

Transcultural Oral Health Care: 4. Dental Medication for Muslim Patients

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Abstract: The aim of this paper is to provide a guide for general dental practitioners who may need to prescribe medication to Muslim patients, particularly during the month of Ramadan. An understanding and appreciation of the patients' religious background will aid treatment compliance and allow dentists to provide a culturally sensitive service for their Muslim patients. Drug therapy compliance is important, but it is likely to be poor among Muslim patients during the month of Ramadan, when fasting and religious practices may cause problems. The authors provide guidelines on good clinical practice and prescribing regimens for general dental practitioners treating Muslim patients, particularly during Ramadan.

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Clinical Relevance: The success of any treatment regimen prescribed by a dentist will be based upon the successful communication of the 'need' for treatment, hence empowering the individual to make the choice which will best serve their spiritual, religious and medical needs. Good communication between patient and dentist will increase co-operation and develop an atmosphere of mutual trust, in which the patients' needs can be met with appropriate treatment. Communication and understanding are essential ingredients to support attendance and co-operation.

In an increasingly multicultural society it is important for healthcare professionals to be aware of and to understand the cultural background of their patients and colleagues. Certainly, with respect to their patients, this understanding is likely to result in increased satisfaction in the delivery of care. Patients will feel that their beliefs have been taken into consideration, and health professionals will be able to deliver care that their patients find acceptable and appropriate.

A major cultural and religious custom

relates to fasting. For Muslims this and other customs, such as dietary restriction, are important components of their religious practice. It is important that healthcare professionals are aware of how these can affect routine treatment, especially during special occasions such as the month of Ramadan. Ramadan is the ninth month of the Islamic calendar,¹ and is the holiest month for over 1 billion Muslims around the world. The Islamic calendar is a lunar calendar, and the month of Ramadan lasts either 29 or 30 days;² it also occurs about 11 days earlier in the Gregorian (solar) calendar each year. During Ramadan, Muslims are expected to forsake food and drink between the hours of sunrise and sunset whilst going about their normal daily lives.¹

In Muslim countries such as Saudi Arabia, health services rearrange their care to cater for the religious practices; for example, most primary care units

change their times of operation so that patients can be seen and treated after sunset. The aim of this paper is to provide guidelines to general dental practitioners on dental treatment and potential problems in prescribing medication for Muslims, particularly during Ramadan. These guidelines are in line with generally accepted United Kingdom Islamic opinion; however, it is important to note that opinions will vary from person to person, and often depend on an individual's cultural background.

DRUG COMPLIANCE

Most of the papers in the medical literature have concentrated on the poor compliance to drug regimens of fasting patients and the problems that may result.³⁻⁶ the majority of fasting patients will change their drug regimen during Ramadan. Also, a fasting patient taking multiple drugs to treat several conditions will all too often change their treatment so as to consume the drugs in a single, or at most twice-daily, dose; this can lead to an increased possibility of drug interaction and decreased efficacy of the medication.³

Little information is available in the dental literature on the implications of prescribing during the month of Ramadan. Dentists must be aware of possible non-compliance, and make allowances to accommodate the religious practices of their patients (see Table 1). One simple solution is to change the medication or the dosage – for example, instead of penicillin V, which requires four doses daily, amoxicillin could be prescribed, which requires only three doses a day. The three doses may be rotated, thereby

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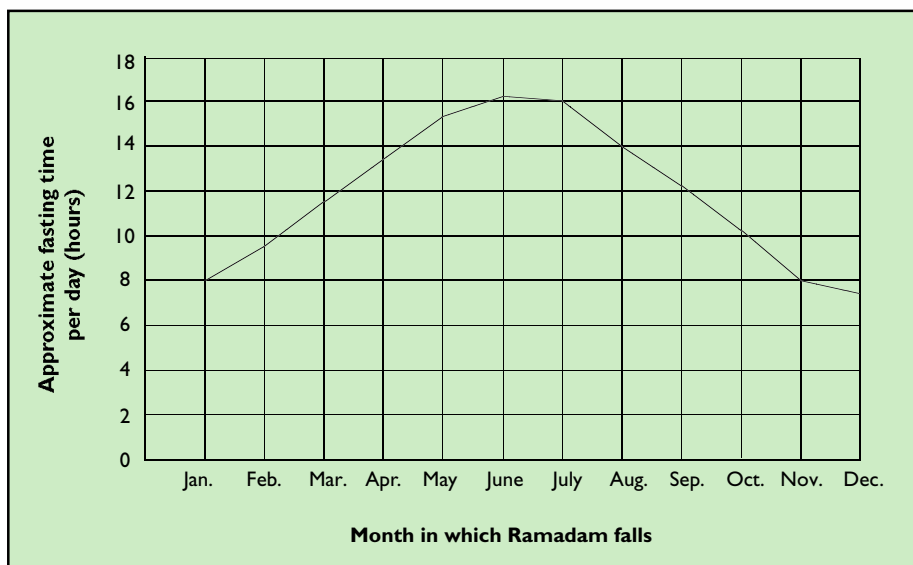


Figure 1. Approximate number of hours fasted during Ramadan.

allowing the patient to take the medication outside the hours of fasting. However, the timing of hours fasted varies from country-to-country and from year-to-year. For example, in the UK in the next few years Ramadan falls during autumn and winter, and the hours spent in fasting will be relatively short, as the gap between sunrise and sunset is only about 9–10 hours. When Ramadan falls in summer the gap can increase to 17–18 hours. This of course makes prescribing much more difficult (Figure 1).

Another possibility is to prescribe slow-release formulations of medication. If such formulations are not included in the *Dental Practitioners' Formulary* (1998), dentists may ask the patient's general medical practitioner to prescribe them. An example is the long-acting version of the non-steroidal, anti-inflammatory drug diclofenac (SR 75 mg): only two doses are required per day.

Alternatively, or in addition to changing the medication or dosage, the dentist must explain the purpose of the medication to the patient and the importance of compliance.

It is important for all healthcare professionals to be aware of the potential for poor compliance before commencing treatment – e.g. patients

requiring antibiotic cover, anticoagulants or long-term steroids. Patients presenting on long-term medication may have altered the timings of their regimen and may be too unstable for treatment.

ORAL MEDICATION

A fasting patient is not able to take medication by the oral route. If a person becomes ill within the period of a fast, however, it is allowable to break the fast. It is for the patient to judge the degree of illness; and if the illness is 'harmful' or life threatening they are advised to undergo treatment, for under Islamic law preservation of life has the greatest priority.

MEDICATION BY INJECTION

Medication in the form of an injection, for example intramuscular and intravenous injections, is generally allowed. Examples that may be of particular importance to dentists are the insulin injections for diabetics and antibiotics given by the intramuscular or intravenous routes. However, consideration should be given to the medication and nourishment that will be required by such patients during the hours of fasting, as anything taken

orally or any nourishment given via any route will break the fast. If such circumstances are foreseen, the advice must be given not to fast.

For example, a patient admitted to an oral or maxillofacial unit in hospital may require intravenous antibiotics. It is highly unlikely that the patient is going to be able to fast, owing to the adjunctive treatment that is often required (analgesia, hydration and nourishment). A patient in hospital is likely to understand this, but the principle must be underlined by the nursing or dental staff attending the patient if there is any doubt.

MEDICAL EMERGENCIES IN DENTAL PRACTICE

Medical emergencies that may occur in dental practice include adrenal insufficiency, anaphylaxis, asthma, cardiac emergencies, epileptic seizures, hypoglycaemia and syncope.⁷

Almost without exception these conditions will necessitate administration of medication immediately (e.g. adrenaline injection in the case of anaphylaxis), or immediately after the initial event has taken place (e.g. diazepam injection in the case of prolonged epileptic seizures). Islamic rules governing fasting are very clear; one of the acceptable reasons for breaking the fast is if life is threatened. Thus, if a person has a condition that is a threat to his or her life (perhaps he or she has poorly controlled diabetes), it is forbidden by

<p>Patients will be reluctant to take medication that disrupts fasting</p> <p>Patients may:</p> <ul style="list-style-type: none"> ● Fail to take prescribed medication during fasting hours ● Take all medication outside fasting hours, hence at incorrect intervals ● Take all medication in one go, particularly if several different medications are prescribed <p>Dentist's options:</p> <ul style="list-style-type: none"> ● Change medication ● Change dosage ● Explain necessity of compliance with prescribed medication

Table 1. Drug compliance issues.

Islamic law for them to continue fasting.

MOUTHWASHES

Chlorhexidine is a commonly prescribed antiseptic mouthwash. It may be used as a mouthwash, spray or gel, for a variety of conditions. Another mouthwash in the *Dental Practitioners' Formulary* that is used as an antiseptic is povidone-iodine. Allowance is made for these, and others commonly prescribed in dentistry, to be used if required. However, patients may be reluctant to use any mouthwash for fear of absorption from the mucosa and of inadvertently swallowing some. Wherever possible, alcohol-free mouthwashes should be prescribed or recommended.

It may be advisable to discuss these issues with the patient concerned and to suggest that, if the patient is reluctant to use the mouthwash during the fasting period, he or she should use it outside fasting hours.

VARNISHES

Varnishes used during dental procedures (e.g. Duraphat) are designed for sustained release of, for example, fluoride onto the tooth surface. Fluoride application is often a treatment for tooth sensitivity or prevention of caries. In either case the fasting patient may be reluctant to accept this treatment, the concern being that he or she could inadvertently swallow the varnish or paste. Dentists should thus recommend that adjunctive treatment is carried out outside the hours of fasting (for instance, patients should apply small amounts of fluoride toothpaste at night to the affected areas). Alternatively, fluoride drops in water, used during non-fasting hours, may suffice. Normal treatment should resume once the fasting period has been completed.

PULP CAPPING MEDICAMENTS

Ledermix, or a similar substance, is often used in the treatment of acute pulpitis; the paste is placed directly into the canal, or on to the pulp. This is allowed during

Medication route/type	Permissibility for fasting patients	Provisos
Oral medication	Not permissible	Emergencies; deteriorating illness where patient feels unable to continue fasting; when harm may result from avoiding taking medication
Medication by injection	Permissible	Injection is non nutritional; as long as adjunctive treatment that may interfere with fast is not required. (e.g. analgesia)
Mouthwash	Permissible	Must not be swallowed; patients may be reluctant to use, particularly if alternative available; non-flavoured variety preferred; a non-alcoholic alternative must be used if available
Varnish	Permissible	Patients may prefer to have alternative treatment, or treatment outside fasting hours

Table 2. An overview of the general principles of prescribing during the fast of Ramadan.

fasting and does not invalidate the fast.

ANTIBACTERIAL DRUGS

When a Muslim patient is fasting it is preferable to delay antibiotic delivery until the fast is broken in the evening – if it is possible to do so without undue difficulty or discomfort to the patient. If this is not possible, then the patient may be encouraged to break the fast. It should be noted that the localized placement of antibiotics (e.g. during periodontal treatment) is allowed during the fast.

ANTIFUNGAL DRUGS

In a general dental practice the most common source of fungal infection is likely to be *Candida albicans*.⁷ Three presentations of *Candida* are specifically mentioned within the *Dental Practitioners' Formulary*: thrush (acute pseudomembranous candidiasis), denture stomatitis and angular cheilitis. For thrush and denture stomatitis the recommended treatment is nystatin, amphotericin or miconazole, usually in the form of pastilles or lozenges. Miconazole may be given as a gel for local application.

When treating a fasting patient, to improve compliance it is better to schedule the medication to be taken outside fasting hours: if taken during daylight hours, pastilles and lozenges will

invalidate the fast. Miconazole, although not strictly forbidden, will have poor uptake by patients, so scheduling medication outside the hours of fasting is recommended.

A cream may be used for extra-oral application (such as Daktacort), but systemic antifungal therapy is not allowed during fasting hours.

ANTIVIRAL TREATMENT

The most common antiviral medication that a dentist is likely to prescribe is a cream for the treatment of a perioral herpetic lesion. This is perfectly acceptable treatment for the fasting patient.

ANALGESICS

The most common form of analgesia prescribed by dentists is tablets or capsules, to be taken orally. This is not permitted for a fasting patient, unless the fast is to be broken. Treatment that may require postoperative analgesia is best delayed until after the month of Ramadan if possible. However, if appropriate, intramuscular injection of analgesics (which is allowed) can be considered if treatment cannot wait.

LOCAL ANAESTHESIA

This is an acceptable form of treatment

for a fasting patient; however, the dentist should be aware that some Muslim patients may be reluctant to undergo it, so it may be best to delay or rearrange treatment so it does not coincide with the period of fasting.

ALVOGYL

Localized placement of Alvogyl or a similar substance, often used in the treatment of dry socket, is acceptable during Ramadan. However, any possible ramifications of an infection should be explained to the patient, because they may prefer not to fast rather than to break their fast.

TREATMENT OF CHILDREN

Before the age of puberty Muslims are not obliged to fast. Therefore prescribing and offering treatment for this age group should not differ from the norm. However, treatment of children above this age will follow patterns

similar to those mentioned for adults.

SUMMARY

Within the month of Ramadan most forms of prescribing are allowable, with the notable exception of oral medication (see Table 2). However, even with acceptable types of medication, the dentist will often find open or hidden reluctance to comply with the regimen prescribed. The healthcare professional must be aware of this and should alter their prescribing practise or advice accordingly. It is also important, when treating a fasting patient on long-term medication, to ensure satisfactory compliance with the normal drug therapy.

It may be advisable, where possible, to delay treatment until after the month of Ramadan, or to tailor any medication so that it is taken outside the fasting hours.

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BOOK REVIEW

Marketing for the Slightly Uncertain. By Fiona Stuart-Wilson and Mike Grace. BDJ Books, 2000 (87pp, £19.95). ISBN 0 904 588 629

This is an excellent book written by two people well known in the dental business world. However, the title barely does justice to the content and it may have been better to have its subtitle 'A practical guide to marketing in dentistry' as the main title.

The authors stress that marketing is an integral and constant part of successful and fulfilling practice, balancing that against the needs of the patients. This book succeeds in its aim of demystifying marketing jargon by making it simpler to understand.

The first chapter destroys a few myths about marketing, which are not only applicable to general practice but to any professional practice, whether in community or hospital. The difference between need and want is clarified.

The next two chapters make the dentist ask the questions: what business am I in? and what am I selling? Many of us just practice without giving a thought to any of this. Consideration is then given to the questions: what do people want? and who are my customers? The many tables and flow diagrams add to the easier understanding and reinforcement of the principles.

A written marketing plan is deemed essential but is followed with very practical advice (as indeed is the rest of the book) with details of its component parts. Again, practical advice as to how to write an advertisement is offered in the chapter about communication.

The final part of the marketing cycle is 'keeping the customers' and the significant role of the staff is emphasized.

The busy professional should find this book very useful as it is small, easy to read and full of easy to implement ideas. While marketing is a constant and continuous process, it can be approached in stages, as broken down

in this book, making the latter a valuable source of frequent and regular referral.

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