

**Editorial**

**Life Style Diseases in Developing World**

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Lifestyle disease can be simply defined as any disease associated with the way a person lives. They include coronary artery disease, stroke, obesity, type 2 diabetes mellitus and diseases associated with smoking and substance abuse. In the yester years, life style diseases were diseases of the affluent and uncommon in the developing world. Gone are those days and now they are an important threat to developing economies, draining a good chunk of their scanty health budget. It is predicted that by 2020, these diseases will be causing 7 out of 10 deaths in developing countries [Boutayeb]. Developing world is now faced with a dual dilemma of having both lifestyle diseases and communicable diseases. Unlike many other diseases, lifestyle diseases are eminently preventable or at least modifiable by changes in lifestyle in very cost effective way.

Obesity rates have tripled in developing countries over the past 20 years. This has occurred as a result of adopting more sedentary lifestyles and dependence on cheap energy rich food. Childhood obesity has also increased as a result of this, with a prevalence of 2 – 10% [Hossain]. Rapid weight gain in childhood can lead to development of insulin resistance and metabolic syndrome. This is more likely in low birth weight babies, the Barker's hypothesis [Barker].

Increasing rates of obesity has lead on to higher rates of type II diabetes mellitus and cardiovascular diseases. Abdominal obesity is an important risk factor for cardiovascular diseases and the prevalence is high in South Asians. An increase in waste-hip-ratio has been noted to be an important predictor of stroke and cardiovascular disease. Lower thresholds for diagnosing abdominal obesity in Asians have been advocated by some authors as well as World Health Organization.

Chronic kidney disease is another important disease related to diabetes mellitus and hypertension. As more and more individuals become diabetic, the prevalence of chronic kidney disease due to diabetic nephropathy also increases. Uncontrolled hypertension also contributes to the burden of chronic kidney disease. An interesting observation is that mortality in chronic kidney disease is most often due to coronary events rather than renal failure.

This issue of the journal carries three articles on lifestyle diseases. The article by Prasanth S et al [Prasanth] who analyzed the prevalence of hypertension in rural Kerala, India found a high prevalence in the study population. About 33.5% of the subjects were hypertensive with prevalence rising to 65.6% in those above 60 years. Harish K et al [Harish] has highlighted the importance of

non-alcoholic fatty liver disease in Asians (NAFLD). They have noted that NAFLD is often seen obese (60%-95%), diabetic (28%-55%) and dyslipidemic individuals (27%-92%). Shah C et al has found some interesting information regarding childhood obesity in their study among school children in Bhavnagar, India. There was an

association between excess weight and inactivity, as expected. There was a positive association between time spent in sleeping and a balance between weight and height. Children of working mothers had a tendency to become underweight [Shah].

### References

1. Boutayeb A, Boutayeb S. The burden of non communicable diseases in developing countries.
2. Int J Equity Health. 2005;4:2.
3. Hossain P, Kavar B, El Nahas M. Obesity and Diabetes in the Developing World -
4. A Growing Challenge. N Engl J Med 356: 213-215.
5. Barker DJ. Maternal nutrition, fetal nutrition, and disease in later life. Nutrition. 1997;13:807-13.
6. Prasanth S, Vijayakumar K. Prevalence of Systemic Hypertension among the rural residents of Kerala. Calicut Medical Journal. 2008; 6(3)e4
7. Kareem Harish, Varghese Thomas. Non-alcoholic fatty liver disease in Asians – An Emerging Problem Calicut Medical Journal.2008;6:(3)e6
8. Shah C, Diwan J, Rao P, Bhabhor M, Gokhle P, Mehta H. Assessment of Obesity in School Children. Calicut Medical Journal.2008; 6 (3)e2

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