



A Review Article on “HERBAL MOUTHWASH”

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Abstract :Mouthwashes made from natural plant extracts are known as herbal mouthwashes. Herbal mouthwash has become more popular than chemical mouthwashes because it doesn't include alcohol and has non-irritating and non-staining qualities. The organic extracts found in these a variety of plant leaves; fruits, seeds, and tree oils can be used to make herbal mouthwashes.

Investigating the antibacterial effects of herbal mouthwash on a range of microorganisms was the aim of this investigation. The primary advantage of mouthwash is that it could be utilized as a component of a routine at home to preserve superior dental hygiene.

The role of mouthwash in enhancing oral health cannot be overstated. By improving breath freshness, it plays a vital part in daily hygiene routines, allowing individuals to feel confident in their interactions. Furthermore, mouthwash effectively removes plaque, a significant contributor to dental issues, thereby lowering the risk of gum disease and cavities. However, to maximize its benefits and ensure proper usage, consulting with a dentist is essential.

IndexTerms-Tooth decay, mouthwash, oral hygiene, natural plants, and herbs.

LINTRODUCTION

Mouthwashes are liquids with analgesic, antibacterial, and anti-inflammatory properties. Mouthwash is a solution that is most frequently used for its antibacterial, refreshing, and deodorizing qualities as well as for plaque reduce conversely; therapeutic mouthwash has active ingredients that support oral health maintenance and mechanical control. Mouthwashes provide a number of functions, such as cleaning food particles out of the mouth, reducing the total number of germs in the mouth, and adding flavor to the breath and oral cavity. Additionally, mouthwash contains compounds that aid with digestion. It is possible to prevent and regulate plaque buildup by employing a variety of strategies that improve oral hygiene standards. Examples of this include the mechanical removal of dental plaque using professional scaling and polishing, dental floss, teeth cleaning sticks, oral irrigators, and/or brushing.

To prevent the development of plaque, In some situations, mechanical methods might not be enough. In these situations, it is highly recommended to use antibacterial mouthwashes in addition to mechanical oral hygiene methods. Numerous popular herbal products have helped with management. In dentistry, mouthwashes are frequently recommended for the prevention and management of a number of oral diseases. These mouthwashes often contain ingredients that target bacteria and reduce inflammation, promoting overall oral health. Regular use, combined with proper brushing and flossing techniques, can significantly enhance the effectiveness of one's dental care routine.

Mouthwashes serve two purposes: they contain antibacterial properties and can be used at home as part of a consistent oral hygiene routine. Prophylaxis is used both before and after oral surgical procedures like tooth extraction. Organic when used alone or in combination, herbs like spinach, neem, and tulsi, among others, have been clinically proven to be a safe and efficient treatment for oral health issues like bleeding gums, halitosis, mouth ulcers, and preventing tooth decay without any negative side effects.



Figure 1.1

Mouthwash can be used in the following cases:
Gum disease.

- Mucositis.
- Halitosis.
- The disease of periodontal tissue.
- Xerostomia.
- To keep septic sockets clean.
- To manage plaque.
- To experience agony again.
- To efficiently provide fluoride to stop oral cavities.
- Diminish inflammation.

1.1. Advantages of mouthwash;

- New breath
- Aids in removing food particles and debris that have become lodged between teeth.
- Avoid the accumulation of space.
- Aids in the prevention of cavities

1.2. Disadvantages of the mouthwash:

- Children under the age of six may be at risk from mouthwash.
- Because mouthwash contains a lot of alcohol, it might aggravate canker.
- Mouthwash can discolor teeth.
- It may harm certain oral tissues.

1.3. Various herbs are used in herbal mouthwash:-

- Turmeric
- Neem
- Peppermint sativa
- Amla
- Clove

1.3.1. Turmeric

Biological source: Arhizoatous herbaceous plant product i.e, curcuma longa.

Family: Zingiberceae.

Chemical constituent

It contains alkaloids as chemical constituent that is curcuminods (3-5%) carbohydrate (70%), mineral and essential oils.

Use:

- It is very crucial ingredients for mouthwash for teeth whitening treatments.
- It also helpful in prevent from inflammations, so act as anti-inflammatory agents.
- Also has an antibacterial activity.



Figure 1.2

1.3.2. Neem

Biological source: twigs and barks of Azudirachta Indica.

Family: Melaceae

Chemical constituents

Azudirachtin, nimbonin, nimbin, salannin and quercetin.

Use:

- Neem barks is used in number of toothpaste and toot power due to Itsanti bacterial property.
- It is twigs are used as oral deodorant, for toothache and for cleaning of teeth.



Figure 1.3

1.3.3. Peppermint sativa

Biological source: Leaves of *Mentha piperita*.

Family: Labiatae.

Chemical constituents

It contains menthene, methylacetate piperitorymenthol etc.

Use:

- It helps to get rid plaque and ensure that fresh breath for longer.
- It is also being used for common cold, sinus infection treatment, headaches etc.



Figure 1.4

1.3.4. Amla

Biological source: Fruit of *Emblica officinalis*.

Family: Euphobiaceae.

Chemical constituents-

It consist Emblicanin A&B chebulagic acid, Ascorbic acid, Elagic acid, Kampferol, etc.

Use:

- Due to presence of vitamin c, it helpful in preventing mouth ulcer.
- It also acts as Antioxidant.
- Its power helps to support the supporting tissue of the teeth.
- It helps in healing and developing of tissue.



Figure 1.5

1.3.5. Alum

It found is the minerally kalinite, alonite & leucite which can be treated with sulphuric acid to obtain crystals of alum. It is also known as phitakri.

Use:

- It is specially use to treat plaque and gingivitis in children.
- It is also used to remove stains from the teeth.



Figure 1.6

1.3.6.Clove

Biological sources: buds of *SyzygiumAromaticum*.

Family: Myrtaceae.

Chemical constituents: Eugenol, gallic acids, & AB carbophyllenes.

Use:

- Due to its antimicrobial property to it is used in herbal mouthwash.
- It also acts as an anti-inflammatory agent in gum treatment.



Figure 1.7

2.1.METHOD AND PREPARATION:

Collection of Leaves: The Siddha Central Research Institute confirmed that a healthy plant provided the peppermint (*Mentha piperita*) and betel (*Piper betle*) leaves. **Extraction Procedure:** To prevent chemical deterioration from sunlight, shade drying was carried out for 15 days. The leaves were ground into a coarse powder by grilling them in grinder. The leaf powder was kept in water bath (10 g/100 ml) and cooked in sterile water for 15 minutes. **Formulation of Herbal Mouthwash:** The herbal mouthwash was formulated using Table 1 and then all the other extracts were blended in different ratios.

Table 2.1: Formulation of Herbal Mouthwash

S.No.	Ingredients	Botanical name	Role	Quantity
1	Peppermint	<i>Mentha piperita</i>		40ml
2	Betel	<i>Piper bittle</i>		40ml
3	Clove oil	<i>Syzygiumaromaticum</i>		2ml
4	Peppermint oil			2ml

2.2.Preparation:

40 ml of each extract (peppermint extract and betel leaf extract) were mixed with 2 ml of clove oil and peppermint oil. The sample thus prepared was now kept in two volumetric flasks at two varied temperatures, one at ambient temperature and the other at low temperature. Thus, the prepared herbal mouthwash was subjected to further evaluation. **Phytochemical Analysis:** The aqueous extracts of the plant sample were analyzed for the presence of alkaloids, steroids, tannins, flavonoids, terpenoids, saponins, cardiac glycosides, and phenols using the phytochemical analysis techniques.

3.1.CONCLUSION

Depending on the type of oral disease, different mouthwashes may be prescribed. Oral healthcare professionals must therefore be aware of the different etiologic factors and oral cavity predisposing conditions. Chlorhexidine is undoubtedly the most effective mouthwash. However, herbal mouthwashes might be a useful substitute when socioeconomic concerns, adverse effects, and/or public preference for natural goods need to be taken into account. To extrapolate the benefits and drawbacks of these herbal products, more research can be done. The present formulation's natural herbs have been medically proven to prevent bad breath and poor oral hygiene. Numerous studies have shown that these herbs have been known to work miracles for years and decades. With this herbal mouthwash, a person can effortlessly rinse their mouth and avoid a wide range of oral health problems.

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