

# Dental Patient Preference On Over The Counter Medication And Self Medication

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## **Abstract**

### **Introduction:-**

*Self medication and over the counter medication drugs are formerly prescribed drugs taken without a current physicians consult. These are used to treat self diagnosed minor symptoms or disorders. Over the counter drugs has the potential to do good as harm as it involves use of drugs. It is widely practiced world wide in urban and rural population including developing countries like india.*

### **Aim:-**

*To evaluate various aspect of self medications in patients.*

*Material And Methods:- Cross-sectional, Questionnaire-based study was carried out at saveetha dental college, Chennai. A 16 open ended questionnaire was used for the study to collect information regarding age, gender, awareness of self medication practice, type of drugs self-medicated.*

**Results:** *Our study showed that most of the patients prefer self-medication and over the counter medication, most of the patients use over the counter medication ,majority of the patients use google for self-medication before consulting a doctor and they are not aware of the adverse effects.*

**CONCLUSION:** *Most of the patients prefer self-medication lack of awareness and awareness should be spread through patient education.*

**KEYWORDS:** *Over the counter medication and Self-medication.*

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## **I. INTRODUCTION:-**

OTC medicine abuse was identified in many countries and although implicated products varied, 3 key groups emerged: Antibiotics, Non-steroidal anti inflammatory drugs, Anti histamines (Van den Bulck, Leemans and Laekeman, 2005; Cooper, 2013). This variation may be related to both geographical variation and methodological and study design factors (Van den Bulck, Leemans and Laekeman, 2005; Cooper, 2013). Geographical variation was evident and different products were subject to abuse in different countries (Agaba *et al.*, 2011). This appeared to be associated with variation in the availability of products, such as codeine-based analgesic or cough medicines in several countries but not in the United States, for example; specific trends, such as adolescent dextromethorphan abuse in the United States; and variation in regulation, such as availability of prescription medicines for purchase in some countries (Ajuoga *et al.*, 2008; Sangsiry *et al.*, 2008). For example, antibiotics and pain killers were commonly prescribed by pharmacists as being abused, as regulations restricting their supply were not always enforced. Such variation, common themes emerged in identifying three key groups of non-prescription medicines that were implicated in OTC abuse namely: Antibiotics, Non-steroidal anti inflammatory drugs, Anti histamines. In some studies opioids are misused due to addiction (Fish *et al.*, 2016; Sawant *et al.*, 2016). Self medication, use of over the counter medication drugs and the formerly prescribed drugs taken without a current physicians recommendation. These are used to treat self diagnosed minor symptoms or disorders. Over the counter drugs has the potential to do good as harm as it involves use of drugs (Bennadi, 2014).

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It is widely practiced world wide in urban and rural population including developing countries like india. In india self medication is very common and over the counter medication is very common for dental problems (Schuckit, 1979; Akram, 2000; Bennadi, 2014; Li *et al.*, 2018). The uneducated patient prefers over the counter medication for dental problems. the educated patient mostly uses google for self-medication and they are not aware of the adverse effects (Schuckit, 1979; Akram, 2000; Bennadi, 2014; Mhatre and Sansgiry, 2014; Li *et al.*, 2018). Sometimes the self-medication works good but sometimes the adverse effects cannot be controlled (Schuckit, 1979; Akram, 2000; Bennadi, 2014; Mhatre and Sansgiry, 2014; Li *et al.*, 2018). The adverse effects like allergy, diarrhea, jarish-herxmeir reaction, steven-jhonson syndrome and most common is antibiotic resistance. In india most of the patients prefer self-medication for dental problems before visiting a dentist (Sansgiry *et al.*, 2008). This can be overcome by educating the patient regarding the adverse effects

## II. Aim:-

To evaluate various aspect of self medications in patients.

## III. Material And Methods:-

Cross-sectional, Questionnaire-based study was carried out at saveetha dental college, Chennai. A 16 open ended questionnaire was used for the study to collect information regarding age, gender, awareness of self medication practice, type of drugs self-medicated.

Results: Our study showed that most of the patients prefer self-medication and over the counter medication, most of the patients use over the counter medication ,majority of the patients use google for self-medication before consulting a doctor and they are not aware of the adverse effects.

Males shows 58.8% females 41.2%. Out of the entire population 59.5% visit a dentist when required. 94.1% of the people in the study prefer for the illness to cure on itself. 45.5% of population in the study wait for 1 week before consulting a dentist. 41% of the population in the study consult the dentist and not wait the illness to cure on itself. The study reveals pain is the main cause to visit a dentist. Only 50% of the population prefer to take the self-medication. Counter medication is preferred by 50% of the population. 36% in the study are not aware that medication is available in different dosages. 50% of the population in the study thinks pharmacist is qualified to prescribe the medication. 55% of the population in the study are aware that pharmacist cannot give correct dosage. 85% of the population in the study google for self medication. 29.9% of the population in the study had effected by the adverse affect due to self medication. 30% of the population in the study are not aware that certain medications are to be avoided in self medication. 47% of the population in the study are not aware of antibiotic abuse. 42% of the population in the study thinks that adult dosage is same for kids. 29.4% of the population in the study are aware of drug synergism and antagonism. 33% of the population in the study do not check for the expiry date before purchasing medication.

## IV. Discussion:-

Selfmedication is commonly used for dental problems . Its true that self medication can give some relief but it has a lot of side effects which can lead to uncertainties (extremity including death and emergence of multi drug resistance pathogens) (Akram and Roberts, 2003). Although Chennai is a metropolitan city with various dental establishments, our study was conducted in saveetha dental college where 16 open ended questionnaire has been prepared and uploaded in the google forms, link has been shared to the students to collect the data from the patients coming for the treatment. If contraindications of certain drugs is made aware then people would avoid self medication or over the counter medication (OTC) (Dugan, DeeAnn Dugan and Heller, 2004). It is generally believed men are less health conscious the women even after woman having low pain threshold. Women are more scared of dental procedures compare to men (Akram, 2000). Even educated people have a wage idea of dental procedures and drugs don't have a complete picture about it. This might lead to serious issues such as drug resistance bacteria and adverse effects as they are not aware of the required dosage (Lumpkin, 1989). One of the main limitation of the study is that, it is institutional study which may have led to higher percentage of self medication prevalence. A more comprehensive study should be done with larger section of general population should be carried out to gain a base line data (Mhatre and Sansgiry, 2014). The utilization of drugs without earlier medicinal conference in regards to sign, measurements, and term of treatment is alluded to as self-prescription (Vidourek, King and Burbage, 2015). In many disease scenes; self medication is the primary alternative which makes it a typical practice around the world. Responsible self-drug which requires a specific level of learning and wellbeing introduction has a few points of interest. Self-pharmaceutical is thought to diminish the heap on the restorative administrations, diminish the time spent in holding up to see the doctor, and spares cost particularly in financially denied nations with restricted wellbeing assets (Perrot *et al.*, 2019). In any case, dependable self medicine isn't free of hazard which can build the weight and out of pocket costs since it might bring about unfavorable wellbeing impacts that require therapeutic mediation.

Numerous articles revealed that regular Over The Counter (OTC) and Prescription Only Medications (POM) have been related with unfriendly wellbeing responses or fatalities (Albsoul-Younes *et al.*, 2010). What's more self-solution can slip towards pharmaceutical with POM and Controlled Drug Prescription Only Medicines (CD-POM). This wrong utilize may

bring about nonsensical solution utilize, deferred looking for restorative counsel, expanded symptoms and medication interactions(Albsoul-Younes *et al.*, 2010; Wazaify *et al.*, 2017) . A few examinations researching self-solutions have uncovered the utilization of sub helpful measurements and successive utilization of anti-infection agents and other POM. Self-pharmaceutical is impacted by numerous variables, for example, instruction, sexual orientation, financial status and accessibility of medicines (Albsoul-Younes *et al.*, 2010; Abood and Wazaify, 2016; Wazaify *et al.*, 2017). An examination was directed in Khartoum state, Sudan to assess the commonness of self-solution with anti-microbials/antimalarials presumed that the self-drug is alarmingly high where 73% of the populace answering to have utilized such meds. Given the developing worldwide protection for anti-toxin and the reported wellbeing related issues to unseemly utilization of such medicines;this has real effect on general wellbeing and ramifications of wellbeing arrangements for nations like Sudan (Awad *et al.*, 2005).

A case scenario 9 months old child kid created watery looseness of the bowels, six movements for every day. The mother gave her infant metronidazole suspension which she as of now had at home. Subsequent to utilizing the medication for two days the loose bowels didn't stop, she went to the drug store and was given co-trimoxazole suspension. By and by the looseness of the bowels did not settle(Awad *et al.*, 2005; Elmahi, Balla and Khalil, 2020).Two days later,the youngster created oral thrush, rejected sustaining and his general condition weakened (Wabe, Ahmed and Angamo, 2012). The mother halted the pharmaceutical and took him to a conventional healer, who cut the child's uvula. The child's condition deteriorated and was taken to the healing center. He was determined as sepsis to have lack of healthy sustenance and was conceded for 15 days (Awad, Eltayeb and Capps, 2006; Wabe, Ahmed and Angamo, 2012). The doctor suitable treatment and directed the mother and prompted her on the best way to manage such conditions if experienced later on.

This can be overcome by spreading awareness through health education to the public regarding the adverse effects of self-medication. Healthcare workers advised to recommend medication after a diagnoses has been made(Almarsdóttir and Grímsson, 2000). Advice healthcare workers to refer patients to the appropriate specialty in order to prevent prolonging patient's suffering, subjecting them to needless complications and to over burden them with an extra out of pocket expenditure (Almarsdóttir, Morgall and Grímsson, 2000) .

#### V. Conclusion:

Most of the patients prefer self-medication lack of awareness. Awareness should be spread through patient education and Campaign of health education.

#### References:-

- [1] Abood, E. A. and Wazaify, M. (2016) 'Abuse and Misuse of Prescription and Nonprescription Drugs from Community Pharmacies in Aden City—Yemen', *Substance Use & Misuse*, pp. 942–947. doi: 10.3109/10826084.2016.1155619.
- [2] Agaba, E. I. *et al.* (2011) 'Physician Knowledge and Practices of Urethral Catheterization in Jos, Nigeria', *Journal of Medicine in the Tropics*. doi: 10.4314/jmt.v13i2.70710.
- [3] Ajuoga, E. *et al.* (2008) 'Use/misuse of over-the-counter medications and associated adverse drug events among HIV-infected patients', *Research in Social and Administrative Pharmacy*, pp. 292–301. doi: 10.1016/j.sapharm.2007.08.001.
- [4] Akram, G. (2000) 'Over-the-counter medication: an emerging and neglected drug abuse?', *Journal of Substance Use*, pp. 136–142. doi: 10.3109/14659890009053078.
- [5] Akram, G. and Roberts, K. (2003) 'Pharmacists' management of over-the-counter medication requests from methadone patients', *Journal of Substance Use*, pp. 215–222. doi: 10.1080/14659890310001636044.
- [6] Albsoul-Younes, A. *et al.* (2010) 'Abuse and Misuse of Prescription and Nonprescription Drugs Sold in Community Pharmacies in Jordan', *Substance Use & Misuse*, pp. 1319–1329. doi: 10.3109/10826080802490683.
- [7] Almarsdóttir, A. B. and Grímsson, A. (2000) 'Over-the-counter codeine use in Iceland: the impact of increased access', *Scandinavian Journal of Public Health*, pp. 270–274. doi: 10.1177/14034948000280041001.
- [8] Almarsdóttir, A. B., Morgall, J. M. and Grímsson, A. (2000) 'Cost Containment of Pharmaceutical Use in Iceland: The Impact of Liberalisation and User Charges', *Journal of Health Services Research & Policy*, pp. 109–113. doi: 10.1177/135581960000500209.
- [9] Awad, A. *et al.* (2005) 'Self-medication with antibiotics and antimalarials in the community of Khartoum State, Sudan', *Journal of pharmacy & pharmaceutical sciences: a publication of the Canadian Society for Pharmaceutical Sciences, Societe canadienne des sciences pharmaceutiques*, 8(2), pp. 326–331.

- [10] Awad, A. I., Eltayeb, I. B. and Capps, P. A. (2006) 'Self-medication practices in Khartoum State, Sudan', *European Journal of Clinical Pharmacology*, pp. 317–324. doi: 10.1007/s00228-006-0107-1.
- [11] Bennadi, D. (2014) 'Self-medication: A current challenge', *Journal of basic and clinical physiology and pharmacology*, 5(1), p. 19.
- [12] Cooper, R. J. (2013) 'Over-the-counter medicine abuse – a review of the literature', *Journal of Substance Use*, pp. 82–107. doi: 10.3109/14659891.2011.615002.
- [13] Dugan, B. D., DeeAnn Dugan, B. and Heller, K. (2004) 'Resources for Safe Over-the-Counter Medication Use', *Journal of the American Pharmacists Association*, p. 110. doi: 10.1331/154434504322713327.
- [14] Elmahi, O. K. O., Balla, S. A. and Khalil, H. A. (2020) 'Self-Medication with Antibiotics and Its Predictors among the Population in Khartoum Locality, Khartoum State, Sudan in 2018', *International Journal of TROPICAL DISEASE & Health*, pp. 17–25. doi: 10.9734/ijtdh/2020/v4i1430267.
- [15] Fish, H. *et al.* (2016) 'Analysis of adverse drug events and adherence rates with newer diabetes medications in a Humana commercial, MAPD, Medicaid, and PDP member population', *Research in Social and Administrative Pharmacy*, p. e3. doi: 10.1016/j.sapharm.2016.05.008.
- [16] Li, B. T. *et al.* (2018) 'When Treatment Turns to Addiction: Emerging Issues in Over-the-Counter and Prescription Drug Abuse', *Psychiatric Annals*, pp. 379–383. doi: 10.3928/00485713-20180719-01.
- [17] Lumpkin, J. (1989) 'The Effect of Self-Reliance and Information Needs on Over-the-Counter Medication Use Among the Elderly', *Journal of Pharmaceutical Marketing & Management*, pp. 25–45. doi: 10.1300/j058v04n01\_03.
- [18] Mhatre, S. K. and Sansgiry, S. S. (2014) 'Impact of Over-the-Counter Medication Use on Patients' Health-Related Quality of Life: Development and Psychometric Validation of Over-the-Counter Medication Impact Scale', *Clinical Drug Investigation*, pp. 277–286. doi: 10.1007/s40261-014-0173-6.
- [19] Perrot, S. *et al.* (2019) 'Self-medication in pain management: The state of the art of pharmacists' role for optimal Over-The-Counter analgesic use', *European Journal of Pain*, pp. 1747–1762. doi: 10.1002/ejp.1459.
- [20] Sansgiry, S. S. *et al.* (2008) 'Impact of Over-the-Counter Medication Misuse and Adverse Drug Events on HIV Patients' Health-Related Quality of Life', *Journal of Pharmacy Technology*, pp. 323–329. doi: 10.1177/875512250802400602.
- [21] Sawant, R. V. *et al.* (2016) 'Factors associated with intention to engage in self-protective behavior: The case of over-the-counter acetaminophen products', *Research in Social and Administrative Pharmacy*, pp. 327–335. doi: 10.1016/j.sapharm.2015.06.005.
- [22] Schuckit, M. A. (1979) 'Over-the-Counter (O/C) Drugs', *Drug and Alcohol Abuse*, pp. 138–151. doi: 10.1007/978-1-4684-3542-9\_10.
- [23] Van den Bulck, J., Leemans, L. and Laekeman, G. M. (2005) 'Television and Adolescent Use of Over-the-Counter Analgesic Agents', *Annals of Pharmacotherapy*, pp. 58–62. doi: 10.1345/aph.1e091.
- [24] Vidourek, R. A., King, K. A. and Burbage, M. L. (2015) 'Correlates to over-the-counter drug use among college students', *Journal of Substance Use*, pp. 310–314. doi: 10.3109/14659891.2014.911978.
- [25] Prakash, M.S., Ganapathy, D.M. and Nesappan, T., 2019. Assessment of labial alveolar bone thickness in maxillary central incisor and canine in Indian population using cone-beam computed tomography. *Drug Invention Today*, 11(3).
- [26] Wabe, N., Ahmed, D. and Angamo, M. (2012) 'Self-Medication with Antibiotics and Antimalarials in the Community of Silte Zone, South Ethiopia', *TAF Preventive Medicine Bulletin*, p. 529. doi: 10.5455/pmb.1-1314892446.
- [27] Wazaify, M. *et al.* (2017) 'Jordanian community pharmacists' experience regarding prescription and nonprescription drug abuse and misuse in Jordan – An update', *Journal of Substance Use*, pp. 463–468. doi: 10.1080/14659891.2016.1235734.