WHO's Strategy on Traditional and Complementary Medicine

A Disgraceful Contempt for Evidence-Based Medicine

The World Health Organization once again advocates for implementing complementary and alternative medicine in national health services, jeopardizing global public health and evidence-based medicine.

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Despite the increasing global recognition of the value of evidence-based medicine, the World Health Organization (WHO) still appears to be on a quest to promote the integration of consistently unproven and irrational therapies (quackery) into medicine worldwide. In a shameful recent advertising supplement in *Science*, fully sponsored by two Chinese universities, Margaret Chan, director-general of the WHO, calls once again for integrating traditional medicine (TM) with scientific medicine:

> For many millions of people, often living in rural areas within developing countries, herbal medicines, traditional treatments, and traditional practitioners are the main—and sometimes the only—source of health care. The affordability of most traditional medicines makes them all the more attractive at a time of soaring health care costs and widespread austerity. . . . In wealthy countries, TM meets an additional set of needs. People increasingly seek natural products and want to have more control over their health. They turn to TM to relieve common symptoms, improve their quality of life, and protect against illness and diseases in a holistic, nonspecialized way. (Chan 2014)

The typical logical fallacies commonly displayed by pro-alternative supporters are flagrantly apparent in her discourse; we can recognize the naturalistic fallacy, argument from popularity, argument from antiquity, etc. Worse, her words imply that any reasonable quality standards for health care can be disregarded for the poor. This corresponds to nothing less than double standards in global health care. Her statements are a painful illustration of the course the WHO has taken since 2002 and can be seen as a follow up on the publication of the *WHO TM Strategy 2014-2023* earlier last year. This strategic document, which like the *Science* supplement was financially supported by China, urgently needs our attention as it prioritizes political preference and commercial value of an important Chinese export product over the advancement of global health. (For more on the *Science* TCM supplement, see David Gorski's article in this issue, p. 46.)

Reinvigorating a Traditional Strategy

At the start of 2014, the WHO reinvigorated its strategy to boost the use of TM, nine years after its previous strategy report expired. In the new report *WHO TM Strategy 2014-2023*, the WHO persistently entangles the definitions of TM and "complementary and alternative medicine" (CM), including botanical medicine (World Health Organization 2013). CM includes all kinds of unproven therapies such as acupuncture, homeopathy, chiropractic, and anthroposophic therapy. This strategy follows the Declaration of Alma Ata (World Health Organization 1978) that positioned the traditional healers within the primary health care and the previous *WHO TM Strategy 2002-2005* (World Health Organization 2002). The current renewal of the strategy is the result of a resolution accepted by the World Health Assembly (WHA) in 2009, stating that an update of its predecessor was timely. This WHA resolution (WHA62.13), it

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says, demands the adoption, implementation, and integration of T&CM (WHO's eclectic collection of traditional and alternative therapies together under one umbrella) into the health system of the member states "where appropriate, based on safety, efficacy, and quality." The resolution urges the WHO to assist the member states in this process as much as possible.

The resulting WHO TM strategy report that was published last year was mainly inspired by China and sponsored by the Chinese government, a major exporter of traditional remedies, and its contents were predictable. Without demonstrating any awareness of the virtually complete absence of evidence for both TM and CM, the strategy defines its own goals as "harnessing" the contribution of T&CM to health care and "promoting the safe and effective use of T&CM by the member states." According to the new strategy, member states experience difficulties with respect to the development of policy and regulations of T&CM, the integration of T&CM in the national health systems, assessment of safety of products and practitioners, research and development, and the sharing of information between countries. The report gives some statistical data regarding the increasing popularity of CM in developed countries and stresses the cheapness of TM in developing countries as a major advantage, forgetting that much T&CM is far from cheap and, more important, that comparing costs without evaluating efficacy can lead to absurd recommendations. The selection of references shows a strong pro-T&CM preference and uncritical appraisal. Critical papers demonstrating the decline and the lack of scientific support for CM are systematically neglected (Shang et al. 2005). After many decades of research on this issue (for example by the NIH's National Center for Complementary and Alternative Medicine, which spent almost $2 billion on this matter), no convincing evidence to support the practice of any CM has been found (Mielczarek and Engler 2012), except for a few botanical products now justifiably incorporated into conventional medicine. Critical and robust science regarding the proof of efficacy of TM is very rare and the outlook for this branch of medicinal folklore is bleak. Politically touted praise for TM by the WHA and the demand for mutual respect between traditional healers and medical doctors are not in the interest of global health and are outdated. The EU rules on safety and efficacy of med-

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ication have led to the disappearance of thousands of traditional remedies from pharmacies. Should they be reinstated? Is the WHO really advancing global health by promoting both TM and CM?

Traditional and Complementary Medicine: Any Common Ground?

The actual definition of T&CM in the WHO's report is so vague that it could be used for almost any form of therapy, product, diagnostic, therapeutic procedure, or ritual, as long as there is no convincing proof for its efficacy. There is actually little "traditional" about all the Western CM therapies. The currently prevailing alternative therapies have only in the last few decades gained popularity in Western countries over the more traditional therapies such as traditional herbal therapy, magnetizing, and naturopathy. These have nearly vanished, which in itself certainly has to be considered as progress, but they have been replaced by more modern CM therapies, such as those we have mentioned. The adjective "complementary" in "complementary medicine" implies that it has added value or improves the regular medicine to which it is added. This is deceptive phrasing, because it remains unclear what unproven alternative therapies such as homeopathy and anthroposophic medicine, essentially "quack" therapies that have been widely criticized, can add to regular medicine. In well-designed randomized clinical trials, the efficacy of CM therapies could not be established. More importantly, their underlying theories are incompatible with current scientific ideas at large, and thus there is no rationale for these therapies (Puustinen 2014; *The Lancet* Editors 2005). They are not always harmless; at best they only delay any effective treatment and leave the patient with an absurd concept of pathophysiology and disease. The report claims, but does not prove, that CM has great value in prevention or health maintenance. The anti-vaccination attitude among homeopaths, anthroposophists, and chiropractors points in a completely different direction (Carillo-Santisteve and Lopalco 2012). If any "complementary" therapy would be effective and exhibit therapeutic value, by the rules of evidence-based medicine, it would of course have been incorporated into regular medicine and the prefix "complementary" would no longer be adequate.

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Traveling Together

Traditional medicine, such as that practiced in Asia and Africa, consists of a mixed bag of therapies (e.g., plant-, animal-, spiritual-, and energy-based). Some of these traditional therapies have a rational theoretical base, but most of them do not. The same holds for the CM therapies, with a possible exception for some elements of manipulative therapy. As we have described, there are actually few similarities between the various TM and CM therapies. But the adherents of TM and CM found each other through a shared problem: they both remain unsupported by scientific evidence and are not generally accepted in the world of evidence-based medicine. Therefore, they travel together and misuse the numerical majority in the WHA to gain acceptance by political means.

Curiously, the focus of the *WHO TM Strategy* is neither toward rigid proof of efficacy of the mixed bag of therapies nor toward access to effective therapy but seems to be aimed at the financial and intellectual property (IP) aspects: commercialization, reimbursement, and protection of IP. For China, the Chinese TM therapies are a hugely important export product worth $3.14 billion in 2013 (Ying 2014). The Chinese government clearly seeks recognition and legitimacy of these traditional therapies. It wants to claim they have efficacy, safety, and quality so it can export even more of them. But a lack of proven efficacy and guaranteed safety has limited the possibilities of approval through the conventional medical regulatory authorities (Jia 2011). China is therefore circumventing the regular medicine legislation and is actively seeking other "marks" of quality, such as ISO certification of their products (International Organization for Standardization 2012). The financial support of the present *WHO TM Strategy* report might be another lobby effort of China for its export product.

Advancing Global Health?

While the lack of access to quality health care in many parts of the world is evident and requires urgent action from WHO member states, in our opinion the proposed strategy for increasing the rollout and strength of T&CM as proposed in the recent WHO strategy will only aggravate the situation. The universal right to health

demands universal access to *good quality* health care and medicines of proven efficacy. Whether or not a therapy is of good quality should be assessed by the rules of evidence-based medicine and confirmed by good-quality clinical trials. The report advocates "real world experiments," without explaining what that means. This expression was invented by vendors of therapies that failed the objective tests of randomized clinical trials. They try to gain acceptance based on testimonies, or "anecdotal evidence," which obviously does not equal proof of efficacy. Promoting a treatment solely based on satisfaction or popularity, without comparisons to a control group, will not bring the goal of access to efficacious treatments for all any closer.

Most Western complementary therapies (e.g., homeopathy) have already been extensively proven to be ineffective and should immediately be abandoned. Promising traditional therapies, which are compatible with established medical knowledge, need more extensive and rigid clinical evaluation before being promoted or regulated. However, evaluation of T&CM could become a never-ending story since most of these therapies do not have generally accepted rules or procedures, and individual therapists each practice their own version. Assumed safety, solely based on many years of use, is unacceptable and can in fact be life threatening, as illustrated by the Chinese nephropathy tragedy (De Broe 2012) and well-documented cases of heavy metal poisonings by Indian Ayurvedic products (Lynch and Braithwaite 2005; Saper et al. 2004). The correct order of procedures should be: register and define, evaluate, recognize, regulate, but integrate only after convincing proof of safety and efficacy. The WHO should not support and promote acceptance of non-evidence-based therapies based solely on popularity and tradition, not in rich countries and not in poor countries. It is unethical to integrate therapies in a national health-care system before convincing proof of efficacy and safety is provided.

The role of traditional healers in advancing global health might be to have them assist and become involved in the spread of regular evidence-based care and access to essential medicines. In that process, practitioners of proven medicine will gradually replace any unproven therapies and practices. It is a missed opportunity that the *WHO TM Strategy* does not describe this scenario and by doing so impedes effective health care for underprivileged patients in resource-poor regions. We regard this as a disgraceful example of political choices in an area that should be dominated by science. ■

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