The Office of Alternative Medicine/ National Center for Complementary and Alternative Medicine Should Be Abolished

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This article first appeared in the North Carolina Medical Journal *(1998;59[1]) under the title "Let's Abolish the Office of Alternative Medicine of the National Institutes of Health." The article was followed by commentaries by Robert Park, PhD, who agreed, and by Barrie Cassileth, PhD, and others who disagreed in part or in whole. Pro and con letters followed, but obviously no political action resulted, except that Congress that year passed the legislation elevating the Office of Alternative Medicine to an independent center.*

Other commentaries in the Scientific Review of Alternative Medicine *give more reasons why research into aberrant methods is wasteful and fruitless. Calling on the oft-quoted logical conclusion that one cannot prove a negative, one must conclude that research on implausible claims can only result in more questions that cannot be answered with absolute certainty. That result in some people's minds obligates the research community to an endless pursuit of evanescent propositions. The editors of this journal agree with Dr Halperin's arguments. The article is reprinted here with permission.—Eds.*

The Office of Alternative Medicine (OAM) of the National Institutes of Health (NIH) was mandated by Congress in 1991 and launched in 1992 with an annual budget of $2 million. Congress has increased the office's budget steadily, to $12 million this year. Recently, Oregon Democrat Peter A. DeFazio introduced a bill, cosponsored by 155 other members of the House of Representatives, to elevate the OAM to the status of major center at the NIH and change its name to the National Center for Integral Medicine. Sen Tom Harkin (D–Iowa) plans to introduce a similar bill in the US Senate.[1]

The OAM is charged with screening and evaluating the clinical benefits, if any, of unconventional or nontraditional approaches to health problems. In return for millions of our tax dollars, the office has funded studies such as the following:

(1) A study of ayurvedic medicine (a traditional medicine of India). Patients are assigned to 1 of 3 groups to receive either a onetime "risk assessment"; information on aerobic exercise; or instruction in "primordial sound meditation," yoga, and ayurvedic dietary principles. The study will follow blood pressure, cholesterol, and general health status for 1 year. Since there are only 30 patients in each group, statistical principles dictate that it will be virtually impossible to detect any significant difference between the groups even if one exists. Cost: $30 000.

(2) A study in which a group of "pray-ers" from Albuquerque, New Mexico, will pray at least once per week for drug addicts in an experimental group. Success in curing the "prayed-for" of their addiction will be compared to a group "not prayed for." Cost: $30 000.

(3) A study of the effects of touch therapy on the immune system. The hands of the "therapists" do not actually touch the body, but "smooth out" a hypothetical "energy field" surrounding the body. Cost: $30 000.

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(4) Interviews with 1500 AIDS patients to ask what types of alternative therapies they use and how their disease is progressing. Cost: $1 million.[2,3]

(5) A study, coordinated by Duke University, of 336 patients with major depression who will be randomized to 8 weeks of treatment with either conventional antidepressants, placebo, or St John's wort. The latter is a perennial plant used for centuries as a folk remedy for a host of illnesses. Its efficacy and safety are not established. Cost: $4.3 million.[4]

TO BEE OR NOT TO BEE

How did these unusual undertakings acquire federal funding? The spigot of dollars was opened by the US Senate. Senator Harkin, who swallowed 250 capsules of bee pollen to treat his allergies several years ago, decided to push for the OAM "because [bee pollen] sure worked for me."[2] In addition to his disregard of the scientific method, Senator Harkin received his bee pollen from Royden Brown of the C.C. Pollen Company. Mr Brown had alleged that bee pollen capsules could cure heart disease, reverse the aging process, prevent memory loss, prevent premenstrual syndrome, improve sex activity, kill bacteria, and promote weight loss. Mr Brown subsequently paid $200 000 to the Federal Trade Commission under a consent decree for false advertising.[2,3]

After establishing the OAM, Senator Harkin successfully pushed to have 4 alternative medicine "advocates" placed on the 18-member OAM advisory board. These included a gentleman who claimed to have been cured of prostate cancer by someone who invented a special microscope able to look "at blood samples and diagnose cancer well before a victim has symptoms." Another board member was fired from Memorial Sloan-Kettering Cancer Center's public relations office after he denounced the hospital for "covering up the benefits of Laetrile." Yet another runs an organization called People Against Cancer and feels that "radiation and chemotherapy are extremely dangerous and they don't make people live longer."[2,3]

WHO'S MINDING THE OFFICE OF ALTERNATIVE MEDICINE?

The original director of OAM was Joseph Jacobs, MD. He resigned in 1994 after he complained about interference from congressional staffers pushing special-interest projects as well as interference from Senator Harkin's appointees to the advisory board. The present director, Wayne B. Jonas, MD, is a primary care physician and lieutenant colonel in the army.[5] Dr Jonas worked for one year in a research laboratory at Walter Reed Army Institute of Research. He is a proponent of homeopathy, a movement that traces its origins to Samuel Hahnemann's 1808 book, *Organon der rationellen Heilkunde* (*Principles of Rational Medicine*). Hahnemann thought disease was a disorder of the "vital force," which he contemplated as purely spiritual. Doctors, he said, should not concern themselves about the nature of illness, but only about its cure. "Maladies would be cured by administering in minute or infinitesimal doses those substances which in large doses were capable of provoking similar symptoms."[6] Homeopathy relies on the "principle of similars" (treating a symptom with a drug that produces similar symptoms) and the "principle of dilutions" (diluting a drug until no molecules of it are left; the remaining solvent "remembers" information from the drug).[7] Hahnemann's nonsensical remedies were useless but they were, at least, so profoundly diluted that they were nontoxic.

According to a recent article in *Scientific American*, Dr Jonas was asked to repeat his internal medicine rotation at Wake Forest University's School of Medicine after he suggested homeopathic remedies for a patient with severe, antibiotic-resistant pneumonia. While at Walter Reed, Dr Jonas attempted to publish a paper asserting that a homeopathically prepared solution of bacteria produced immunoprotective effects in mice. Two laboratory supervisors declined to be coauthors. The paper ultimately was rejected by 3 immunology journals.[5]

In a recent *Lancet* article, Dr Jonas and his collaborators reviewed 186 homeopathy trials. Looking at a range of conditions (asthma to stroke to otitis media to postoperative ileus) and a broad range of interventions (mustard gas, asafetida, pollen, etc.), Dr Jonas and coworkers argue that the data favor a benefit to homeopathy and that "further research on homeopathy is warranted provided it is rigorous and systematic."[7] An accompanying editorial by Jan P. Vandenbroucke critiques the paper: "The problem with homeopathy is not that there is no explanation for its possible action. If there is no explanation for the action of an agent, one might still give it the benefit of the doubt under certain conditions. The problem with homeopathy is that the 'infinite dilutions' of the agents used cannot possibly practice any effect. A randomized trial of 'solvent only' versus 'infinite dilutions' is a game of chance between two placebos."[8]

Dr Jonas manages a multimillion-dollar federal biomedical research agency, so I conducted a MEDLINE

search to count his scientific publications in peer-reviewed journals. (My idea wasn't original. *Scientific American* similarly investigated Dr Jonas in 1996.[5]) As of this writing, Dr Jonas's research output consists of 2 letters to the editor, 1 review article, 1 article in the *Lancet*, and 1 preliminary study on nicotinamide in osteoarthritis. Dr Jonas has penned a few reports on the mission and operations of the OAM and is the coauthor of a book, *Healing with Homeopathy: The Complete Guide*.

The Problem with Squandering Research Funds

Serious researchers are investigating the human genome, the causes and prevention of cardiovascular disease, oncogenes, mental illness, physiology, tumor suppressor genes, computers in medicine, cell signaling, pharmacology; the list goes on and on. Many others, in spite of receiving outstanding scores on grant applications, cannot do their work because there are no available funds. The OAM is far more than an amusing federal boondoggle; it is a shameful diversion of taxpayers' dollars to foundationless pseudoscience instead of biomedical research.

We have heard the standard defense of enterprises such as the OAM: Because many patients use "alternative" home remedies, they deserve to be rigorously investigated. A recent defense of the St John's wort study claims that "for several years the herb has far outsold Prozac in Germany as a treatment for depression."[4] This argument leaves me cold. A lot of things that people (including Germans) do are devoid of any scientific rationale. Such behavior is not, in my view, a reason to divert money away from serious science.

It is also argued that, because a large segment of the population places some credence in "alternative" therapies, we should systematically evaluate them to glean nuggets of useful biological information.[7] Perhaps some useful botanical pharmacology lies hidden in the panoply of folk remedies. Perhaps not. I believe that tax-supported research dollars would be better spent in rational drug discovery processes and medicinal chemistry than in highly speculative hunts for pots of gold at the end of root-and-herb rainbows.

Maybe the political will that generated the OAM reflects public dissatisfaction with medicine and science. If this is the case, the scientific community shares blame with the public. Scientists have not always explained their work to the public as well as they should. Public education has not raised the general level of scientific literacy or dispelled superstition and myth. And a general level of hypocrisy exists among physicians and a public that decries a lack of medical progress while simultaneously refusing to participate in rational clinical trials.

The OAM isn't funny anymore. It consumes research dollars that could be put to good use. The last thing Congress needs to do is upgrade this sideshow to a "national center." What we, as thinking physicians, need to demand—and what Congress needs to do—is to abolish the OAM.

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