Beliefs of People With Diabetes About Skin Prick During Ramadan Fasting

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A large number of adult Muslims choose to fast during the month of Ramadan. The Ramadan fasting lasts 29–30 days, depending on the sighting of the moon. The duration of the fast can be 12–19 h, depending on the regional equatorial position. People with serious illness and long-distance travelers are exempted from fasting, but they have to fast after Ramadan to complete the missed days, except for those with serious disease (1). Most of the people with chronic diseases such as diabetes do not like to quit fasting. Studies show that individuals are exposed to risks if they do not modify their lifestyle and monitor their blood glucose during the Ramadan fasting (2–4).

A retrospective observational study was planned to assess the existing beliefs and practices of people with diabetes about skin prick for blood glucose testing during Ramadan fasting. Eight hundred sixty people with diabetes (76 with type 1 [9%], 784 with type 2 [91%]) were interviewed by structured, close-ended questionnaire. The data were collected from the outpatient department of Diabetic Association of Pakistan, Karachi, and the National Institute of Diabetes and Endocrinology, Dow University of Health Sciences, Karachi. The study duration was from October 2012 to December 2012.

The mean age of the participants was 51.54 $\pm$ 13.83 years. About 44% of the study population did not receive Ramadan-specific diabetes education. Although 57% of the study population was literate, 77% did not perform blood glucose monitoring (BGM), of which the majority (93.5%) of participants had type 2 diabetes, and of them, 63.6% were obese, and 40% were taking insulin and/or oral hypoglycemic drugs. The most common practice of BGM was three times a month ($P < 0.05$); therefore, the risk-based categorization of the study population was done according to participants' belief about skin prick during Ramadan fasting (Fig. 1). Their belief reflected their practices of BGM. Participants with diabetes who experienced hypoglycemia but were not performing BGM were categorized as having high-risk behavior compared with those who performed BGM and managed their glycemic irregularity by breaking the fast before Iftar (opening fast time). Participants with diabetes who were not performing BGM (33.6%) believed that skin prick during fasting would make the fast void; as a consequence, 39.8% of participants who were taking insulin never checked their blood glucose levels during fasting ($P < 0.05$). These participants were identified as a high-risk group needing Ramadan-specific diabetes education.

This study identified BGM as one of the fundamental factors that needs to be addressed for safer Ramadan fasting. To achieve this goal, effective counseling, comprehensive awareness, and Ramadan fasting–related education with a particular emphasis on permissibility of skin pricking during fasting for maintenance of normoglycemia must be given before Ramadan to people with diabetes and their family members. This would help to identify people with diabetes at high risk and prevent them from glycemic irregularities and sequelae.

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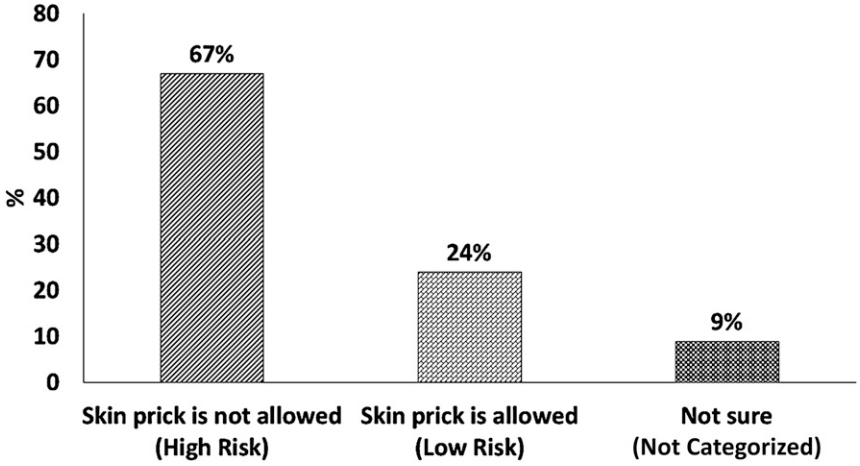

Figure 1—Risk-based categorization of people with diabetes according to their belief about skin prick during Ramadan fasting.

and takes responsibility for the integrity of the data and the accuracy of the data analysis.

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