



Survey of Awareness About Identification & Treatment of Mouth Ulcer

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Abstract: -

Introduction: - This survey was done on seeing the growing mouth ulcer in society. This survey will create awareness in society by identifying the mouth ulcer they have previously suffered.

Objective: -

This survey helped People to identify the mouth ulcer, availability of different medicinal system, few generic and branded product of medicine for mouth ulcer.

Methodology: -

With the help of Online Forum 'Google Form' we took survey. We added image in the google form for better selectivity of mouth ulcer like minor, major, herpetiform. Few Question were set for people drug of choice in solid, liquid and gel preparation. Close ended question was part of survey.

Result: -

Improved literacy rate among people, shown improved health education knowledge in them. Most of them are health conscious, know well how to fight with small health problem.

Conclusion: -

Recurrent Aphthous stomatitis is the most frequently observed painful pathology of the oral mucosa in the society.

Introduction: -

An oral ulcer is defined as 'as a break in the mucosal surface of the oral cavity. An ulcer is a break in the skin or mucous membrane with loss of surface tissue and the disintegration and necrosis of epithelial tissue. A *mucosal ulcer* is an ulcer which specifically occurs on a mucous membrane.

An ulcer is a tissue defect which has penetrated the epithelial-connective tissue border, with its base at a deep level in the sub mucosa, or even within muscle or periosteum. An ulcer is a deeper breach of epithelium compared to an erosion or excoriation, and involves damage to both epithelium and lamina propria.

An erosion is a superficial breach of the epithelium, with little damage to the underlying lamina propria. A *mucosal erosion* is an erosion which specifically occurs on a mucous membrane. Only the superficial epithelial cells of the epidermis or of the mucosa are lost, and the lesion can reach the depth of the basement membrane. Erosions heal without scar formation.

Excoriation is a term sometimes used to describe a breach of the epithelium which is deeper than an erosion but shallower than an ulcer. This type of lesion is tangential to the rete pegs and shows punctiform (small pinhead spots) bleeding, caused by exposed capillary loops.

Oral ulcers are common and although most are caused by trauma or are recurrent aphthae, some may be the manifestation of an underlying systemic disease or may be due to malignant disease, mainly oral cancer.^{1,2,3,4} Malabsorption states, hematological disorders, cutaneous diseases, connective diseases, drugs and infections including HIV should always be born in mind in the etiology of mouth ulcers.^{1,2,3,4}

Recurrent aphthous stomatitis (RAS) is the most common form of oral ulceration that affects up to 25% of the worldwide population. RAS present as recurring, round, or ovoid painful ulcers surrounded by erythematous halos and grey/yellow bases. Three types of aphthous stomatitis exist based on their appearance, namely minor, major and herpetiform major aphthous ulceration. Minor aphthous ulceration is the most common type, presenting with 1–6 small (2–4mm diameter), round/oval ulcers with a yellow-grey color and an erythematous (red) "halo". These ulcers heal with no permanent scarring in about 7–10 days. Ulcers recur at intervals of about 1–4 months. Major aphthous ulceration is less common than the minor type, but produces more severe lesions and symptoms. Major aphthous ulceration presents with larger (>1 cm diameter) ulcers that take much longer to heal (10–40 days) and may leave scarring. The minor and major subtypes of aphthous stomatitis usually produce lesions on the non-keratinized oral mucosa (i.e. the inside of the cheeks, lips, underneath the tongue and the floor of mouth), but less commonly major aphthous ulcers may occur in other parts of the mouth on keratinized mucosal surfaces.

The least common type is herpetiform ulceration, so named because the condition resembles primary herpetic gingivostomatitis. Herpetiform ulcers begin as small blisters (vesicles) which break down into 2–3mm sized ulcers. Herpetiform ulcers appear in "crops" sometimes hundreds in number, which can coalesce to form larger areas of ulceration. This

subtype may cause extreme pain, heals with scarring and may recur frequently. They are considered to be one of the most painful oral mucosal inflammatory conditions and can cause discomfort with eating, swallowing, and speaking. Treatment for RAS is not curative and management is aimed at symptomatic relief. As with other oral ulcerative conditions, the chronic nature of RAS, the symptomatic manifestation and the possible side effects of the medication used to provide symptomatic relief can have an effect on the daily life of patient. Studies from a number of countries have shown that persons suffering from mouth ulcers may seek advice from dental or medical practitioners;[5](#)·[6](#)·[7](#)·[8](#)·[9](#)·[10](#)·[11](#)·[12](#)·[13](#)·[14](#)·[15](#)·[16](#)·[17](#) may be encouraged by press advertising to self-medicate using proprietary preparations that are rarely of scientifically proven value; may approach the community pharmacy for advice;[18](#)·[19](#)·[20](#)·[21](#) or may investigate the effects of complementary medicine. In some countries at least, the evidence suggests that the latter delays diagnosis.

Information regarding health problems is one of the most commonly researched topics of the internet. However, there is little data on from whom patients actually do seek advice. Therefore, this survey was conducted to investigate the views of the public on the naturally origin mouth ulcer, form which type of mouth ulcer they suffered, as they would seek advice about Over the counter product for mouth ulcers also.

Methodology: -

We use primary data collection method; it collects both quantitative and qualitative methods. A questionnaire is a research instrument consisting of a series of a questions and other prompts for the purpose of gathering information from respondents. We adopted this pathway for statistical

analysis of the responses. Usually, questionnaire consist of a number of question that the respondent has to answer in a set format. A distinction were made between questionnaires with questions, the former category of question were part of survey, whereas questionnaires in the latter category are commonly part of tests. The question which we prepared were close ended were respondent has to pick answer from a given number of option. In short we prepared warm-ups question which were simple to answer, help to capture interest interest in the survey, which should not pertain our objective. We created google form for data collection of our topic awareness of mouth ulcer.

From the Google form itself we generated link, forwarding this same link for a number of times, doing few changes in the setting like limiting to one response. So that multiple response of single person should not be collected. Data was obtained from adult of few district, who less often or often suffered with mouth ulcer. We included everyone who are currently patient of mouth ulcer and those who were not patient.

The following information were independently collected by three member of our group and seen how much person are aware about their health: -

1. Demographic (gender, district)
2. Opinion on mouth ulcer.
3. Type of mouth ulcer : Minor<Major<Herpetiform.
4. Decrease of the lesion after 3 and 7 days
5. Nutrient deficiency of mouth ulcer.
6. Line of treatment for mouth ulcer : Ayurveda, Homeopathic, Allopathic, Unani, Siddha.
7. Selection of solid, liquid, gel preparation for mouth ulcer.

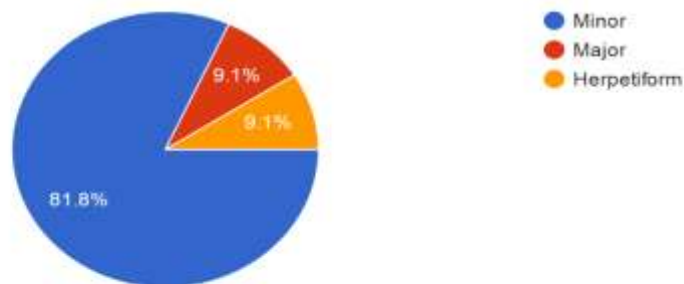
Data were recorded in a web based electronic report, excel sheet of google form with their name gender, and district. We tried to do this

awareness research project via secure network through link with open access to public for awareness ensuring their compliance.

Statistical analysis :-

Type of mouth ulcer: -

Which type of Mouth Ulcer do you have ?
220 responses

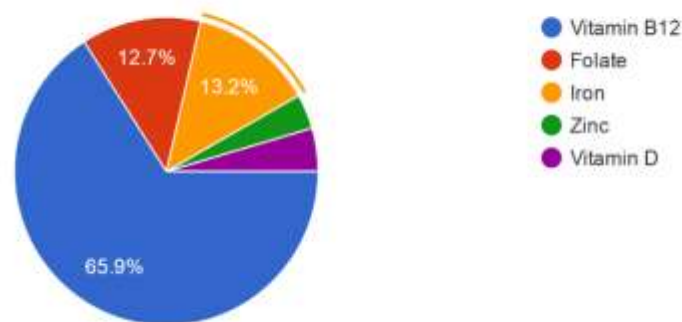


Recurrent aphthous stomatitis typically starts in childhood or adolescence with recurrent small, round, or ovoid ulcers with circumscribed margins, erythematous haloes. Majority of the people suffer with Minor ulcer that is 82% were as 9 % of Major ulcer and 9% of Herpetiform ulcer. Minor ulcer are more common than major ulcer were as herpetiform is very rare. Minor aphthous ulcers are less than 5 mm in diameter. Major aphthous ulcers are large ulcers that heal slowly over weeks or months with scarring. Herpetiform ulcers are multiple pinpoint ulcers that heal within about a month. Percentage of getting affected with minor ulcer is 53.18% in men & 28.64% in female. Were as for major and herpetiform ulcer more or less equally divided. As there are various etiological factor like that can be identified, including stress, trauma, stopping smoking, menstruation, and food allergy.

Nutrient deficiency :-

Which nutrient deficiency are responsible for Mouth Ulcer ?

220 responses



Diagnosis of aphthae is based on the patient's history and clinical features because specific tests are unavailable. A full blood chemistry (hemoglobin level, differential white cell count, and red cell indices), iron levels, and possibly red cell folate and serum vitamin B12 measurements, and other investigations may help exclude systemic disorders. Biopsy is rarely indicated.

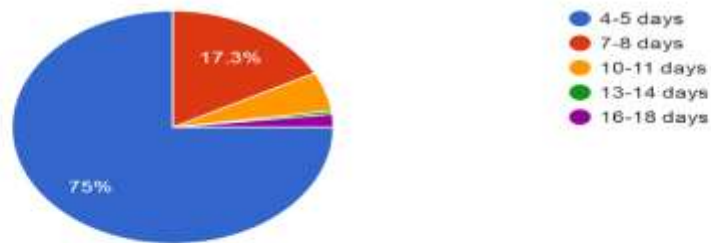
For instance, mouth ulcers, also commonly referred to as canker sores, are often the result of deficiencies in iron or B vitamins. This awareness survey note that patients with mouth ulcers appear to be 13% as likely to have low iron levels.

Most problems of the skin and outermost layers of the human body in areas such as the inside of the mouth are owing to vitamin deficiencies. In case of canker sores, the specific vitamin is B-12 was 66%. Vitamins B12 deficiency in reaching to adult stage or going from adults stage.

Because they are consistently growing and the body keeps demanding more vitamins. People with folate, zinc deficiency are also contributing factor for mouth ulcer. While survey 13% of people they were folate deficient and 4% were zinc deficient. Most this deficiency are found in female as compare to male.

Days required to heal mouth ulcer :-

How many days do you suffer from Mouth Ulcer ?
220 responses



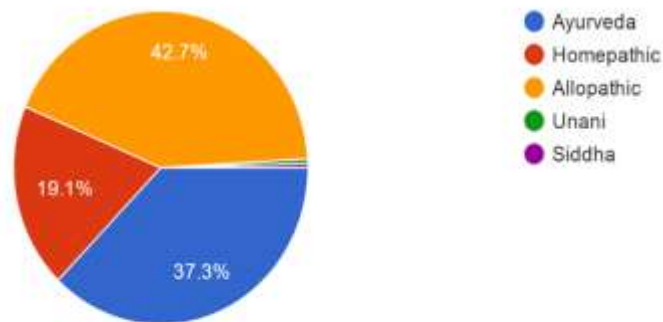
Most mouth ulcers are usually harmless and resolve by themselves within 10 to 14 days. The 25% of people who have a poor immune system are more prone to canker sores and take more time to heal. It is difficult to find a specific correlation of immune system with canker sores and pinpoint what exactly is in one's immunity that triggers canker sores, but the fact that the immune system cannot prevent or repair it quickly is reason enough to consider it to be a contributing factor. People with minor ulcers prone to recover in 4-5 days were 75%. However, if your mouth ulcer is hanging around for over three weeks, or you are experiencing them on a regular basis, it may indicate an infection or other underlying problem and it's worth seeking medical advice.

Other types of mouth ulcers, such as the aphthous variety or those caused by herpes simplex infection, need topical treatment such as a mouthwash, ointment or gel.

Line of treatment :-

Which line of treatment do you follow for Mouth Ulcer?

220 responses



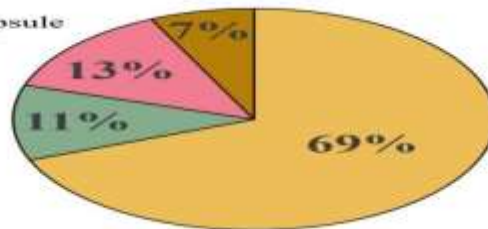
From the 220 survey we got to know that people are more toward Allopathy, Ayurvedic, & Homeopathy.

As we know that allopathy is the fastest way of healing 43% people are following Allopathic medicine, or allopathy, refers to science-based, modern medicine. Only there are regional variations in usage of the term of various dosage form.

Treatment of mouth ulcers in Ayurveda involves correcting root causes.

Based on initial consultation 37% people go with an expert advice and help to understand the root causes and recommend a plan specific for you. Diet needs to be modified to improve digestion and absorption. Reducing chillies, garlic, alcohol, hot and spicy foods, etc can help. Interestingly, 19% of the people follow homeopathic concept, it is now being used to prepare an entirely new generation of homeopathic drugs by potensising conventional medicines. According to this survey, homeopathically prepared doses of conventional medicines can be used for the treatment of symptoms which appear as a side effect of the said drug can be potentized and used homeopathically for treating ulcers.

Patient Drug Choice for Capsule



Based on ease of action, patient compliance, and following previous medication 59% people go for gel preparation & 11% go for ointment preparation from above line of treatment. Very less go for tablet and other preparation. In the severe case of herpetiform ulcer and major ulcer, 17% people choose to go for tablet preparation and very less 6% go for capsule preparation. This all-patient selection were based on there severity of pain and type of ulcer.

Result & Discussion:-

The results of the present study show that the adult general public surveyed were prepared to co-operate in this survey. Although this is not a large response rate, nevertheless the large sample does mean that the responses might be fairly representative of the population in question. Of these, believed they had suffered from oral ulceration, and about reported they had suffered from recurrent mouth ulcers. These findings are consistent with results from similar studies, though point studies show higher figures.

The findings as to where the public would seek advice are interesting. Our results indicate that the vast majority of the public would first approach a general medical practitioner for advice: indeed, only would first approach a dentist. A somewhat lower number would first go to a pharmacy for advice, were they to suffer mouth ulceration. These findings are of special interest since dentists clearly have considerably more training and knowledge regarding the diagnosis and management

of mouth ulcers than do most medical or pharmacy practitioners. The evidence indicates that few medical students or doctors receive any training in oral disease and few medical texts contain much data about the mouth, though some journals now offer continuing professional education in this area.

Also of interest is the fact that, despite advertisements in the lay press that encourage the public to approach community pharmacies with oral (and other) problems. Unsurprisingly, if patients seek advice in a pharmacy, the quality of advice given is dependent on whether the respondent is a pharmacist or a community pharmacy assistant.²¹ Although pharmacies can play a very useful role in community health care, patients with symptoms which necessitate medical or dental attention are best not advised to seek such opinions unless they can be certain they will receive professional advice; the evidence indicates that shop sales persons (community pharmacy assistants) are frequently consulted, rather than the qualified pharmacists.^{18·19·20·21} Thus, although there is no doubt that pharmacies could be helpful in dealing with oral health problems, this situation is of some concern since although few mouth ulcers are of systemic importance (most are of traumatic etiology or are recurrent aphthae), malignant disease or systemic disorders underlie some mouth ulcers.^{1·2·3·4} Most important are malignant ulcers, typically squamous carcinomas, since the earlier these are diagnosed the better the prognosis. Many malignant ulcers present as a single persistent ulcer, typically in the older male and on the lateral margin of the tongue and there is still often an inordinate delay before patients present, though most studies in the English-speaking world show that both medical and dental practitioners will refer patients with oral cancer to a relevant hospital department after only a relatively short period of observation.^{5·6·7·8·9·10·11·12·13·14·15·16·17·}

A small group of patients with aphthae have identifiable and often treatable predisposing factors, such as a hematinic deficiency or coeliac disease. Mouth ulcers can also be caused by some other blood dyscrasias, dermatoses and infections such as syphilis, tuberculosis or HIV infection.⁴ In all of these, medical and/or dental care is indicated.

In conclusion, in order to offer patients better access to information and care, it would seem logical for the dental profession to collaborate more closely with the medical and pharmaceutical professions, in order to offer them educational material covering orofacial health and disease.

Conclusion:-

This awareness survey confirmed the importance for quality of life of core. These anatomic structures have many pathologic lesions together with many variations that are observed frequently in society. Recurrent Aphthous stomatitis is the most frequently observed painful pathology of the oral mucosa in the society. Lay persons could not distinguish an ulcer with features that would strongly suggest a malignant neoplasm from other types of mouth ulcer. Government as well as community pharmacist should take initiative to create awareness about common health issues to avoid oral cancer in the future. The vast majority in India this days would first approach their general pharmacist practitioner for advice, we should first approach a general dental practitioner. Health-conscious people were able to identify which mouth ulcer they do have. Based on previous prescription they were able to identify there dosage form, which one was previously effective for them. Majority of the people have shown trust for Gel preparation for allopathic, Ayurveda, and homeopathic medicinal system. Some of them are trying home remedies as per traditional practice of medicine. They show majority drug of choice for Folic acid tablet, Renifol capsule, candid under liquid preparation. While doing survey we got to

know that female were suffering from mouth ulcer due to deficiency of iron, zinc and folate were as most men were suffering from mouth ulcer due to vitamin b12 deficiency, smoking, cheek biting, chewing tobacco product mainly ghutkas. Various health program can help to improve the awareness of this health problem and to reduce mortality rate.

References

1.

Scully C, Flint S, Porter S R, Moos K . *Oral and maxillofacial diseases*. 3rd ed. London: Taylor & Francis, 2004.

[Google Scholar](#)

2.

Scully C. Aphthous ulceration. *New Engl J Med* 2006; **355**: 41–48.

[Article Google Scholar](#)

3.

Scully C, Felix D H . Oral medicine – update for the dental practitioner. 1. Aphthous and other common ulcers. *Br Dent J* 2005; **199**: 259–264.

[Article Google Scholar](#)

4.

Scully C, Felix D H. Oral medicine – update for the dental practitioner. 2. Mouth ulcers of more serious connotation. *Br Dent J* 2005; **199**: 339–343.

[Article Google Scholar](#)

5

Scully C, Malamos D, Levers B G, Porter S R, Prime S S . Sources and patterns of referrals of oral cancer: the role of general practitioners. *Br Med J (Clin Res Ed)* 1986; **293**: 599–601.

[Article Google Scholar](#)

6

Guggenheimer J, Verbin R S, Johnson J T, Horkowitz C A, Myers E N. Factors delaying the diagnosis of oral and oropharyngeal carcinomas. *Cancer* 1989; **64**: 932–935.

[Article Google Scholar](#)

7

Schnetler J F. Oral cancer diagnosis and delays in referral. *Br J Oral Maxillofac Surg* 1992;**30**: 210–213.

[Article Google Scholar](#)

8

Dimitroulis G, Reade P, Wiesenfeld D. Referral patterns of patients with oral squamous cell carcinoma, Australia. *Eur J Cancer B Oral Oncol* 1992; **28B**: 23–27.

[Article Google Scholar](#)

9

Kowalski L P, Franco E L, Torloni H etal. Lateness of diagnosis of oral and oropharyngeal carcinoma: factors related to the tumour, the patient and health professionals. *Eur J Cancer B Oral Oncol* 1994; **30B**: 167–173.

[Article Google Scholar](#)

10

Allison P, Locker D, Feine J S. The role of diagnostic delays in the prognosis of oral cancer: a review of the literature. *Oral Oncol* 1998; **34**: 161–170.

[Article Google Scholar](#)

11.

Hollows P, McAndrew P G, Perini M G. Delays in the referral and treatment of oral squamous cell carcinoma. *Br Dent J* 2000; **188**: 262–265.

[Article Google Scholar](#)

12

Pitiphat W, Diehl S R, Laskaris G, Cartsos V, Douglass C W, Zavras A I. Factors associated with delay in the diagnosis of oral cancer. *J Dent Res* 2002; **81**: 192–197.

[Article Google Scholar](#)

13

Onizawa K, Nishihara K, Yamagata K, Yusa H, Yanagawa T, Yoshida H. Factors associated with diagnostic delay of oral squamous cell carcinoma. *Oral Oncol* 2003; **39**: 781–788.

[Article Google Scholar](#)

14

McLeod N M, Saeed N R, Ali E A. Oral cancer: delays in referral and diagnosis persist. *Br Dent J* 2005; **198**: 681–684.

[Article Google Scholar](#)

15

Tromp D M, Brouha X D, Hordijk G J, Winnubst J A, de Leeuw R J. Patient and tumour factors associated with advanced carcinomas of the head and neck. *Oral Oncol* 2005; **41**: 313–319.

[Article Google Scholar](#)

16.

Diz Dios P, Padron Gonzalez N, Seoane Leston J, Tomas Carmona I, Limeres Posse J, Varela-Centelles P. 'Scheduling delay' in oral cancer diagnosis: a new protagonist. *Oral Oncol* 2005; **41**: 142–146.

[Article Google Scholar](#)

17.

Gordon M, Rishpon S, Gorski M. [Delayed diagnosis of carcinoma of the oral cavity]. *Harefuah* 2005; **144**: 243–245, 304, 303. [In Hebrew].

[PubMed Google Scholar](#)

18.

Scully C, Gill Y, Gill Z. How community pharmacy staff manage a patient with possible oral cancer. *Br J Oral Maxillofac Surg* 1989; **27**: 16–21.

[Article Google Scholar](#)

19.

Leonard M S, Isetts B J, Leonard C X. Response of community pharmacists to potential oral carcinoma. *J Am Pharm Assoc (Wash)* 1996; **NS36**: 203–205.

[Article Google Scholar](#)

20.

Gill Y, Gill Z, Scully C. How community pharmacy staff manage recurrent mouth ulcers. *Pharmaceutical J* 1988; **241**: 82–83.

[Google Scholar](#)

21.

Evans M J, Gibbons A J. Advice given in community pharmacies to patients with possible oral carcinoma. *Br J Oral Maxillofac Surg* 2005; **43**: 253–255.

[Article Google Scholar](#)
