# Perception About Self-Medication Practices For Oral Health Problems Among The General Population Of Chennai And Tiruvallur.

# Dr.MRC Rajeswari, Dr. B Prem Karthick, Dr. P Nancy Dr.S Rajalakshmi

Priyadarshini Dental College and Hospital, Tiruvallur. Name of The Department: Department of Oral Pathology and Microbiology.

### Abstract:

**Aim:** To evaluate perception about self-medication practices for oral health problems among the general population of Chennai and Tiruvallur districts.

**Materials and method:** A Cross-sectional survey was conducted among 325 people in Tiruvallur and Chennai districts. Data were collected through specially designed proforma using a closed-ended, self-administrated questionnaire containing 10 questions.

**Results:** Response rate of the survey was 100%. Self-medication and nondoctor prescription were found to be obvious and at an alarming rate of 67%. Among reasons of self-medication, toothache was the most common one. People of all sociodemographic categories approved self-medication giving reasons of fear of dental clinics as a major reason followed by nonseriousness of their condition. Salt and water were often used for treating their oral health problems.

**Conclusion:** Self-medication for oral health problems prevalence was higher in the population of Chennai district than Tiruvallur district. Majority of study participants visited dentists if oral symptoms persisted even after the self-medication.

Keywords: Chennai, Tiruvallur, Oral health, Self-medication

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#### I. Introduction:

"A desire to take medicine is perhaps the great feature which distinguishes man from animals" -William Osler. According to WHO, health is defined as the state of complete physical, mental, and social wellbeing and not merely the absence of diseases or infirmity. [1] Self-medication is an element of self-care based on selection and use of medicines by individuals to treat self-recognized illnesses or symptoms. [2] Self-medication is an important health issue especially in developing countries like India. In developing countries, where universal access to health care is yet to be achieved, self-medication is one of the common and preferred modes resorted by the patients. Various studies reported that self-medication may lead to delay in care seeking which results in paradoxical economic loss due to delay in the diagnosis of underlying conditions and appropriate treatment. [3] The most commonly used drug for self-medication worldwide was found to be antibiotics which are also commonly used in dentistry, therefore, necessitating the need for this study. [4] Many factors play a role in the practice of self-medication, including economic status, cultural perception of diseases, anxiety, and dental phobia.<sup>[5]</sup> Families, friends, neighbours, the pharmacist, previous prescribed drug, or suggestions from an advertisement in newspapers or popular magazines are common sources of self-medications. Now-a-days, selfmedication should be seen as the "desire and ability of people/patients to play an intelligent, independent and informed role, not merely in terms of decision-making but also in the management of those preventive, diagnostic and therapeutic activities which concern them." [6] In the dental profession, apart from anxiety due to a phobia for dentists and their practice, toothache is the most likely symptom that may warrant patients to embark on self-medication. Consequently, there is increasing evidence that self-medication practices among dental patients with history of toothache are common in many developing countries and despite its adverse

impact on the dentition. [7] Ignorance to seek treatment for oral health problem is the unawareness of the patients toward the treatment regimens and also the fear and myths associated with the dental treatment which would serve as a predisposing factor to indulge in self-medication practices. This study highlights on the

association between the self-medication practices and the ignorance in seeking dental treatment among dental patients. [8]

This study was aimed to estimate the prevalence of self-medication for oral health problems among people in Chennai and Tiruvallur districts; to identify triggering factors that could influence self-medication practices; to identify sources of medications used; to identify sources of information about medications used; and to identify reasons for self-medication.

#### Aim:

To assess the perception about self-medication practices for oral health problems among the general population of Chennai and Tiruvallur districts.

#### **Objectives:**

- To know knowledge toward self-medication practices for oral health problems among the general population of Chennai and Tiruvallur districts.
- To assess attitude and practices toward self-medication practices for oral health problems among the general population of Chennai and Tiruvallur districts.

#### **II.** Materials And Methods:

#### Study design

A cross-sectional field survey.

#### **Ethical clearance**

The synopsis of the proposed survey was prepared and submitted to the Institutional Review Board, Priyadarshini Dental College and Hospital, Tiruvallur for Ethical Approval. After the review and scrutiny by the board members, approval was granted to conduct the survey.

#### **Description of the questionnaire**

Data were collected using a specially designed proforma. It was a closed-ended, self-administered questionnaire containing 15 questions, in two sections. The questionnaire had provision to take voluntary written informed consents from the participants.

First section of the questionnaire contained information related to demographic details of the survey participants. Second section of the questionnaire contained ten questions which were related to the knowledge, attitude and practices about self-medication in relation to the oral health problems.

#### Eligibility criteria

# Inclusion criteria

General population of Tiruvallur and Chennai.

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# Exclusion criteria

Marital status

Single

Subjects who are illiterate and mentally incapacitated to give a valid response to questions

# **Statistical procedures**

The data obtained in the present survey were compiled and organized systematically. A master table was prepared. Dataset was subdivided and distributed meaningfully in individual tables. Statistical analysis was carried out using SPSS.19.0. software.

# III. Results:

The present survey had response rate of 100%. The demographic details of the survey are presented as shown in Table 1. About 67% of the population had practice of the self-medication for oral problems and majority had used only for few days till condition subsides [Table 2]. Majority of subjects opined toothache as major triggering factor and fear of dental clinics as major reason for practicing self-medication for oral health problems [Tables 3 and 4]. Subjects who practiced self-medication used analgesics as the main mode apart from salt and water and had temporary relief of pain [Tables 5 and 6]. The most common source was the pharmacy shop [Table 7]. Majority of subjects practicing self-medication opined that they had personal knowledge for self-medication [Table 8] and opined that they would visit the dentist when oral problems persisted even after self-medication [Table 9].

**Table 1:** Demographic details of the population

Maximum

%

61.8

Mean

Minimum

n

201

Age	325		18	70		28.7	
Gender		n			%		
Male		174			53.5		
Female		151			46.5		
Total		325			100		

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Married	124	38.2
Total	325	100
District	n	%
Chennai	146	44.9
Tiruvallur	152	46.8
Others	27	8.3
Total	325	100
Educational status	n	%
School and Higher secondary	30	9.2
Professional graduates	71	21.8
Non-professional graduates	224	69
Total	325	100

Table 2: Practice of self- medication for oral health- related problems among study population

	n	%
Self-medication practice		
Yes	218	67
No	107	33
Total	325	100
Same prescription as family members		
Yes	136	41.8
No	189	58.2
Total	325	100
Duration of Self-medication usage		
Few days	228	70.2
Few weeks	44	13.5
Till condition subsides	53	16.3
Total	325	100

**Table 3:** Triggering factors for self- medication among the study population

Triggering factors	n	%
Toothache	179	55.1
Gingival bleeding	26	8
Halitosis	10	3.1
Sensitivity	42	12.9
Oral facial swelling	15	4.6
Tooth mobility	6	1.8
Others	47	14.5
Total	325	100

Table 4: Reasons for self- medication among the study population

Tubic in transports for some interestion among the study population			
Reason for self-medication	n	%	
Fear of dental clinics	100	30.8	
Lack of time	59	18.2	
Lack of money	40	12.3	
Minor problems	86	26.5	
Traditional/Religious beliefs	6	1.8	
Others	34	10.5	
Total	325	100	

Table 5: Effects after taking Self- medication

Feel after Self-medication	n	%
Temporary pain relief	168	51.7
Effective	64	19.7
Useful in stressful conditions	22	6.8
Unsure about effects	27	8.3
Curative in nature	19	5.8
Cheaper options	11	3.4
Others	14	4.3
Total	325	100

**Table 6:** Types of self- medication used by the general population

Tuble of Types of self-integration used by the general population				
Type of Self-medication used	n	%		
Analgesics	80	24.6		
Native herbs	34	10.5		
Antibiotics	78	24		
Salt and water	94	28.9		
Ice pack	25	7.7		
Others	14	4.3		

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1001	Total	325	100	
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**Table 7:** Source of buying self- medication

Source of buying	n	%
Pharmacy shop	213	65.5
Hospital pharmacy	54	16.6
Traditional home	52	16
Others	6	1.8
Total	325	100

Table 8: Consultation made for self- medication

Advice for self-medication	n	%
Personal knowledge	128	39.4
Relatives	65	20
Friends	47	14.5
Pharmacist	48	14.8
Mass media	21	6.5
Traditional healers	4	1.2
Others	12	3.7
Total	325	100

**Table 9:** Measures taken if problem persists

Measures taken if problem persists	n	%
Visit a dentist	252	77.5
Visit a medical practitioner	27	8.3
Continue same medication	23	7.1
Try different medication	23	7.1
Total	325	100

#### **IV.** Discussion:

The survey found the prevalence of self- medication practice to be very high (67% of total study participants). The reasons for such high prevalence of such a practice according to authors by seeing the results of present survey may be due to lack of awareness among general population about oral diseases, cost of dental treatments, lack of time, quick relief from symptoms, no family support, lack of knowledge about side effects, and belief in other herbal system of medicines. This result is in line with the results obtained in other studies conducted by many authors globally where the prevalence ranged from about 50% to as high as 75% in relation to general health problems where dental problem was part. In contrary, there are few studies where the prevalence was found to be as low as 26%, which was attributed to the presence of strict regulations by the government on marketing of OTC or without prescription medications. [9]

The age group of the study population in the survey ranged from 18 to 70 years, and mean age group of the participants was 29 years indicating that the majority of the study participants were middle- aged and had practice of self- medication. This finding is in accordance with the study conducted by Shankar et al., Ritu et al. and Sweileh where it was found that middle- aged participants had practice of self- medication when compared to extreme age groups (children or old age individuals). The reason for such trend is due to the fact this age group in the population are the one who are at more stress and workload and also at the same time the working population in the society. This is the age group which is more susceptible to many health problems including oral health problems and tries to adopt self- medication practices due to various factors like lack of money, time, feeling of disease as not serious, familiarity with the diseases and remedy, lack of insurance and also lack of trust on physicians. [13]

It was found in our survey that practice of self- medication was more among male participants when compared to female participants. This finding is in agreement with many studies conducted by Shankar et al., Ritu et al. Hurthermore, there are few studies that showed contrary results where female participants were more involved in self- medication compared to male participants. The main reasons were the fact that in those studies hospital facilities were out of reach especially for female housewives, presence of more health consciousness, due to the low threshold of pain and more fear of dental procedures. [9]

The finding of the present study showed that among participants who practiced self- medication, toothache was the main reason for administration of self- medication. This finding is in accordance with the study made by Anjan Giriraju. [1]

In the present survey, participants cited fear of dental clinics as a major reason for taking self- medication in relation to oral health problems followed by minor problems as a major reason. The following finding in this survey is a pointer showing that the majority of the participants have fear of dental procedures and also consider dental problems as minor ailments and self- treatable. This kind of thinking according to author may be due to less awareness to dental health among the population, who consider the

necessary and correct treatment from oral professionals only when all the remedies have failed to cure or treat the oral disease <sup>[16]</sup> Similar results were seen in other studies. <sup>[1,14,17,18,20]</sup>

It was found in our survey that half of the participants used the same prescription of their family members while the other half did not use the same prescription of their family members. Though majority of the participants do not use the same prescription as their family members, the number of participants that used is high. The present finding may be due to use of self- medication among family members who influence the other members and sometimes also recommend the other family members to use the same prescription used by them as the prescription could have led to relief of symptoms in them, [19] similar results were seen in other studies conducted. [11,17,18,20] where use of the same prescription was reported for the relief of symptoms.

Majority of the study participants in our survey used self- medication to cure their symptoms for few days. This finding is in line with two studies [11,20] where it was found that majority of the participants also consumed self- medication for few days, and there was some relief of symptoms for which self- medication was consumed.

Relief from pain was given as a major response by majority of the respondents who had taken self- medication in relation to their oral health problems. This may be due to the finding that majority of our study participants complained toothache as a major reason for their self- medication. Similar results were seen in some studies. [14,18,21] where majority of participants felt that self- medication gave temporary relief from symptoms like pain, saved money, made them independent to take care of themselves and time and also felt self- medication cured their ailments.

In our study, majority of participants who used self- medication used analgesic as the most common form other than salt and water. This finding can be linked with our previous finding which highlighted the presence of toothache among majority of participants who had self- medication. This result is in accordance with some studies [10-12,21] where use of analgesics was found to be the most common form of self- medication used.

Majority of the participants in our study procured self- medication from pharmacy shop, followed by other places such as hospital pharmacy and herbal homes. This finding was found mainly because majority of drugs used to treat minor illness are available as OTC drugs in many of the pharmacy shops in Chennai and Tiruvallur districts without professional prescription. Also many factors as seen previously like lack of time, cost of dental treatment, fear of dentists, peer and parental influence and ease of approach to pharmacists for their required medication without prescription favoured contacting pharmacists at first place for self- medications, [20] similar results clearly corresponded with other studies [1,10,11,13,14,18]

# V. Conclusion:

This survey was conducted to review the self-medication and nondoctor prescription for oral health problems among the population in Chennai and Tiruvallur districts. Results showed that self-medication and nondoctor prescription was found to be obvious and at an alarming rate of 67%. Among the reasons of self-medication, toothache was the most common one. In this survey, people of all sociodemographic categories approve of self-medication giving reasons of fear of dental clinics as a major reason followed by nonseriousness of their condition. In addition to analgesics, salt and water were often used for treating their oral health problems. Most of the respondents have personal knowledge for basic treatment and only decided to approach a dentist if the problem persisted. Self-medication has to be used within the limits of the oral health problems and treated along with proper consultation from a registered pharmacist if possible.

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