

THE WORLD HEALTH ORGANIZATION'S PERCEPTIONS OF TRADITIONAL MEDICINE

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ABSTRACT

I investigate how the World Health Organization (WHO) perceives traditional medicine. The WHO has issued publications related to traditional medicine for decades, acknowledging and commenting on traditional medicine as a globally prevalent system of health care, and providing various guidelines and recommendations. I analyze those documents as well as a series of interviews with current employees within various departments at the WHO Headquarters in Geneva, Switzerland to see how the WHO perceives the array of pros and cons related to traditional medicinal practices, and with the aim of understanding the WHO's overall stance on the role of traditional medicine. Findings show the WHO treads carefully in regards to traditional medicine, as they do not want to publicly discredit a practice widely popular among constituents, nor blatantly support a potentially harmful practice. Generally, the WHO portrays a neutral or positively slanting opinion of traditional medicine through its publications. However, among employees and through subtle references in publications doubts about the practicality and value of traditional medicine become apparent.

INTRODUCTION

Communities around the world have practiced traditional medicine as a way to combat illness and injury for many years. Fossil records demonstrating human use of plants for medicinal purposes date from the Middle Paleolithic age, around 60,000 years ago (Fabricant, Farnsworth 2001). Today, traditional medicine is prevalent in many developing countries; some estimates claim 80 percent of the population in African countries uses traditional medicine. Recently, industrialized countries have also experienced a rise in popularity of traditional medicine, where approximately half of the population now regularly uses some type of traditional medicine (Bodecker, Kronenberg 2002).

This project investigates the World Health Organization's (WHO) stance on the role of traditional medicine, motivated by three central research questions. First, what aspects of traditional medicine does the WHO view positively and which, if any, does it view negatively? Secondly, to what extent does the WHO view traditional medicine as a collaborative or parallel system to conventional medicine and to what extent do they view traditional medicine as a competing system of health care challenging conventional medicine? And finally, what motivates the WHO's perception and presentation of traditional medicine in its publications and operations?

Within the United Nations, the WHO is the flagship authority for health. The WHO's responsibilities include: "providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends" (WHO 2011). Governed by 194 Member States, the WHO's agenda and policies are determined annually at the World Health Assembly (WHA). The WHO's agenda acts as the primary voice

for global health, influencing policy and perceptions of health around the world. The health issues dealt with by the WHO are of relevance to all member states, for in addition to economic, technological, and social implications, the WHO's work encounters health challenges that respect no national borders or geographical separations. The WHO presents the collective forum necessary to manage health as a global issue.

Traditional medicine is a term applied to a wide array of techniques, and so is defined in a variety of ways and can be used interchangeably with the terms complementary or alternative medicine. This paper uses the definition of traditional medicine provided by the WHO, "the sum total of knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures that are used to maintain health, as well as to prevent, diagnose, improve or treat physical and mental illness" (WHO Media Centre 2008).

The wide range of traditional medicine practiced today includes herbal treatments, manual therapy (e.g. massage), and ritualistic medicine (Waldrum 2000). Traditional Chinese medicine, present in China for over 2,000 years and now popular in other places around the world with its techniques including herbal medicine and acupuncture, is evidence of the economic force and global presence of traditional medicine in its production of \$48 billion worth of herbal drugs each year, exporting \$3.6 billion worth (Patwardhan et al. 2005). Ayurveda is another compilation of medical practices. Established in India and some neighboring countries of Southeast Asia, the basis of Ayurveda is the belief that the human body is one with the universe (WHO 2010). Other types of traditional medicine recognized by the WHO include: naturopathy, based on philosophical principles emphasizing holistic and minimalistic techniques linked to ancient Greece; Nuad Thai, a type of manual therapy treatment that originated in Thailand; osteopathy, a series of therapeutic manual techniques established in the United States; Tuina,

developed in China with a reliance on manual techniques; and Unani medicine, which incorporates humoral theory (humors in the body) and began in Greece (WHO 2010).

Dealings with the traditional medicine system are complicated due to the wide array of practices included in the system. One may accept herbal remedies more easily than ritualistic medicine, for instance (Waldrum 2000). Western societies today are aware of the proven antioxidants and health benefits resulting from green tea. The tangible connection between a traditional herbal practice from China and this commonly accepted, commercial Western product is evident (Cheng 301). This product's ability to crossover cultures successfully may suggest why herbal remedies are easier to acknowledge. Yet, for argument's sake, how different are ritualistic practices such as treating humors of the body than visiting psychiatrists to discuss conquering one's inner demons? While the differences between conventional and traditional medicine may seem stark when viewing the health care systems from the surface, some commonalities do underlie these culturally different approaches to medicines.

Essentially, the two systems pursue the same goal: to improve the health of the patient. That underlying principle alone creates a strong tie of similarity between the two systems. In general, however, the two systems fundamentally view disease and health in different ways. Conventional medicine focuses on disease as a malfunction of a particular function of the body resolvable through treating that isolated mechanism, whereas traditional medicine views disease more holistically as an imbalance of interconnecting functions within the body (Houghton 1995). Yet, many conventional medicines derive from traditional medicines, herbal remedies, or treatments. In fact, almost 30 percent of pharmaceuticals prescribed derive from flowering plants (Houghton 1995). Antimalarial drug advancements derived from artemisinin – a plant used in traditional medicine in China – presents a well-known example of traditional medicine's

influence on drug discovery (Fabricant, Farnsworth 2001). While the form and mode of delivery may change between systems, the medicine's acting agent can be strikingly similar since many modern medicines use "active principles" of traditional medicines as their base (Houghton 1995). This potential for traditional medicine to be a resource for new drugs may become increasingly important as antimicrobial resistance becomes more prevalent against conventional medicines (Norry et al. 2005).

LITERATURE AND THEORY DEVELOPMENT

Due to the prevalence of traditional medicine today, and its role in the realm of global health, this project seeks to clarify how the WHO perceives traditional medicine. A variety of existing literature on traditional medicine provides a contextual lens to contemplate the WHO's position.

Prevalence of Traditional Medicine

Traditional medicine is a common practice around the world today, especially in developing nations, because of its affordability, accessibility, cultural familiarity, and the perception of natural processes as more effective and/or safer than synthetic pharmaceuticals (Elvin-Lewis 2001, Bodecker, Kronenberg 2002). In some of these instances, traditional medicine is the only option people have for health care. However, even in some instances, following the introduction of conventional systems, community members continue to opt for traditional medicine due to their perceptions of conventional medicine as expensive, dangerous, or illegitimate (Assan et al. 2009, Graz 2011). In more industrialized countries, increased side effects from conventional medicines and increasing microbial resistance contribute to the renewed interest in traditional medicine (Patwardhan et al. 2005).

One might hypothesize the WHO considers traditional medicine a feasible method of granting at least some degree of health care access to people who may not have access otherwise. If this traditional medicine is exclusively available and will at least do no harm, the WHO would likely prefer its use to inaction.

Traditional Medicine and Conventional Medicine

Traditional and conventional medicines do overlap and interact to a certain degree. Complicating the argument for traditional medicine as a resource for drug discovery with great potential for use in research and development, a debate has developed about how to respect and reward, rather than exploit, traditional knowledge if it provides medicinal value (Gupta et al. 2005, Graz 2011). Some countries already have national policies incorporating both traditional and conventional medicine. These countries use two general models: an integrated approach – integrating both traditional and conventional medicine into one collaborative system – or a parallel approach – treating each system of medicine independently. The integrated approach is visible in China and Vietnam, whereas India utilizes the parallel system (Bodecker 2001). Traditional medicine in China is highly institutionalized, as about 95 percent of China’s general hospitals have their own traditional medicine departments (Patwardhan et al. 2005).

Cultural Aspect of Traditional Medicine

Traditional medicine is deeply intertwined with cultural practices and social norms in many instances. A study from South Africa promoting integration of conventional and traditional medical practices found that 70% of patients prefer traditional practitioners – a significant number maintain this preference even for life-threatening medical problems (Puckree et al. 2002). Difficulties can arise when integrating the two systems since each has variant views on the cause and/or treatment of disease (Kayombo et al. 2007). For instance, within traditional medicine in

sub-Saharan Africa, common belief holds that disease is caused by witchcraft or sorcery, supernatural causes, or natural causes (Liddell et al. 2005). Since conventional practitioners generally do not attribute medical problems to supernatural forces, socio-cultural effects often cause patients in sub-Saharan Africa to prefer traditional healers (Kayombo et al. 2007). Some literature recommends training traditional healers in conventional medicine as a potential collaborative approach enabling better communication with patients to positively influence health care (Homsy 2004).

Yet, some parties perceive traditional medicine as inherently inferior or even misguided. For this group, traditional medicine is a highly subjective and symbolic cultural construction relative to the scientific, empirically based biomedical techniques of industrialized countries (Waldrum 2000, Bodecker, Kronenberg 2002).

Traditional Medicine Challenges

Some practitioners and academics maintain reservations with traditional medicine resulting from the lack of standardized regulation. As one study highlighted, a commonly held belief that herbal drugs are completely safe and do not cause negative side effects is not true. Some reference this as a reason to harmonize and improve current regulations relating to herbal medicines – implying more testing and standardized measurements of effectiveness to ensure safety and quality control (Calixto 2000).

A variety of studies on traditional medicine have found a spectrum of results regarding effectiveness of various practices. For instance, one study found that a combination of herbal medicine, acupuncture, and moxibustion – a healing tradition involving burning the mugwort herb (Medical Dictionary 2011) – seemed to be effective in treating infertility in Korea (Park et al. 2011). Another study found that using the traditional Arabic technique of couching – pushing

the lens of the eye out of alignment with the pupil (Medical Dictionary 2011) – in order to treat cataracts was ineffective, and even dangerous for patients (Bamashmus 2010). Aside from disparate efficacy reports, another difficulty arises in comparing the efficacy of different medical systems, because rarely would efficacy measures of one system represent the other system as accurately (Waldrum 2000).

Given the cultural context and varied discussion of efficacy, one might hypothesize the WHO generally supports traditional medicine proven to work effectively independently, or in conjunction with, conventional medicine. However, the WHO likely disapproves of traditional medicine acting as an insufficient substitute. Therefore, one might speculate the WHO may be more supportive of herbal medicine as a beneficial and affordable substitute than ritualistic medicine that may cause further health problems or denial of conventional medicine.

Understanding the Role of International Organizations

In considering traditional medicine within the context of the WHO, the existing body of literature on international organizations is useful in defining the basic structure and operating principles of the WHO. As Nielson and Tierney explain, the principal-agent model of international organizations considers member governments as the principals, and the international organization as the agent. The principals delegate to the agents, and leave the agents with a certain degree of autonomy to pursue established goals. However, the principals impose various institutional constraints to ensure agents act according to their wishes (Nielson, Tierney 2003). The constraints of member states can limit the autonomy of international organizations, interfere with their operations, ignore their dictates, or restructure and dissolve them (Abbot, Snidal 1998).

Interstate relations and collective action are advantages resulting from this model of international organizations. For instance, the WHO pools national contributions and cost sharing, although industrialized countries bear the brunt of the financial responsibility, to function effectively and efficiently on the global scale. The WHO's smallpox campaign highlights the benefits of the centralized action of an international organization. The WHO's global campaign against this contagious disease was more effective than decentralized efforts could be, preventing coverage gaps that would render the campaign ineffective (Abbott, Snidal 1998).

In addition, the ability of international organizations to act autonomously is imperative to their authority. As Barnett and Finnemore explain, the independent power of the organizations comes from both their legitimately granted legal authority, and their control over technical expertise and information (Barnett, Finnemore 1999). However, the aforementioned constraints limit this autonomy, as well as the need to balance desires of principals with disparate views. As a result, these bureaucracies often generate universal rules and categories that sacrifice diversity and particularistic concerns (Barnett, Finnemore 1999). The WHO experiences this difficulty of diverse interests and perspectives with its 194 different member states (WHO 2011).

This understanding of international organizations governed by principals with diverse interests leads to the hypothesis that the WHO may officially provide an unbiased presentation of traditional medicine as a prevalent global health care system, neither directly endorsing or dismissing traditional medicine in publications geared towards member states.

METHODOLOGY

This project used a two-part methodology to analyze how the WHO perceives traditional medicine as a health care system. The methods included 1) qualitative analysis of the WHO's

official publications related to traditional medicine, and 2) in-person interviews with relevant staff members of the WHO Headquarters in Geneva, Switzerland.

Qualitative Content Analysis

Using NVivo qualitative analysis software, I analyzed how the selected WHO publications, dating to 1978, framed traditional medicine. The publications ranged from guidelines to strategic plans developed by the WHO, to benchmarks for training for traditional medicine practitioners. Table 1 lists all coded publications, categorized by time of publication and general type.

Table 1: Coded Publications

<u>CODED PUBLICATIONS</u>		
Publication	Year Published	Type of Publication
World Medicines Situation 2011 – Traditional Medicines: Global Situation, Issues and Challenges	2011	Global Status Report
Benchmarks for Training: Ayurveda	2010	Guidelines (for practitioners)
Benchmarks for Training: Traditional Chinese Medicine	2010	Guidelines (for practitioners)
Benchmarks for Training: Naturopathy	2010	Guidelines (for practitioners)
Benchmarks for Training: Nuad Thai	2010	Guidelines (for practitioners)
Benchmarks for Training: Osteopathy	2010	Guidelines (for practitioners)
Benchmarks for Training: Tuina	2010	Guidelines (for practitioners)
Benchmarks for Training: Unani Medicine	2010	Guidelines (for practitioners)
WHO TM Strategy 2002-2005	2005	Global Status Report; WHO Strategy
National Policy on TM and Regulation of Herbal Medicines - Report of WHO Global Survey	2005	Report on National Situations

Guidelines on Developing Consumer Information on Proper Use of Traditional, Complementary, and Alternative Medicine	2004	Guidelines
Acupuncture: Review and Analysis of Reports on Controlled Clinical Trials	2003	Report on Analysis/Discussion
TM Growing Needs and Potential - WHO Policy Perspectives on Medicines	2002	Global Status Report; WHO Strategy
Legal Status of TM and Comp/Alt Medicine: A World Review	2001	Report on National Situations
General Guidelines for Methodologies on Research and Evaluation of TM	2000	Guidelines
Traditional Practitioners as Primary Health Care Workers	1995	Report on Analysis/Discussion
Report of the Consultation on AIDS and TM: Prospects for Involving Traditional Health Practitioners	1990	Report on Analysis/Discussion

The coding specifically identified positive and negative references to the usage, safety and effectiveness of traditional medicine. Special attention focused on references to conventional medicine to determine whether the approach to the systems was positive and collaborative, separate and parallel, or competitive. Appendix II outlines the specific coding scheme. This data was then analyzed for general trends regarding the WHO's perceptions of traditional medicine, and how norms surrounding traditional medicine at the WHO have evolved into their present form.

Interviews

I conducted eight interviews during the summer of 2011 with staff members at the WHO Headquarters in Geneva. The individuals came from various departments within the WHO that might have different perceptions of traditional medicine. Individuals working in programs ranging from access to medicines to patient safety, to terminology and classification of

medicines, among others, provided a diverse sampling with noteworthy insights. The interviewees work in Headquarters, and thus have a broader understanding of the WHO's presence in the realm of global health. The interviews determined how interviewees encountered traditional medicine in their work, their personal views of traditional medicine and its relation to conventional medicine, and their perceived role of the WHO in relation to traditional medicine. Appendix III presents the complete template of interview questions.

Limitations

One major limitation to this project is the lack of a random sample for the interviews. This sampling of individuals who willingly agreed to interviews provides interesting material, but one cannot justly extrapolate this sample to represent the entire organization, nor assume each individual represents their department's perspective. Additionally, this project was unable to fully understand and account for the politics surrounding the publications issued by the WHO. While this project suggests plausible inferences, the analysis is significantly limited in contextual and background information surrounding the publications.

DATA ANALYSIS: Publications

The WHO Headquarters in Geneva, Switzerland released the selected publications, and all include traditional medicine practices or practitioners in their titles. Publications from the WHO Regional Offices are not included, as different regions may have disparate views that are not representative of the organization at large. Theoretically, publications from Headquarters represent the organization's stance on globally relevant issues. The prolific traditional medicine department projects a public image encouraging individuals to form ideas about the WHO's official stance on traditional medicine.

The earliest coded publication reports extremely positively on a meeting from 1978 focused on the promotion and development of traditional medicine, calling for expansion in its use and development. The most recent publication is a relevant chapter from *The World Medicines Situation 2011* focused on traditional medicine and coauthored by two individuals, one being the head of the Department of Traditional Medicine at the WHO. This publication discusses the universal appeal of traditional medicine, the challenges in regulation and registration, the economic importance of the traditional medicine industry, and how the WHO is working to monitor and gather information for their next strategy on traditional medicine. This most recent publication is less obviously positive regarding traditional medicine, but still presents its importance, and signifies the WHO's involvement within the realm of traditional medicine. The other publications include guidelines on consumer information, the WHO's former traditional medicine strategy, the legal status of traditional medicines in countries around the world, etc. None of the publications question or frame traditional medicine in a negative light in their titles, simply presenting different aspects of an issue the WHO has been consistently involved with neutrally or with a positive slant.

Lack of Discussion of Efficacy

In publications, the WHO tends to avoid discussing efficacy. No publication focused on proving or providing evidence for the effectiveness of the traditional medicine discussed. Rather, they state what the traditional medicine is used to treat, and/or describe what the treatment entails. Interestingly, however, none of the publications explicitly states traditional medicine treatments are ineffective. The most recent publication, *The World Medicines Situation 2011*, actually states there is a growing acceptance among policy-makers that traditional medicine can be an appropriate and effective treatment for certain conditions (WHO 2011). The WHO does not

perceive their role as specifically encouraging or dismissing the use of traditional medicines, so they to work to enhance the quality of regulations and guidelines, rather than analyzing the actual treatment itself. Nine of the publications, including the majority of the benchmarks series, claimed the continued use of traditional medicine by generations over centuries implies some form of benefit resulting from its use. There is no clarification whether the benefit derives from efficacy, the placebo effect, cultural conditions, or other causes.

Varied Discussion of Safety

All publications discussed safety in regards to traditional medicine, but in different ways. Fourteen discussed the safety challenges facing use of traditional medicine, seven framed the issue neutrally or described an absence in data, and six suggested traditional medicine was safe. The description of challenges centered mostly on lack of regulation and/or information in regards to traditional medicines, as twelve publications referenced these types of challenges. The *Acupuncture Review* publication mentions traditional medicine as unsafe because it causes patients to neglect the proper conventional treatment. Approximately 13 percent of *The World Medicines Situation 2011* chapter on traditional medicine focused on safety, more than any previous publication. The earliest publication, from 1978, mentioned the issue of safety twice in 44 pages, noting the need for further evaluation. This might suggest a trend of the WHO being more concerned with safety now than in the past, or a greater awareness of safety complications or complexities involved with traditional medicine.

Discussion of the Benchmarks for Training Publications

In this series of seven publications, the WHO outlines benchmarks for training health care practitioners in specific forms of traditional medicine. All of these forms are either herbal remedies or manual therapies; the series does not discuss ritualistic medicine. The WHO does

not clarify whether this choice stems from monetary reasons, perceptions about effectiveness, or other motives. In the benchmarks, a key phrase is included, “Upon completion of this subject, students are expected to be able to describe and apply basic methods for diagnosis and clinical management of common conditions. They should be able to refer patients to other health-care professionals when required”. This phrase may speak to a greater issue, highlighting the need for traditional medicine practitioners to refer their patients to others, likely conventional medicine practitioners, when traditional medicine will not resolve the problem. The WHO may be subtly attempting to push traditional medicine towards conventional medicine, possibly signifying a perceived inferiority of traditional medicine.

Idealistic Presentation of Integrative and Collaborative Systems

Some publications call to the potential for collaboration between traditional and conventional systems, since both theoretically share the same end goal. For instance, the publication on *Traditional Practitioners as Primary Healthcare Workers* points to the possibility for integration of traditional beliefs with conventional concepts under the overarching goal of promoting health when teaching patients about prevention and treatment of illness. In the *WHO Traditional Medicine Strategy 2002-2005*, the text references a consultation held by the WHO in 1999 examining how to harmonize traditional and conventional medicine to achieve maximum health impact. However, in general this harmonization has not yet happened, with rare exceptions like China. This renders claims for a collaborative or integrative approach as rather idealistic, neglecting the complexities inherent in this approach. If the perception is indeed that traditional medicine is inferior, this suggests a collaborative or integrative approach might actually mean encouraging traditional medicine’s assimilation into conventional health care.

Discussion of Competing Relationship between Health Care Systems

Several of the publications state the relationship between traditional and conventional health care hierarchically. Three publications explicitly state conventional medicine's superiority. One publication attributed the preference of consumers for traditional medicine to their concerns about conventional medicine. *The Promotion and Development of Traditional Medicine* document refers to culture, "(traditional medicine) has certain advantages over imported systems of medicine in any setting because, as an integral part of the people's culture, it is particularly effective in solving certain cultural health problems" (WHO 1978, 213). The opposing argument was described in the *WHO Traditional Medicine Strategy 2002-2005*, although the WHO did not clarify whether or not they agreed, "Many allopathic medicine professionals, even those in countries with a strong history of traditional medicine, express strong reservations and often frank disbelief about the purported benefits of traditional medicine/complementary medicine." Noteworthy, in each case the text subtly wove in references to superiority of one system over the other, generally as a single sentence. The publications did not devote sections to thoroughly discuss or highlight any competing relationship between the systems.

Discussion of the WHO's Role

The WHO publications do not claim responsibility for the research or battery of evaluations necessary to alleviate known safety challenges facing traditional medicine. Rather, the WHO offers technical assistance to the member states in the shape of guidelines, data on the status of traditional medicine globally, etc. *The World Medicines Situation 2011* chapter references WHA Resolution 62.13, from May 2009, urging governments to respect, preserve and widely communicate traditional medicine knowledge while formulating national policies and regulations to promote appropriate, safe, and effective use (WHO 2011). This allusion reiterates

that member states are responsible for setting the WHO's annual agenda at the WHA each May. The 1978 document mentions WHA Resolution 30.49 from May 1977, which urges interested governments to give adequate importance to the utilization of their traditional systems of medicine (WHO 2011). Overall, the WHO classifies eleven WHA resolutions targeting traditional medicine since 1969. Fairly idealistic in their declarations for utilizing traditional health care practitioners, urging for greater classification, regulation and quality control, the requests in the resolutions dating to the late 1960s are still relevant and echoed in the most recent resolutions (WHO 2011). The aforementioned references within the publications to the WHA and specific resolutions both acknowledge the responsibility of the WHO to keep traditional medicine on the agenda since member states have directed this via resolutions, but also reflect the cyclical nature of the WHO hierarchy, which brings the fundamental responsibility to implement recommendations back to member states.

The focus on regional areas or types of traditional medicine within the WHO's work with traditional medicine is not explicitly addressed in the documents, but a pattern emerges. The *WHO Traditional Medicine Strategy 2002-2005* does say, "WHO is particularly active in supporting development of Traditional Medicine in Africa, South-East Asia and the Western Pacific." This focus likely results from the high prevalence of traditional medicine in these areas as a primary system of health care. However, publications such as the *Benchmarks for Training* series suggest the WHO's aforementioned claim may not be entirely accurate. Of seven benchmarks, two focus on treatments established in the Western world (Naturopathy from Europe, Osteopathy from the US), and five come from Asia (traditional Chinese medicine and Tuina from China, Nuad Thai from Thailand, Unani from South Asia, and Ayurveda from India). Neither benchmarks, nor any other specific publications from the WHO Headquarters focus on

traditional medicine in Africa or South America. This lack likely stems in part from a resource standpoint; the generally poorer African countries are unable to fund requests like more developed countries, but may also suggest the WHO is more comfortable dealing with established herbal or manual therapies over ritualistic medicine.

Considering Role of the WHO Regional Offices

If Headquarters is restricted by concerns for cultural sensitivity and general avoidance of difficult political situations, then perhaps the six regional offices would have more freedom to maneuver the realm of traditional medicine. While the publication databases available on the regional websites are not as complete or organized as those from Headquarters are, a pattern emerges. On the Europe, Americas, and Eastern Mediterranean (EMRO) regional websites, the Health Topics tabs do not list traditional medicine. The EMRO regional website does discuss traditional medicines, however, with a more hidden link filed under their Essential Medicines webpage. South-East Asia's regional website lists traditional medicine as a health topic, but does not link from that list (links exist for some other topics, presumably those of greater importance). Africa's regional website lists traditional medicine as a health topic, and links to the WHO Headquarters webpage on traditional medicine. Finally, the Western Pacific region lists traditional medicine as a health topic, and links to a subsequent regional webpage.

Different technological skills or styles between the offices may cause these stylistic differences, but they might also reflect each region's perceived importance of traditional medicine. Given this assumption, a spectrum of relevance and/or importance of traditional medicine develops. Europe and the Americas would be least concerned, since they do not reference traditional medicine. EMRO would be slightly more concerned, layering their discussion within the website. South-East Asia would be concerned, listing traditional medicine

as a health topic, but perhaps not as focused since there is no link to a specific webpage. Africa would be increasingly concerned since they list and link traditional medicine, and Western Pacific the most concerned, as the only region to primarily list and link traditional medicine to a regionally specific webpage.

DATA ANALYSIS: Interviews

The interviewees were divisible into four groups explained below. Interviewees represented the following departments: Efficacy and Pharmacovigilance; Essential Medicines; Ethics and Health; Patient Safety; Prequalification of Medicines; Rational Drug Use; Regulatory Issues and Support; and Safety, Classifications, Terminology, and Standards. As voluntary participants, one cannot consider these individuals as a representative random sample for the organization. Also noteworthy, six employees contacted for interviews declined and recommended other individuals they considered more involved with traditional medicine. The Traditional Medicine Department, consisting of a director, scientist, and an administrator, responded once positively about participating, but then declared an inability to meet due to their schedules. One may speculate the department was attempting to avoid investigative scrutiny, since the interview request was for 30-60 minutes at some point within two months.

The first group includes interviewees who are knowledgeable about traditional medicine and supportive of further research and integration. This group shared the following common knowledge and beliefs: many people around the world use traditional medicine; the public health realm should develop traditional medicine to become as effective and beneficial as possible; traditional medicine might be the only feasible method of medicinal treatment available in some areas of the world; and traditional medicine's holistic approach has value, even if the patient is simply responding to the placebo effect. Of those interviewed, five of eight fit into this group.

Two interviewees were knowledgeable about traditional medicine, but uninterested in devoting time and resources into further research and integration. This group generally feels traditional medicine is dangerous, largely due to a severe lack in regulation and inconsistent treatment. Members of this group feel devoting the WHO's, or other, resources to traditional medicine is a waste of money, and less effective and/or less efficient than conventional medicine.

One interviewee was unknowledgeable, but open to the possibilities of traditional medicine. This person had no particular negative predispositions, and was unopposed to integrating beneficial techniques into their work. This person exemplified the situation where due to the general lack of regulations, guidelines, and testing procedures for many traditional medicines, the conventional medical world and standard medical training often slight or ignore traditional medicine as a viable practice. Specifically within the WHO, this person called attention to the isolated nature of the departments within the organization. This separation prevented interaction with the Traditional Medicine Department. Thus although open to integration, this individual was not given the opportunity to collaborate or integrate across departments.

The final group is unknowledgeable and dismissive of traditional medicine, believing conventional medicine to be superior and/or the only viable health care system option. None of the individuals interviewed possessed these characteristics, perhaps partially a result of the voluntary participation.

Common Concern: Safety and Regulation

A common concern discussed by all those interviewed was the lack of regulation and evidence on safety and efficacy in traditional medicine. Regardless of whether they supported or opposed traditional medicine as a system, all acknowledged the significant limitation caused by

the lack of trials and research. Without the research, evidence, and regulation standardized in the world of conventional medicine, the scientific community has difficulty endorsing traditional medicine safely and with confidence. As one interviewee explained, “If it is well-regulated, then it is as safe as any other kind of medicine. If it is not regulated, then again, it is as dangerous as any other unregulated medical practice.” This type of argument led some interviewees to call for further resources to test and create a base of evidence and scientific research in the field of traditional medicine, whereas others took this as evidence that resources should be directed towards conventional medicines already proven to work.

Presumed Value of Placebo

While the WHO may be unable to officially endorse the placebo effect, many interviewees found value in this aspect of traditional medicine. Several interviewees presumed the placebo effect to be particularly high in traditional medicine due to the social role traditional practitioners play in a culture or community. As one interviewee stated, “People believe in them, and the fact of the matter is if you believe in something, there’s a certain curative just for believing.” However, the acknowledged difficulty arises when the placebo effect is not enough, and conventional medicine could have been more effective.

Value of Increased Health Care Access

Four of the interviewees highlighted the importance of traditional medicine’s role in global health care access. Pointing specifically to populations in developing countries or remote areas, traditional medicine may be the only health care option for those groups. One interviewee highlighted many patients prefer to initially use traditional medicine due to cultural specificities or affordability. The caveat, as one interviewee expressed after discussing the benefits of increased care resulting from traditional medicine, is, “When we are saying that some access is

better than no access, we are clarifying that it is qualified access.” This touches on the shared concern by all interviewees about the insufficient guidelines and regulations, and the need to ensure traditional medicine is beneficial and effective, or at least not harmful for patients.

Perceptions of the WHO's Current Focus on Traditional Medicine

When questioned whether the WHO will continue to devote resources to traditional medicine, most interviewees explained that decision is made by member states. If member states direct the WHA agenda toward traditional medicine, then the WHO must oblige. Similarly, if a member state chooses to donate certain funds for specific use by the traditional medicine department, the WHO cannot redirect those funds.

This funding allocation can cause bias in how the department focuses on specific areas. As one interviewee explained, “Particular publications are pushed by particular member states or donors, whether it’s the Gates Foundation, or the USA, or China for example. They may have a particular agenda that they want a WHO publication for.” Over the past couple decades the traditional medicine department has focused strongly on traditional Chinese medicine, and as one interviewee speculated, recently this might be tied to current Director General Margaret Chan’s Chinese upbringing. The interviewee speculated the focus on the highly institutionalized and popular traditional Chinese medicine might be an attempt to encourage commercialization of the traditional medicine industry by China. Fundamentally, the WHO’s level of focus on traditional medicine follows the interests, and monetary power, of countries. As one interviewee put it, “Traditional medicine raises money, and part of the reason they can do that is because there’s just a lot of interest in member states.” When member states call for attention on a specific area or type of traditional medicine, and they provide the necessary funds, the WHO generally seems to accept those proposals.

Perceptions of the WHO's Appropriate Role

Most interviewees highlighted a paradox as they considered the WHO's role in the realm of traditional medicine. As one explained, "We (the WHO) also are unable to dismiss or encourage the use of these medicines, because we don't have the robust scientific basis." However, having a prolific Department of Traditional Medicine in the WHO might send mixed or vague signals. One interviewee expounds, "There have been concerns raised that the traditional medicine unit has basically been used as PR for traditional medicine in publishing so many documents." The WHO certainly does not officially endorse this claim, but in regards to traditional medicine the WHO's role is still convoluted. Most interviewed felt traditional medicine falls within the WHO's realm of responsibility due to its general prevalence, impact on public health, and specific directives by member states, but raised questions of feasibility. The impracticality of dealing with traditional medicine on a global scale led several of the interviewees to question whether the topic might be better served through dealings on a country or regional level. Another interviewee stated the WHO is constrained to collecting and sharing information, but member states ultimately determine what occurs because of that information.

Relative Perceptions of Traditional Medicine and Conventional Medicine Health Care Systems

Many interviewees perceived a parallel relationship between traditional and conventional medicine. One interviewee explained, "It's medicine but with a different historical focus or theoretical background. Often the theory of diagnosis is different, but at the end of the day they're still treating the same patients." Several interviewees described the systems as complementary, both capable of offering benefits. If the end goal remains the same, questions one interviewee, why not, "Find the strengths, find the weaknesses, and see if there's a way we can put them together as a jigsaw puzzle in the interest of patient health." Four interviewees

acknowledged the challenge of harmonization, because a currently nonexistent degree of communication, collaboration, and transparency would be necessary to be successful.

Of those interviewed, a self-selecting group, only one seemed completely opposed to traditional medicine. The interviewee was skeptical of collaboration between traditional and conventional medicine saying, “Empires clash, empires don’t collaborate.” While not as vehement, another interviewee did declare his perceived inferiority of traditional medicine, “Personally, I think it’s a long way off for conventional medicines and traditional medicines to be seen to be equivalent in many parts of the world.” For these individuals, traditional medicine is not the preferred area of health care for the WHO’s time and resources.

Future Challenges in the WHO’s Work with Traditional Medicine

Interviewees presented an array of challenges to the WHO’s future work in traditional medicine. Each recognized the need for more research and evidence, but most questioned the feasibility of obtaining said research. A couple highlighted the lack of methodology for evaluating traditional medicines, another pointed to the fallacy in directing time and resources to investigating traditional medicine when conventional medicines have already proven effective. A different interviewee adopted a more cynical perspective, suggesting the responsibility of research and evidence falls to the manufacturers and practitioners of traditional medicine, who have no incentive begin said research given their existing, thriving economic market. Several interviewees also highlighted the challenge of the expansive definition of traditional medicines. One depicted how difficult harmonizing regulations can be at the global level, and another suggested breaking down the category into more manageable groups. Table 2 summarizes the findings from the interviews.

Table 2: Main Findings from Interviews

MAIN FINDINGS FROM INTERVIEWS		
POSITIVE ASPECTS OF TRADITIONAL MEDICINE	NEGATIVE ASPECTS OF TRADITIONAL MEDICINE	NEUTRAL COMMENTS ON TRADITIONAL MEDICINE
Placebo Effect Valuable at least	Safety and Regulation: Consensus this is main concern	No Unified Opinion on traditional medicine among WHO staffers
Increased Health Care Access	Possible bias towards Chinese medicine; WHO department essentially a PR firm for traditional medicine	Member States determine WHO resource distribution

CONCLUSION

In the case of traditional medicine, a practice prevalent worldwide and culturally sensitive in many regions, the WHO treads carefully in attempts to effectively increase safety and efficacy without isolating or creating conflict with member states reliant on traditional medicine's health care access or commercial advantage. The WHO does not want to publicly discredit a practice widely popular among constituents, nor blatantly support a potentially harmful practice. However, the WHO's prolific traditional medicine department in recent years has contributed to the pool of knowledge and literature on traditional medicine with publications adding a level of legitimacy and importance. Generally, the WHO portrays a neutral or positively slanting opinion of traditional medicine through its publications. However, among employees and in subtle sentences woven into publications doubts about the practicality and value of traditional medicine become apparent.

While the interviewees shared some common opinions, like traditional medicine's weakness in regulation and proof of safety, overall individual positions varied greatly. Each possessed disparate levels of knowledge, resulting in different views of traditional medicine's

relation to conventional medicine and the WHO. Regardless of the presentation of traditional medicine by the organization in its publications, there is no common opinion or stance on traditional medicine within the WHO Headquarters among employees and across departments. Possibly attributable to the lack of communication and collaboration between departments in the WHO, or the lack of traditional medicine background in conventional medical training, at an individual level there is little agreement or consistency regarding traditional medicine. Table 3 outlines the general factors influencing the WHO's involvement.

Table 3: Factors Affecting the WHO's Involvement

FACTORS AFFECTING THE WHO'S INVOLVEMENT	
Barriers to WHO Involvement (-)	Motivators for WHO Involvement (+)
Lack of Proven Safety	Funding from Member States
Lack of Proven Efficacy	Resolutions from World Health Assembly
Lack of Consistent Regulation	Possibility for Increased Health Care
Diversity of Practices and Types of Traditional Medicine	Wide Popularity and High Global Use

This project spurs several interesting questions. The pros and cons surrounding traditional medicine undoubtedly influence the WHO's presentation of information on the issue. Yet, one wonders why the WHO has not directed greater focus to possible benefits of a reciprocated learning and teaching arrangement between the two health care systems. Undoubtedly, conventional medicine prevails in certain health care aspects, such as surgery and antibiotics. However, the health care systems having different strengths does not immediately prove superiority of one, nor does it invalidate the potential for meaningful contributions to be made by both systems. Why is it rarely questioned what traditional medicine has to offer conventional

health care? Are general cultural differences manifesting in an inability to relate or communicate over greater cultural boundaries? The holistic lifestyle treatment of traditional medicine holds acknowledged merit in its focus on the individual and relational aspect. With the rise of noncommunicable diseases like diabetes and cardiovascular disease today, generally resulting from lifestyle choices, perhaps traditional medicine's holistic approach to health care will become more prominent in conventional methods.

Moving forward, perhaps the most feasible solution is for national governments to implement stricter regulations and standards for traditional medicines. However, as geographical divisions become less and less constraining in an increasingly globalizing world, this localized approach will likely be insufficient. The greater crossover between people and nations, the more imperative globally standardized rules and regulations are in health care. One may speculate as global health progresses in coming years, in part as a reaction to globalizing communities, cultural interactions and understanding will become more important in the realm of health care. The incorporation of training involving the influence of culture on medicine, and the encouragement of open-mindedness by conventional doctors working globally might be one way to increase safe collaboration and effective integration.

In pursuing an idealistic, collaborative approach to medicine, however, interesting complications arise when considering how to compare the two health care systems in the future. For instance, assuming the WHO supports traditional medicine as long as it does no harm, if benefit arises solely from placebo effect, then how does that compare to standards set for conventional medicine? In the United States, would patients consider doctors as acting ethically if they prescribed medications or treatments that were purely placebo? The difficulty in determining how to juggle the existence of multiple health care systems is a chief challenge

moving forward, and threatens to create a double standard in evaluations. Yet, does the existence of this type of double standard truly matter if the ultimate result is increased exposure and benefit from health care?

FUTURE RESEARCH

Several potential areas for future research exist within this subject. First, analyzing the WHO's regional offices may provide more specific data for how the WHO's work relates to traditional medicine in practice, and what the interaction of traditional and conventional medicine is like on the ground. Since traditional medicine covers such a wide spectrum of practices, analyzing traditional medicine subsets in certain areas of the world could demonstrate how the WHO's role and opinion may vary depending on location or specific practice. Additionally, the way the WHO portrays and discusses conventional medicine in publications focused on conventional medical techniques and/or practitioners would allow comparisons that could give greater depth to the findings discussed here.

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APPENDIX I

Chronological List of Coded WHO Documents

“The Promotion and Development of Traditional Medicine: Report of a WHO meeting” (1978)

“Report of a WHO Consultation on Traditional Medicine and AIDS: Clinical Evaluation of
Traditional Medicines and Natural Products” (1990)

“Report of the Consultation on AIDS and Traditional Medicine: Prospects for Involving
Traditional Health Practitioners” (1990)

“Guidelines for Training Traditional Health Practitioners in Primary Health Care” (1995)

“General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine”
(2000)

“Legal Status of Traditional Medicine and Complementary/Alternative Medicine: A Worldwide
Review” (2001)

“Traditional Medicine Growing Needs and Potential – WHO Policy Perspectives on Medicines”
(2002)

“Acupuncture: Review and Analysis of Reports on Controlled Clinical Trials” (2003)

“Guidelines on Developing Consumer Information on Proper Use of Traditional,
Complementary and Alternative Medicine” (2004)

“National Policy on Traditional Medicine and Regulation of Herbal Medicines – Report of a
WHO Global Survey” (2005)

“WHO Traditional Medicine Strategy 2002-2005” (2005)

“The World Medicines Situation 2011: Chapter 18 – Traditional Medicines: Global Situation,
Issues and Challenges” (2011)

Benchmarks for Training Series

“Benchmarks for Training in Ayurveda” (2010)

“Benchmarks for Training in Traditional Chinese Medicine” (2010)

“Benchmarks for Training in Naturopathy” (2010)

“Benchmarks for Training in Nuad Thai” (2010)

“Benchmarks for Training in Osteopathy” (2010)

“Benchmarks for Training in Tuina” (2010)

“Benchmarks for Training in Unani Medicine” (2010)

APPENDIX II

Coding Categories For Qualitative Analysis of Selected WHO Publications

Safety

- Absent or Neutral: Discusses safety neutrally, or does not address safety
- Positive: Discusses positive aspects of safety, or safety in positive light
- Challenges: Discusses negative aspects of safety, or barriers or challenges to safety

Efficacy

- Absent or Neutral: Discusses efficacy neutrally, or does not address efficacy
- Supporting: Discusses supporting evidence or claims efficacy of treatments or practices
- Oppositional: Discusses poor evidence or claims lack of efficacy of treatments or practices

Relation to Conventional Medicine

- Parallel: Discussion of traditional medicine and conventional medicine as two coexisting health care systems that function simultaneously alongside one another, the different systems increase health care access and can serve different needs for patients
- Collaborative/Integrative: Discussion of traditional medicine and conventional medicine working together in a mutually beneficial relationship
- Competing – Discussion of traditional medicine and conventional medicine as two competing entities, where one system is superior or the two are oppositional to one another

Future – Challenging Outlook: Recommendations or predictions with a negative spin

Future – Positive Outlook: Recommendations or predictions with a positive spin

Specific Role of the WHO

- Resources and Funding: Discussion of the WHO's funding – from who, where distributed, and why
- Research on Traditional: Purpose and/or direction of the WHO's research on traditional medicine
- Focus within Traditional Medicine: What aspects discussed, discussion of how attention is distributed within the department

APPENDIX III

Interview Questions

1. In what capacity do you work at the WHO, and what do your duties entail?
2. Have cultural differences influenced your work at the WHO, in terms of programs you have implemented or worked on? If you encountered cultural barriers and/or obstacles, how did you overcome them?
3. How does traditional medicine play a role in your realm of work, in terms of quality assurance and safety of medicines? Has that role changed or evolved over time?
4. Has the issue of traditional medicine affected WHO programs, as well as your work specifically, both positively and negatively?
5. Do you feel there is a value added by traditional medicine in the realm of global health and health policy? What are the strengths and weaknesses of traditional medicine?
6. The term traditional medicine covers a wide range of practices, from herbal remedies to acupuncture, practiced in a wide range of places around the world. Do you feel differently about different types of traditional medicine, and do you feel the different types should be treated differently by the WHO?
7. What role, if any, do you think traditional medicine plays in terms of access to health care? Is unregulated access to traditional medicine preferable over no access to any health care service?
8. Do you feel differently about traditional medicinal procedures and medicines than you do about practitioners of traditional medicine?
9. The WHO has issued a variety of publications related to traditional medicine, creating a general strategy and guidelines for various practices – why do you think they chose to focus their time and resources on this?

10. Do you think the WHO believes in traditional medicine's effectiveness, and wants to work it into their programs? Or are they more concerned with public relations and a broader strategy of maintaining relationships with communities where traditional medicine exists?

11. What do you see as the future of traditional medicine in your area and in relation to WHO programs in general? What would you prefer to have happen in this regard?

12. Do you wish to add any other information, insights, or opinions? Do you have any recommendations for additional interviewees?