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Original article

Ramadan fasting with diabetes: An interview study of inpatients' and general practitioners' attitudes in the South of France

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Abstract

Aim. – The aim of this study was to evaluate attitudes in hospital inpatients and physicians towards Ramadan fasting and diabetes in Marseille.

Methodology. – This cross-sectional study was conducted during the three months prior to the month of Ramadan. A total of 101 patients (age: 57 ± 17 years) and 101 general practitioners (GPs) were recruited into the study.

Results. – The patients had low levels of education (52% illiteracy). Of the 101 patients, 52 continued to fast during Ramadan, and only 65 patients had discussed the matter with their GP. Of these, 36 were told that fasting was forbidden, but more than half ($n = 19$) fasted despite the medical advice. Six patients thus experienced daily hypoglycaemia because they had continued to take their hypoglycaemic agent or insulin analogue at noon. Both inadequate education and religious attitudes were found to endanger patients during the fast: 15 patients skipped the meal scheduled before dawn, five of whom persisted in taking their sulphonylurea. Also, 27% of patients refused, in spite of daytime hypoglycaemia, to ingest anything orally to avoid breaking their fast. Among the GP population, medical knowledge of Ramadan fasting with diabetes was low, leading to medically unjustified negative advice for fasting and a lack of patient education on adjusting treatments. This particular situation weakened the patient–physician relationship.

Conclusion. – This study confirms the importance of Ramadan fasting for Muslim patients, and reveals a wide cross-cultural gap between GPs and their patients. Systematic advice on treatment adjustment needs to be given. For this reason, we encourage more sensitive care of these patients and more medical training for physicians.

Keywords: Ramadan fasting; Diabetes mellitus; Education counseling; Cross-cultural competence

Résumé

Diabète et jeûne du Ramadan : regards croisés patients et médecins généralistes dans le Sud de la France.

Objectif. – Évaluer les attitudes des patients diabétiques et des médecins généralistes (MG) face au jeûne du Ramadan à Marseille.

Méthodes. – Étude transversale menée dans les trois mois précédant le Ramadan chez 101 patients diabétiques musulmans hospitalisés (âge : 57 ± 17) et 101 MG.

Résultats. – Les patients avaient un faible niveau d'études (52 % d'illettrisme) ; 52 pratiquaient le Ramadan chaque année. Soixante cinq patients ont discuté de faire le jeûne avec leur MG. Parmi eux, 36 se sont vus interdire de jeûner mais 19 ont décidé de jeûner contre l'avis du MG. Six patients ont présenté des hypoglycémies répétées à midi du fait de la poursuite de leur sulfamide hypoglycémiant ou de leur insuline rapide pendant le jeûne. Le manque d'éducation thérapeutique ou certains comportements religieux peuvent mettre le patient en danger : cinq patients ont rapporté sauter le repas avant l'aube et prendre leur sulfamide ; 27 ont déclaré qu'ils refuseraient de se resucrer en cas d'hypoglycémie pour ne pas rompre le jeûne. Parmi les 101 MG, les connaissances médicales portant sur le sujet diabète et Ramadan étaient faibles. De ce fait, beaucoup de conseils négatifs étaient donnés sur la pratique du Ramadan et peu d'éducation thérapeutique ou d'ajustement thérapeutique étaient réalisés, fragilisant la relation médecin-malade.

Abbreviations: GP, General practitioner; OAD, Oral antidiabetic drugs.

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Conclusion. – Cette étude confirme l'importance du jeûne pour les patients diabétiques musulmans et révèle une barrière transculturelle médecin–malade. Une éducation et une adaptation thérapeutique systématique devraient être réalisées. Nous encourageons la prise en charge spécifique de ces patients et la mise en œuvre de formations médicales sur le Ramadan.

Mots clés : Jeûne du Ramadan ; Diabète ; Éducation thérapeutique ; Compétence inter-culturelle

1. Introduction

As Ramadan fasting is one of the five Pillars of Islam, more than one billion Muslims fast simultaneously worldwide. Observance insists that they refrain from eating and drinking from dawn to sunset during the entire month of Ramadan. Although the Koran exempts the sick from fasting [1], especially if fasting could lead to harmful consequences, Muslim diabetic patients commonly wish to participate and frequently do so. Over the coming decade, Ramadan will fall during the summer months, thus increasing the number of fasting hours and raising the risk of negative effects for diabetic patients wishing to fast [2].

The EPIDIAR study [3], conducted in 13 Islamic countries, was the first retrospective study to provide epidemiological data on diabetic patients who practice Ramadan, and showed that 79% of type 2 diabetics and 43% of type 1 diabetics actually fast during Ramadan. Moreover, this study showed 4.7-fold and 7.5-fold increases in severe hypoglycaemia in type 1 and type 2, respectively, diabetic fasting patients. The practice of Ramadan by diabetics has raised medical concerns for years [4–8]. The American Diabetes Association (ADA) has issued statements on the practice to help clinicians to identify patients at high risk during fasting [9,10]. However, counselling migrant patients on their religious practices is a considerable challenge for healthcare professionals who often have a different religion and language. As a consequence, general practitioners (GPs) may simply prohibit their diabetic patients from fasting, advice that weakens the patient–physician relationship instead of enabling patients to better manage the condition themselves [11].

Disregarding religious beliefs may create a barrier in the global process of cross-cultural therapeutic education. Whether diabetic Muslim patients ask their physicians about fasting and follow their medical advice is unknown. The reasons used by GPs to convince their patients not to fast are also of interest and may involve cultural beliefs.

In this context, the present study evaluated the attitudes and practices of patients and GPs towards Ramadan fasting in the 'real world' setting of the south of France to invite an open dialogue on the topic, and to obtain a dataset of patients' and physicians' opinions on the matter. Indeed, Marseille is a crossover point between France and North Africa, and is host to a diverse religious population, including a large number of Muslim migrants. The aim of this study was to better understand the cross-cultural patient–physician relationship concerning Ramadan practice to improve the medical advice given, and to empower Muslim diabetic patients in disease self-management. Thus, two cross-sectional studies were conducted in Marseille, one involving Muslim diabetic patients and the other in GPs not related to the patients to avoid any biased answers.

2. Research design and method

2.1. Study 1: patients' attitudes and practices

A sample of Muslim diabetic patients was selected from among patients hospitalized for the first time in our department, or in other departments of Marseille's university hospitals, for reasons related or not to diabetes. All recruited inpatients were living in Marseille or its suburbs. The recruitment period extended over eight weeks in the summer, within the three months prior to Ramadan. All patients gave their informed consent to answer a questionnaire aimed at determining their attitudes towards Ramadan fasting.

For inclusion, patients had to be Muslim with either type 1 or type 2 diabetes and able to reply to an oral questionnaire. Newly diagnosed patients (< 1 year) and patients who had previously received specific counselling in our department were excluded from the study.

2.1.1. Questionnaire

Data collection was obtained from individually held face-to-face interviews between all patients and the same investigator. A standardized questionnaire, comprising 54 open and closed questions, was the basis of the interview, and covered:

- a detailed medical history, including type and duration of diabetes, complications, medical follow-up, drug treatment, autonomy for monitoring capillary blood glucose or insulin injection, level of glycaemic control and frequency of hypo- or hyperglycaemic events during the three months before Ramadan;
- sociodemographic data, such as education level and time since arrival in France;
- questions concerning religious practices, such as daily worship, Mecca pilgrimage, consumption of *Halal* food;
- Ramadan practise, including history of fasting, source and nature of counselling received that may have influenced their practise (healthcare professionals, religious authorities), adverse events during the fast, changes in food intake, physical activity, treatment and medical follow-up, reasons for prematurely breaking the fast or ending Ramadan fasting and;
- their ability to recognize situations at risk of adverse events, and attitudes towards specific situations such as hypo/hyperglycaemia and pregnancy.