in 2000 to 366 million in 2030.<sup>1</sup> Rather than attributing this escalation only to genetics and heredity, the adoption of life style with lack of physical activity and unhealthy eating patterns are also one of the most important factors for the rapid rise.<sup>2</sup> This led to establishment of a link between obesity and diabetes in the scientific world and the connotation of diabesity was coined. The scientific community is only able to visualize the tip of the iceberg; the impending threat is yet to be dealt. The combination and interdependence of diabetes and obesity imposes a therapeutic challenge to the clinicians. In the west, it is considered as the biggest epidemic and strategies to control the situation are in progress.<sup>3,4</sup> The pathophysiology of diabetes is quite complex and multifactorial; nonetheless insulin resistance can be regarded as the basic association between obesity and diabetes.<sup>5</sup> This could explain why treatment and prevention of obesity should be of prime importance in order to save the nations from entering into complexity of diabetes.

Pakistan as a developing country is struggling with the double burden, both of communicable and non-communicable diseases. One of the local studies has shown that approximately a quarter of our people have been assessed to be in the category of overweight and obesity.<sup>6</sup> The changing behaviour and lifestyle of communities and societies over the last century have resulted in dramatic increase in obesity and diabetes. A survey among Pakistani adults revealed an overall prevalence of glucose intolerance of 22.04% in urban and 17.15% in rural areas.<sup>7</sup> There is very limited data for Pakistani population with relation to establishing link between diabetes and obesity. The available local study has shown an association between the two categories where almost 80% of diabetics had metabolic syndrome.<sup>8</sup> The upcoming youth is also adding to the problem making the condition worse with the increase in childhood obesity among Pakistani

population.<sup>9</sup>

The recent advances in diabesity are important for the clinicians and awareness with newer interventions is necessary for best practices and outcomes. The treatment modalities have been considered to be almost similar for the two entities diabetes and obesity. Life style modifications have been regarded to be of prime importance in controlling diabesity and breaking the link between the two.<sup>10</sup> This should begin with reduction of obesity and maintaining healthy life styles rather than aiming at the treatment of diabetes. However, newer treatment options are also under study to combat the situation having dual mode of action reducing hyperglycaemia and facilitating weight loss.<sup>11</sup>

It is high time to regard obesity as a disease entity rather than only to be a risk factor. The strong association between obesity and diabetes, "diabesity" should be observed as an entity for future research. Considering the pathophysiology and treatment of both to be similar, the preventive strategies should address diabesity as a whole rather than dividing the term into two separate entities.

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