

Alternative Medicines and Their Applications in Dentistry- A Brief Review

Vela Desai, Shruti Sharma and Neelkant Patil

Jaipur Dental College, Jaipur, Rajasthan, India.

ABSTRACT

The current accepted modern medicine or allopathy has gradually developed over the years by scientific and observational efforts of scientists. However, the basis of its development remains rooted in traditional medicine and therapies. The history of medicine includes many ludicrous therapies. Nevertheless, ancient wisdom has been the basis of modern medicine and will remain as one important source of future medicine and therapeutics. During the last decades, there is increasing interest to unlock the secrets of ancient herbal remedies. The major Complementary and alternative systems have many common characteristics, including a focus on individualizing treatments, treating the whole person, promoting self-care and self-healing, and recognizing the spiritual nature of each individual. In addition, many CAM systems have characteristics commonly found in mainstream healthcare, such as a focus on good nutrition and preventive practices. Unlike mainstream medicine, CAM often lacks or has only limited experimental and clinical study; however, scientific investigation of CAM is beginning to address this knowledge gap. This article covers a brief review of the alternative medicines and their probable application in dentistry.

Keywords: Traditional medicines, ayurveda, mind body practice.

INTRODUCTION

Alternative medicines is defined as therapeutic practices that are based on natural and traditional methods. Alternative medicines are indeed of great importance.

Nowadays, health care professionals are aware of alternative medicine and of its great advantages. Taking care of the whole human body healing and treating the underlying causes of diseases is one of the major advantages. Alternative medicine improves the individual's health and quality of life.

Patients are more interested in Alternative medicine for many reasons; one of which is the high costs of conventional medicine; not all people can get access to medical treatment. Secondly conventional medicines can actually have mild to more serious side effects ranging from nausea, vomiting, ulcers to anaphylactic reactions.¹ Moreover, some hospitals and clinics may not provide a sufficient care to their patients. Therefore, with the rising costs of prescription medicine and the increasing number of reports about the dangers and side effects associated with prescription drugs, many consumers are now seeking alternatives.

Alternative medicine is basically about natural healing which provides an alternative range of treatments. According to National Institutes of Health, they found that in 2002 62.1% of adults in US had used some form of CAM in the past 12 months and 75% across lifespan. This study included yoga, meditation, herbal treatments². The points of thought are why common people divert to use the Ayurvedic, Chinese and other herbal medicines?

Though it is used all over the world, in India, its use is much more because of their easy accessibility, no expert consultation required, are considered safe to use and also because primary health care services fall short of peoples' need both in qualitative and quantitative terms. We should make all these easily marketed ayurvedic, and other herbal medicines FDA approved and increase public awareness about pros and cons of the products for use in dentistry. As most of the studies are carried out ex vivo, more of these compounds should be subjected to animal and human studies to determine their effectiveness, side effects, toxicity and drug interactions.

Classification of alternative medicine³

National Centre for Complementary and Alternative Medicine has developed one of the most widely used classification systems for the branches of complementary and alternative medicine. It classifies complementary and alternative therapies into five major groups, which have some overlap.

1. Whole medical systems: cut across more than one of the other groups; examples include Traditional Chinese medicine, Naturopathy, Homeopathy, and Ayurveda
2. Mind-body medicine: takes a holistic approach to health that explores the interconnection between the mind, body, and spirit.
3. Biology-based practices: use substances found in nature such as herbs, foods, vitamins, and other natural substances
4. Manipulative and body-based practices: feature manipulation or movement of body parts, such as is done

in chiropractic and osteopathic manipulation

5. Energy medicine: is a domain that deals with putative and verifiable energy fields:
 - a. Biofield therapies are intended to influence energy fields that, it is purported, surround and penetrate the body.
 - b. Bioelectromagnetic-based therapies use verifiable electromagnetic fields, such as pulsed fields, alternating-current, or direct-current fields in an unconventional manner.

1. Whole medical system**1. Homeopathy**

It is a form of alternative medicine in which practitioners treat patients using highly diluted preparations that are believed to cause healthy people to exhibit symptoms that are similar to those exhibited by the patient.

The basic principle of homeopathy, is known as the "law of similars", which means "let like be cured by like."

Dental uses of homeopathy⁴

Dental abscess	Belladonna	.Bryonia	Hepar Sulphuris	Myristica	Pulsatilla	Pyrogenium
bruxism	Belladonna	Podophyllum	Tuberculinum			
periodontitis	Arsenicum album	Hypericum	Staphysagria -	Symphytum	ux vomica	Phosphorus
salivation	Baryta carbonica	Bryonia alba	Phosphorus	Pulsatilla	•	•
TOOTH ERUPTION	Calcarea carbonica	Chamomilla	Zincum metallicum	•	•	•
ULCERATIONS	Natrum muriaticum	Nitricum acidum	•	•	•	•

2. Naturapathy

It is a form of alternative medicine based on a belief in vitalism, which posits that a special energy called vital energy or vital force guides bodily processes such as metabolism, reproduction, growth, and adaptation. It includes procedures like acupuncture, applied kinesiology, botanical medicines, colour therapy, nature cure, nutrition, ozone therapy.⁵

3. Unani

Unani in Arabic, means Greek Medicine, and is a form of traditional medicine widely practiced in South Asia. which is based on the teachings of Greek physician Hippocrates, and Roman physician Galen who proposed 4 element concept as follows;

- The four elements: earth, air, water, and fire.
- The four natures: cold, hot, wet, and dry.
- The four humors: blood, phlegm, yellow bile, and black bile⁶.

Ilajbil Tadbeer- Regimenal Therapy	Ilajbil Ghiza Dietotherapy	Ilajbil Dava Pharmacotherapy	Ilajbil Yad (Surgery)
------------------------------------	----------------------------	------------------------------	-----------------------

4. Traditional Chinese Medicine

It is based on Yinyangism the combination of Five Phases theory with Yin-yang theory which was later absorbed by Daoism. Chinese

herbs inhibit proliferation, induce apoptosis, suppress angiogenesis, retard metastasis and enhance chemotherapy, exhibiting anti-cancer potential⁷.

Flavonoids gambogic acid, curcumin, wogonin and silibinin,	Alkaloids berberine, terpenes artemisinin, β -elemene, oridonin, triptolide, and ursolic acid,	quinones ,shikonin , emodin and saponins ginsenoside Rg3
--	--	--

5. Ayurveda

Ayurveda stresses a balance of three elemental energies or humors

- vāta (air & space – wind)
- pitta (fire & water – bile)
- kapha (water & earth – phlegm)

Therapeutic procedures in dentistry listed in ayurveda⁸

1.dantha dhavani –brushing
2.mukha prakashalan –gargling
3.Kavala-mouth yoga
4Gandhoosha-oil pulling
5.Abhyanga -oil massage
6.Vyayama –exercise
7.pratimarsha nasya

2. BIOLOGICALLY BASED THERAPIES

It uses substances found in nature- herbs, foods, and vitamins. dietary supplements,

herbal products, and the use of other so-called natural but as yet scientifically unproven therapies⁹

Herbal agents used in dentistry⁹

herbal agent	active ingredient	properties
.peppermint	Menthol oil	analgesic
garlic	allicin	antiseptic
ginger	gingerols	Analgesic
turmeric	curcumin	antioxidant. antiinflammation antimutagenic
Coconut oil	Caprylic acid	Analgesic. faster healing
Clove	eugenol oil	analgesic
Guava	Guercetin	Antiseptic,anti inflammatory
Aloe vera	Alloins,mannols	Induces healing emolient,anti inflammatory,anti bacterial

4. ENERGY BASED THERAPY

Energy healing is based on the belief that a healer is able to channel healing energy into the person seeking help by different methods: hands-on, hands-off, and distant(or absent) where the patient and healer are in different locations

1. Putative Energy Fields

Biofield energy healing therapies where the hands are used to direct or modulate energies which are believed to effect healing in the patient

- spiritual healing and psychic healing,
- Therapeutic touch, Healing Touch, Esoteric healing, Magnetic healing , QiGong , , Pranic healing, Crystal healing ,acupuncture.

2. Veritable Energy Medicine

Include magnet therapy and light therapy collectively referred as electromagnetic therapy and radiation therapy.

6. MIND –BODY INTERVENTIONS

It enhances the mind's capacity to affect bodily function and symptoms
Therapies used in dentistry as mind body balance.

cognitive-behavioral therapy, meditation, prayer, mental healing, yoga and therapies that use creative outlets such as art, music, or dance
Relaxation A state of altered consciousness, a slowing of breath and heart rate.
Meditation -A process of training one's mind to be attentive, to focus in a non analytical way, an attempt to refrain from rumination, as in relaxation.
Hypnosis -The induction of trance states by therapeutic suggestion, a state of altered consciousness.
Imagery
Autogenic Training -Relaxation and self-hypnosis
Aromatherapy
Biofeedback
Psychotherapy
Counselling
Dance and Exercise Movement .
Yoga

1. Manipulative and body based practices
System of therapies that use either manual manipulation or movement of one or more parts of the body to address structural or systematic imbalances of the bones and joints, the soft tissues, and the circulatory and lymphatic systems.
Eg-chiropractics, massage therapy.

CONCLUSION

The points of thought are why common people divert to use the Ayurvedic, Chinese and other herbal medicines? Though it is used all over the world, in India, its use is much more because of their easy accessibility, no expert consultation required, and are considered safe to use and also because primary health care services fall short of peoples' need both in qualitative and quantitative terms. We should make all these easily marketed ayurvedic, and other herbal medicines FDA approved and increase public awareness about pros and cons of their uses. There is scarce information on the quality, Safety and greater efficiency of these products for use in dentistry. As most of the studies are carried out ex vivo, more of these compounds should be subjected to animal and human studies to determine their effectiveness, side effects, toxicity and drug interactions.

REFERENCES

1. Astin JA . Why patients use alternative medicine: results of a national study. JAMA 1998;279(19):1548-53.
2. Barnes PM, Powell-Griner E, McFann K and Nahin RL. "Complementary and alternative medicine use among adults: United States, 2000 Advance Data. 2004;(343):1-19.
3. Marty. The Complete German Commission E Monographs: Therapeutic Guide to Herbal Medicines. J Amer Med Assoc. 1999; 281(19):1852-3.
4. Shankar K and Liao LP. Traditional systems of medicine. Physical Medicine and Rehabilitation Clinics of North America. 2004;15(4):725-747.
5. Jagtenberg T. Evidence-based medicine and naturopathy. J Altern Complement Med. 12(3):323-8.
6. Subbarayappa BV. The roots of ancient medicine: an historical outline. Journal of Bioscience. 2001;26(2):135-144.
7. Robert L Park. Superstition: Belief in the Age of Science, Physical Medicine and Rehabilitation Clinics of North America. 2001;15(4):715-720
8. Mishra L, Singh BB and Dagenais S. Healthcare and disease management in Ayurveda. Alternative Therapies in Health and Medicine. 2001;7(2):44-50.
9. Parmar V. Herbal Medicines: Its Toxic Effects & Drug Interactions The Indian Anaesthetists Forum Online October 2005 ISSN 0973-0311.