

Knowledge and awareness of diabetes amongst diabetic patients in urban and rural areas of Jamnagar District, Gujarat

Sir,

General knowledge on type 2 diabetes mellitus (T2DM) to the community can assist in early detection of the disease and prevent complications.^[1] It is not known how much the public actually knows about diabetes through current programs. In spite of growing literacy and socioeconomic standing, the knowledge and awareness among the diabetic patients in the Indian subcontinent is still poor.^[2] Knowledge on the public level is crucial to health educators to plan for future programmes related to T2DM.^[3] It is equally important for the public to be aware of T2DM because knowledge is a critical component of behavioral change.^[4] Once awareness is created, people are more likely to participate in prevention and control measures.^[5] Reports on the level of knowledge on diabetes among diabetic population in Jamnagar district are lacking. This study was therefore planned to determine the knowledge and awareness of T2DM among residents of Jamnagar.

A cross-sectional survey was conducted on randomly selected 350 type 2 diabetic patients (aged ≥ 40 years) residing in urban and rural areas of Jamnagar, attending the outpatient department from May 1, 2013-February 28, 2014. Among 350 patients, urban = 195 (55.71%), rural = 155 (44.29%), females = 152 (43.43%), males = 198 (56.57%). The mean age for females and males was 46.2 ± 11.16 years and 47.5 ± 10.12 years, respectively. Details regarding diabetes were collected using a STEP-1 (knowledge and sign and symptoms) and STEP-2 (awareness) questionnaire. Data was collected related to personal demographic characteristics, lifestyle, behavior, history of diabetes and hypertension, and awareness level by face-to-face interaction.

Results on the basis of knowledge and awareness questionnaire include: 55.17% ($P < 0.05$) urban and 40.73% rural people knew that diabetes is a metabolic disorder; 53.76% ($P < 0.05$) urban and 34.24% rural people knew the symptoms of diabetes; 59.22% ($P < 0.05$) urban, 34.20% rural people were aware of causative factors of diabetes;

66.38% ($P < 0.05$) urban and 45.55% rural population accepted sedentary lifestyle as main cause of diabetes; 63.78% ($P < 0.05$) urban and 35.81% rural population were aware that obesity can cause diabetes; and 73.44% ($P < 0.05$) urban, 34.60% rural population were familiar with ranges for blood sugar levels. Only 33.27% urban and 18.31% rural population had knowledge of risk factors for diabetes. 66.70% ($P < 0.05$) urban and 25.18% rural population considered family history as the main risk factor. 53.60% ($P < 0.05$) urban and 27.94% rural population were aware that diabetes can cause complications in other organs. 74.83% ($P < 0.05$) urban and 35.49% rural population aware about impact of diet and exercise plan to manage the disease. 60.88% ($P < 0.05$) urban and 29.10% rural agreed that diabetes can be prevented if necessary care is taken. 62.52% ($P < 0.05$) urban and 31.67% rural population was obese. In 74.85% ($P < 0.05$) urban and 29.17% rural population, sedentary lifestyle was found to be a cause of diabetes. 79.66% ($P < 0.05$) urban and 56.10% rural population consider cardiovascular as major complication. Few observations made on studied subjects were as follows. 61.28% urban and 74.34% ($P < 0.05$) rural population suffer from retinopathy. 44.09% urban and 38.83% rural suffer from nephropathy. 20.06% rural, 7.37% urban population suffers from foot ulcers. 50.18% urban and 31.70% rural population were having memory impairment in diabetes. In 74.85% ($P < 0.05$) urban and 29.17% rural population, sedentary lifestyle was found to be a cause of diabetes.

Though the survey was of limited sample size, the findings reflect the poor knowledge and awareness of diabetes in studied population, mainly in rural areas. Sustained, well-executed community awareness via certified diabetes educators^[6] and mass media campaigns are required to increase awareness and improve knowledge and attitudes about causes, risk factors, and management of T2DM in a range of target groups, in different settings. Beside family care and community support, patients' self empowerment approach is essential, which recognizes that the patients are in control of, and responsible for, the daily self-management of their T2DM.^[7] To manage the disease before secondary stage complications develop, people should be encouraged to report to health facilities whenever they observe symptoms of T2DM. The present study is expected to wake up the concerned authorities to promote health education and implement better health care services in their respective areas.

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