



The Motives behind the Skepticism of Conventional Medicine Advocates towards Traditional Persian Medicine: An Expert Opinion

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Abstract

The conflict between conventional medicine and traditional medicine is an issue worldwide. Various factors contribute to this dissent. In our study, we have explained that there are several denunciations about traditional medicine mentioned by proponents of conventional medicine. A search of important databases utilized related keywords to describe this purpose. Furthermore, the main Persian medicine resources were reviewed. Some critiques are because of a knowledge gap between ontology and epistemology of complementary medical approaches and conventional medicine. The other issue is the inadequate self-presentation of traditional medicine modalities to unwrap its obscure points for contemporary paradigm advocates to promote its points of strength. Traditional and conventional medicine share many abilities, but they cannot address all healthcare requirements alone. If we delineate medicine as a distinct system, it is a knowledge-based art for palliating physical and mental pains, and the traditional/conventional classification of medicine and separating these two schools is the first terrible impediment. It is believed by many that personalized medicine improves the management of patients. To achieve medicine's true objective - preserving and restoring health - we should move towards integrative medicine and validate patients' priorities and human values. The objective of this viewpoint is to enhance health awareness in both academia and the public sphere.

Keywords: Holistic; Mizaj; Modern medicine; Positivism; Pseudoscience


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Introduction

It can be difficult for a physician who has been trained in conventional medical schools to use traditional medicine's diagnostic tools in dealing with patients. A bridge between conventional and traditional approaches is necessary for every physician who wants to use the benefits of both schools at the same time, given the importance of complementary and alternative medicine (CAM) as a societal phenomenon [1]. The World Health Organization (WHO) defines traditional medicine as "the sum of knowledge, skills, and practices based on theories, beliefs, and experiences indigenous to different cultures" [2]. The conflict between conventional medicine and CAM is a global issue that is not restricted to certain areas of the world. Different regions of the world's unique characteristics, including culture, beliefs, economic issues, and political strategies, contribute to the impact of this conflict [3]. Although the demand for CAM is increasing in almost every country, the infrastructure and resources for support and provision of this demand are not fully provided by health providers in Iran because of deep dissent between the forerunners of traditional Persian medicine (TPM) and conventional medicine [4]. TPM is one of the oldest CAMs and has been practiced since about 7000 years ago [5]. To understand the significance of collaboration, it is important to evaluate the relationship between traditional and conventional medicine and identify the causes of their conflict. This study aims to describe several aspects of existing conflicts and skepticism toward TPM and provide an appropriate viewpoint in medicine as an expert opinion.

Methods

The methodology set out the research questions and concerns that existed about the survey. Electronic databases including PubMed Central, MEDLINE, Scopus, Science Direct, Web of Science, and Google Scholar were searched using the keywords "conventional medicine, modern medicine, traditional medicine, integrative medicine, complementary and alternative medicine, Persian medicine, personalized medicine, evidence-based medicine, Islamic medicine, pseudoscience, science". The search field was title, abstract, and keywords. The Boolean operation "OR" and "AND" was used between some search items to combine them. In addition, the main sources of TPM including The Canon of Medicine, Kholase Al-Hekmat, and Zakhire Kharazmshahi were studied. Finally, the gathered information was presented.

Results and Discussion

Sources of conflict

Different philosophical basis and origins

The context in which a school is derived determines the

rules that govern a discipline. Therefore, the science that is created in a spiritualistic world is not the same as the science that is developed in a world with different basic and regulatory requirements [6]. TPM is founded on natural philosophy, which is closely linked to theistic philosophy; it is a sub-discipline of *Hikmat* also known as Islamic philosophy. In this school, the soul is a substantial thing that governs the body, and consequently, the soul manages the body and maintains the body's health through its minister –nature or *tabi'at* – that is the sober force of the body [7]. The physical body is the primary focus in the current approach to medicine, while the mind is subordinate to it. The conventional approach to medicine does not account for what happens beyond death, as the mind remains alive for as long as the body remains alive. Avicenna's transcendental *Hikmat* states that the soul – *nafs* – is substantial and responsible for the life and survival of the physical body. The relationship between spirit and body is analogous to that of a lord and a bondservant; the lord employs the enslaved individual to realize his full potential. The soul is the primary sober force in the body that governs and manages physical and mental ailments [8]. Jorjani, a great medieval Iranian physician, believed that the psyche could be influenced more profoundly and swiftly by both internal and external stimuli than the body [9]. TPM requires a complete medical history and physical examination to achieve a true medical diagnosis. The focus of TPM is on approaches, individuality, prevention, nutrition, and prescribes herbal medication and manipulative therapies [5,10]. Four qualities, including hotness, coldness, wetness, and dryness, serve as the cognitive cores of TPM (will discuss later in 1.2. topic). Avicenna's interpretation of four qualities is more applicable than Galen's humoral approach, which considered four humors – sanguine, phlegm, bile, and black bile – to be the fundamentals of all medical diagnoses. TPM becomes more imaginable and interpretable by emphasizing four qualities, even though Avicenna's method used four humors as a diagnostic tools [8,11].

Different personalized approach

Personalized medicine is currently establishing new viewpoints to improve approaches [12]. Patients are evaluated based on their individual characteristics, which have an impact on disease presentations and treatment strategies in personalized medicine [13].

To consider a personalized approach, pharmacogenomics, nutrigenomics, metagenomics, and other related factors should be taken into consideration [14]. Genomic research assists in improving clinical care, comprehending disease etiology, and determining the most appropriate treatment with maximal clinical response and minimal side-effects for a specific individual [15,16]. Moreover, the absorption, effectiveness, and side-effects of medications vary among patients. To obtain the simplest and most cost-effective methods with the highest success rate,

researchers are seeking new methodologies [16]. This new way of thinking in conventional medicine is in line with the diagnostic and treatment principles in TPM regarding the concept of *Mizaj* (temperament) [13]. *Mizaj* is determined by a set of 10 criteria that take into account both physical and psychological factors. These include palpation, muscle and fat mass, hair characteristics, skin color, body shape, the speed of being affected by the four qualities, sleep and wakefulness, physical activity, quality of waste matters, as well as mental states. Therefore, each person is classified into either four simple qualities (hot, cold, dry, wet), or four complex qualities (cold - wet, hot - wet, cold - dry, hot - dry), or moderate *Mizaj*. Every person and organ in the body has its own unique *Mizaj*. *Mizaj* imbalance can cause diseases [13, 14]. The *Mizaj* of two individuals has not been identical, as is the case with their fingerprints. Proper therapy requires consideration of patients' *Mizaj*, severity of disease, and current medications [15]. Diagnostic criteria for *Mizaj* have been standardized by TPM researchers in recent years, primarily through questionnaires [13].

In both *Mizaj* and personalized medicine perspectives, diagnosing measures is based on the importance of individual differences. Determining the *Mizaj* may be considered as noticing the phenotypical characteristics for acquiring genotypical characteristics in a short time [14,15]. A common approach between traditional and conventional medicine can be achieved through personalized medicine [17].

Different perspectives on health

Medicine was defined by Avicenna as the science that preserves and restores health [8]. However conventional medicine is disease oriented. The fundamental difference between the reductive perspective of biomedicine and the holistic perspective of TPM on health and disease is attributed to different perspectives on health. Determining the concepts of health and well-being also presents similar difficulties. The attempt to simplify the complex and contentious concept of well-being by defining it as optimal psychological functioning appears over-simplistic [18].

Skepticisms

Pseudoscience

Scientific methods are the best means of obtaining the truth. The use of accurate observation, experiments, measurements, mathematics, and repetition are all part of the standard methods. Scientists reject a hypothesis that has not been validated by experiments. It is often impossible to test a pseudoscientific theory. Pseudoscientists typically start with their intended conclusion and then try to verify it. Experiments that do not support their favorite theory are rebuffed by them [19]. Academicians believe that every approach to medicine other than the biomed-

ical paradigm is quackery and pseudoscience. Others propose that in traditional medicine, quantitative research be conducted alongside qualitative research to approximate the languages of both modalities. When we agree to discuss the concepts of traditional and conventional medicine, we unintentionally fall into the category of conventional medicine. If we don't, we won't be able to discuss medicine in general without being accused of believing in pseudoscience [1]. Positivists rely solely on sensory experience for all medical data. On the other side, traditional proponents believe in the immense complexity of the human body claiming that they have a broader look at the semiology of diseases and tailoring more personalized modalities accordingly [20]. The most fundamental initial question that any newcomer to traditional medical practice may ask is, "Does it work?" Millions of times, repeating this inquiry has rarely resolved any problem or altered the situation. A sociological inquiry that is more relevant would be 'How does it work?' [1]. CAM's effectiveness has been the subject of numerous articles, despite the controversy surrounding it. There has been a push to increase research, standardize, and regulate this field [5,21].

Non-scientific therapists

TPM is a dichotomy between intense, unquestioning excitement and misinformed skepticism, with one accepting it enthusiastically and the other dismissing it with doubt. A hazy environment that befuddles any impartial adjudicator is due to the high proportion of quackery and illiteracy among non-conventional medicine practitioners. TPM modalities are disbelieved by many academics because of the bizarre claims made by some jobber therapists [1]. In Iran, a doctoral program was defined for physicians and pharmacists in the fields of TPM. These courses taught in the main Iranian medical universities. Only graduated physicians or pharmacologists are eligible to participate in the national entrance exam. After being successful in an interview, students take part in a four-year PhD course. The first 2 years consist of learning the basic principles of diagnosis, therapy, and manual intervention, though the second 2 years focus on clinical visits and dissertation [5].

Inappropriate herbal prescription

A primary recommendation for TPM is the use of simple herbal medication with a lower dose. Compound herbal medication and high-dose herbal therapy are not prescribed if there are no acceptable indications [22]. TPM's foundation is in natural philosophy, *hikmat*, and TPM's therapeutic approach to every patient is determined by their unique mental and physical characteristics, *Mizaj*, and stamina. The medical treatment is starting based on the aforementioned measures. In the first place, it is important to follow a step-by-step approach to achieving health through simple foods, safe herbal medicines

(Materia Medica), and compound drugs (Qarabadin) in a wise manner.

Side effects of phytotherapy

The use of certain herbal medications is harmful (such as hepatotoxicity) or ineffective in certain diseases [23]. More evidence is needed to determine the methods and indications of herbal therapy, as some CAM practices may have side effects and herb-drug interactions. Additional clinical trials are necessary to assess the benefits, limitations, adverse drug reactions, and the potential for synergy with conventional therapy [24]. The recommendation is to support successful practices and refrain from using harmful herbs and procedures [25]. CAM should be a part of the knowledge base of physicians so that they can be aware of the contraindications, interactions, or undesirable effects of herbal medicines during their medical practice. However, there is still a shortage of training and knowledge about it [5]. Articles related to CAM, such as case reports, review articles, and clinical trials, contain multiple reports of side effects of unauthorized consumption of herbal medicines [26,27].

No measurable instruments

The theory behind CAM and conventional medicine is vastly different, resulting in a disparity in diagnosis, symptomatology, and therapeutic approach [28]. For instance, a patient with a normal liver function test and a clinically healthy state from the point of a conventional physician may need a tonifying agent in the traditional approach, and it may even look ludicrous from the sight of a physician educated in Western medical schools, unfamiliar with CAM modalities [29]. CAM's clinical diagnosis of pre-pathologic stages of diseases can be a challenge for conventional physicians [29]. By examining a patient's pulse or tongue, a traditional practitioner may suggest that they are at risk for developing gastrointestinal or liver disease [8, 9]. In conventional medicine, it may appear bizarre that a procedure cannot be measured and instrumented. The CAM physician may not describe his/her procedure by current scientific measures. The traditional physician asserts that studying the basics of CAM is necessary for comprehending CAM modalities; however, conventional physicians believe that learning in an outdated school is merely a waste of time. In opposition, this gap gives charlatans a place to take advantage of these hardly solved conflicts - among real current health practitioners - and increase their business freely distant from any disturber!

Being procedure-oriented

The objective of CAM procedures is to achieve health within the shortest possible time, at the lowest possible cost, and with the fewest side effects. Utilizing invasive procedures and overusing simple manual interventions

such as wet cupping, venesection, etc. without any acceptable indication or poor evidence is controversial and even threatening. Expert practitioners with proper indication should perform this manual intervention [22]. CAM focuses on lifestyle modification as the first therapy choice, followed by drug prescription, and manual intervention as the last important step [8,30].

No evidence-based approaches

The physician is responsible for providing the best possible medical care [31]. Sackett and colleagues defined Evidence-based medicine (EBM) as a "systematic approach to clinical problem solving which allows the integration of the best available research evidence with clinical expertise and patient values". EBM involves the practice of medicine based on peer-reviewed guidelines established through clinical trials. It seeks effective and safe therapy for medical dilemmas [32]. The methods used by TPM practitioners for diagnosis and therapy is somewhat justified by the results of clinical trials, particularly in the new epistemology of EBM. TPM specialists must use high-quality research-based data during clinical practice. Iranian researchers have published a considerable number of EBM studies related to TPM to integrate TPM with conventional medicine. These papers can be divided into six categories: historical study, fundamental research, lifestyle modifications, clinical hypotheses, reformulations and standardization of medications, and efficacy and safety analysis [5].

Despite the merits of EBM, it diminishes the importance of physicians' judgment in managing diseases. In EBM, a single person is not an entire trial and focuses on a group of people, so the differences between patients are not considered [33], although personalized approaches is very prominent in TPM [34].

Not publishing the truths

To maintain scientific integrity, it is necessary to publish counter-arguments against false beliefs. [35]. To enhance the perception of CAM among conventional clinicians, it is crucial to critique the unsafe and pseudoscientific approaches of non-experts and report the risks of unauthorized use of CAM modalities. In addition, if certain methods were successful in the past but are no longer safe or practical today, they should be prohibited. Traditional practitioners should steer clear of using outdated, dangerous, and unwelcome modalities. Modifications should be made to herbal use based on new research. To enhance its academic relevance, scientific criticism and evaluation of CAM effectiveness should be conducted with benevolent intentions and in accordance with appropriate research projects [36]. Increased knowledge of human biology is an unavoidable issue, and continuing to use some outdated, risky methods to treat acute and chronic diseases where there are standard, safe, and affordable treatments in conventional medicine looks

unreasonable.

Islamic medicine as a non-academic medicine

TPM existed for many decades before Islam, but it evolved under the influence of Islamic spirituality to become a universal medical school that dominated the world for several decades. [37]. Due to the absence of evidence-based evidence or clinical trials, it is not scientifically possible to use homemade and unapproved herbal medications for treatment and health maintenance. Embezzling religious beliefs to deceive and mislead individuals can lead to serious risks for many individuals [38]. The combination of two dichotomies that come from completely different and distinct sources increases the uncertainty and opens the door for charlatans. Medical interventions based on religious hadiths and traditions used by non-physician practitioners are harmful to both religion and traditional medicine. Transcendence has a negative impact on experimental sciences and diverts scientific reasoning towards pseudoscience.

Role of patients' beliefs to choose CAM

CAM is not a source of adventure or risk-taking for individuals. Patient epistemic beliefs about a medical plan are a crucial factor in medical practice, as they make the final decision on whether to accept or deny a medical regimen. Defining which medical intervention is more appropriate for their current medical problem is crucial to their epistemic beliefs. Frequently, laypeople are unable to pick the most appropriate medical intervention proposed by the media or various modes of providing health care [39].

What valuable issues should not be ignored in medicine?

Despite some criticism from conventional practitioners, there are some viewpoints should not be ignored.

Collaboration in a reasonable manner

Conventional medicine is not a panacea for all medical problems [28]. In certain fields of medical practice, CAM's diagnostic tools offer a better understanding and clarification of certain medical dilemmas than the conventional approach [40]. Functional, idiopathic, and some psychosomatic disorders are the most common cases where conventional medicine fails. Holistic and personalized medicine may both address some shortcomings of conventional medicine in the aforementioned areas [22]. The WHO advocates for the integration of CAM into the health care system. The incorporation of CAM into a national medical system poses multiple challenges, including rationality, access, safety, efficacy, and national regulatory frameworks [4].

The clash of ideas often leads to the loss, deficit, and squandering of priceless resources such as time and energy. To mitigate the situation and solve chronic

conflicts, traditionalists and conventionalists should show mutual respectful collaboration and refrain from condemning each other. The first step is to rid themselves of fanatics and prejudices. Each party must prioritize the safety and financial viability of their suggested interventions. The patients' accessibility to medical services, whether conventional or alternative, is crucial. Integration promotes the best care for patients by selecting the best route to wellness; however, blind integration of two modalities may also be inadvisable, as it may confuse patients and increase the risk of a drug interaction [28]. Hufford asserted that we should take into account the limitations of science, such as objectivity, fairness, autonomy, resource availability, and religious tolerance when evaluating CAM studies and even conventional modalities with precision [41]. By utilizing cutting-edge research to investigate conventional or CAM interventions, we can bridge the gap between opponents and supporters of CAM modalities. CAM requires more data, so it is necessary to conduct more qualitative and quantitative studies [28,42].

Health officials can achieve a balance between two extremes by focusing on community interest in CAM modalities through the Knowledge, Attitude, and Practices (KAP) study. KAP studies indicate a trend toward CAM in both developed and developing countries, indicating that positive aspects of CAM entice people from diverse cultures with varying levels of concern to use it as a secondary or even primary method of resolving health problems. The use of CAM is on the rise in Iran, just like in other countries [5]. But the integration of traditional and conventional medicine in Iran at the academic level is not satisfactory, and patients tend to use CAM clinics during the late stages of their diseases [43].

Integrative medicine has emerged as a new strategy in various communities due to the growing trend towards CAM. In Japan, India, and other countries, CAM is part of the national health care system [42,44]. Integrative medicine advocates a patient-centered or healing-oriented approach to medical practice through the integration of conventional and CAM modalities [45]. The willingness of conventional medicine practitioners to adopt CAM is necessary for integration [40]. In integrative medicine, a physician is well-versed in conventional medicine and makes the best decisions for patients based on the available evidence, whether from the most recent medical research or ancient traditional texts [46].

We advocate the concept of integrative medicine encompassing conventional or CAM, as well as spiritual medicine if we want to take into account the foundation of EBM which is patients' priorities and ethics [47]. However, the current integrative medicine model requires some modifications to make it appropriate for our community; the story is essentially the same regarding the privileges and obstacles associated with this novel approach to medical practice.

Medicine as a unit art

The goal of medicine is to benefit patients. Harming them is not permitted, regardless of the clinical manifestations of disease or patients' claims. The aim of medicine is to find the most efficient way to treat diseases and alleviate the pain of patients. Medicine is medicine, regardless of its conventional or traditional form. It is both an art and a science to help people alleviate their pain by following the healing guidance of knowledgeable physicians [28]. The traditional/conventional classification of medicine is a major hindrance to peace between various schools of medicine, as it serves to divide society and reinforce fanaticism and prejudice rhetorically.

Education

By improving people's knowledge, the connection between the care systems can be improved [28]. Integration allows patients to benefit from both modalities while remaining confident in the relative safety of the interventions. Patients are the ones who end up losing in any conflict between CAM and conventional medicine that is fueled by extremists from both groups [42].

Conventional and complementary medicine integration is impossible without an epistemological agreement. In both schools, it is important to define health epistemologically, and if it is, it is necessary to consider the following steps, diagnostic models, and medical strategies. It is important for medical students to be familiar with the culture of their ethnic region. It helps to understand CAM better and improve their relationships with terms, principles, and approaches of the considered CAM modality [5]. Conventional medical schools are the foundation for academic medical education even in countries with their own CAM. The framework of integrative medicine has the ability to integrate the methods and tools of conventional medicine with the fundamental principles of CAM [48]. CAM must be recognized and acknowledged as a treatment option alongside conventional medicine within the current healthcare system [40]. Health officials should support referral centers and provide tuition for traditional practitioners to facilitate CAM services [43]. By gradually advancing the medical curriculum, we can address the aforementioned gaps and fulfill the public's needs for medicine. It is necessary to modify the processes that enable an enthusiast to become a medical student and physician. A qualified medical doctor is someone who stands up for humanity and is educated in medical knowledge. A medical professional who adheres to medical ethics and prioritizes the mental, spiritual, and physical health of their patients. The authority of a qualified medical doctor extends beyond conventional or traditional approaches. A genuine physician has the ability to utilize any safe and standard method that is

suitable for the patient's current and emotional state.

Conclusion

Integration of conventional and complementary medicine is not feasible without epistemological agreement. Health should be precisely defined in both schools epistemologically, and if it is, then the following steps, diagnostic models, and medical strategies should be considered. Medicine has no meaning other than determining the best technique to treat diseases and relieve patients' suffering. We should notice the conflicts mentioned above and try to solve them. Existing skepticisms create a great gap between conventional medicine and TPM if practitioners refuse to discuss them. Medicine is an art and physicians should integrate different approaches with their art, but without appropriate academic education is not possible. As a result, the curriculum of medicine should be promoted by integrative medicine to make the best decisions for patients.

Conflict of Interests

None.

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None.

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