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Bridging Traditional Oral Healthcare Practices with Contemporary Clinical Insights: A Review

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ABSTRACT: Oral diseases remain a major global public health concern, affecting nearly 3.7 billion people and significantly impairing quality of life, particularly in developing countries where dental caries and periodontal diseases are highly prevalent. Among Indian adults, the prevalence of dental caries has been reported to range as high as approximately 78%, indicating a substantial untreated caries burden in the adult population. Despite the availability of effective preventive and therapeutic measures in modern dentistry, challenges related to cost, accessibility, long-term use, and patient compliance underscore the need for preventive, affordable, and culturally acceptable approaches to oral healthcare. The Unani system of medicine, a well-recognized traditional system, is based on a holistic understanding of health and disease. Classical Unani texts, authored by scholars such as *Ibn Sina, Al-Razi,* and *Al-Zahrawi,* describe various oral disorders including dental caries, gingivitis, periodontal disease, halitosis, and toothache, along with their preventive and therapeutic management. Preventive care is central to Unani medicine with emphasis on dietary moderation and temperament-based regimens. Several Unani drugs including *Salvadora persica* (*Miswak*), *Anacyclus pyrethrum* (*Aqarqarha*), *Punica granatum* (*Gulnar-e-Farsi*) etc. have been traditionally used for dental care owing to their antimicrobial, anti-inflammatory and plaque-reducing properties. This review integrates evidences from classical Unani literature and contemporary scientific studies including in vitro, in vivo and randomized controlled trials to evaluate the role of Unani interventions in oral healthcare, while also emphasizing the need for further well-designed clinical trials and standardization.

Keywords: Oral health, Unani medicine, Preventive care, Modern dentistry

I. INTRODUCTION:

WHO defines oral health as the state of the mouth, teeth and orofacial structures that enables individuals to perform essential functions such as eating, breathing and speaking, and encompasses psychosocial dimensions such as self-confidence, well-being and the ability to socialize and work without pain, discomfort and embarrassment (Oral Health, n.d.-a). Fédération Dentaire Internationale has defined oral health as multi-faceted and includes the ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of emotions through facial expressions with confidence and without pain, discomfort and disease of the craniofacial complex (head, face, and oral cavity) (FDI's Definition of Oral Health | FDI, n.d., 2016). Dental health is defined as a measure that can be assessed both objectively, using indicators such as the decayed, missing, and filled teeth (DMFT) index, and subjectively, through patient perceptions of function and quality of dental care. It encompasses impairment (objective pathology), disability (limitations in activities), and handicap (social role limitations) related to oral health (Dental Health - an Overview | ScienceDirect Topics, n.d.).

Oral health is recognized as a vital component of overall health. In 2009, the WHO's 7th Global Conference emphasized the importance of incorporating dental care into primary healthcare services to ensure comprehensive health management (Prasad et al., 2019). While oral health problems are rarely life-threatening, they remain a significant public health concern due to their high

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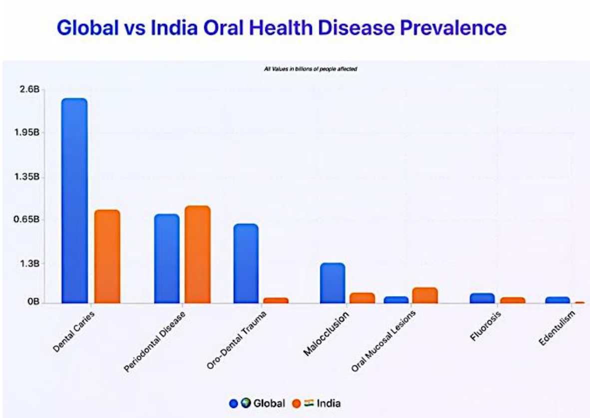
prevalence and widespread impact. Poor oral health can lead to social, economic, and psychological challenges, ultimately affecting an individual's quality of life (Baiju et al., 2017). Although largely preventable, oral diseases remain a major global health challenge, affecting people across their lifespan and causing pain, discomfort, disfigurement, and in severe cases, even death *(Oral Health, n.d.-b)*

Worldwide, nearly 3.7 billion people are affected by oral conditions, with untreated dental caries in permanent teeth being the most common health issue, according to the Global Burden of Disease 2021 *(Oral Health, n.d.-b).* Nearly half the world's population (around 45–48%) have at least one major oral condition such as untreated caries, periodontal disease, edentulism (tooth loss), or other oral disorders (Kassebaum et al., 2017).

The most common and impactful oral diseases worldwide include dental caries (tooth decay), periodontal disease, tooth loss, and cancers of the lips and oral cavity (Peres et al., 2019). Dental caries, periodontal disease, and oral cancers are considered key national public health concerns due to their widespread prevalence and significant health consequences (Batra et al., 2020).



Oral Disease Burden (India) according to the WHO Oral Health Country Profile (2022), (*Oral-Health-Ind-2022-Country-Profile.Pdf*, n.d.)

Oral Health Status	Population Group	Prevalence (%)
Untreated caries of deciduous teeth	Children (1-9 years)	43.3
Untreated caries of permanent teeth	People 5+ years	28.8
Severe periodontal disease	People 15+ years	21.8
Edentulism	People 20+ years	4.0

Traditional medicine takes a comprehensive approach to healthcare, focusing on overall health and well-being rather than just treating specific diseases. It addresses the physical, mental, and environmental factors that affect health as interconnected elements. Throughout history, traditional medical systems have played an important role in maintaining oral and dental health through preventive care, holistic treatment, and personalized approaches (WHO Global Report on Traditional and Complementary Medicine 2019, n.d.). These systems work on the principle of maintaining internal balance and rely on natural remedies to support oral hygiene and address common dental issues. The Unani system of medicine holds a unique place among these traditions. It's built on the concept of *mizaj*, or temperament, which practitioners use to understand diseases and determine appropriate treatments. In Unani medicine, both health conditions and remedies are classified according to their temperamental qualities, allowing for a tailored approach to treating oral and dental problems. Historical Unani texts document numerous single-herb and compound formulations that have been used to treat various oral conditions—from toothaches and gingivitis to bleeding gums, plaque buildup, and tooth decay, among others (Rai et al., 2020).

RISK FACTORS FOR ORAL DISEASES:
Modifiable risk factors:

Tobacco Smoking:

Evidence suggests that smoking changes oral microbial flora increases the level of certain periodontal microorganisms or affects host response (Bergstrom, 2014). The nicotine has been shown to cause periodontal tissue breakdown, directly or indirectly through interaction with other factors (Nazir, 2017).

Poor Oral hygiene:
Poor oral hygiene is a clear risk factor for oral diseases. When plaque control is lacking, harmful microorganisms build up on tooth surfaces and gum lines. This microbial layer starts inflammatory processes that lead to dental caries, gingivitis, and periodontitis. If not managed, these conditions may result in tooth loss (Lertpimonchai et al., 2020).

Dietary habits:
Poor dietary habits, especially a high intake of free sugars and refined carbohydrates, raise the risk of oral diseases. They encourage oral bacteria to produce acid, which causes enamel demineralization and dental cavities. Unhealthy diets also link to more periodontal inflammation and worse overall oral health (Moynihan, 2005).

Hormonal changes in females:
Gingival inflammation can occur in women preceding menstruation as well as during ovulation because elevated levels of progesterone prevent the repair of collagen fibres and cause blood vessels to dilate (Markou et al., 2011).

Pregnancy:
Hormonal changes during pregnancy have been related to an increased inflammatory response, which in turn has been proven to increase the risk of periodontal disease and gingivitis. Porphyromonas gingivalis is a critical microorganism in the advancement of periodontal disease, and studies have revealed a favorable correlation between maternal hormones and levels of this bacterium. Gingivitis has been linked to both low and high levels of oestrogen (Kabali & Mumghamba, 2018).

Diabetes Mellitus:
Diabetes mellitus is a significant risk factor for oral diseases, particularly periodontal disease, as chronic hyperglycaemia alters host immune response, increases inflammatory mediators, and impairs wound healing in periodontal tissues. Individuals with poorly controlled diabetes show increased severity and progression of periodontitis, and diabetes is now recognized as a major modifying factor of periodontal disease (Preshaw et al., 2012).

Non-Modifiable risk factors:

Age:
Ageing is associated with a higher risk of oral diseases such as dental caries, periodontal disease, and tooth loss. This increased risk is mainly due to long-term exposure to harmful factors, reduced immune response, and decreased ability of oral tissues to repair, resulting in a greater burden of oral disease among older individuals (Huang et al., 2025).

Sex: Poor oral health and periodontal disease show differences between sexes. Epidemiological studies indicate that males often have a higher prevalence and severity of periodontal conditions along with poorer oral hygiene practices. Biological and behavioural factors affect disease risk differently for each sex (Sangalli et al., 2023).

COMMON ORAL DISEASES AND THEIR REFERENCE IN UNANI SYSTEM OF MEDICINE:

Dental Caries:
Dental caries is defined as the process of progressive demineralization of the inorganic components along with the disintegration of the organic components of the teeth. It is one of the most prevalent diseases across the globe. It is associated with a balance between demineralization and remineralization caused by the fermentation of refined carbohydrates to organic acids (Khandelwal et al., 2020). In Unani medicine, dental caries is known as *Taʿakkul-e-Asnan*. Early physicians described tooth decay and emphasized preventive care, including avoiding putrefaction of food in the stomach, limiting hard and sticky foods, and maintaining good oral hygiene. The use of tooth powder (*manjan)*, mouth wash *(Madmada)*, and detoxification *(Istifragh*) through purgatives and *fasd* (venesection) was commonly advised. *Rabban Tabri* recommended filling carious teeth with drugs such as *Aqarqarha*, *Afyun*, and *Post-e-Kibr*, along with rinsing rose oil mixed with vinegar to prevent decay. For healthy teeth and gums, he advised herbal massage at the tooth roots using *Saad*, *Gulsurkh*, *Kundur*, *Maazo*, and *Post-e-Anar* (Qamari, 2008; A. al-H. A. ibn S. R. al Tabri, 2010; A. J. M. ibn J. ibn Y. al Tabri, 1997; Zeher, 1986).

Periodontal Disease:
Periodontal disease includes a range of conditions that affect the periodontium, the tissues that support the teeth such as the gingiva, periodontal ligament, cementum and alveolar bone. Detecting the problem early and managing it on time is crucial to avoid long-term complications (Gasner & Schure, 2025). In Unani medicine, periodontal disease is known as *Amraz-e-lissa*. Herbs and minerals such as *Post anar*, *Gulnar*, *Mazoo*, *Alum*, *Aaqar qarha*, *Samaq*, and *Namak* are traditionally used to manage this condition. These ingredients are powdered, blended with fermented vinegar of *Habbul Aas*, formed into tablets, and then administered for treatment (Qamari, 2008).

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Halitosis:
Halitosis, or bad breath, usually originates from the oral cavity or nasal passages. The unpleasant odor is mainly caused by volatile sulfur compounds produced when bacteria break down food particles and cellular debris. Common contributors include periodontal disease, dental caries, acute gingivitis, poorly fitting dentures, oral abscesses, and coated tongue. In Unani medicine, it is known as *Bakhrul fam*. *Tabri* described *Bakhrul Fam* (halitosis) as arising from foul-tasting fluids that stagnate in the stomach, infected gums, or food particles trapped between teeth for prolonged periods. If halitosis is caused by stomach fluids, they should be eliminated using laxative drugs such as *Majoon Fanjnoos, Iyaraj Faiqra, Aaqarqarha, Haleela Zard* etc. (Rashid, 2018).

Gingivitis:
Gingivitis is the earliest and mildest stage of periodontal disease and affects a large proportion of the population. It develops when bacteria and food debris accumulate along the gum margin, causing plaque formation and inflammation of the gingiva. The good news is that gingivitis is completely reversible with proper oral hygiene. If ignored, however, it can gradually progress to periodontitis (Gasner & Schure, 2025). In Unani medicine, it is known as *Awram-e-lissa*. In children, the gums may become inflamed during tooth eruption due to an imbalance of bodily humors, such as excess *Safra* or *Dam*. Certain medications, including preparations containing mercury mixed with other substances, can also trigger gum inflammation and pain (Khan, 2002).

Odontalgia:
Toothache, or dental pain, affects the teeth and their supporting structures and can also result from conditions outside the oral cavity. It is the most common form of oro-facial pain and, when severe, is considered a dental emergency, as it can disrupt sleep, eating, and daily activities, making it a frequent reason for urgent dental visits (Rashid, 2018). It is known as *Wajaul asnan* in Unani system of medicine. Ali Ibne Abbas Majoosi recommended gargling with water boiled with *Post-e-Anar* and *Samaq* for inflamed gums. If pus is present, additional ingredients such as *Sandal*, *Laung*, *Kafoor*, *Sumbuluteeb*, and *Mastagi* were advised. To maintain clean and white teeth, substances like *Kafe-Darya*, *Namak-e-Lahori*, and *Sajaz Hindi* were suggested, while for decayed teeth, a paste of *Bhang*, *Murmuki*, *Afyun*, *Filfil*, and *Heeng* was applied (Majoosi, 2010). Ibn Sina recommended formulations like *Sutira*, *Shajrina*, *Ma'jun al-Khabth*, and *Kaukab* tablets to relieve toothache (Sina, 2007).

CONTRIBUTIONS OF UNANI SCHOLARS IN THE FIELD OF ORAL HEALTH:

Oral health and its related issues have held an important place in the Unani system of medicine for centuries. Classical Unani texts provide detailed guidance on oral hygiene, preventive practices, and the management of various dental and gum disorders. Renowned Unani physicians valuable insights into the prevention and treatment of oral problems (Koutroumpas, 2012).

***Ibn Sina* (Avicenna, 980–1037 CE)**
Ibn Sina was a famous Persian scholar who wrote the comprehensive *Al-Qanun fi'l-Tibb* (The Canon of Medicine). This book became an important medical reference around the world for many centuries. He gave detailed descriptions of oral and dental issues, including bleeding gums, ulcers, fissures, gum recession, and loose teeth. Avicenna focused on herbal remedies and preventive oral care. He recommended practices like using *Miswak* and astringent mouth rinses, and he rarely suggested surgery for dental issues (Sina, 2007).

***Abu Bakr Muhammad ibn Zakariya al-Razi* (Rhazes, 841–926 CE)**
Razi, a distinguished physician and surgeon, authored several influential medical works, including *Kitab al-Hawi* (The Comprehensive Book). He detailed both medical and surgical approaches for managing oral diseases, recommending herbal and mineral-based remedies for toothaches, ulcers, and gum infections. *Razi* also emphasized topical treatments and dental fillings for cavities, described tooth extraction techniques, and outlined protocols for maintaining oral hygiene (Razi, 1998).

***Abū al-Qāsim Khalaf ibn al-Abbās al-Zahrawi* (Abulcasis, 936–1013 CE)**
Al-Zahrawi, often regarded as the father of modern surgery, authored *Al-Tasrif*, a thirty-volume medical encyclopedia. In it, he devoted five sections to dental diseases, illustrating various instruments and detailing treatment methods step by step based on clinical experience. He explained the causes of dental calculus and deposits, designed specialized dental tools, and developed advanced tooth-scaling techniques. *Al-Zahrawi* also described surgical approaches for managing oral ulcers and complex maxillofacial cases, laying the groundwork for modern dental surgery (Noras et al., 2015).

***Rabban Al-Tabari* (838–870 CE)**
Tabari, the author of *Firdaus-ul-Hikmat*, one of the earliest medical encyclopedias, highlighted the importance of oral hygiene and the prevention of gum and tooth disorders. He recommended herbal tooth powders and rose oil to maintain oral health and emphasized the daily use of *Miswak* and other chewing sticks as part of routine dental care (A. al-H. A. ibn S. R. al Tabri, 2010).

***Ali ibn Abbas Majusi* (Haly Abbas, d. 994 CE)**
Majusi, in his work *Kamil-us-Sana'a,* provided detailed explanations of various oral and dental diseases. He classified dental and periodontal disorders, offered guidance on both medical and surgical treatments, and emphasized preventive oral care using herbal regimens (Majoosi, 2010).

PREVENTION OF ORAL DISEASES:

In modern dentistry, preventive strategies that tackle the root causes of oral diseases have become very important. Managing microbial growth, reducing gum inflammation, and limiting plaque buildup are key to maintaining oral health (Bhusari et al., 2024). Early disease detection, followed by quick preventive care, improves treatment outcomes. To reach this goal, healthcare professionals should focus on accurate diagnosis. At the same time, public awareness about oral diseases and the value of regular dental check-ups should be increased (Seow et al., 2025). Simple practices like proper mouth cleaning, daily tooth brushing, and flossing are still the most effective ways to prevent oral disease and periodontitis (Niederman, 2014). Additionally, stannous fluoride has shown to reduce plaque and gingivitis. It decreases harmful bacteria and spirochetes in the subgingival areas, helping to support overall gum health (Gunsolley, 2006).

According to Unani literature, most of the problems are caused by a lack of proper hygienic practices. Therefore, the maintenance of proper hygiene is of utmost importance to prevent dental diseases. For example, toothache is mostly caused by lack of regular brushing and in appropriate dietary habits. Often, this leads to dental caries. Improper dental hygiene is also responsible for discoloration of teeth which leads to bad appearance and bad odour. Eventually, it causes loosening of the teeth. Sometimes, intestinal parasites infestation may lead to irritation of teeth which causes uneasiness in the teeth. Excess consumption of sour diet may also cause irritation of the teeth (Khan, 2002).

For the purpose of preventing dental problems, the Unani physicians have formulated certain principles.

1) Milk and fish should not be taken together in one meal.
2) Those foods which do not easily get digested should also be avoided.
3) Vomiting should be avoided especially acidic vomiting.
4) Hard things should not be chewed, especially sweet preparations like Aloo-baloo and Dry fig.
5) Hard things should not be broken by teeth such as Almond, walnut etc.
6) Frequent sugary diet and uses of alcohol should be avoided.

Use of *Miswak* regularly has been advised by many scholars (Chandpuri, 1984; Jurjani, 1903; Razi, n.d.; A. J. M. ibn J. ibn Y. al Tabri, 1997). However, caution should be exercised while using *Miswak*. Its uses should be in moderation (Razi, n.d.). The best *Miswak* is that which is bitter in taste, also a branch of olive tree is considered a very good *Miswak* (A. J. M. ibn J. ibn Y. al Tabri, 1997).

According to *Ahmed-al-Hasan Jurjani*, emesis is also harmful to the teeth. Thus, before undergoing therapeutic emesis, it is essential to anoint one's teeth with appropriate oils. Indigestion can also cause dental issues. As a result, it should be treated as soon as possible. Excessive eating should be avoided (Jurjani, 1903). Regular, thorough tooth cleaning is essential, but it must be done with caution to avoid damaging the gums. Therefore, you should not brush too hard. Every meal should be followed by thorough teeth cleaning. If food is lodged between your teeth, you should clean it out. Avoid really sour fruits if you want to keep your teeth sensitivity. Avoid eating anything that is either too hot or too cold (Razi, n.d.; Sina, 2007).

Hakim Ajmal Khan advised proper cleaning after eating and removal of debris by *miswak* or tooth pick and gargle with Alum in water for healthy teeth and gums. In case of cavity formation he advised its filling by *Aqar qarha, Naushader* and *Afyun* for bleeding and on inflamed gums apply *Suhaga, Mazoo, Kabaab Cheeni* in the form of paste or tooth powder (*manjan*) (Rashid, 2018). Zakariya Razi also advised treatment of oral diseases by venesection and leeching (Razi, 1998). For most of the dental and gums problems drugs which were ciccative, healing or astringent in function are used for local application and to the patient detoxification (*tanqia*) from harmful humours either by purgatives or venesection *(fasad)* is provided as a whole (Jurjani, 1903).

TRADITIONAL MEDICINES (SINGLE DRUGS) USED FOR ORAL DISEASES MENTIONED IN CLASSICAL UNANI LITERATURE:

Traditional Unani Name	Botanical Name	Indications	Classical Reference
Aqarqarha	*Anacyclus pyrethrum*	Toothache, dental caries, gum disease, oral ulcers	*Al-Qanun fil Tibb, Firdaus ul Hikmat* (Sina, 2007; A. al-H. A. ibn S. R. al Tabri, 2010)
Miswak	*Salvadora persica*	Dental caries, gingivitis,plaque, oral hygiene	*Al-Qanun fil Tibb* (Sina, 2007)
Babool/Aqaqia	*Acacia arabica/nilotica*	Strengthening teeth, bleeding gums, mouth ulcers	*Kamil us Sana'a, Firdaus-ul-Hikmat* (Majoosi, 2010; A. al-H. A. ibn S. R. al Tabri, 2010)
Gulnar Farsi/Post-e-Anar	*Punica granatum*	Bleeding gums, gingivitis, mouth ulcers	*Al-Qanun fil Tibb, Kitab ul Hawi* (Razi, 1998; Sina, 2007)
Qaranfal/Laung	*Syzygium aromaticum*	Bleeding gums, gingivitis, mouth ulcers	*Al-Qanun fil Tibb, Kamil us Sana'a* (Majoosi, 2010; Sina, 2007)
Kaat Safed	*Acacia catechu*	Toothache, halitosis, gum infections	*Bayaz-e-Kabir, Al-Qanun fil Tibb* (Kabiruddin, n.d.; Sina, 2007)
Sandal	*Santalum album*	Mouth ulcers, gingivitis, bleeding gums	*Kamil us Sana'a, Al-Qanun fil Tibb* (Majoosi, 2010; Sina, 2007)
Gul-e-Surkh	*Rosa damascena*	Inflamed gums	Al-Qanun fil Tibb, Bayaz-e-Kabir (Kabiruddin, n.d.; Sina, 2007)
Shibb-e-Yamani/ Phitkari	Potash Aluminium Sulfate (Alum)	Bleeding gums, mouth ulcers, astringent, antiseptic	*Kitab ul Haziq, Kamil us Sana'a* (Khan, 2002; Majoosi, 2010)
Haldi	*Curcuma longa*	Anti-inflammatory, oral ulcers	*Al-Qanun fil Tibb, Kamil us Sana'a* (Majoosi, 2010; Sina, 2007)
Podeena	*Mentha arvensis*	Mouth freshener, oral ulcers, gingivitis	*Ghena Mena, Al-Qanun fil Tibb* (Qamari, 2008; Sina, 2007)
Neem	*Azadirachta indica*	Gum diseases, dental caries, antiseptic	*Kitab al Hawi, Bayaz-e-Kabir* (Kabiruddin, n.d.; Razi, 1998)

CLINICAL EVIDENCE SUPPORTING THE EFFICACY OF TRADITIONAL UNANI DRUGS IN ORAL HEALTH:

The table below brings together traditional Unani drugs that have been researched in clinical studies for their relevance to oral health. It summarizes the available evidence on their use in the management of common oro-dental conditions and suggests an overview of the drugs studied and the clinical effects observed.

Drug Name	**Type of Study**	**Aim / Objective of the study**	**Conclusion**
Aqarqarha (Anacyclus pyrethrum)	In vitro	To determine antibacterial activity against oral bacteria *(S. aureus, S. mutans, S. sanguis, P. aeruginosa*)	Produced little antibacterial effect against *S. aureus and S. sanguis*.(N et al., 2012)
Miswak (Salvadora persica)	In vitro	To compare *Persica* mouthwash vs placebo.	Improved gingival health and lowered cariogenic bacteria.(Khalessi et al., 2004)
	RCT	Effect of *miswak* chewing sticks on plaque, microbiota, and gingival inflammation.	*Miswak* improves oral hygiene when complemented with toothbrushing.(Rifaey et al., 2021)
	RCT	Effects of *Meswak* on saliva composition, plaque & gingivitis.	Lower plaque & gingival indices; *Meswak* releases Ca & Cl that support enamel health. Frequent use suggested.(Gazi et al., 1992)
Babool (Acacia arabica)	RCT	Evaluate short-term effects of *Acacia arabica gel* on gingival inflammation.	Gumtone gel may be a useful herbal plaque-control agent.(Pradeep et al., 2010)
Gulnar Farsi (Punica granatum)	RCT	Evaluate safety & efficacy vs 0.2% CHX in diabetic gingivitis.	Safe, effective, and could be a good alternative to CHX.(Sedigh-Rahimabadi et al., 2017)
Qaranfal (Syzygium aromaticum)	RCT	Evaluate antibacterial properties and biofilm inhibition.	Clove extract has strong antibacterial and antibiofilm activity.(Rehman et al., 2024)
	RCT	Compare salivary *S. mutans* reduction after clove vs CHX rinse.	Significant reduction in *S. mutans*; clove is effective and culturally acceptable.(Yavagal et al., 2024)
	RCT	Assess analgesic effect of eugenol from clove.	Clove extract as effective as benzocaine as topical anesthetic.(Razzaq et al., 2025)
Kaat safed (Acacia catechu)	In vitro	Antimicrobial activity *against A. actinomycetemcomitans* and *P. gingivalis.*	Extracts show antimicrobial action against periodontal pathogens.(Koregol et al.,2016)
	RCT	Compare *A. catechu & Solanum xanthocarpum* vs CHX.	Both effective, *A. catechu* performed better than CHX for gingivitis.(Joshi et al., 2021)
	RCT	Compare *A. catechu* mouthwash (20%) vs 0.2% CHX in gingivitis.	*A. catechu* is almost equally effective as CHX.(Rangaraju et al., 2023)
Sandal (Santalum album)	In vitro	Effect on *Streptococcus mutans* biofilm formation.	Sandalwood oil inhibits biofilm formation.(Nadhifa & Binartha, 2023)
Gul-e-Surkh (Rosa damascene)	In vitro	Evaluate antimicrobial and molecular docking activity against dental pathogens.	*R. damascena* extracts are promising for anti-biofilm formulations.(Peeran et al., 2024)
Shibb-e-Yamani (Potash Aluminium Sulfate)	RCT	Effect of topical alum on aphthous ulcers.	Alum significantly reduces ulcer size and pain with no major side effects.(Rafieian et al., 2016)
Zard Chob (Curcuma longa)	RCT	Compare turmeric vs CHX mouthwash for plaque & gingivitis.	Turmeric is a good adjunct to plaque control.(Waghmare et al., 2011)
	RCT	Efficacy of curcumin for oral submucous fibrosis (OSF).	Curcumin shows positive therapeutic promise in OSF. (Hazarey et al., 2015)

	RCT	Topical curcumin for oral lichen planus (OLP).	Curcumin reduces pain and inflammation, comparable to steroids with fewer side effects.(Keshari et al., 2015)
Podina (Mentha piperita)	In vitro	Antibacterial and antibiofilm effect against *A. actinomycetemcomitans*.	Effective at low concentrations, potential periodontitis therapy.(Karicheri & Antony, 2016)
	In vitro	Effectiveness of *M. piperita* leaf extract against oral pathogens.	Findings support potential of herbal antimicrobial therapy.(Raghavan et al., 2018)
Neem (Azadirachta indica)	RCT	Compare neem mouthrinse vs 0.12% CHX.	Neem mouthrinse is highly efficacious and an alternative therapy.(Botelho et al., 2008)
	Clinical study	Compare neem gel vs 0.2% CHX mouthwash.	Neem gel significantly reduces plaque & bacteria.(Pai et al., 2004)

II. CONCLUSION:

Oral diseases still pose a significant public health challenge, even though many of them can be prevented. This review emphasizes the role of the Unani system of medicine in oral healthcare. It focuses on preventive measures, keeping up with oral hygiene, dietary management, and using both single and compound herbal remedies. Recent experimental and clinical studies show that several Unani medicines, including *Miswak, Aqarqarha, Gulnar Farsi*, clove, turmeric, and neem, have antimicrobial, anti-inflammatory, antiplaque, and pain-relieving properties. In some cases, their effectiveness is comparable to conventional treatments like chlorhexidine.

These results suggest that Unani therapies could serve as safe, affordable, and culturally acceptable options for preventing and managing oral diseases. However, more well-designed clinical trials and standardization of products are necessary to help integrate these practices into evidence-based dental care.

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