# Management of Dental Pain by Primary health care providers

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#### Abstract

**Aim:** Primary health care providers are often approached by patients with dental pain and are expected to provide simple management to alleviate the pain and prevent further discomfort until a dentist can be consulted by the patient. The objective of this study is to evaluate the approach towards management of dental pain by general practitioners.

Materials and Methods: A questionnaire was used to evaluate the approach and experience of primary health care providers in managing dental pain.

**Results:** Oral Paracetamol and Amoxicillin were found to be the preferred analgesic and antibiotic of choice respectively for management of dental pain.

**Conclusion**: The results of this study point out that the primary health care providers follow a safe approach when it comes to managing dental pain.

Key words: Dental Pain, Analgesics, Antibiotics.

## Introduction

Management of dental pain is a challenging task even for a dentist due to its diverse aetiology and varied clinical presentation.<sup>(1)</sup> Primary health care providers are often approached by patients with dental pain. This could be due to lack of round the clock dental clinics, inadequate knowledge of the patient and dental pain often presents itself with headache, earache, fever, swelling and various associated symptoms.<sup>(2)</sup> Primary health care providers are expected to provide simple management to alleviate the pain and prevent further discomfort until a dentist can be consulted by the patient.<sup>(3)</sup> Though oral diseases are a part of the medical curriculum, general practitioners have very little training and experience in the management of dental pain.<sup>(4)</sup> The objective of this study was to evaluate the approach towards management of dental pain by primary health care providers through a questionnaire.

## Material and Methods

100 primary health care providers were selected randomly in and around the city of Chennai and were asked to answer a questionnaire designed to evaluate the approach and experience in managing dental pain. The study group included willing participants who practised either at a private setting or associated with a hospital with an experience of minimum of five years. None of the participants were associated with any academic institutions. Informed consent was obtained from all participants.

## Results

The age of the participants varied from 29 to 78 with the average being 47 years. The study group consisted of 57 males and 43 females.

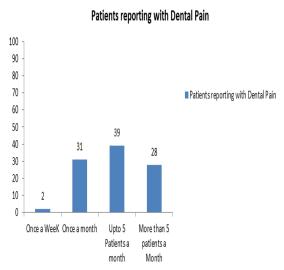


Fig. 1: Graph indicating patients reporting with Dental Pain

39% of the participants had upto 5 patients a month reporting with dental pain while 28% of the participants had more than five patients seeking dental help. Only 9% of the participants examined their patients for any dental pathology. 70% of the participants found headache to be the associated symptom along with dental pain while 13% found earache and the rest found other symptoms such as fever and swelling.

All the participants prescribed analgesics to patients with dental pain as relief. Paracetomol (Acetaminophen) was the most preferred analgesic of choice with 81% of participants prescribing the same. 11% preferred Diclofenac and the rest preferred analgesics such as Acelofenac, Mefenamic Acid and Ibuprofen.

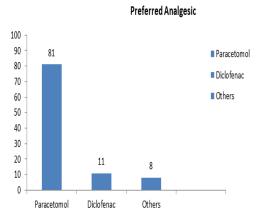


Fig. 2: Preferred Analgesic by General Practitioners

90% of the participants preferred oral as the route of choice for analgesics to manage pain while the rest preferred intra-muscular injections.

44% of the participants prescribed antibiotics for patients with dental pain with oral Amoxicillin being the most preferred antibiotic of choice of 95% of those who prescribed antibiotics though 67% preferred amoxicillin alone while 28% prescribed amoxicillin in combination with metronidazole.

**Preferred Antibiotic** 

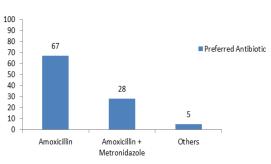


Fig. 3: Preferred Antibiotic Prescribed by General Practitioners

## Discussion

This study was aimed to evaluate the approach of primary health care providers towards management of patients reporting with dental pain. The age range of the participants was wide and the male female ratio was almost 1:1. 67% of the General Practitioners had five or more patients reporting to them with dental pain in a month. Majority of these, 67% of the participants worked late night. This could be due to the nonavailability of dental clinics at that hour. Though 70% of the participants found headache to be the common associated symptom with dental pain and 13% felt earache and 17% found symptoms like fever and swelling all agreed that dental pain presented with varied signs and symptoms therefore often the patients would not be able to identify the source of the pain leading them to consult a primary health care provider.

All participants prescribed analgesics as relief to patients reported with dental pain with Paracetomol being the most preferred. Paracetamol was prescribed as it is an over the counter drug and was considered safe and sufficient to alleviate the pain till a dentist could be consulted. 11% preferred Diclofenac as analgesic as they felt the intensity of dental pain is severe and could not be effectively managed by Paracetomol. Also Diclofenac was the drug of choice when administered intra-muscularly.90% of the participants preferred oral analgesics.

Only 44% of the participants prescribed antibiotics. The rest did not prescribe as they were not sure about the exact pathology of the dental pain. Out of the participants who prescribed antibiotics 95% preferred oral amoxicillin either alone or in combination with metronidazole and rest opted for ciprofloxacin or erythromycin.

#### Conclusion

Management of dental pain continues to be a demanding task for the dentist as well as a primary health care provider due to its complex etiological factors and varied clinical presentation<sup>5</sup>. The dental pain can manifest in diverse degree of intensity.<sup>(6)</sup> Till date there are no such guidelines for the management of dental pain.<sup>(7)</sup> The results of this study point out that the primary health care providers follow a safe approach when it comes to managing dental pain. Paracetomol and Amoxicillin are the preferred analgesics and antibiotic respectively. Primary health care providers have been practising adequate measures to relieve the pain until a dentist can be consulted.<sup>(8)</sup> Since dental pain presents with various other symptoms such as earache, headache, fever and swelling it is not possible to completely avoid patients with dental pain reporting to a general medical practitioner.9 Round the clock dental clinics and measures to improve patient's knowledge to distinguish between dental and other type of pains would considerably reduce such scenario.

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