

# Knowledge, attitude, practices and provision of health care to fasting patients with diabetes: a national survey



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## Background

Fasting during Ramadan is obligatory for all adult healthy Muslims across the world. Through literature review, it has been found out that there are various articles published for the awareness of patients and general population regarding safe fasting during Ramadan. In Pakistan most of the patients with diabetes prefer to fast. However, nationwide data regarding knowledge, attitude practices of fasting patients with diabetes and provision of care to these patients during Ramadan is scarce.

# Objective

- 1. To observe the knowledge, attitude, practices among fasting patients with diabetes during Ramadan.
- 2. To assess availability of appropriate care to the fasting patients with diabetes during Ramadan.

# Methodology

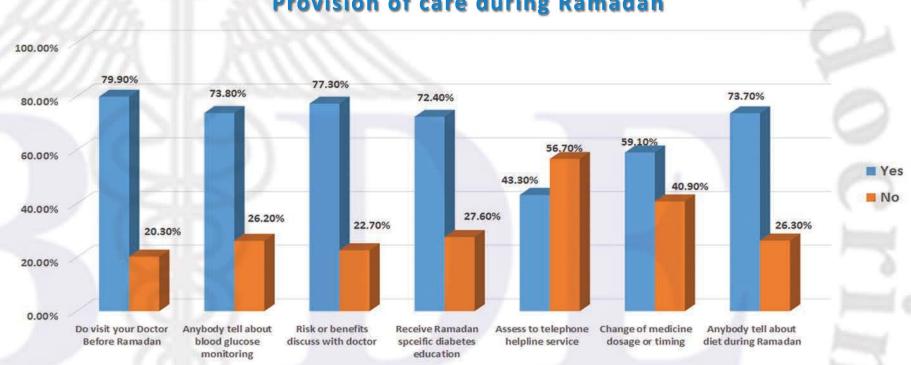
This observational study was conducted at multi tertiary and primary care centers from all over Pakistan, started from November 2016 to March 2017 (Muslim year 1437). Ethical approval for the study was obtained from the Institutional Review Board of Baqai Institute of Diabetology and Endocrinology (BIDE). Fasting patients with diabetes across the country who give informed consent was included in the study. Patients with diabetes who do not fast, Non-Muslim diabetic patients and children less than 12 years of age were excluded from the study. At each center, health care professionals involved in the care of patients with diabetes were requested to complete the questionnaire to fasting patients with diabetes using convenience sampling. An identical standardized questionnaire-based interview was conducted on one-to-one basis across the country. Information regarding demographic, anthropometric measurements, number of days of fasting, type of treatment of diabetes, Ramadan related knowledge, attitude and practices was collected. Pre-Ramadan diabetes education, adjustment of medication dosage and timings, frequency of blood glucose monitoring, development of hypoglycemia and hyperglycemia symptoms and their frequency during Ramadan were also taken. All the data was centralized into the computer database of BIDE. Statistical Package for Social Sciences (SPSS) version 20 was used to analyze the date.

## Results

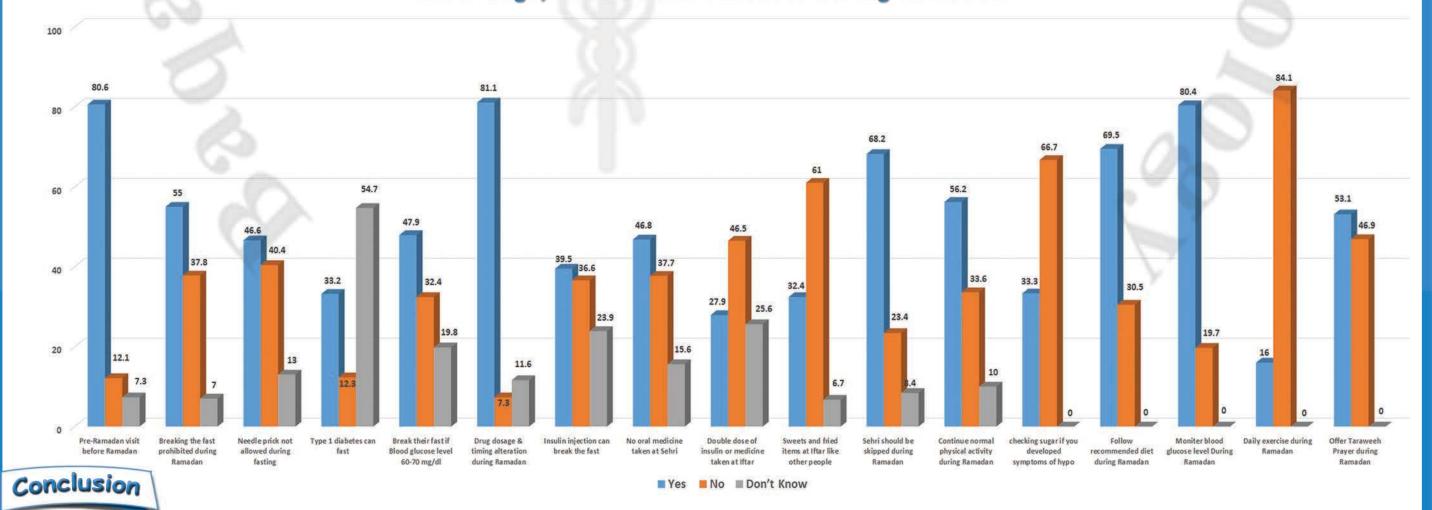
### **Basic characteristics**

n	2814
Gender	
Male	1527(54.5%)
Female	1276(45.5%)
Medicines	
Insulin	686(24.6%)
Oral hypoglycemia	1628(58.3%)
Insulin+OHA	479(17.2%)
Type of diabetes	
Type 1	322(11.5%)
Type 2	2482(88.5%)
Data presented as n (%)	

## **Provision of care during Ramadan**



## Knowledge, Attitude and Practices during Ramadan



Results of this survey showed that there is a significant lack of awareness and misconceptions among fasting patients with diabetes across the country. Standardized diabetes care is not uniformly available for patient at primary and tertiary care level during Ramadan. There is an immense need to promote educational programs and CMEs to increase knowledge among doctors, healthcare professionals and patients regarding safe fasting with diabetes during Ramadan.

