Preparation and characterization of Toothpaste of poly herbal plants to treat various tooth problems

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Abstract: Every human wants to a healthy teeth so they are use various types of toothpaste to keep their tooth healthy. These toothpastes are minimised the problem of tooth and gum. Generally the toothpaste having many properties to treat such as cavities, bleeding gum and avoid bad smell on mouth. Herbal plants extract are use to formulate good quality of toothpaste. The herbal formulation was prepared by guava leaf, Clove fruit, Neem, honey and several other substances.

Keywords: Herbal, Toothpaste, teeth

Introduction: Toothpaste is generally used to remove the deposits on teeth. If the teeth are not cleaned easily and the plaque formation occurs then the formation of gum diseases occurs and may be lead to bleeding gum or gingivitis. If the gum are red and swollen then the gingivitis is initiated. The reason of gum bleeding is the vitamin c and vitamin K deficiency. According to American Dental Association the human teeth are mainly composed of four dental tissues. The four dental tissues are- Enamel, Dentin, Cementum and Pulp. When the dentin surface covering are loose then the sensitivity of heat and cold are occurred. (1)

At the present time a lot of peoples are suffering from the dental carries and they are feeling pain during eating, chewing and smiling. The treatments of dental diseases are mainly done by the antimicrobial agents. The dentists and dental professionals are using the broad spectrum antibiotics to treat easily the dental problems. The S. mutans Lactobacillus and Actinomycetes species bacteria are mainly responsible for the dental carries.(2)

The removal of plaque is done by the mainly mechanical plaque methods and it is time consuming methods and easily operated. To the oral infection of S. mutans and other species of Actinomyetes was done by the herbal plant neem which has the antimicrobial property against them. (3) For removing of plaque instruments is required. (4)

Collection of plant materials:

Neem:

Biological source: It is obtained from the leaves of Azadirachta indica plant.

Family: meliacae.

Uses: Used as antimicrobial agents.
Clove:

**Biological Source:** It is obtained from dried flower buds of Eugenica Caryophyllus.

**Family:** Murtaeae

**Uses:** Used as dental analgesic, 4kotate

Guava leaf:

**Biological source:** It is obtained from the dried leaves of Psidium guajava.

**Family:** Myrtaceae.

**Uses:** used as antibacterial and mouth sores.
Tulsi leaf:

**Biological Source:** It is obtained from the fresh and dried leaves of Ocimum species.

**Family:** Lamiaceae.

**Uses:** Used as moth freshener and oral disinfectant.

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**Formulation of Toothpaste:** Mainly the formulation of toothpaste was completed by the using polyherbal plants such as Neem, Clove fruit, Guava, and tulsi leaf.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Herbal Ingredients</th>
<th>Quantity (gm).</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Neem</td>
<td>6 gm</td>
</tr>
<tr>
<td>2.</td>
<td>Clove fruits</td>
<td>6 gm</td>
</tr>
<tr>
<td>3.</td>
<td>Guava</td>
<td>2 gm</td>
</tr>
<tr>
<td>4.</td>
<td>Tulsi</td>
<td>2 gm</td>
</tr>
<tr>
<td>5.</td>
<td>Honey</td>
<td>1 gm</td>
</tr>
</tbody>
</table>

**Evaluation of Toothpaste:** Evaluation of toothpaste are generally completed by the following parameters.

1. Homogeneity
2. Tube inertness
3. Lead determination
4. Flouride determination

**Conclusion:** In this review paper we are focused on the preparation of toothpaste by using the polyherbal plant materials to overcome the dental problems. The dental problems are increased day by day and have a major effects on human health so avoid of it the herbal toothpaste can play a role.

**References:**


7. Mangilal T, Ravikumar M, “Preparation and evaluation of herbal toothpaste and compared with commercial herbal toothpaste: an invitro study” page no.3-4.