

Herbal Dental Powder as an Oral Care Agent

Mast. Aditya Pramod Bihade, Mr. Vinod Chaware, Dr. Shivshankar D Mhaske

Hrushikesh Keshav Vinchurkar, Tushar Pramod Bihade,

Janhavi Shivilal Dandale, Mohan Baliram Deokar

Satyajeet College Of Pharmacy, Khandala, Mehkar, 444301

hkvinchurkar@gmail.com, bihadetushar8@gmail.com

dandalejanhavi1@gmail.com, mohandeokar0717@gmail.com

Corresponding author: Mast. Aditya Pramod Bihade

adityabihade12@gmail.com

Abstract: Herbal dental powders are increasingly recognized for their safety and effectiveness as compared to conventional synthetic dentifrices due to its antimicrobial anti-inflammatory and oral hygiene benefits. Many studies have pointed out their efficiency in plaque removal. It prevents gingivitis and maintains gum health and has few side effects. This Review synthesises research evidence on formulation, pharmacological properties, clinical utility, and future research directions of the dental powders derived from herbs.

Herbal dental powders are being increasingly recognized as the safe and effective alternatives to conventional synthetic dentifrices, due to their varied pharmacological Antimicrobial, anti-inflammatory, and oral hygiene properties, among other benefits. Review synthesizes research evidence on the formulation, phytochemical investigation, Clinical utility and future research directions for these natural oral care agents are discussed.

The popularity of herbal dental powders represents a widening range of consumer interest preference for chemical-free, eco-friendly products and their generally favorable safety profile. Traditional formulations contain powdered natural products which include abrasive, cleansing, and therapeutic effects, such as clove-analgesic, neem. This includes herbs such as antimicrobial, babool (gum strengthening), mint/tulsi (mouth freshener), and licorice (foaming/healing), rock salt (scrubbing), and charcoal (bleaching). Phytochemical

Phytochemical screening confirms the presence of beneficial compounds like alkaloids, saponins, and Flavonoids, which collectively enhance oral health outcomes. Clinical evidence strongly supports the use of herbal powder, documenting significant reductions in oral pathogens and plaque scores. Various ingredients include neem, clove, and triphala are underlined because of their particular effectiveness. Besides, these Preparations have anti-inflammatory and therapeutic effects; gum tissue is the purposes of such dressings are protection, reduction of bleeding, and minimization of swelling.

More importantly, trials report minimal adverse effects compared to chemical dentifrices and meta-analyses. It explains various powdered formulations that are as effective as conventional toothpastes and mouthwashes, although with less risk of developing side effects. Practical benefits include affordability, ease in transport, and the fact is that farming will probably become environmentally low-impact, requiring minimal packaging.

However, key challenges remain, including the variable consistency of raw materials, lack of formulation Standardization and the need for more robust, blinded, long-term clinical trials adhering According to CONSORT guidelines, in order to confirm the efficacy across different populations.

Conclusion: Herbal dental powders represent natural, effective, and well-tolerated alternatives for oral hygiene, with proven antimicrobial and anti-inflammatory benefits. As the body of evidence builds up, standardized formulations and large-scale Clinical trials will further establish their therapeutic value.



Keywords: Herbal dental powder, Oral hygiene, Antimicrobial activity, Anti-inflammatory properties, Phytochemical analysis, Herbal dentifrice, Natural oral care, Plaque reduction, Gingivitis prevention, Medicinal plants, Standardization of formulations, Traditional medicine, Neem (*Azadirachta indica*), Clove (*Syzygium aromaticum*), Dental plaque control

