

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## A Review Literature on Alternative Medicine in Clinical Practice.

Nitesh Kumar, Piyush Yadav\*, and Amarjeet Yadav.

Prasad Institute Of Technology, Department Of Pharmacy, Jaunpur – 222001, Uttar Pradesh, India.

### ABSTRACT

The objective of this study was to know about Alternative medicine and their use pharmacy field. Alternative medicine is a term that describes medical treatments that are used instead of traditional therapies; In general, the term “alternative therapy” refers to any health treatment not standard in Western medical practice. Alternative medicine is a term that describes medical treatments that are used instead of traditional therapies. Some people also refer to it as “integrative or “complementary” medicine. Whereas complementary medicine is used together with conventional medicine, alternative medicine is used in place of conventional medicine. Doctors say that alternative medicine remains scientifically unproven, and therefore cannot be trusted. What these doctors don't say is that many of the everyday medical practices and treatments are also scientifically unproven, but that doesn't stop doctors from prescribing them. Some other definition seek to specify alternative medicine in terms of its social and political marginality to main stream healthcare Alternative medical systems may be based on traditional medicine practices, such as traditional Chinese medicine Ayurveda in India, or practices of other cultures around to the world.

**Keyword:** Alternative Medicine, Mind-Body Medicine, Energy Therapies, Acupuncture Acupressure, Healing Therapies

<https://doi.org/10.33887/rjpbcs/2022.13.1.25>

*\*Corresponding author*

## INTRODUCTION

Alternative medicine is a term that describes medical treatments that are used instead of traditional (mainstream) therapies. Some people also refer to it as integrative or complementary medicine. Alternative Medicine is a term commonly used to include all the healing practice that does not fall within the realm of conventional medicine. Examples of alternative practices include homeopathy, traditional medicine, chiropractic, and acupuncture. Complementary medicine is different from alternative medicine [1]. Where as complementary medicine is used together with conventional medicine, alternative medicine is used in place of conventional medicine, Acupuncture – One of the better known alternative healing therapies is acupuncture. The healing technique has its origin in ancient China and has been practiced for thousands of years. Acupuncture practioners believe that diseases and ailments are caused due to the imbalances of universal energies. Alternative medicine is any practice that aims to achieve the healing effects of medicine, but which lacks biological plausibility and is untested, untestable or proven ineffective[2,5]. Alternative therapies share in common that they reside outside of medical science and instead rely on pseudoscience. Traditional practices become "alternative" when used outside their original settings without proper scientific explanation and evidence. Frequently used derogatory terms for the alternative are new-age or pseudo, with little distinction from quackery [1 3].



**Fig: Alternative Medicine**

Some alternative practices are based on theories that contradict the science of how the human body works; others resort to the supernatural or superstitious to explain their effect. In others, the practice is plausibly effective but has too many side effects. The main worldview in conventional medicine is the biomedical model. Treatment within this model is mainly oriented at "fighting the disease" both in prevention and treatment, in order to regain the default situation of health[9]. Alternative medicine is distinct from scientific medicine, which employs the scientific method to test plausible therapies by way of responsible and ethical clinical trials, producing evidence of either effect or of no effect[4,6]. Research into alternative therapies often fails to follow proper research protocols, providing invalid results.

Prominent members of the science and biomedical science community say that it is not significant to define an alternative medicine that is separate from a conventional medicine because the expressions "conventional medicine", "alternative medicine", "complementary medicine", "integrative medicine", and "holistic medicine" do not refer to any medicine at all. Others say that alternative medicine cannot be precisely defined because of the diversity of theories and practices it includes, and because the boundaries between alternative and conventional medicine overlap, are porous, and change [9, 4]. Healthcare practices categorized as alternative may differ in their historical origine, theoretical basis, diagnostic

technique, therapeutic practice and in their relationship to the medical mainstream. Under a definition of alternative medicine as "non-mainstream", treatments considered alternative in one location may be considered conventional in another.

Critics say the expression is deceptive because it implies there is an effective alternative to science-based medicine, and that complementary is deceptive because it implies that the treatment increases the effectiveness of (complements) science-based medicine, while alternative medicines that have been tested nearly always have no measurable positive effect compared to a placebo. John wrote that "there is really no such thing as alternative medicine, just medicine that works and medicine that doesn't", a notion later echoed by Paul Offit: "The truth is there's no such thing as conventional or alternative or complementary or integrative or holistic medicine[5]. There's only medicine that works and medicine that doesn't. And the best way to sort it out is by carefully evaluating scientific studies - not by visiting Internet chat rooms, reading magazine articles, or talking to friends."

In general, the term "alternative therapy" refers to any health treatment not standard in Western medical practice [7]. When used alongside standard medical practices, alternative approaches are referred to as "complementary" medicine. Beyond that, complementary and alternative therapies are difficult to define, largely because the field is so diverse.

It encompasses diet and exercise changes, hypnosis, chiropractic adjustment, and poking needles into a person's skin (aka acupuncture), among other treatments. The benefits of alternative therapies are hotly contested. More research is needed to determine the efficacy of nearly all of these practices, but that has not stopped people from checking them out. In 2008 (the most recent valid data we could find, more than 38 percent of American adults used some form of alternative medicine, according to the NIH. Here are some of the practices that are changing the way Americans approach medical care[7,8].

Much of the perceived effect of an alternative practice arises from a belief that it will be effective (the placebo effect), or from the treated condition resolving on its own (the natural course of disease). This is further exacerbated by the tendency to turn to alternative therapies upon the failure of medicine, at which point the condition will be at its worst and most likely to spontaneously improve. prevention of infections is achieved by use of natural products, for example, prevention of wound and gastrointestinal infections by apitherapy and respiratory tract infections by probiotics[22,17]. In the absence of this bias, especially for diseases that are not expected to get better by themselves such as cancer or HIV infection, multiple studies have shown significantly worse outcomes if patients turn to alternative therapies. While this may be because these patients avoid effective treatment, some alternative therapies are actively harmful or actively interfere with effective treatments.

The alternative sector is a highly profitable industry with a strong lobby, and faces far less regulation over the use and marketing of unconfirmed treatment [10]. Its marketing often advertises the treatments as being "natural" or "holistic", in comparison to those offered by medical science. Billions of dollars have been spent studying alternative medicine, with few or no positive results. Some of the successful practices are only considered alternative under very specific definitions, such as those which consist of all physical activity under the umbrella of "alternative medicine".

## History

The history of alternative medicine may refer to the history of a group of diverse medical practices that were collectively promoted because "alternative medicine" beginning in the 1970s, to the collection of individual histories of members of that group, or to the history of western medical practices that be labeled "irregular practices" through the western medical establishment[2] .It includes the histories of complementary medicine and of integrative medicine. Before the 1970s, western practitioners that were not part of the increasingly science-based medical establishment were referred to "irregular practitioners", and were dismissed by the medical establishment as unscientific and as practicing quackery. Until the 1970s, irregular practice became increasingly marginalized as quackery and fraud, as western medicine increasingly incorporated scientific methods and discoveries, and had a corresponding increase in success of its treatments. In the 1970s, irregular practices were grouped with traditional practices of nonwestern cultures and with other unproven or disproven practices that were not part of biomedicine, with the entire group collectively marketed and promoted under the single appearance "alternative medicine".

Use of alternative medicine in the west began to rise following the counterculture movement of the 1960s, as part of the rising new age movement of the 1970s. This was due to misleading mass marketing of "alternative medicine" being an effective "alternative" to biomedicine, changing social attitudes about not using chemicals and challenging the establishment and authority of any kind, sensitivity to giving equal measure to beliefs and practices of other cultures and growing frustration and desperation by patients about limitations and side effects of science-based medicine [12,14]. At the same time, in 1975, the American Medical Association, which played the central role in fighting quackery in the United States, abolished its quackery committee and closed down its Department of Investigation. By the early to mid 1970s the expression "alternative medicine" came into widespread use, and the expression became mass marketed as a collection of "natural" and effective treatment "alternatives" to science-based biomedicine [2,15]. By 1983, mass marketing of "alternative medicine" was so pervasive that the British Medical Journal (BMJ) pointed to "an apparently endless stream of books, articles, and radio and television programmers urge on the public the virtues of (alternative medicine) treatment ranging from meditation to drilling a opening in the skull to let in more oxygen".

### **Type of Alternative Medicine**

Alternative medicine can be classified into five major categories of practice:

- Whole medical systems
- Mind-body techniques
- Biologically based practices
- Manipulative and body-based therapies
- Energy therapies

### **Whole Medical System**

Whole medical systems are complete systems that include a defined philosophy and clarification of disease, diagnosis, and therapy [13]. They include the following:

- Ayurveda
- Homeopathy
- Naturopathy
- Traditional Chinese medicine

### **Mind-Body Medicine**

Mind-body techniques are based on the theory that mental and emotional factors can influence physical health. Behavioral, psychologic, social, and spiritual methods are used to preserve health and prevent or cure disease. Because of the abundance of scientific evidence backing the benefits of mind-body techniques, many of the approaches are now considered mainstream [18]. For example, the following techniques are used in the treatment of chronic pain, coronary artery disease, headaches, insomnia, and as aids during childbirth

- Biofeedback
- Guided imagery
- Hypnotherapy (hypnosis)
- Meditation, including mindfulness
- Relaxation techniques

These techniques are also used to help people cope with disease-related and treatment-related symptoms of cancer and to prepare them for surgery.

#### **1) Biologically Based Therapies**

Biologically based therapies use naturally occurring substances to affect health. These practices include the following:

- Botanical medicine

- Natural products and supplements
- Chelation therapy
- Diet therapy

### **Manipulative and Body-Based Practices**

Manipulative and body-based therapies treat various conditions through bodily manipulation. These therapies include

- Chiropractic
- Osteopathic manipulation
- Cupping
- Massage
- Moxibustion
- Reflexology
- Scraping (for example, coining, spooning)

These therapies are based on the belief that the body can regulate and heal itself and that its parts are interdependent[13]. Acupuncture is also sometimes considered a manipulative therapy.

Some of these therapies (cupping, scraping, and moxibustion) result in lesions that may be mistaken for signs of trauma or abuse[11]. These therapies are thought to stimulate the body's energy and to enable toxins to leave the body. However, very little high quality research has measured how effective they are.

### **Energy Therapies**

Energy therapies focus on the energy fields thought to exist in and around the body (biofields). These therapies also encompass the use of external energy sources (electromagnetic fields) to influence health and healing. Energy therapies are based on a core belief in the existence of a universal life force or subtle energy that resides in and around the body [16]. Limited scientific evidence supports the existence of such a common life force, which is inherently hard to measure.

Energy therapies include the following:

- Acupuncture
- Magnets
- Qi gong and Tai chi—components of traditional Chinese medicine using gentle postures, mindful movement, and the breath to bring the person's energy into better balance
- Reiki
- Therapeutic touch

### **Most Popular Alternative Healing Therapies**

Alternative Healing Therapies are healing methodologies that differ from the usual line of treatment than that of a doctor. In other words therapeutic practices that are currently not considered as an integral part of conventional medical practice are classified as alternate healing therapies or alternate medicine [19,20]. Many a times the benefits and healing abilities of these therapies are established through research, other times they may be unproven scientifically. With alternate healing therapies, healing, treatment and cure may be achieved through diet, self healing mechanism of the human body, various energies, herbal and other supplements and much more. Few of these healing techniques are thousands of years older than conventional medicines. Over the last couple of decades there has been a renewed interest in holistic and natural healing and thus various alternative healing therapies have found acceptance and are getting popular both in India and world over [17]. Some of the most popular alternative healing therapies are:

**Acupuncture** – One of the better known alternative healing therapies is acupuncture. The healing technique has its origin in ancient China and has been practiced for thousands of years. Acupuncture



practioners believe that diseases and ailments are caused due to imbalances of universal energies. In our body there are invisible paths through which the energies Ying and Yang run. These two opposing forces are constantly merging, but can also become unbalanced [22]. The energy network of the body has specific acupuncture points that are linked with various organs or body functions. In acupuncture needles are inserted into the subcutaneous connective tissue at these very specific points which in turn helps balance, slow down or stimulate certain energies and thus provide healing.

**Acupressure** – Acupressure just like acupuncture works on the principal of various specific points being energy centers of the human body. Stimulation of these points helps correct imbalances in the flow of life energy and thus provides healing. In acupressure correct amount of pressure is applied at these vital points in the human body using hands, elbows or specific devices to release blockages and provide healing.

**Ayurveda** – Ayurveda is an ancient healing practice that originated in India. The word Ayurveda is made from two words Ayur meaning life and Veda meaning knowledge. Ayurveda is a natural healing technique that establishes balanced in the body by bringing balance in the three fundamental life forces in our bodies known as Vata, Pitta and Kapha. Ayurveda teaches living in harmony with nature and using the human body self healing powers. Other than herbal remedies Ayurveda also uses techniques such as meditation, breathing and Yoga.

**Aromatherapy** – Aromatherapy is a holistic therapy that uses aroma of essential oils to improve health, vitality and emotional well-being. Although aromatherapy has mention in both ancient Indian and Chinese healing techniques but the discovery of modern day aromatherapy is attributed to French pharmacist, Rene-Maurice Gattefosse[2].In aromatherapy essential oils can be used as ointments, infusions or lotions externally. They can also be used internally; wherein they can be mixed with food and consumed.

**Reiki** – Reiki is a energy healing process which originated in Tibet and Japan. The word Reiki means Universal Life Energy. Reiki was rediscovered in Japan in the nineteenth century by Dr. Mikao Usui from Kyoto, Japan who named it Rei-Ki. Reiki is very simple; it works by the imposition of hands on different parts of the body, energy centers, thus giving vital energy to all organs. During Reiki sessions the practitioner does not use his own energy but serves as a channel and directs the universal energy towards the receiver by using his hands. Reiki provides healing by bringing harmony and physical, emotional, mental and spiritual balance in the body.

**Homeopathy** – Homeopathy originated in Germany in the 18th century. It is one of the more popular and accepted types of alternative medicine. Homeopathy is based on the philosophy that both the cure and the ailment come from the same situation. The substance, which causes a disease in high doses, gives a medicinal effect when used in very low doses [2, 21]. Thus similar symptoms to that of the ailment are created to cure the ailment. Homeopathy also uses herbs and natural medicines.

**Naturopathy** – Naturopathy as the name suggest is an alternate healing therapy in which only natural methods are used to assists the human body's self healing ability. Healing therapies such as verbalism, color therapy, ozone therapy, reflexology, massage therapy and others can be classified below naturopathy.

#### **Advantage of Alternative Medicine**

- It is an development of the Quality of Life. When we use prescription drugs we generally see an development in pain, but once the drug goes out of our system the pain returns. When using alternative medicine, there is a drastic improvement in the quality of life a person has.
- It is safer. Alternative medicine is a wide spectrum of therapies, and they are almost always considered to be much safer than mainstream medicine [21]. Natural remedies are used to correct the problem. There are no man-made, unnatural substances that you would be using to put in your body.
- It does not have bad side effects. When using mainstream medicine you might be able to get rid of your headache, but the side effects might include nausea, hallucinations and risk of stroke in the process. Almost all mainstream medicine has some type of warning about the bad side effects that come from taking it, where natural remedies don't.
- It is more flexible. Alternative medicine allows more elasticity in treatment plans. Many chiropractors and alternative medicine professionals' change their treatment plans according to lifestyle changes, where mainstream medical professionals wouldn't.

- It looks at overall health of your body. Alternative medicine focuses on healing pain and disease by balancing out other aspects of your life [15, 18]. Sleep, nutrition and stress can affect your body, so adapting health plans with these in mind is important with alternative medicine. Mainstream medicine is not nearly as well rounded.
- It doesn't offer dependence treatment options. Prescription pills can cause dependency and other harmful side effects to the body and mind. Alternative medicine does not have those same disadvantages.

### CONCLUSION

Alternative Medicine is very useful in the Pharmacy. It focuses on healing pain and disease by balancing out other aspects of your life. Natural remedies are used to correct the problem. There are no man-made, unnatural substances that you would be using to put in your body.

### REFERENCES

- [1] Ernst E, Resch KL, Mills S, Hill R, Mitchell A, Willoughby M, White A. *Br J Gen Pract.* 1995; 45:506.
- [2] [https://en.wikipedia.org/wiki/Alternative\\_medicine](https://en.wikipedia.org/wiki/Alternative_medicine)
- [3] Correa, AI. *International Journal of Alternative and Complementary Medicine* 1999; 10–11.
- [4] Angell M, Kassirer JP. *N Engl J Med.* 1998; 339(12):839–841.
- [5] Meeker WC, Haldeman S. *Ann Intern Med.* 2002; 136(3):216–227.
- [6] Jonas WB. *Mosby's Dictionary of Complementary and Alternative Medicine.* St. Louis, MO: Elsevier Mosby; 2005.
- [7] <https://www.msmanuals.com/professional/special-subjects/integrative-complementary-and-alternative-medicine/types-of-complementary-and-alternative-medicine>
- [8] Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rompay M, Kessler RC. *JAMA.* 1998;280(18):1569–1575
- [9] JA Marcum, *An Introductory Philosophy of Medicine: Humanizing Modern Medicine*, vol. 99, Springer Science & Business Media, 2008.
- [10] KM Brooks, JM George, and P Kumar. *Expert Review of Clinical Pharmacology* 2017;10(1):59–79.
- [11] Workshop on Alternative Medicine. *Alternative Medicine: Expanding Medical Horizons.* Washington DC: NIH; 1995. A Report to the National Institutes of Health on Alternative Medical Systems.
- [12] Straus S. Presentation given to the Committee on the Use of Complementary and Alternative Medicine by the American Public. Washington, DC: IOM; 2003. *NCCAM Research: Measures of success, lessons learned, and opportunities.*
- [13] R Teschke, L Zhang, H Long et al. *Annals of Hepatology* 2015;14(1):7–19.
- [14] Barrett, Stephen; London, William M.; Kroger, Manfred; Hall, Harriet; Baratz, Robert S. (2013). *Consumer health: a guide to intelligent decisions* 9<sup>th</sup> edition. New York: McGraw-Hill. pp. 34–35, 134, 137.
- [15] Tyreman, Stephen. *Medicine, Health Care and Philosophy* 2011;14 (2): 209–17
- [16] Kaptchuk TJ, Eisenberg DM. *Ann Intern Med* 2001; 135(3):196–204.
- [17] Hufford DJ. CAM and Cultural Diversity: Ethics and Epistemology Converge. In: Callahan D, editor. *The Role of Complementary and Alternative Medicine: Accommodating Pluralism.* Washington DC: Georgetown University Press; 2002. pp. 15–35.
- [18] Fontanarosa, PB, et al. *JAMA* 1998;280 (18): 1618–19.
- [19] Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. *N Engl J Med.* 1993; 328:246–252.
- [20] Sampson W. *Annals of the New York Academy of Sciences* 1995;775 (1): 188–97.
- [21] Cassileth, BR, et al. *The Oncologist* 2004;9 (1): 80–89.
- [22] T Eteraf-Oskouei and M Najafi. *Iranian Journal of Basic Medical Sciences* 2013;16(6):732.