

Perception about Self-medication Practices for Oral Health Problems among Patients attending Dental Hospital, Udaipur, Rajasthan, India

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ABSTRACT

Introduction: Self-medication is the treatment of common health issues with pharmaceuticals particularly planned/ designed and labeled for use without medical supervision and endorsed as protected and effective for such use. Medicines for self-medication are frequently called “nonprescription” or “over the counter” and are accessible without a specialist’s prescription through pharmacies.

Objective: To assess the prevalence of self-medication practices for oral health problems among patients attending dental hospital, Udaipur, Rajasthan.

Materials and methods: A descriptive cross-sectional study was conducted among 220 patients attending the dental hospital, Udaipur, Rajasthan, India. Study population consisted of patient attending the OPD of Pacific Dental College & Hospital, Udaipur, Rajasthan, India. Descriptive statistics included computation of percentages that was used to calculate the frequencies related to self-medication practices for oral health problems among dental patients.

Results: This study was carried out among 220 subjects, out of which 56.8% (n = 125) were males and 43.2% (n = 95) were females. It was observed that majority of the participants practice self-medication 70% (n = 154) and 54.5% (n = 120) used same prescription as family members.

Conclusion: Self-medication is highly prevalent among the patients attending the dental hospital as medications are effortlessly accessible at the medical store and they can easily take the medicine without the prescription of the doctor or specialist, which is wrong on the part of the community as they are not aware of the harmful effects of medications at time. To create awareness about the drug reactions and its side effects due to self-medication, health education sessions should be conducted. Strict laws should also be planned by the concerned experts or authorities that without prescription of doctors no medicine

and prescription should be given to anyone at the medical store or pharmacy.

Keywords: Oral health problems, Pharmacists, Self-medication, Udaipur city.

How to cite this article: Sultane P, Chhabra S, Bhat N, Choudhary S, Todkar M, Singh P, Patel SA, Patel S. Perception about Self-medication Practices for Oral Health Problems among Patients attending Dental Hospital, Udaipur, Rajasthan, India, Rajathan. *Int J Oral Care Res* 2017;5(1):47-52.

Source of support: Nil

Conflict of interest: None

INTRODUCTION

Self-medication is the treatment of common health issues with pharmaceuticals, particularly, planned/ designed and labeled for use without medical supervision and endorsed as protected and effective for such use.¹

Self-medication is commonly practiced everywhere throughout the world.²⁻⁴ Medicines for self-medication are frequently called “nonprescription” or “over the counter” (OTC) and are accessible without a specialist’s prescription through pharmacies. Self-medication is now progressively being considered a part of self-care.⁵

“The desire to take medicine is perhaps the greatest feature which distinguishes man from animals” — William Osler.⁶ According to WHO, health is characterized as a state of complete physical, mental, and social well-being and not merely the absence of diseases or infirmity.⁷ Self-administered medicines is an age-old practice. Some of the reasons for growth in self-medication are the inclination of self-care, feeling of sympathy toward relative in sickness, lack of health administrations, poverty, ignorance, doubts, extensive advertisements of drugs, and accessibility of medications in establishments other than pharmacies.⁸

Sale of antibiotics and physician-endorsed drugs which are part of schedule H, by a nonpharmacist and without a valid prescription are banned/prohibited according to the Drug and Cosmetics Act of 1945 in India.⁶ Poor diagnostic ability compounded by a constrained knowledge of proper administration results in

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the increase of self-medication and low rate of health services utilization.⁹

Individuals sometimes self-administer pharmaceuticals through drug identification. Trade names were common means of distinguishing proof and less frequently by generic name, action, color, shape, and basic usage names. Sources of medication data could be from business representative in the chemist shop, print media, family and friends, pharmacists, general medicinal dealers, and general and private medicinal practitioners.¹⁰⁻¹³

Among the youthful ones, sources of medication knowledge include relatives, particularly, the mother (for therapeutic purposes), peer groups, and the illegal market (for addiction purpose).¹⁴

Individual of all sociodemographic classes practice self-medication. Recent advances in medication research have provided many synthetic medicines for the treatment of disease, prompting to a drug explosion. Today, 7000 medications and drug combinations are available.¹⁵ Many of them have been released for general utilization and are sold directly to the people in general as OTC remedies. Advertisements on television, newspapers, and other pharmaceutical distributions have enhanced the rate of self-medication.¹⁶

In financially deprived groups, most scenes of ailments are treated by self-medication.¹⁷

Serious issues worried with self-medication are wastage of resources, microbial resistance, adverse drug reactions and drug-drug interactions, delayed suffering, and medication dependence.¹⁸

Henceforth, knowledge on behavioral viewpoints related to medication utilization is required to enhance and expand the information base on health services seeking behavior.

Despite the fact that self-medication is difficult to eliminate, intervention can be made to demoralize the rampant practice. Thus, this study was conducted to assess the perception about self-medication practices for oral health problems among patients attending dental hospital of Udaipur, India.

MATERIALS AND METHODS

Study Design and Population

A descriptive cross-sectional study was conducted among 220 patients attending the dental hospital, Udaipur, Rajasthan, India from October to December 2016. Study population consisted of patient attending the OPD of Pacific Dental College & Hospital, Udaipur, Rajasthan, India.

Ethical Clearance and Official Permission

The study protocol was reviewed and approved by the institutional review board of Pacific Dental College &

Hospital and ethical clearance was granted. Also official permission was taken from the principal of dental hospital.

Informed Consent

Written informed consent was obtained from participants after explaining the nature and purpose of research.

Sampling Methodology

A list of four dental hospitals in Udaipur city was obtained by the investigator. One was randomly selected from it, i.e., Pacific Dental College & Hospital.

Pilot Survey

A pilot survey was conducted among 30 patients. Based on the results of the pilot study, the prevalence of self-medication was found to be 88.3%.

Sample Size Calculation

The sample size was calculated using the formula:

$$N = \frac{z^2 \alpha pq}{L^2}$$

Where,

p = patients overall satisfaction

q = 100-p

Z α = confidence factor for type I error α = 5% = 1.96;

L = allowable error, i.e., 10% of p

where p = 88.3%

q = 100 – 88.3 = 11.7%

Z α = 1.96

L = 10% of p = 4.4

$$\frac{(1.96)^2 \times 88.3 \times 11.7}{19.36} = 213 \text{ subjects}$$

The maximum sample size was attained from prevalence of self-medication and hence, rounded off to 220.

Inclusion Criteria

- Subjects visiting outpatient department of Pacific Dental College & Hospital, Udaipur.
- Patient above the age of 18 years.

Exclusion Criteria

- Subjects who are illiterate, mentally incapacitate to give valid response to questions, and those not willing to participate.

Survey Instrument

A pretested self-administered questionnaire was used to assess perception about self-medication practices for

oral health problems among patients attending dental hospital, Udaipur, Rajasthan, India.

The modified questionnaire was based on Giriraju,¹⁹ questionnaire to measure self-medication practices for oral health problems. Questionnaire was closed-ended questions. The survey pro forma was prepared in English and got translated into Hindi language (local language).

Questionnaire consisted of four sections:

1. First section of the questionnaire contained information related to demographic details of the survey participants.
2. Second section of the questionnaire contained five questions which are related to the practices and knowledge about self-medication related to oral health problems.
3. Third section contained three questions which are related to triggering factors, reasons for self-medication, and response of the population after the self-medication in relation to oral health problems.
4. Fourth section contained four questions which are related to the type of self-medication, source of buying, consultation made for self-medication, and measures taken if problem persists.

Survey Methodology

A survey was conducted on 220 subjects. The study participants were selected by simple random sampling method. A pretested self-administered questionnaire in Hindi (local language) was distributed to the selected patients (subjects) visiting OPD of dental hospital. The purpose of the study was informed and explained to the participants. Participants were asked to rate each item and choose the appropriate response. Ample time was given to them to fill the questionnaire and any queries, which the subject had, were clarified by the investigator. On average, it took 15 to 20 minutes for subjects to answer all the questions in the questionnaire. All questionnaires were collected from the subjects after they finished answering on the same day and checked carefully for their completeness.

Statistical Analysis

Completed questionnaires were coded, compiled, and entered in a spreadsheet computer programme (Microsoft Excel 2013) and then exposed to data editor page of Statistical Package for the Social Sciences version 20.0 (SPSS Inc. Chicago, Illinois, USA) and analyzed. Descriptive statistics included computation of percentages that was used to calculate the frequencies related to self-medication practices for oral health problems among dental patients.

RESULTS

Table 1 shows the distribution of study population according to demographic variables. The present study

was carried out among 220 subjects, out of which 56.8% (n = 125) were males and 43.2% (n = 95) were females. The number of respondent in 41 to 50 age groups were maximum 40.5% (n = 89) while viewing the educational background of study subjects, it was found that 52.7% (116) studied only up to high school level, only 14.1% (n = 31) of population studied up to primary school, and 33.2% (n = 73) were graduates.

Table 2 shows the distribution of study population based on practices and knowledge of self-medication for oral health-related problems. It was observed that majority of the participants practice self-medication 70% (n = 154) and 54.5% (n = 120) used same prescription as

Table 1: Demographic details of the population

Age	n	Percentage
18-30	26	11.8
31-40	51	23.2
41-50	89	40.5
50-65	54	24.5
Gender		
Male	125	56.8
Female	95	43.2
Total	220	100.0
Education		
Primary school	31	14.1
High school	116	52.7
Graduates	73	33.2
Total	220	100.0
Marital status		
Single	41	18.6
Married	179	81.4
Total	220	100.0

Table 2: Practice and knowledge of self-medication for oral health-related problems

	n	Percentage
Practice of self-medication		
1. Self-medication practice		
Yes	154	70.0
No	66	30.0
2. Same prescription as family members		
Yes	120	54.5
No	100	45.5
3. Duration of self-medication usage		
Few days	61	27.7
Few weeks	75	34.1
Till condition subsides	84	38.2
Knowledge of self-medication		
4. Awareness about side effects of self-medication		
Yes	86	39.1
No	134	60.9
5. Checking of expiry date		
Yes	108	49.1
No	112	50.9

family members. Majority of participants' usage of self-medication duration was till condition subsides 38.2% (n = 84). It was found that only 39.1% (n = 86) study participants were aware of the side effects of self-medication and 49.1% (n = 108) had only knowledge of checking expiry date of medication.

Table 3 shows the distribution of study population based on triggering factors, reasons for self-medication, and response of population after the self-medication. Majority of subjects opined toothache 45.9% (101) as major triggering factor and minor illness 66.4% (n = 146) as major reasons for practicing self-medication for oral problems and had temporary relief of pain 35.9% (n = 79).

Table 4 shows the distribution of study population based on source, consultation, and measures taken if problem persists even after self-medication. Subjects who practice self-medication used antibiotic 35.5% (n = 78) as the main mode. Majority of subjects practicing self-medication that they would consult pharmacist 34.1% (n = 75). The most common source was the pharmacy shop 52.3% (n = 115) and opined that they would visit the dentist 48.2% (n = 106) when oral problems persisted even after self-medication.

Table 3: Triggering factors, reasons for self-medication, and response of population after the self-medication

	n	Percentage
<i>Triggering factors</i>		
Toothache	101	45.9
Gum bleeding	43	19.5
Bad breath	16	7.3
Orofacial swelling	25	11.4
Tooth mobility	31	14.1
Others	4	1.8
Total	220	100.0
<i>Reasons for self-medication</i>		
Lack of time	20	9.1
Lack of money	23	10.5
Traditional/religious belief	11	5.0
Minor illness	146	66.4
Unavailability of doctors	12	5.5
Others	8	3.6
Total	220	100.0
<i>Feel after self-medication</i>		
Temporary pain relief	79	35.9
Effective	30	13.6
Useful in stressful condition	19	8.6
Unsure about effects	21	9.5
Curative in nature	13	5.9
Cheaper options	58	26.4
Total	220	100.0

Table 4: Types of self-medication, source of buying, consultation made for self-medication, and measures taken if problem persists

	n	Percentage
<i>Types of self-medication used</i>		
Analgesics	31	14.1
Native herb	45	20.5
Antibiotics	78	35.5
Salt and hot water	30	13.6
Ice pack	32	14.5
Others	4	1.8
Total	220	100.0
<i>Buying of self-medication</i>		
Pharmacy shop	115	52.3
Hospital pharmacy	53	24.1
Traditional home	46	20.9
Others	6	2.7
Total	220	100.0
<i>Advice for self-medication</i>		
Relatives	34	15.5
Friends	11	5.0
Personal knowledge	25	11.4
Pharmacists	75	34.1
Mass media	30	13.6
Traditional healers	45	20.5
Others	0	0
Total	220	100.0
<i>Measure if problem persists</i>		
Visit dentist	106	48.2
Visit a medical practitioner	79	35.9
Continue same medication	35	15.9
Total	220	100.0

DISCUSSION

This survey was carried out to find the prevalence of self-medication practice to be high (70% of total study participants).

In this study, the age group of the study population in the survey ranged from 18 to 65 years. Majority of the study participants were middle-aged (41-50 years) and had practice of self-medication. This finding is in accordance with the study conducted by Shankar et al²⁰ and Ritu et al.²¹ Majority of the participants were male (56.8%) because of availability/presence of them at the time of study which was similar to the studies done by Alghanim,²² Ahmad et al,²³ Giriraju,¹⁹ Ritu et al,²¹ Eticha et al,²⁴ Komalraj et al,²⁵ Wijesinghe et al,²⁶ Shankar et al,²⁰ and Jain et al,²⁷ while other studies Katkuri et al²⁸ and Bashir et al²⁹ gave opposite results.

The findings of this study showed that among respondents who practiced self-medication, toothache was the primary main triggering factor for self-medication administration. Similar studies done by Giriraju¹⁹ and Komalraj et al,²⁵ but when we compared it to other studies done by Katkuri et al,²⁸ Eticha et al,²⁴ Ritu et al,²¹ Bashir et al,²⁹ and Uppal et al,³⁰ gave opposite results.

In this study, the maximum (54.5%) number of respondents used the same prescription of their family members which was in accordance with the studies conducted by Komalraj et al²⁵ and Giriraju.¹⁹

Our results showed that self-medication was used till the condition subsided but this was not in accordance with the studies done by Giriraju¹⁹ and Komalraj et al.²⁵

In our survey, majority of the participants (60.9%) were not aware of side effects of self-medication because of lack of knowledge. This was in accordance with the study done by Katkuri et al.²⁸ In this study, the expiry date on the medicine was checked by lesser number of participants (49.1%) before using it for self-medication, but this was not in accordance with the study conducted by Uppal et al,³⁰ but similar result was found in the study done by Katkuri et al.²⁸

The main reason for taking self-medication among study population was minor illness (66.4%) in the current study but when other studies were compared, then this study was in accordance with the studies conducted by Komalraj et al,²⁵ Alghanim,²² Giriraju,¹⁹ and Jain et al.²⁷ These results were in contradiction to the other studies done by Eticha et al²⁴ and Katkuri et al.²⁸

In this study, maximum number of respondents felt that self-medication gave temporary pain relief. This result was in accordance with the studies conducted by Komalraj et al²⁵ and Giriraju.¹⁹

Antibiotics (35.5%) were used as a common type of self-medication among the study subjects. Similar results were found in Eticha et al,²⁴ but this result was not in accordance with the studies conducted by Jain et al,²⁷ Uppal et al,³⁰ Shankar et al,²⁰ Komalraj et al,²⁵ Giriraju,¹⁹ and Ritu et al²¹ where analgesics were used as a common type of self-medication.

The most common sources of medication or sources of drug supply for self-medication was pharmacy shop (52.3%). Similar results were found in the study done by Eticha,²⁴ Komalraj et al,²⁵ Alghanim,²² and Giriraju.¹⁹

In this study, the main consultants or advisor for taking self-medication were pharmacists followed by traditional healers and relatives. Similar results were seen in study done by Giriraju,¹⁹ Komalraj et al,²⁵ Alghanim,²² Uppal et al,³⁰ and Ahmad et al.²³

Majority of the study participants visited dentist followed by medical practitioner if the problem persists. This result was in accordance with the study conducted by Giriraju¹⁹ and Komalraj et al.²⁵

CONCLUSION

Self-medication is highly prevalent among the patients attending the dental hospital as medications are effortlessly accessible at the medical store and they can easily take the medicine without the prescription of the doctor/

specialist which is wrong on part of the community as they are not aware about the harmful effects of medications at time. To create awareness about the drug reactions and its side effects due to self-medication, health education sessions should be conducted. Strict laws should also be planned by the concerned experts/authorities that without prescription of doctors no medicine and prescription should be given to anyone at the medical store or pharmacy.

ACKNOWLEDGMENT

Authors would like to acknowledge the individuals who contributed their precious time during data collection. The respondents who took part in this study are also acknowledged for their time.

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