

## **Abstract**

**To determine the age of onset of diabetes mellitus, hypertension and co-morbid state in a suburban Jamaican Community.  
Roselyn Nneamaka Reid**

The study was conducted among patients attending the Health Centre at the Department of Community Health and Psychiatry, University of the West Indies, from January through March 2002 (in the up dated Diabetic and Hypertensive Registry). This clinic sub-serve August Town and Hermitage areas. This cross sectional study focused on patients whose time of onset of diabetes or hypertension were established. Patients with both diseases diagnosed at the same time, were excluded along with those who had impaired glucose tolerance and those who had not been consistently followed up in the clinic up till year 2002 March. Diagnosis of diabetes was based on both clinical and laboratory assessment while hypertension followed the World Health Organization criteria of consistent elevation of Blood pressure  $\geq 140/90$  mmHg on three consecutive visits, secondary causes having been excluded. No age specification or duration of illness required to be included.

Sample size was 125 of which 24% were males (mean age  $72.27 \pm 10.73$  years) and 76% were females (mean age  $61.49 \pm 14.68$  years. Male to female ratio was 1:3.1. The number of diabetics were 44, 43.3% were males and 32.7% were females while 56.7% of males were hypertensive and 67.3% of females were

hypertensive. The ratio of male to female diabetics was 1:2.5 while that of hypertensives was 1:3.8. Mean age of onset of diabetes  $48.77 \pm 14.54$  years and males  $57 \pm 9.17$  years with earlier onset in females. This was significant at  $p < .05$ . Mean age of onset of hypertension in females  $48.91 \pm 12.46$  years and males  $61.94 \pm 11.26$  years again with earlier onset in females which attained a significant level at  $p < .05$ .

62.4% of the study population developed co-morbid state. 42.3% of diabetics developed hypertension while 57.7% of hypertensives developed diabetes (mean age for males  $69.70 \pm 11.67$  years. Females  $59.09 \pm 9.8$  years with significant difference at  $p < .05$  level) (mean age for males  $62.22 \pm 9.02$  years, females  $55.08 \pm 12.33$  years with no significant difference).

An association was established between the use of thiazide diuretic and the development of diabetes mellitus in hypertensive patients. The odds ratio was 5.46 which indicated a high association.