

# TEMPORAL TRENDS IN THE PREVALENCE OF DIABETES MELLITUS IN A RURAL COMMUNITY IN SRI LANKA

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The prevalence of Diabetes mellitus in the rural sector is reported to be low compared to that of urban communities. This has been attributed to the traditional life style of those living in rural areas compared to the more westernized way of life of those who live in the cities. However recent clinical observations suggest that the prevalence of diabetes is increasing even in the rural sector. The objectives of the present study were to determine whether this is true by scientifically assessing the prevalence in a rural community at present and compare with what has been reported 10 years ago from the same community and to determine whether the socio-economic status has changed during this period.

The study was carried out in the same rural community at Hindagala Health Project Area that was studied in 1990 adopting the same methodology. Of a total population of 25,605 adults over the age of 18 years a sample of 220 was selected. A sample of blood was obtained for estimation of sugar after a 12 hour overnight fast. The level of education, occupation, monthly income, height, weight and the blood pressure were recorded. The body mass index was calculated from the height and weight. World Health Organisation criteria were adopted to define diabetes mellitus.

Two hundred subjects, 94 males and 106 females, completed the study. Their ages ranged from 19 to 80 years. Among these, 13 patients (7 males and 6 females) were identified to have diabetes accounting for a prevalence rate of 6.5% compared to a prevalence of 2.5% in 1990. This difference was statistically significant. Comparative results of the socio-economic status indicated that there was a significant improvement in the level of education, monthly income and the body mass indices during the period of 10 years.

The prevalence of diabetes which has more than doubled during the past 10 years in this community could be attributed to the changing life style of this community as shown by the improvement in the socio-economic status. The World Health Organization has attributed the impending epidemic of diabetes in the developing countries to these life style factors and have suggested suitable remedies to deal with the increasing load of patients as well as for its prevention. The findings of the present study is of considerable public health importance considering the fact that more than 70% of Sri Lankans still live in the villages and appear to develop 'rich mans' illnesses such as diabetes even without migration to the cities.