Coexistence of Malnutrition with Obesity

As economic development and urbanization proceed globally, the pace varies between and within countries and in many instances, is also marked by increasing inequities. In many parts of the world, health and nutrition disparities have been recognized as major impediments to the achievement of the millennium development goals [1]. Although high burdens of undernutrition among women and children are frequent in developing countries, the coexistence of over-nutrition within the same populations, especially among adults, is also well known [2]. This ‘double-burden’ of undernutrition and obesity is being increasingly recognized in developing countries and the incidence for both has been shown among poorest families [3]. Figure 1 indicates the population prevalence of nutrition markers among children aged 6–10 years in an urban slum of Karachi, indicating the co-existence of both forms of undernutrition.

Childhood obesity is now assuming epidemic proportions in many parts of the world and increasing in many low and middle income countries. An estimated 22 million children under five are estimated to be overweight worldwide. In the USA the prevalence of obese children aged 6–11 years has more than doubled since the 1960s. Among children aged 12–17 rates of obesity have increased dramatically from 5 to 13% in boys and from 5 to 9% in girls between 1960–1970 and 1988–1991 [2]. However, more recent analysis indicates that the rise in obesity may be higher among children of higher income families [5]. A review of the situation in Latin American region indicated that there was an inverse relationship between stunting and overweight and the South American sub-region had the highest increase and prevalence of overweight [6].

Major risk factors for this rising burden of obesity include lifestyle issues and dietary patterns. Others have underscored the importance of prenatal nutrition and the fact that relatively high burdens of nutrition related overweight and micronutrient deficiencies, especially when coupled with rapid weight gain in early childhood, could lead to premature onset of cardiovascular disease [7,8].

Action is needed to redress the situation. Converged large scale interventions addressing ‘malnutrition in all its forms’ are an important consideration for policy [9], and should include balanced emphasis on living conditions, physical activity and appropriate diets. Many of these interventions are best delivered through community-based interventions, using outreach workers [10] as well as the use of mass media. A major focus of interventions should also be on appropriate urban planning to promote active lifestyle and influencing dietary patterns through effective regulation and information.

References

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