

Glucose Monitoring and Hypoglycemia Awareness in Saudi Arabian Patients with Type 2 Diabetes: A Cross-sectional Study

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ABSTRACT

Type 2 Diabetes Mellitus represents a global epidemic with overall 17.7% prevalence rate in Saudi Arabia. Many patients need Continuous glucose monitoring to avoid fluctuations in blood glucose level with hypoglycemia threatened the life of many diabetics especially elderly. This study investigates the knowledge of patients with T2DM regarding recognition of hypoglycemia and their experiences with glucose monitoring systems. A questionnaires based cross-sectional study was conducted among T2DM Saudi patients who used Continuous glucose monitoring devices to adjust their blood glucose level and medication dosage. The Questionnaire covers three domains which are: demographics, device satisfaction, and awareness of low blood sugar events. Our study revealed that the demographic distribution of our participants was 59% female, 41% male with average age of 44 years. The participants gave mixed responses regarding blood glucose monitoring devices where 31.5% of responders found them convenient, while 31.1% were indifferent and a significant portion; 37.7% of them disagreed with their value. Worryingly, only 59.4% of participants consistently monitored their blood sugar during hypoglycaemia, highlighting a potential risk of neglecting this vital practice. Our research identified a significant knowledge gap among T2DM patients in Saudi Arabia regarding hypoglycemia awareness and management. Educational and technological solutions are crucial to empower patients and improve their overall health outcomes.

Keywords: Type 2 Diabetes Mellites, Hypoglycaemia, Glucose Monitoring Devices, Prevalence, Management, Techniques

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