Physical activity among adults in the urban area of Colombo, Sri Lanka and its relationship with the built environment

A.A.S.H. De Silva Weliange[a], D Fernando[a] and J Gunathilake[b]

[a]University of Colombo, [b]University of Peradeniya, shreenika@commed.cmb.ac.lk

Sri Lanka has experienced a change in trend in the pattern of disease burden. In 2001, 71% of all deaths in Sri Lanka were due to chronic NCDs. According to the Annual Health statistics, coronary heart disease has been the leading cause of hospital deaths in Sri Lanka since 1997. Physical inactivity contributes to 6% of deaths globally and is identified as the fourth leading risk factor for mortality due to NCDs.

Physical activity (PA) can be achieved through 'active living' which is a way of life that integrates PA into daily routine. Evidence suggests that neighbourhood design features, are associated with PA, especially with leisure time and transport related activity. The aim of this study was to assess neighbourhood design features associated with PA and to assess its relationship to leisure time and transported related activity.

A group of 960 adults aged 20-59 were selected. PA was assessed using the validated long version of the international physical activity questionnaire. Individuals were classified into 'sufficient activity' and 'insufficient activity based on a cut off of 600 MET (metabolic equivalent of task) minutes of activity a week, which is the minimum recommendation for good health. Physical environment was assessed using the 'physical and social environment scale' which was developed and validated to assess the environment associated with PA in Sri Lanka. It measured the perceived built environment in the following domains of residential density, land use diversity, infrastructure for walking, aesthetics and facilities for cycling, vehicular traffic safety, access and connectivity, recreational facilities for PA and safety.

The sample consisted of 53.3% (n=513) females and 46.7% males. Majority (62.1%) were overweight or obese and 32.2% (n=309) had an education less than G.C.E ordinary level. From the mean scores of aesthetics and facilities for cycling and vehicular traffic safety were identified as not conducive for physical activity in the urban areas of Sri Lanka. When the level of PA was cross tabulated with factors in the environment aesthetics and facilities for cycling, recreational facilities for PA, type of residencies and land use diversity showed significant relationship.

In conclusion, factors in the built environment were seen to have an influence on the leisure time and transport related PA behaviour. This calls for a multi-sector approach to make the environment friendlier towards "active living," thus enhancing the health and well-being of the urban population of Sri Lanka.