



Ten Clinically Relevant Herbs of Traditional Mexican Medicine

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Introduction

- In 2012, \$12.8 billion was spent in US on integrative health and medicine, with an upward trend in use
- Many Mexican Americans continue to practice traditional Mexican medicine in consideration of access to health care, cost, and long family tradition
- Mexico has a substantial history of herbal use in context of the immense biodiversity of 4500 native plants in the region and extensive Mesoamerican history
- Badianus manuscript is earliest documentation of the Aztec herbal practices of the 1500's reporting 184 herbal remedies for specific ailments
- There is an established concern that up to 72% of the Mexican American population does not report their use of herbal remedies to their primary care provider

Objective

- In accordance with the identified need by multiple organizations including the National Center for Complementary and Integrative Health, the purpose of this study is to further investigate the herbs used by Mexican Americans today
- This population was selected due to the primary author's interest in focusing career among this population
- The first component of this objective included understanding the cultural significance and history of Traditional Mexican Medicine as described in intro
- The second component was dedicated to creating a type of modern Badianus manuscript of 10 herbal remedies used today

Methods

- Two methods used to collect information and create herbal guide
- First, provider interviews were completed both in Mexico City and Denver to identify commonly used herbs
- Then a literature review was completed with focus on those commonly used herbs that may change clinical practice (i.e. those that are likely safe and effective or those that are likely unsafe but still used)

Results: Herbal Guide

- Growing evidence for herbs as anti-inflammatory, antibiotic and even anxiolytic agents
- Principal concerns remain- allergic reactions, CYP450 enzyme interactions, and hepatotoxic effects of certain herbs
- Important to identify quality products- ensure clean of adulterants; correct cultivation and processing for more accurate active components and concentrations
- Herbs included: Toloache (*Datura stramonium*), Arnica (*Heterotheca inuloides*), Manzanilla (*Matricaria chamomilla*), Hierbabuena (*Mentha piperita*), Sabila (*Aloe vera*), Valeriana (*Valeriana edulis*), Anis Estrella (*Illicium verum*), Passiflora (*Passiflora mexicana*), Gordolobo (*Verbascum densiflorum*), and Tila (*Tilia americana*)

Toloache (Jimson weed, *Datura stramonium*)

- Native to Americas, especially Mexico in dry temperate regions, with a variety of cultures reporting use
- Common use previously as an orally administered love potion or ritualistic hallucinogen
- Clear data of safety concerns due to anti-cholinergic toxicity; patient may be unaware of ingestion
- May still have use as topical anti-inflammatory or antibiotic



Arnica (Mexican Arnica, *Heterotheca inuloides*)

- Native to Mexico- local replacement by Spaniards of physically similar plant *Arnica montana*
- Common use as topical anti-inflammatory agent especially for joint pain, muscle aches, and bruises
- Research shows likely effective, and likely safe when applied topically; avoid use on open wounds; may be hepatotoxic at very high doses



Passiflora (Mexican Passionflower, *Passiflora mexicana*)

- Native to Mexico, southeast US, and South America
- Common use for insomnia, anxiety, and muscle relaxant
- Used as infusion or tea of leaves and flowers
- Research shows possibly effective, likely safe but high doses can cause adverse effects (dizziness, vomiting, hepatotoxicity)



Conclusion

- This guide functions as an introductory base of knowledge to be more prepared to evaluate specific herbs used by patients
- Many herbs show potential as both safe and likely effective agents that can be part of a patient's care plan
- Next steps include creating a local patient survey to further identify herbal usage and disclosure with primary provider

Limitations

- Unreasonable to memorize complete list of common herbs and uses, especially considering regional difference
- Difficult to generalize information- much of the research completed on herbs is still in silos and of in vitro research as opposed to robust clinical trials demonstrating efficacy
- Challenge in correctly identifying quality products for use in patient care to ensure desired outcome

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