

# The Trends of Self-Care Remedies among the Patients with Dental Pain Attending the Out-Patient Department of Dental Institute in Multan

Self-Care Remedies among the Patients with Dental Pain

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## ABSTRACT

**Objective:** To determine the prevalence and type of self-care remedies used by patients who experienced dental pain, visiting the OPD department of dental institute in Multan.

**Study Design:** Cross sectional study

**Place and Duration of Study:** This study was conducted at the College of Dentistry, Bakhtawar Amin Dental Hospital, Multan from 16<sup>th</sup> March to 16<sup>th</sup> July, 2020.

**Materials and Methods:** A standard sample of 389 was taken according to the WHO criteria. A questionnaire was used which actually consisted of demographic details, dental pain remedies, their hazardous effects, and frequency. In current study findings that the majority of the females involved in the practice of self-medication. In addition to that many of the patients (51%) get the medication for dental problems other than the registered dental practitioner. In the field of dental medicine, the accurate dosage and drug for a specific time are more important. This research disclosed that most of the patient take the self-care remedies at the time of dental pain only. Clove oil, its powder, or any crude form appeared to be the major option as a self-care remedy adopted by the patients.

**Results:** The results show a percentage of 185 (46.5%) participants who use self-care remedies at home with consultation from health care provider other than the dentist and 204 (51.3%) were those participants who use self-care remedies without any consultation. Analgesics used by participants have a percentage of 13.3%, antibiotics used were 16.8%, cloves 23.9%, salt-water gargle 11.1%, tobacco 9.3%, herbal remedies 22.4% and participants who did not give any response to these self-remedies constituted only 1%.

**Conclusion:** In current study findings that the majority of the females involved in the practice of self-medication. In addition to that many of the patients (51%) get the medication for dental problems other than the registered dental practitioner. In the field of dental medicine, the accurate dosage and drug for a specific time are more important. This research disclosed that most of the patient take the self-care remedies at the time of dental pain only. Clove oil, its powder, or any crude form appeared to be the major option as a self-care remedy adopted by the patients.

**Key Words:** Self-care remedies, self-medications, dental pain

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## INTRODUCTION

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Dental pain is more common in the patients presenting with carious lesions and can occur in any gender, at any age, and in any topographical region for which proper diagnosis and treatment is of utmost importance. It is the most likely symptom for which the patients, particularly those facing obstacles to receiving oral health care, often use self-care remedies or medications without consultation, in order to avoid the need for dental treatment.<sup>1</sup>

In the dental profession pain is a primary symptom encountered by a patient for which analgesics and antibiotics are used as a treatment in order to avoid the dental consultation and treatment. Other reasons are insufficient dental clinics/hospitals, failure to get a dental appointment, and too expensive dentists' consultation fees. The most common complication arises from an adverse drug reaction, expenditure, drug interaction, and drug resistance.<sup>2</sup>

Medication is one of the influencing tools in the public health profession. Self-care remedies including self-medication, non-drug self-treatment are one of the common practices worldwide, particularly in the developing countries, in order to avoid long waiting periods in the hospitals, free access to the OTC drugs in the local market, mild illness and to save money. There is a significant relationship between the self-care remedies with age, gender, education, and socio-economic status. Self-medication is referred to as the use of drugs by the patient himself or on the advice of a layperson without medical consultation for treating self-diagnosed disorders or symptoms.<sup>3</sup> There are many factors that lead to the self-care remedies like dental cost, awareness, and lengthy procedures.<sup>4</sup>

The World Health Organization approved some drugs to be changed from prescription status to be sold over the counter (OTC), to reduce the burden on Health care professionals in the 1980s, increasing the public health importance of self-medication. Benefits include reduced frequency of dental visits, cost, and increased patient freedom.<sup>2</sup> However, self-medication can endanger their lives and can lead to habituation, adverse allergic reactions, under and over dosage which may result in increased symptoms and injury to different organs.<sup>5</sup> In developing countries, people mostly use self-care remedies such as clove oil, peppermint essential oil, garlic, and turmeric powder to relieve dental pain or rely on self-medication which primarily includes analgesics, antibiotics, native herbs, salt, and hot water and ice packs were used for treating their oral health problems.<sup>6</sup>

Chronic dental diseases can lead to the removal of teeth and in some cases, it has an emotional, physical, and economic impact. It is an established fact that poor oral and dental hygiene has also been linked to lung and heart diseases.<sup>7</sup> Many studies conducted throughout the world to determine self-medication among their population. The aim of this study was to investigate the trends of self-care remedies among the patient with dental pain.<sup>8</sup>

## MATERIALS AND METHODS

A cross-sectional descriptive study was done using a simple random sampling technique in which a total of 389 patients were enrolled meeting WHO criteria. A questionnaire was used which consisted of demographic details, dental pain remedies, their hazardous effects, and frequency of their usage. It also contained questions about patients' practice of self-remedies, the time duration of using the remedies, what kind of remedy is used, potentiating factors of using it, information about the self-care remedies, thinking about hazardous effects of self-medication and how to encounter those adverse effects. Each participant was given an equal chance to be selected and to showcase

his/her knowledge about self-care remedies regarding dental pain.

The data was collected from the out-patient department of Bakhtawar Amin Dental Hospital, Multan after ethical and technical approval from the Institutional Research Board (IRB) of BADC&H (Ref. no 310/2020). The duration of the study was six months after approval. All information gathered on the questionnaire was later coded and entered in SPSS IBM Version 22. All the nominal data was presented in a form of frequencies and percentages and numerical data in form of mean and standard deviation.

All participants/patients who reported into out-patient department of Bakhtawar Amin Dental Hospital and already take the medication for dental pain without prescription from registered dental practitioner and gave verbal informed consent irrespective of gender and age were included in this study. However, any patients having any systemic disease, psychological ailment, or on any medication due to previous illness were excluded from the study.

## RESULTS

A sample of 389 was taken and the description shows that male participants were 139 whereas females were 250.

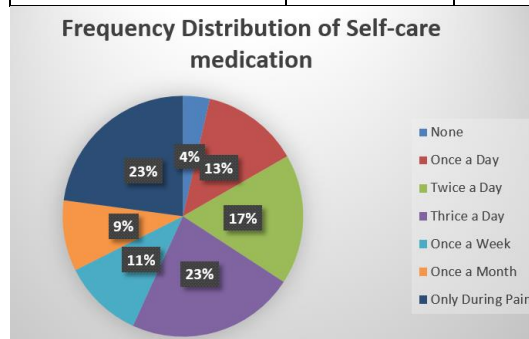
**Table No.1: Gender distribution among participants**

| Gender | Frequency | Percent |
|--------|-----------|---------|
| Male   | 139       | 34.9    |
| Female | 250       | 62.8    |
| Total  | 389       | 97.7    |

In this study 204 participants used self-care remedies for relieving their dental pain or problems while 185 participants were those who were concerned with different healthcare workers other than a dentist for their dental issues and considered as taking self-care remedies. Table 2.

**Table No.2: The practice of using self-care remedies with or without consultation with the health care provider**

|                      | Frequency | Percent |
|----------------------|-----------|---------|
| Without Consultation | 185       | 46.5    |
| With Consultation    | 204       | 51.3    |
| Total                | 389       | 97.7    |



**Figure No.1: Frequency of using self-care remedies**

The majority of the participants opted for different self-medication or remedies only at the time of severe dental pain. Figure 1 shows the frequency of taking self-care remedies which were observed during the current study. During the current study, it was observed that most of the participants had strong beliefs on clove oil and clove extracts in alleviating dental pain. The participants (22%) gave a history of usage of different herbal products for their dental issues. Other agents used by the patients are given in Table 3.

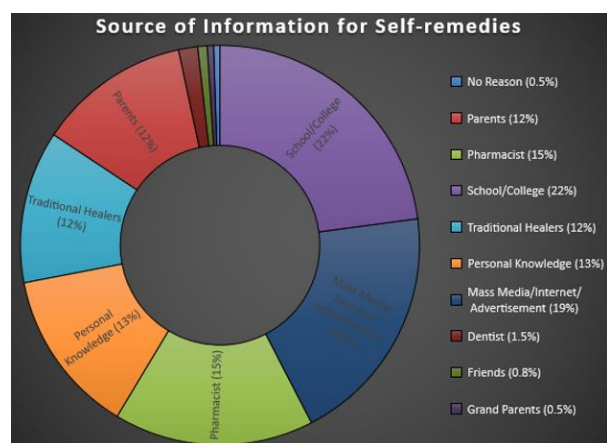
**Table No.3: Self-Careremedies Used for Dental Pain**

|                   | Frequency | Percent |
|-------------------|-----------|---------|
| None              | 4         | 1.0     |
| Analgesic         | 53        | 13.3    |
| Antibiotics       | 67        | 16.8    |
| Cloves            | 95        | 23.9    |
| Saltwater Gargles | 44        | 11.1    |
| Tobacco           | 37        | 9.3     |
| Herbal Remedies   | 89        | 22.4    |
| Total             | 389       | 97.7    |

Data regarding different reasons for choosing self-care remedies suggests that people choose different remedies because they cannot afford expensive dental products. Most of the participants in this study population is from under developed area who could not afford lengthy appointments and expensive dental products and procedures. Other reasons for choosing self-care remedies were given in Table 4.

**Table No.4: Reasons for choosing self-care remedies**

|                         | Frequency | Percent |
|-------------------------|-----------|---------|
| No Reason               | 27        | 6.8     |
| Lack of Time            | 55        | 13.8    |
| I Prefer It             | 48        | 12.1    |
| Expensive Medicaments   | 85        | 21.4    |
| Laziness                | 54        | 13.6    |
| Lack of Health Services | 56        | 14.1    |
| Lengthy Procedures      | 64        | 16.1    |
| Total                   | 389       | 97.7    |



**Figure No.2: Source of information for self-care remedies**

Different sources of information that influence the patients for the usage of self-medication are shown in Figure 2. Data clearly depicts that major contributing factors are parents advice (12%) and pharmacist (15%) and many other minor factors like school/college (22%), traditional healers (12%), personal knowledge (13%), and electronic and print media (19%).

## DISCUSSION

This current study was about to identify the trends of self-care remedies used in a local community of Multan. The sample size was 389 during the six months of the study out of these 389 only 204 patients (51.3%) use the self-care remedies without consultation from any health care worker while 185 patients (46.5%) taking remedies with consultation other than the dentist. The results of this study clearly depict that majority of the females (62.8%) taking self-care remedies while only (34.9%) male patients were taking self-care remedies. In contrary to current study results, the study was conducted in 2017 among Sudanese in Khartoum Sudan to identify the self-care remedies used to relieve dental pain. The study included 384 participants in which 75.5% male, and 24.5% female used self-care remedies.

About this current research, another study was carried out in Portugal back in 2002. The study includes 3312 subjects have selected the distribution regarding self-medication among males was 28.4% higher than females and it was 25.2%. In 2015 another study was conducted in India and their aim was to assess the prevalence level regarding dental pain and the type of self-care remedy used for relief of pain. In this study 630 individuals were selected and among the total subjects, 55.9% were female and 44.1% were males using the self-care remedies as same in our region.

In current study, frequency distribution of self-care remedies among the patients shows that the majority of the patients take medication thrice a day (23%) and 23% of patients take medication at the time of pain only. It is a serious concern regarding the dosage of using antibiotics for a limited time only.

This study shows the significant results regarding the use of various remedies like analgesics, antibiotics, cloves, salt-water gargles, tobacco, and herbal remedies use for the relief of dental pain. According to this study cloves (23.9%) were considered as the most relieving ingredient in dental pain. In addition to that some types of herbal (22.4%), antibiotics (16.8%), analgesic (13.3%), saltwater gargles (11.1%), and tobacco (9.3%) used by the self-care remedies patients.

Another study which was conducted in Fatima Memorial Hospital Pakistan on 400 participants also depicts similar findings related to prevalence and factors associated with self-medication among dental patients. The result showed that oral analgesics (58.8%), anti-inflammatory(0.5%), topical (2.3%),

muscle relaxant (0.9%), miscellaneous (3.2%), oral Analgesics + antibiotics (13.4%) and other combinations (51.5%) was used by participants.<sup>1</sup> A recent study was conducted in India in 2018 showed an association between self-medication and beliefs regarding medicines with dental pain. They were focused on the norms and myths in their cultures about the effects of medicine and its frequency of usage.<sup>9</sup>

A study was conducted in 2017 among Sudanese in Khartoum Sudan to identify the self-care remedies used to relieve dental pain. The most frequently used remedy as shown in this study was cloves (33.8%) alongside a wide variety of other remedies.<sup>2</sup> A study conducted in 2015, determine the self-medication practice among 120 participants in Karnataka India. The data showed that frequently used drug was analgesics (42.5%) followed by traditional medicine (14.2%) and antibiotics (10.0%). However, it was interesting to note that 33.3% of people were unaware of the drugs that they were consuming.<sup>3,8</sup> A search conducted in 2009 in the USA on 384 participants disclosed that around 45.1% used self-care medications and the best possible remedy used among them was clove oil and herbal products.<sup>10</sup> Current study research results showed significant findings regarding the use of clove and herbal products for the relief of dental pain.

This study also disclosed the reason behind the use of self-cure remedies 21.4% of patients due to expensive medicaments, 16% due to lengthy procedures, 14% lack of health services, 13% laziness and lack of time, and 12% say that I prefer to take. The major factor in this area is an expensive medication. This current study also highlighted the factors which should be addressed to decrease or discourage the use of self-care remedies. The current research actually not only identified the use of different self-medication options, but it also helped to identify the frequency and the factors which encourage the use of self-care remedies among the local community of Multan.<sup>11-14</sup>

## CONCLUSION

The use of self-care remedies is one of the major problems in dental practice especially in underdeveloped areas of Pakistan. It is the need of the time to identify and discourage the real cause of self-care remedies from the grassroots level. In current study findings that the majority of the female involved in the practice of self-medication. In addition to that many of the patients (51%) get the medication for dental problems other than the registered dental practitioner. In the field of dental medicine, the accurate dosage and drug for a specific time are more important. This research disclosed that the majority of the patient take the self-care medicine at the time of dental pain only. Clove, its powder, or any crude form appeared to be the major option adopted by 24% of the patients and

considered this one of the effective remedies against dental pain.

**Recommendations:** In relation to this study, necessary steps should be taken by the local government and hospitals to educate the local community people about the benefits and risks of using self-medication. Many contributing factors that enhance the use of self-medication should be discouraged and awareness should be given to them in order to avoid any hazardous effects which would actually face in the near future.

**Limitations of study:** This study only gives a statistical analysis of a targeted population at a single tertiary care setting. More studies should be carried out at a mass scale with the higher number of sample size for the generalization of findings over a large population.

### Author's Contribution:

|                            |   |
|----------------------------|---|
| Concept & Design of Study: | Muhammad Junaid Hashmi                                  |
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| Revisiting Critically:     | Muhammad Junaid Hashmi, Muhammad Azeem Khan             |
| Final Approval of version: | Muhammad Junaid Hashmi                                  |

**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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