

Prevalence of Diabetes Mellitus among Non-Bahraini Workers Registered in Primary Health Care in Bahrain

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Background: Diabetes mellitus (DM) is a major public concern in Bahrain and throughout the World. It is an important health problem because of its high morbidity and mortality. Although its complications are partially preventable, yet the impact of the increased cost of the disease and its complications is a burden on the health system and the national economy.

Objectives: To estimate the prevalence of abnormal glucose tolerance (DM and IGT) among Non-Bahraini workers (labour force) in Bahrain and its associated risk factors.

Methods: The study was limited to non-Bahraini workers using the recent WHO diagnostically criteria which are the same as ADA criteria for 1997. The population sample was selected randomly (stratified sample). An overnight 12-16 hour fasting blood sample was collected for sugar and cholesterol measurements.

Results: A total of 528 cases were selected with 98.5% response rate. The prevalence rate of diabetes was 10.6% of which 3.3% were already previously diagnosed, and 7.3% newly diagnosed. The prevalence of impaired fasting glucose tolerance was 6.3%, making total glucose intolerance 16.9%. The associated risk factors with their correlation with diabetes were also studied.

Conclusions: Two thirds (66.6%) of the diabetic subjects were aged 40-49, and 91.7% of the subjects who had an abnormal glucose tolerance were in the age group 35-54 together with the high prevalence of DM and IGT among these workers. The majority of the affected subjects are in the productive age group, which may affect their productivity and its impact on the health services and economy. This necessitates focusing on health promotion among workers and early intervention to insure better health status of the labour force.