



Scenario of Products or Practices Claiming to be Ayurveda – Need for Awareness and their Regulation

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Abstract

Ayurveda, is the ancient system of traditional medicine in India. It is a divine science dealing with having healthy life and life style. Mastering Ayurvedic practice is an art and science. Due to the popularity not only in India but abroad and relatively less number of practitioners compared to allopathic doctors, there has been concern with quacks and fake products in the name of Ayurveda. This article discusses some social malpractices (mostly related to the Indian scenario), in the name of Ayurvedic practices, mentions some deviations in implementing ayurvedic practice, highlights some Indian regulations in education and products dealing with Ayurveda, dwells on the importance of public awareness and education in order to prevent people from unknowingly being victims to malpractices under the name of Ayurveda, and suggests possible ways to regulate Ayurvedic practice.

Keywords: Ayurveda; Panchakarma; Massage; Quacks; AYUSH; Ayurvedic Food; CDSCO; CCRAS

Abbreviations: NCCIH: National Center for Complementary and Integrative Health; NAMAC: National Ayurvedic Medical Accreditation Council; BAMS: Bachelor of Ayurvedic Medicine and Surgery; CCRAS: Central Council for Research in Ayurvedic Sciences; D&C: Drugs and Cosmetics; CDSCO: Central Drugs Standard Control Organization; PCIM&H: Pharmacopoeia Commission for Indian Medicine & Homoeopathy; QCI: Quality Council of India; FSSAI: Food Safety and Standards Authority of India; AIIA: All India Institute of Ayurveda.

Introduction

Ayurveda is a divine science, it speaks about holistic healing where mind and body both are considered for diagnosis and treatment. 'Ayur' means life and 'veda' means

science, it is life science which is taught with several theories of nature and human being. Historical report mentions that it dates back to more than 5000 years. Ayurveda is considered as the 5th veda by its virtue. It is an Indian traditional system which teaches medicine and surgery. Ayurveda focuses on preventive and curative aspects. Preventive Ayurveda mainly focuses on daily regimen and seasonal regimen with guided food and lifestyle habits as per the season and as per the individual body nature [1,2].

Ayurveda medicines have single or combination of materials from herbal, animal and minerals sources. Any of these undergo the process of 'Shobhana' which means cleansing before making it to the deliverable form of medicine for the patients. Those which have not gone through this process might be fatal or have adverse effects on health.

Apart from medicines, the uniqueness of Ayurveda stays in its 'panchakarma' therapies which act equivalent to surgery in most of the cases. Panchakarma are the five procedures which are done by considering the nature of the body, season, disease progress, disease history, physical condition and age of the person. Panchakarma practice is to be done only under the guidelines of Ayurveda physician. Irrational and unsupervised practice has its own complications [2].

Ayurveda follows many concepts like concept of Panchamahabhuta, which says everything in this universe is made out of five elements. The Tridosha concept which discusses about Vaata, Pitta and Kapha which are present as an individual's innate nature. They increase or decrease based on the disease condition. Saptadhatu concept speaks about seven elements which human body consists of. Concept of Triguna is descriptive for the mind, which speaks about nature of mind viz. Sathvik, Rajasik and Tamasik. Similarly there are many concepts present in Ayurveda which speak about nature of the body, preventive aspects of health, healthy way of living with food and lifestyle, diagnosis, treatments, medicinal formulations and so on.

Ayurveda Reflected in Poor Light

Ayurveda is vast. It discusses about diagnosis, medicines, formulations, diet, food preparations, regimens and other aspects like signs of non-progress and death. Such a vast science has been misused by many people tarnishing the image of the profession. Few of them are listed below.

Massages

Massages have been one of the approaches to therapy. They also come with side effects [3]. Ayurveda has become a brand name for massages. Ayurvedic therapy prescribes massaging by application of oil only as a part of the treatment. Oil massage alone is not considered as a complete treatment. Due to the usage of the term 'Ayurveda massages' for commercial purposes in many places, the societal opinion reflected is that Ayurveda means only massages or massage parlors. This is a misconception about Ayurveda and has to be addressed to retain the sanctity of this medical practice.

Abhyanga or massages are part of Panchakarma Therapies. The therapy is specific based on the indication. Specified oils and specific procedures are prescribed for the treatment. Abhyanga or massages are also classified body part wise like padabhyanga, ekangabhyanga, shirobhyanga, etc. These massages are done after the therapies like kati basti, janu basti, shirodhara, etc [4].

Ayurveda suggests the application of oil to the whole body after exercise followed by a warm water bath, as

part of daily regimen. This helps in preventing body pains and lubricates the joint and in turn rejuvenates the body. The oil massage helps in rejuvenating the body. The issue in this context is about promoting Ayurveda meagerly as a massage system which is not a good reputation for this holistic science.

The name of Ayurveda massage parlours can disintegrate the traditional system of medicine which in turn can lead to devastation of the concepts of Ayurveda. Even more tarnishing is the scenario where in the name of Ayurvedic massage treatment flesh trade and drug trafficking is being carried out [5].

Therapy for Fertility and Libido Concerns

Second most common is, the name of Ayurveda camps are given by the one who claim themselves to be Ayurveda pandits and have their camps on road sides with many herbs in glass jars. In addition to all sorts of health maladies, they are mainly targeting male impotency and male fertility related products where they sell in high price. Such camps display a banner mentioning "Ayurveda camp" or such other terms and also photos claiming to treat male impotence [6].

In India, people generally hesitate to discuss about issues related to sexual health. Fake practitioners take advantage of this ignorance. They convince buyers by claiming that the herbs or minerals they recommend are obtained from the sacred mountainous regions. Such products may not even be cleaned and purified. The general health condition or the previous medical history of the person is not verified before giving the claimed medicinal products. Such kind of practice may not be of help to improve libido or potency but may also be harmful to health.

Social, cultural and religious practices in India influence the perspective on sexual health. India has been reported as the impotence capital of the world as published in Outlook magazine during February 2022. Nearly 25 out of every 100 patients in India with Erectile Dysfunction (ED) are below 30 years, as per a report of Institute of Andrology and Sexual Health, January 2022. Such men are falling prey to purchase products in the name of Ayurveda are charged very high price.

Some such medicines used for ED, if taken for longer time or at a higher dose may lead to cardiac vascular (CV) disorders. This could be due to the malpractice of mixing Viagra (sildenafil citrate) into Ayurvedic products. Viagra is known to lead to CV events and is unsafe in patient with history of CV issues. Apart from these the persons may go through depression or mental health problems when such (fake) medicines do not show expected therapeutic response.

Female infertility is also an exploited area for such practices [7].

Fake Practitioners

Considering the above mentioned concerns about massages and infertility treatment, the root cause is the surge of quacks claiming to be Ayurvedic practitioners. Many news reports mention such fake practitioners. Early this year such a fake racket was busted by STF in Uttarakhand, India [8]. Such falsified therapies have occurred via online consultation too where three culprits were held for cheating patients online in name of Ayurveda treatment [9].

Ayurvedic Ice Creams

Ayurveda has many principles about food. To mention a few, Ayurveda tells not to eat cooked foods which are left over night, not eat raw vegetables, to avoid sprouts, to have warm foods and drink. Cold foods are not recommended as they hamper the digestion activity. There are more than 30 regulations as such with regards to food selection, preparation and intake of prepared foods. Not only these regulations even Ayurveda guides about the places or season according to which we have to select our food.

In particular to cold foods, Ayurveda mentions that the food/drink which is warm or in particular season kept at room temperature is ideal for the body for good digestion. Cool foods or drinks will create indigestion and will harm the internal organs from functioning and further affect health due to or in other words it says cold foods and drinks are incompatible to digestion. In this theory it is clearly understood that ice creams are incompatible food for health. So when concept of ice cream only is not as per Ayurveda, naming a flavour by adding a herb cannot be an Ayurvedic ice cream. Eg. adding turmeric and naming as Ayurveda flavoured ice creams. Not only for ice creams but many food products are named after Ayurveda which has opposite theories to Ayurveda [10].

Misnomers and Fake Ayurvedic Products

Another concern is misuse of associating the word 'Ayurveda' with food or medicinal products. Many products are sold by adding just a single or more herbs to any combinations and naming it as Ayurveda products. Few to mention are: toothpaste, soaps, shampoos, water, milk, coffee and many more including ice creams as discussed above.

Additionally, Ayurvedic medicines themselves similar to allopathic medicines, are not devoid of adverse effects [11]. With quality medicines themselves posing some unwanted health issues, it is dangerous to consume Ayurvedic

medicines that are fake and adulterated. Reports from across the country mention such criminal activities related to Ayurvedic products. A case on selling fake Ayurvedic orthopedic medicines was reported in 2021 from Karnataka [12] and May 2023 saw another such group arrested for selling fake ayurvedic medicines in New Delhi [13].

Ayurveda Influence in Foreign Countries like USA

The USFDA does not regulate the Ayurvedic system of medical practice. "Ayurvedic products and their product labels are not approved by the agency, and FDA cannot ensure the safety of these products" [14] Yet the country has been interested in this Eastern traditional health practice for over two decades. The NAMA National Ayurvedic Medical Association was founded in 2000 to support Ayurvedic education and the resulting professional practices [15]. National center for complementary and integrative health (NCCIH) of the National discusses about Ayurveda [16] National Ayurvedic Medical Accreditation Council (NAMAC) is the body under NAMA looking into quality Ayurvedic education in the USA. The California College of Ayurveda was Established in 1995 by Dr. Marc Halpern, is the first state-approved school for Ayurvedic medicine.

In India where Ayurveda has been the traditional medicine, people are being victims to various malpractices in the health care profession. Thus in most of foreign countries where claims are being made to be Ayurvedic system greater caution is necessary. Though institutions are available to impart Ayurvedic education in the USA, only those who have undergone proper training could practice well. Public have to be watchful about claims to be Ayurveda practitioners just by undertaking some short term courses. Persons with such half knowledge are disrupting some of Ayurvedic practices E.g. employing curcumin extract rather than using turmeric, prescribing celery juice for detox and describing it as Panchakarma therapy, adding neem in toothpaste and calling it ayurvedic toothpaste, consuming one teaspoon of extra virgin coconut oil early morning and announcing that is it an Ayurveda lifestyle [17].

Deviation from Ayurvedic Practice

Ayurveda system is scientifically based. The effectiveness is not limited to only medicines but also extends to therapies. Ayurveda classically explains panchakarma as equivalent to surgery. Panchakarma is set of procedures and just not oil massage. Ayurveda also speaks about other branches like Rasayana, vajikarana, kaya kalpa, etc., in addition to Panchakarma. Panchakarma is not prescribed for all it has its own limitations. Due to the usage of name panchakarma for oil massages, Ayurveda has become as massage therapy. There

are more than 30 therapies that come under Panchakarma. Abhyangam is one of the common practices popular all over the world. Just using any of herbal oil for massage does not fulfil the purpose of the receiving the benefits of Abhyangam mentioned in Ayurveda. There is a specific time allocated for the Abhyanga, i.e. massage in the morning hours or during any illness before 12 noon or between 3 pm to 6 pm, i.e. before sun set, but in spa and parlours they do massage at any time in a day or even night many places. Shirodhara (pouring oil as a stream on the forehead) is the second most popular therapy after Abhyanga. Many people practice it in the wrong way which may lead to adverse effects

Massages are not to be given after eating, but it is not heeded to and conducted any time even after eating. Also there is a technique mentioned in Ayurveda about massages which has downward movements similar to muscles in the body, while in spas and many other places termed as Ayurvedic massage centre, massage strokes are haphazard or unregulated. People should know that Ayurveda is a science of medicine where people can use the Ayurvedic medicines and therapy to prevent, treat, manage or cure the diseases and also to get rid of symptoms or ailments. Such holistic science has been promoted as only massages by many therapy centres and many therapists which should be avoided. It would be ideal if the Abhyanga or massages are used as a part of therapy after the consultation with Ayurveda physician as per the condition of the person in perspective of preventive or curative

Steam is not advised in Ayurveda for head. Rightfully in Ayurveda centres the steam chamber is provided with a an opening to keep the head outside. Unlike that, places claiming to be Ayurveda massage clinics have sauna bath or steam chamber where whole body including head is inside the steam chamber which deviates from the principle of Ayurveda.

Remedial Measures

Awareness and Education

In the light of the above mentioned malpractices under the mask of Ayurveda, it is the need of the hour to impart awareness and education to the general public about Ayurveda viz. information about the right educational qualifications, how the Ayurvedic products (medicines and food) are being regulated and what care is being imbibed into conducting research in Ayurvedic sciences.

Educational Qualification and Regulations

Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery- B.A.M.S.) qualifies an individual to practice

Ayurveda In India, which includes four and half years of course curriculum and one year of intense training. Ayurveda also has post graduate course in 16 specialization and it will be another three years of extensive training programs. The National Commission For Indian System of Medicine is the statutory body constituted under NCISM Act, 2020 to provide for a medical education system in Indian system of medicine to ensure transparency and enhance quality of educational institutions of Ayurveda, Siddha, Unani, Sowa-Rigpa and Homeopathy [18].

Certificate Courses/Online Courses

In addition to undergraduate, post graduate and doctoral programs in Ayurveda, short term certificate courses are being offered by many institutions [19]. Many online courses are also available for learning the Ayurvedic life style.

Research

Research in Ayurvedic sciences is also attend to and overseen by the Government to ensure quality scientific practices. Accordingly under AYUSH Ministry the Central Council for Research in Ayurvedic Sciences (CCRAS) oversees the promotion of research in Ayurvedic sciences [20].

Ayurvedic Medicines Regulation in India

As per the Drugs and Cosmetics (D&C) Act 1940 and Rules 1945, Quality Control and issuance of drug license of Ayurveda, medicines is vested with the Central Drugs Standard Control organization (CDSCO). Regulatory Officers of the Central and State Governments enforce the legal provisions for Ayurvedic medicines. Rule 158-B in the D&C Rules 1945 provides the regulatory guidelines for issue of license to manufacture Ayurvedic medicines. Pharmacopoeia Commission for Indian Medicine & Homoeopathy (PCIM&H), under Ministry of AYUSH lays down Pharmacopoeial Standards and Formulary specifications for Ayurveda, drugs within the ambit of D&C Act, 1940. There are presently 55 Drug Testing Laboratories for quality testing of Ayurvedic medicines and raw materials [21]. Certification for Ayurvedic medicines as per WHO/CDSCO/ Quality Council of India (QCI) guidelines is facilitated respectively. Pharmacovigilance system for safety monitoring of Ayurvedic medicines has also been initiated in India National AYUSH Mission to strengthen quality control.

Ayurvedic Food

Ayurvedic food quality and safety is also under monitoring. The Food Safety and Standards Authority of India (FSSAI) released the Food Safety and Standards (Ayurveda Aahara) Regulations, 2022 notified in the Gazette. All India

Institute of Ayurveda (AIIA) conducted lectures and camps to educate, create awareness and propagate significance of Ayurveda Ahara in nutrition. This is a milestone in the field of Ayurvedic sciences in India wherein regulations have been framed for Ayurvedic foods prepared as per the recipes, ingredients and processes described in authoritative Ayurveda books [22].

Ayurveda Day Observation

To create awareness of Ayurvedic system of medicine, promote and globalize this ancient practice towards holistic health, the National Ayurveda Day was declared to be observed for the first time in 2016 on the 28th of October. Dhanwantari Jayanthi is being observed as National Ayurveda Day. The Ministry of AYUSH celebrated 10th November 2023 as Ayurveda Day this year with theme 'Ayurveda for one health – Ayurveda for everyone on every day'.

Thus by the awareness and education, people would choose wisely the correct ayurvedic products and practices and be conscious/cautious of about misleading ones.

Vigilance

Apart from the awareness measures mentioned in the previous section, the other strategy to address fake Ayurvedic practices/ products is by implementation of regular and strict monitoring to nab culprits involving in such rackets. The central and state Regulatory bodies Secondly, any centre claiming to provide Ayurvedic therapy or services should be made mandatory to be associated with a registered Ayurvedic practitioner. The license of the registered practitioners too has to be renewed on a regular basis. Inspections for personnel, facilities and products should enable removal of fake or substandard and harmful ones. Thus it would help uphold quality ayurvedic medicine.

Conclusion

The global Ayurveda market is valued at 9.2 billion USD for the present year and is likely to escalate to 26.16 billion USD [23]. With such rising demand, it is imperative that Ayurvedic science and medical practice maintain high standards and quality. It is estimated that there are around 4 lakh registered Ayurveda practitioners in India [23]. In spite of regulations in place there continues to be reports related to malpractices and fake medicines. Thus on one hand public awareness towards Ayurveda has to be promoted by authorized personnel and on the other hand licensing for practice and approval of products has to be very stringent. Vigilance has to be stepped up as well. These regulations would help to keep up the prestige of Indian traditional system of medicine and avoid malpractices and bad fame for

Ayurveda [24].

References

1. (2001) The Ayurvedic Pharmacopeia of India. 1st(Edn.), Ministry of Health and Family Welfare, Department of Ayush, Government of India, Delhi, 1(1): 1-183.
2. Swami Sada Shiva Tirtha (1998) The Ayurveda Encyclopedia Natural Secrets to healing prevention and longevity. 1st(Edn.), Sri Satguru Publications, New Delhi.
3. Cambron JA, Dexheimer J, Coe P, Swenson R (2007) Side-effects of massage therapy: a cross-sectional study of 100 clients. *J Altern Complement Med* 13(8): 793-796.
4. Johari H (1996) *Ayurvedic Massage Traditional Indian Techniques for Balancing Body and Mind*. Vermont. Inner Traditions Bear & Co.
5. The New Indian Express (2023) Raids on illegal massage centres and spas in Kochi; two booked.
6. Thakur VA, Raneev Kumar, Suresh, et al. (2014) Unauthorized Ayurvedic Tent Houses/Khaandani Dawakhana Prevailing In Dev Bhoomi Himachal Pradesh In India - A Research Survey. *International Journal of Novel Research in Engineering & Pharmaceutical Sciences* 1: 47-51.
7. The times of India (2023) Quack held for fake medicine sale in Maharashtra.
8. Hindhustan times (2023) Fake Ayurvedic doctors' racket busted by STF in Uttarakhand; three arrested.
9. The print (2023) Three held for cheating patients online in name of Ayurveda treatment.
10. Frawley D *Ayurvedic Dairy: The Raw Story on Milk, Yogurt, and More*.
11. Paudyal B, Thapa A, Sigdel KR, Adhikari S, Basnyat B (2019) Adverse events with ayurvedic medicines-possible adulteration and some inherent toxicities [version 3; peer review: 2 approved, 1 approved with reservations]. *Wellcome open research* 4: 23.
12. Deccan Herald (2021) Gang selling fake Ayurvedic medicines on orthopaedics arrested.
13. ANI (2023) Delhi Police busts gang involved in sale of fake Ayurvedic medicines; 10 arrested.
14. FDA (2023) Information consumers and patients drugs fda warns about heavy metal poisoning associated certain unapproved Ayurvedic drug products.

15. National Ayurvedic Medical Association.
16. National Center for Complementary & Integrative Health Ayurvedic Medicine: In Depth.
17. California College of Ayurveda (1995) World of Ayurvedic Medicine.
18. National Commission For Indian System Of Medicine (2020) Rules & Regulations.
19. National Institute of Ayurveda (2020) Academic.
20. Central Council for Research in Ayurvedic Sciences.
21. Press Information Bureau (2018) Ministry of AYUSH has published Good Clinical Practice Guidelines for conduct of clinical trials on Ayurvedic, Siddha and Unani medicines: AYUSH Minister.
22. Press Information Bureau (2022) Ayurvedic Aahar Products.
23. Market Research Future (2023) Ayurveda Market Research Report.
24. Pharmabiz, News Details, Homoeopathy.

