



Self Care or Self Harm; Oral Health Problems: Survey

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Oral ulcers,
Toothache

ABSTRACT:

Introduction:The increasing prevalence of self-medication for common oral health problems, such as toothache, mouth ulcers, and dental sensitivity, is fueled by easy access to over-the-counter drugs and a general lack of dental awareness. While this practice may offer temporary pain relief, the inappropriate use of medication can lead to serious adverse effects, contribute to antibiotic resistance, and significantly delay professional dental care, often worsening the underlying condition.

This study aims to comprehensively assess the prevalence, primary reasons, and levels of awareness regarding self-medication practices for common oral problems among individuals. By gathering this crucial data, the research highlights an urgent need for targeted public education campaigns. The ultimate goal is to promote responsible drug use and encourage timely professional consultation, thereby mitigating the associated health risks and improving overall oral health outcomes.

Methods:A cross-sectional survey was conducted using a structured Google Form questionnaire designed to assess self-medication practices for common oral problems. The form included both closed- and open-ended questions covering demographic details, types of oral problems, drugs used, and awareness levels. The survey link was distributed online among 200 participants. Collected responses were tabulated and analysed using descriptive and inferential statistical methods, including frequency distribution and chi square tests, to determine associations between variables.

Results:Among 200 participants, most were aged **20–30 years (80%)** and **female (74%)**, with **graduates (69%)** and **students (51%)** forming the majority. The most common oral problem was **mouth ulcer (40%)**, followed by **toothache (22%)**. **Painkillers (43%)** were most frequently used, mainly suggested by **family or friends (42%)**. About **61%** were aware of antibiotic duration, but only **39%** completed it. **Side effects** were uncommon (32%), mainly **nausea (17%)** and **headache (16%)**. The leading reason for self medication was the **belief that the problem was minor (49%)**. Most respondents (**86%**) were aware of risks, and (**85%**) preferred **future dental consultation**.

Conclusions:The study revealed that self-medication for common oral problems is highly prevalent, especially among young adults and females. Although most participants were aware of the risks, many continued the practice due to the belief that their oral issues were minor and easily manageable. Painkillers and home remedies were the most commonly used treatments, often based on non-professional advice. The findings emphasize the need for greater public



awareness regarding the risks of self-medication, appropriate antibiotic use, and the importance of seeking professional dental care for safe and effective treatment.

1. Introduction

Self-medication is the use of drugs without professional consultation to treat selfdiagnosed conditions. It is increasingly common in dentistry, especially for minor oral problems such as toothache, mouth ulcers, and gum pain. Easy access to over-the-counter medications, lack of awareness, and time constraints promote this practice. Although it may offer temporary relief, self-medication can cause adverse effects, antibiotic resistance, and delayed treatment. Despite its growing prevalence, limited research exists on self-medication behaviors for oral problems. Therefore, this study was conducted to assess the prevalence, reasons, and awareness of self-medication for common oral problems and to emphasize the importance of patient education and responsible drug use in maintaining oral health.

2. Methods

Study Design

A **cross-sectional questionnaire-based survey** was conducted to assess the prevalence, awareness, and factors influencing self-medication practices for common oral problems.

Study Population

The study included **general public participants** from various educational and occupational backgrounds who had experienced common oral problems such as toothache, mouth ulcer, or tooth sensitivity.

Sample Size and Sampling

A total of **200 participants** were included using a **convenience sampling method**. The survey link was shared through online platforms for voluntary participation.

Inclusion and Exclusion Criteria

Inclusion criteria: Individuals aged **18 years and above** who had experienced oral health problems and were willing to participate.

Exclusion criteria: Dental professionals, healthcare workers, and respondents unwilling to give consent.

Questionnaire Design

A **structured Google Form questionnaire** was designed based on previous literature and expert guidance to evaluate knowledge, attitude, and practices related to self-medication.

Questionnaire Items

The questionnaire consisted of **17 items**, including demographic details, types of oral problems, drugs used, sources of advice, awareness about antibiotics, side effects, and future intention to consult a dentist.

Data Collection

Responses were collected **online via Google Forms** over a specified period. Participation was voluntary, and confidentiality was maintained throughout the study.

Statistical Analysis

Data were compiled and analyzed using **descriptive and inferential statistics**. Frequency and percentage distributions were calculated. The **Chi-square test** was applied to determine associations between variables, with **$p < 0.05$** considered statistically significant.

3. Results

Out of 200 participants, the majority were aged **20–30 years (80%)**, followed by **31–40 years (6%)**, **41–50 years (8%)**, and **below 20 years (3%)**. The sample consisted predominantly of **females (74%)** compared to males (26%). Demographically, the sample was dominated by graduates (69%). The remaining participants were postgraduates (23%) and individuals with a school-level education (8%). Regarding occupation, students were the largest category at 51%, with the remaining participants being employed individuals (34%), homemakers (11%), and retired persons (4%)

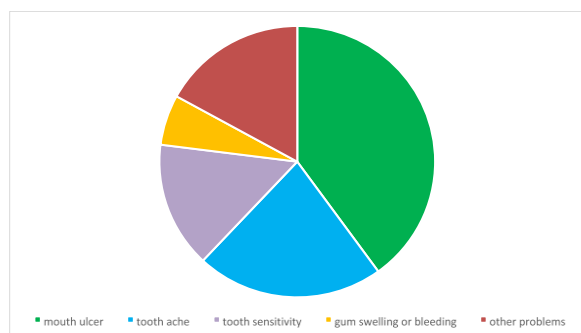
The most common oral problem leading to self-medication was **mouth ulcer (40%)**, followed by **toothache (22%)**, **tooth sensitivity (15%)**, **gum swelling or bleeding (6%)**, and **other problems (17%)**. (Fig-1) A significant difference was observed between



the frequencies of these responses ($p = 0.0017$), indicating that mouth ulcer was the predominant condition .

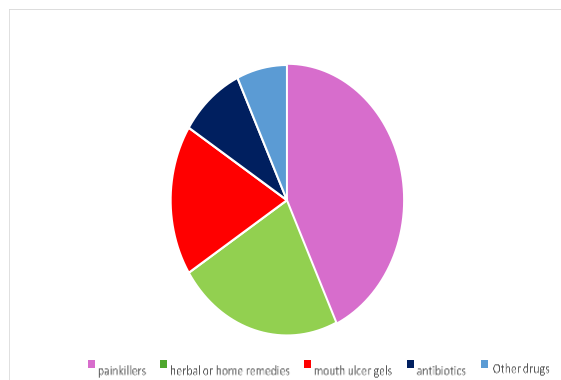
Statistically significant — the differences between groups are unlikely due to random variation

FIG-1 :COMMON ORAL PROBLEMS TREATED WITH SELF MEDICATION



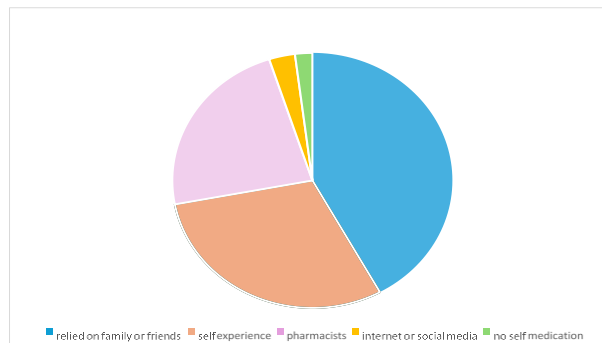
Among the types of medicines used, **painkillers (43%)** such as paracetamol or ibuprofen were the most common, followed by **herbal or home remedies (23%)**, **mouth ulcer gels (18%)**, **antibiotics (9%)**, and **other drugs (7%)**. (Fig-2)The difference among groups was highly significant ($p < 0.001$) that the pain killers was most commonly used.

FIG-2: TYPES OF MEDICINES USED



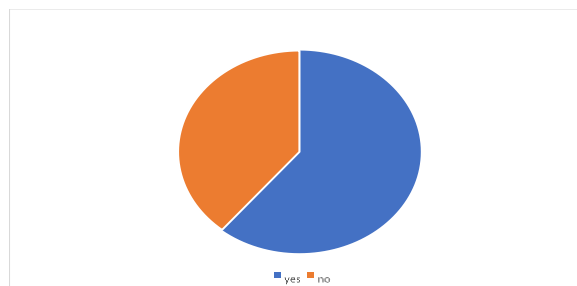
Most participants relied on **family or friends (42%)** for medication suggestions, followed by **self-experience (30%)**, **pharmacists (23%)**, and **internet or social media (3%)**. Only **2%** reported not taking any self-medication. (Fig-3)This difference was statistically significant ($p < 0.001$) indicating that the most participants relied on family of friends for medical suggestions.

FIG-3: SELF MEDICATION SUGGESTION



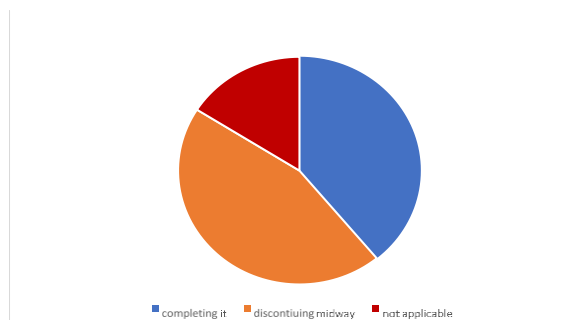
About **61%** of participants were aware of the correct course and duration of antibiotic use, whereas **39%** were unaware. (Fig-4)The difference was statistically significant ($p=0.04$) indicating that most of the participants are aware of the course and duration of the antibiotics.

FIG-4: ANTIBIOTICS AWARENESS



However, when asked about completing the full course, only **39%** reported completing it, **45%** admitted discontinuation midway, and **16%** stated it was not applicable. (Fig-5)The difference was statistically significant ($p < 0.001$) indicating that most of the participants discontinue the course midway.

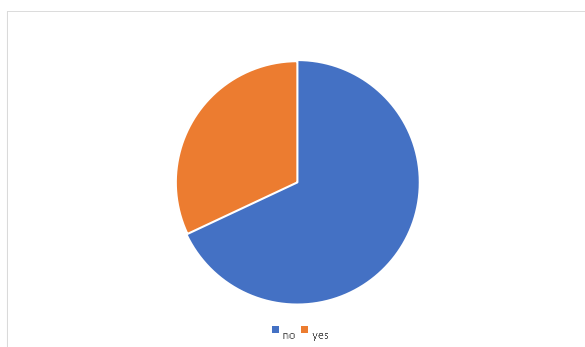
FIG-5: COURSE OF MEDICATION





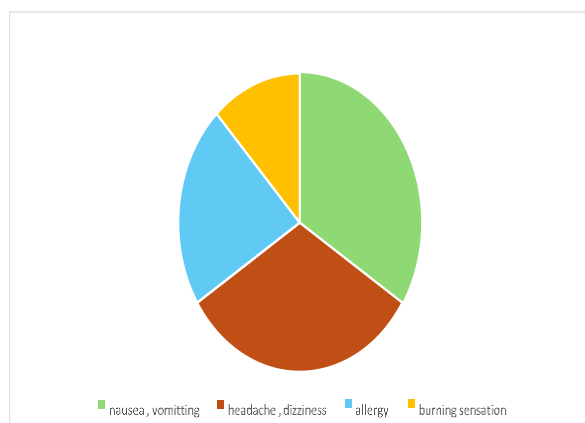
Most respondents (68%) did not experience any side effects, while 32% reported adverse effects. (Fig-6) The difference was statistically significant ($p < 0.05$) indicating that the most participants did not experience any side effects

FIG-6 : EXPERIENCE OF SIDE EFFECTS OF SELF MEDICATION



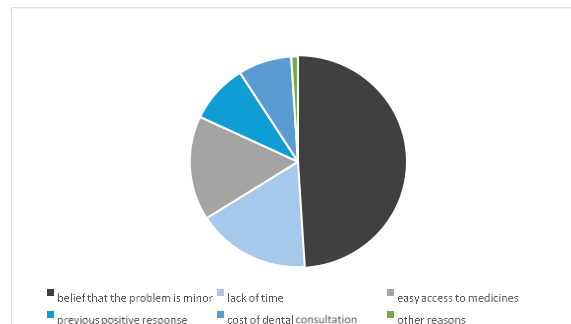
Among those, the common side effects included **nausea or vomiting (17%)**, **headache or dizziness (16%)**, **allergy (11%)**, and **burning sensation (6%)**. (Fig-6) Statistical analysis showed a highly significant difference in frequency ($p < 0.001$) indicating the most common side effect was nausea or vomiting.

FIG-7: SIDE EFFECTS OF SELF MEDICATION



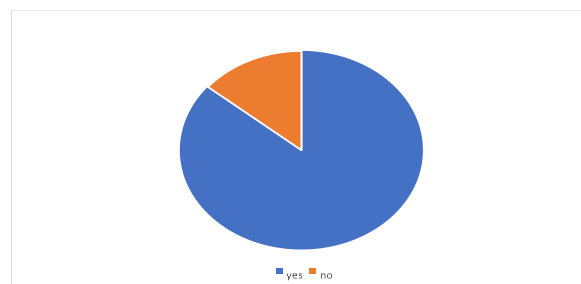
The main reason cited was the **belief that the problem was minor (49%)**, followed by **lack of time (17%)**, **easy access to medicines (16%)**, **previous positive experience (9%)**, **cost of dental consultation (8%)**, and **other reasons (1%)**. (Fig-8) This was statistically significant ($p < 0.001$) indicating that most of the participants believed that the problem was minor.

FIG-8: ETIOLOGY OF SELF MEDICATION



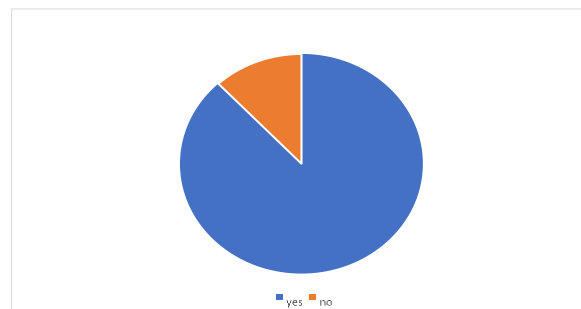
(Fig -9) A majority (86%) were aware that self-medication could lead to complications such as drug resistance or worsening of disease ($p < 0.001$).

FIG-9: SELF MEDICATION COMPLICATION AWARENESS



Similarly, **88%** knew the names of the medicines they used whereas 12% doesn't know the name. (Fig-10) The difference was statistically significant ($p < 0.001$) indicating the majority of the participants knew the names of the medicine.

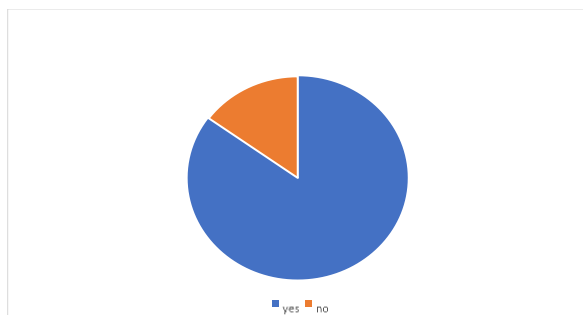
FIG-10 : KNOWLEDGE OF SELF MEDICATION NAMES



When asked about future care, **85%** stated they would **consult a dentist (Fig-11)** if their oral problems did not improve with self-medication ($p < 0.001$) which is highly significant

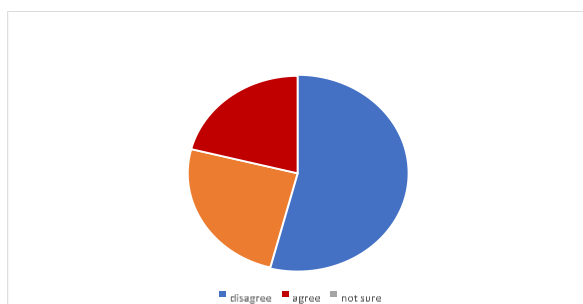


FIG-11: UNRESOLVED ORAL PROBLEMS MANAGEMENT



When asked whether herbal or home remedies are safer than prescribed medicines, 54% disagreed, 25% agreed, and 21% (Fig-12) were unsure ($p = 0.0014$), indicating that most respondents do not consider home remedies inherently safer.

FIG-12 : HERBAL / HOME REMEDIES USAGE



All results showed statistically significant ($p < 0.05$) differences — indicating that participants' responses were not random, and there were clear patterns in self-medication behavior (e.g., younger adults, painkiller use, family advice, and awareness gaps).

4. Discussion

The present study evaluated the prevalence and patterns of self-medication for common oral problems among the general population. The findings revealed a high prevalence among young adults aged 20–30 years, predominantly females. This agrees with Sharma et al. (2020), who concluded that self-medication is more common among educated young adults due to their belief in self-care and time constraints.

Similarly, Patil et al. (2019) found that females were more likely to self-medicate, attributing it to convenience and accessibility of over-the-counter (OTC) medications.

Mouth ulcers and toothache were the most common conditions for which participants self-medicated, consistent with Gupta and Singh (2018), who reported that these are often perceived as minor, self-limiting problems. In the current study, painkillers were the most frequently used medications, aligning with Al-Baker et al. (2021), who concluded that analgesics are the preferred first-line drugs for oral pain despite potential misuse. The influence of family and friends as main sources of advice is similar to findings by Kumar et al. (2020), who noted that non-professional recommendations play a significant role in promoting self-medication behavior.

Although more than half of the respondents were aware of antibiotic course duration, many failed to complete it. This supports World Health Organization (2020) reports emphasizing that inappropriate antibiotic use accelerates antimicrobial resistance. Most participants were aware of the complications associated with self-medication, a finding that mirrors Reddy et al. (2021), who observed that awareness alone does not always translate into safe medication practices. Encouragingly, most respondents in this study expressed willingness to consult a dentist in the future, reflecting increasing oral health awareness and a positive attitude toward professional care.

Overall, the results highlight the widespread yet preventable nature of self-medication in oral health. As suggested by previous research, improving health literacy, implementing community-based education programs, and enforcing stricter regulation of OTC drug sales can significantly reduce unsafe self-medication practices and promote rational drug use.

Conclusion

The present study demonstrates that self-medication for common oral problems is highly prevalent, particularly among young adults and females. Although many participants were aware of the potential risks, a considerable proportion continued the practice due to convenience, perceived mildness of symptoms, and easy access to medications. Painkillers and home remedies were the most commonly used, often guided by non-professional advice, highlighting a lack of awareness regarding rational drug use and antibiotic compliance.



These findings emphasize the urgent need for targeted public health interventions focusing on oral health literacy, responsible medication use, and the dangers of antibiotic misuse. Dentists and pharmacists play a crucial role in counseling patients, while policymakers should strengthen regulations governing over-the-counter drug sales. Promoting early dental consultation and community-based educational campaigns can effectively reduce unsafe self-medication practices and improve long-term oral health outcomes.

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