

Alternative Medicine: A Response to the White House Commission on Complementary and Alternative Medicine Policy

Executive summary	2
Introduction	3
CAM Definition	3
Basis for Evaluating CAM	4
Provision of Information	5
Research Priorities	7
Educational Priorities	7
Inclusion of Spirituality within CAM	8
Issues of Justice	10
Safety Issues	10
Conclusion	10
Author	11
References	12

Dónal P. O’Mathúna, Ph.D.
Professor of Bioethics & Chemistry
Mount Carmel College of Nursing
Columbus, Ohio

A scientific and bioethics analysis resource of the Christian Medical Association

Note: This paper, prepared in April 2002, is an evaluation of the Final Report of the White House Commission on Complementary and Alternative Medicine Policy. As such, it is not an official statement of the Christian Medical Association, nor does it attempt to present the definitive position on how public policy should be formulated regarding Complementary and Alternative Medicine (CAM). Rather, this paper seeks to contribute to further dialogue on an important healthcare issue and to serve as a valuable resource in facilitating that discussion. Nothing in this paper should be construed as necessarily reflecting the views of Mount Carmel College of Nursing or Mount Carmel Health.

Executive summary

Complementary and alternative medicine (CAM) continues to capture the attention and dollars of the American public. Some surveys have found that almost half of all Americans use CAM,¹ although other surveys have put the use as low as 6.5 percent.² The crucial variable appears to be how CAM is defined. For this reason, a clear and precise understanding of what is meant by CAM is needed before making public policy recommendations.

However, the Final Report of the White House Commission on Complementary and Alternative Medicine Policy (WHCCAMP) fails in this important area. The WHCCAMP Report (hereafter referred to as the Report) fails to clearly distinguish CAM from conventional medicine and treats CAM in a highly generalized way. Such an approach leads to such sweeping recommendations that it will be impossible to implement or fund those that might be beneficial.

CAM, as defined by the Report, includes therapies that are completely compatible with conventional medicine, and others that are fundamentally incompatible. CAM includes therapies with some possibility of being safe and effective, and others best viewed as quackery. CAM includes therapies needing scientific analysis, and others that call for spiritual and theological evaluation. One approach is not appropriate for such diverse therapies. The Report fails to recognize this. A more useful and beneficial approach would have been to subdivide CAM into different types of therapies. One such approach will be described in this paper.

Central to controversy over CAM is how to evaluate therapies. The Report must be commended for its insistence on holding CAM to the same standard as conventional medicine. Such an approach ensures that the public is protected from unsafe and ineffective therapies and that resources, public and private, are not wasted on worthless ‘therapies.’

While the Report endorses the evaluative approach known as evidence-based medicine, it acknowledges that proponents of CAM frequently do not adhere to those principles. CAM courses in medical schools often promote CAM rather than critically evaluate it. Unfortunately, the Report itself frequently violates the very evidence-based principles it endorses. Several specific examples will be given. The lack of diversity in the Commission’s composition is most clearly reflected here. The sweeping recommendations of the Report thus fail to prioritize where resources should be directed and how those priorities should be determined.

Problems with the Report’s broad recommendations are most apparent with spirituality. The Report treats spirituality like another therapy, failing to recognize its deeply personal and sensitive nature. Neither does the Report address the difficulties of addressing spiritual concerns within healthcare. Spirituality should not be treated as a generic therapy. The Report does not address the training of healthcare professionals to appropriately and ethically address spirituality, nor does it tackle the way some CAM therapies disguise their religious roots. In neglecting these issues, the Report contributes to such covert promotion of religious practices. The Report similarly fails to address the use of federal funds in promoting spiritual practices or specific religions. This paper will propose ways to address spiritual issues ethically within healthcare.

In summary, the Report’s all-encompassing recommendations are too broad and impractical. The Report recognized how evidence-based principles can recognize and promote the best within CAM, but then failed to adhere to this approach itself. The Report missed an important opportunity to promote dialogue on difficult but important issues surrounding CAM by taking an advocacy position. A more nuanced approach was needed, in which different criteria are used to evaluate different forms of CAM therapies. Without this, the public will continue to be exposed to unproven, unsafe CAM therapies, and public funds will be used in inappropriate and unjust ways.

Introduction

In March 2000, President Bill Clinton established the White House Commission on Complementary and Alternative Medicine Policy (WHCCAMP). The Commission's mission was to provide recommendations that would ensure that public policy maximizes the potential benefits of complementary and alternative medicine (CAM). Specifically, the mission was to address:

- education and training of health care practitioners in CAM,
- coordination of research to increase knowledge about CAM products,
- provision of reliable and useful information on CAM to healthcare professions, and
- provision of guidance on the appropriate access to and delivery of CAM.³

The twenty-member Commission held ten meetings and solicited input from various healthcare professions and the public. Its Final Report was released in March 2002 and will be referred to hereafter as the Report.

Included within the Report was a letter to the Secretary of the Department of Health and Human Services from two of the Commissioners, Tieraona Low Dog, M.D. and Joseph J. Fins, M.D. These Commissioners expressed important concerns about the Report. In particular, they claimed that the Report did not adequately appreciate the limitations of unproven and unvalidated CAM interventions, and did not pay enough attention to the importance of minimizing CAM risks. This letter adds important qualifying remarks to the Report and will be referred to in this paper as the dissenting letter.

CAM Definition

The definition of CAM adopted by the Report is the following: "Complementary and alternative medicine, or CAM, can be defined as a group of medical, health care, and healing systems other than those included in mainstream health care in the United States. CAM includes the worldviews, theories, modalities, products, and practices associated with these systems and their use to treat illness and promote health and well-being."

This is a representative definition of CAM, but as such adopts problems inherent with such far-reaching and all-encompassing definitions. CAM, then, as used in the Report, stands for everything from the religious-philosophical system of traditional Chinese medicine to individual herbal remedies. While this accurately represents what is viewed as CAM, it leads to serious problems when public policy is based on such a broad definition.

For example, public policy regarding the production and distribution of herbal remedies should look very different to that regarding people's philosophical or religious beliefs and practices. Public policy must approach health-related practices that invoke spiritual beings (like prayer, shamanism, or Reiki) differently than it does acupuncture and nutrition. The importance of these distinctions was not appreciated or addressed in the Report. As two of the Commissioners stated in their dissenting letter, "In sum, generic pronouncements about 'CAM' neither serve the public interest nor protect the public health." A recommendation that CAM be researched or covered by insurance or taught in medical school provides little or no practical guidance for those who have to decide which forms of CAM are deserving of such policies.

The other definitional approach taken in the Report was to describe the general characteristics of CAM. Four characteristics were suggested:

1. CAM commonly approaches patients in ways that include "a focus on individualized treatments, treating the whole person, promoting self-care and self-healing, and recognizing the spiritual nature of each individual."
2. CAM frequently has much in common with aspects of conventional medicine, such as nutrition and preventive healthcare.
3. CAM therapies usually have little support from scientific study and clinical research.
4. CAM therapies often focus on "the prevention of illness by enhancing the vital energy, or subtle forces, in the body."

Again, these characteristics are so unspecific that they provide little guidance in distinguishing CAM from conventional medicine. These same characteristics have been reported before by the author of this paper, while acknowledging their practical limitations for evaluating CAM.⁴

Another problem with the Report's approach arises because of the significant overlap between conventional medicine and CAM as defined in the Report. The only examples of CAM therapies that the Report specifies as being proven safe and effective are exercise, nutrition, and stress management. But these interventions have been evaluated and affirmed within conventional medicine. Why then should they be used as support for the benefits of CAM? Many of the characteristics of CAM listed in the Report are completely compatible with conventional medicine. In fact, the medical ethics literature contains many calls for an emphasis on many of these approaches as part of the art of medicine and the importance of bedside manner. If these practices should characterize all forms of medicine, their ascription to CAM does nothing to help clarify what is meant by CAM.

To give practical guidance and direction, broad definitions and lists of characteristics are severely limited. For this reason, CAM must be subdivided to assist further discussions. One such scheme has been offered by this author, dividing CAM into five categories:⁴

- 1) Complementary therapies
- 2) Scientifically unproven therapies
- 3) Scientifically questionable therapies
- 4) Energy medicine
- 5) Quackery or fraud

Therapies within each category raise different questions and issues. Rather than making sweeping recommendations for all CAM, public policy recommendations should vary from one category to another. For example, research funding may be recommended for a promising herbal remedy, but a different recommendation should be offered regarding prayer and health. Medical schools may want to add information about scientifically unproven remedies (like many herbal remedies) but not about life energy medicine (with little evidence base, and having more in common with religious practices). Some such categorization, with selective recommendations, would have made the Report vastly more useful than it is with its broad definition and all-encompassing recommendations.

Basis for Evaluating CAM

One of the strengths of the Report is its very clear articulation of the importance of evidence-based medicine. For example, the Report states: "The Commission's position is that the same high standards of quality, rigor, and ethics must be met in both CAM and conventional medical research, research training, publication of research results in scientific and medical journals, presentations at research conferences, and review of products and devices."

Human health and illness are complicated phenomena. When people try a therapy, improvements may be due to the therapy, to some other factor in their lives, to the natural course of the illness, or to the placebo effect.⁴ The latter is a complicated set of factors that includes the interaction between the healthcare professional and the patient, the patient's confidence and expectations, and the power of suggestion. Just because someone feels better after using a therapy or remedy does not mean the intervention caused those changes.

Because of these complexities, evidence-based medicine is an approach to medical decision-making that relies on the highest quality objective research available. Medical research studies are designed in several different ways, leading to evidence of differing quality. In keeping with evidence-based medicine, the National Center for Complementary and Alternative Medicine (NCCAM) prioritizes the types of studies in the following order:⁵

- i. Large randomized clinical trials
- ii. Small randomized clinical trials
- iii. Uncontrolled trials
- iv. Observational studies
- v. Case studies
- vi. Anecdotes

Randomized controlled trials (RCT) offer the best form of evidence for determining whether or not an intervention actually caused the observed changes. Subjects are randomly divided into at least two groups. One group receives the therapy and the other receives a placebo. The subjects in both groups should not know which intervention they are receiving, and neither should the researchers who are interacting with the subjects (called a double-blind study). The results should be analyzed statistically to ensure that the two groups were similar, that enough people were enrolled in

the study, and that the differences observed are significant (not just due to random variation). If all these criteria are met, the differences will be reported as ‘statistically significant.’

Anecdotes or testimonials are the least useful reports in helping to understand the cause of any changes. These are the stories and reports we all hear of where someone tried a remedy and felt much better afterwards. These reports have a role to play in medicine, but they do not demonstrate what caused any reported improvements. Their major limitation is that they do not control for the many changes that could have occurred in someone’s life.

For example, if we feel we are getting a cold, we may cut back on activities, try to get some extra sleep, and take some over-the-counter cold medications. Someone may tell us they always take high doses of vitamin C when they get a cold, and we decide to give it a try. If we start to feel better shortly after taking the vitamin C, we as humans seem to have a psychological predisposition to associate our most recent change with the improvements we experience. We may then believe that vitamin C cured our cold. In reality, however, we made a number of changes, any and all of which could have contributed to our improvement. In addition, colds are going to go away after a few days no matter what we do. Testimonials are not reliable. In addition, with this example, several large RCTs have found that vitamin C may improve cold symptoms by about ten percent, but it doesn’t cure or prevent the common cold.⁶

The WHCCAMP Report accepts this order of priority in weighing the evidence for and against a remedy or therapy. “Decisions on regulating the use of and reimbursement for CAM therapies should be based on published evidence of safety (including toxicity, side effects, and adverse interactions), clinical efficacy, general effectiveness, and cost-effectiveness and cost-benefit analyses rather than on traditional use, anecdotal reports, consumer interest, and market demand.” The Report makes it clear that “use and interest in CAM is not an indication that these practices are effective.”

There is not a conventional way to evaluate medicines and an alternative way to evaluate medicines. In fact, many of the central features of modern medical research were developed while studying what would today be viewed as CAM therapies.⁴ The Report is to be commended for insisting on the highest quality evidence for CAM therapies. If such evidence exists to support the use of a therapy, it should persuade those who may initially be more skeptical of that therapy’s value. If those sorts of studies do not exist for a therapy for which much anecdotal evidence of effectiveness exists, the first priority would be to develop high-quality evidence.

Provision of Information

Given the importance that the Report places on evidence-based medicine, it then calls for the use of this approach in the provision of CAM information to the public. The Report states that CAM must be shown to be safe and effective before being promoted, provided, or paid for. However, too often this does not happen.

The Report states: “To ensure public safety in the continually evolving area of CAM, accurate information must be available so that people can make informed choices. This includes choosing the most appropriate type of practitioner, deciding what type of approach can benefit certain conditions, ascertaining the ingredients in a product (such as a dietary supplement), and determining whether ingredients are safe and can assist in maintaining health. Yet far too often information to help make these choices is nonexistent, inaccurate, or difficult to find.”

The Internet is increasingly being used by the public as an educational tool on healthcare matters. Yet the quality and accuracy of the Internet information on CAM is highly questionable. “People may be making life-and-death decisions based on information from the Internet that may be misleading, incomplete, or inaccurate. This is particularly true in the case of CAM, for which a significant amount of evidence-based material is not yet available.”

The Commissioners state that “most CAM modalities have not yet been proven to be safe and effective” and therefore they “believe that it is premature to advocate the wide implementation and reimbursement of CAM modalities that are yet unproven.” At this point, the Report is in agreement with those who advocate an evidence-based approach to CAM.

However, the Report also reveals a high level of confidence that much within CAM will prove to be safe and effective. “Although most CAM modalities have not yet been proven to be safe and effective, it is likely that some of them eventually will be proven to be safe and effective, whereas others will not.” Having made this prediction in the Introduction, and affirmed the general lack of high-quality evidence for CAM throughout the Report, Chapter 7 is contradictory: “A growing body of evidence shows that many CAM interventions are effective in treating or helping to treat a range of health conditions.”

These contradictory statements are the clearest examples of a level of internal inconsistency regarding evidence-based medicine found throughout the Report. On the one hand, the Report calls for adherence to the principles on evidence-based medicine and acknowledges that much of CAM does not have this level of support. On the other hand,

the Report frequently speaks of CAM as if it had evidence-based support and makes recommendations assuming CAM does or soon will have this sort of support. The Commissioners who wrote the dissenting letter point out that the Commission's recommendations "do not appropriately acknowledge the limitations of unproven and unvalidated 'CAM' interventions or adequately address the minimization of risk." They elaborate that, "While the Report acknowledges that much of what is considered 'CAM' has not been shown to be safe and effective, a presumption exists that complementary and alternative medicine will be found to be beneficial."

The Report does claim that, "Adequate evidence as to safety and efficacy already exist for considering coverage of some CAM interventions." But they do not elaborate on which interventions they include here, or for which indications. The specific interventions they cite as having been demonstrated to be safe and effective are exercise, nutrition, and stress management. Yet the effectiveness of these interventions has been established within conventional medicine with its on-going emphasis on evidence-based research to support practices. In fact, some of the CAM recommendations made within these areas (such as diets for curing cancer and some fad diets) contradict the recommendations of evidence-based approaches to these same interventions. This raises once again the Report's overriding problem in lacking definitional clarity as to what precisely constitutes CAM.

Not only is there a contradictory emphasis within the Report, but the principles of evidence-based medicine endorsed by the Report are not used when it makes recommendations about particular CAM therapies. The Report includes a chapter on wellness and health promotion. This section is plagued by a lack of clarity, including the statement, "Helping people achieve a healthy, meaningful, and long life is the fundamental purpose of all health care systems." Such broad goals for any healthcare system would generate huge problems. How is the healthcare system supposed to help people achieve a meaningful life? Who will define what makes life meaningful? This brings healthcare into the realm of promoting philosophical or religious teachings that encourage a person to find meaning in life. This aspect of the Report will be further explored later in the section on spirituality.

Returning to issues related to the use of evidence, the Report states that, "CAM practices such as acupuncture, biofeedback, yoga, massage, and tai chi, as well as certain nutritional and stress reduction practices, may be useful in contributing to the achievement of the nation's health goals and objectives."

The Report then recommends that various programs be piloted to examine the benefits of CAM in schools, workplaces, and federal programs. The Report proclaims with great confidence, "CAM principles and practices may be useful not only in preventing some of these diseases and conditions, but also in enhancing recovery and preventing further illness." But how the Report supports these claims does not follow the evidence-based principles the Report itself endorses.

For example, the Report simply states that, "A significant portion of the adult population takes supplements and herbs to maintain health." This claim was not balanced against the Report's earlier statement that popular use does not support effectiveness or safety.

The Report then selected one or two studies with positive results for the use of a particular CAM intervention. Listing one positive study after another (for different interventions) gives the impression of a significant body of evidence supporting CAM. However, selectively picking and listing positive studies is not in keeping with evidence-based medicine. One or two positive studies can be found for almost any intervention. What is needed is a systematic review of the literature to get an objective overview of the research findings. For example, yoga was mentioned as an intervention that might contribute to people's health through reducing stress levels. The Report stated, "Studies have shown that stress reduction techniques such as yoga and meditation are beneficial." While that may be true, other studies do not support this conclusion. A controlled study found that yoga was no more effective in reducing stress than sitting and relaxing as measured by blood pressure levels.⁷ Such selective use of the literature is inappropriate, although a common problem in reviews of CAM interventions.⁸

The Report also bolstered the appearance of evidence in support of CAM by citing studies of questionable relevance. For example, a study on the benefits of wearing seat belts was mentioned. In another place the Report cited a workplace study that found reduced incidences of illness in employees after the introduction of lifestyle wellness programs. The Report did not describe the programs, which focused on interventions like safety classes, training of supervisors, and the evaluation of smoking policies and the food available in cafeterias.⁹ It is difficult to see how any study of these sorts of interventions provides support for CAM. This is a practical demonstration of the types of problems that arise when a clear and concise definition of CAM is not used.

Another example of how the Report did not abide by evidence-based principles is provided by its approach to homeopathy. Although never examined in any detail in the Report, numerous references were made to homeopathy as a popular example of CAM. The Report mentions that homeopathy was listed among the five CAM therapies most commonly believed by conventional physicians to be effective.

Yet no mention was made of the fact that systematic reviews consistently find that evidence for the effectiveness of homeopathy is, at best, very weak. The most recent review was carried out by the British National Health Service (NHS) Centre for Reviews and Dissemination.¹⁰ Homeopathy remains very popular in Britain, in part because of its use by the Royal Family, and can be paid for by the NHS. The NHS review noted that many of the 200-plus studies of homeopathy, and some earlier systematic reviews, were very poorly designed and carried out. The review concluded that there is insufficient evidence to recommend homeopathy as a treatment for any specific condition.

No indication of this situation is given in the WHCCAMP Report when it includes homeopathy along with all other CAM modalities. Some sort of differentiation of specific CAM therapies would have been expected in the Report, such as the categorization system suggested earlier.⁴ Without this, the Report's many calls for further funding and research of CAM would be assumed to include examination of homeopathy. Yet here is one CAM intervention that has been repeatedly studied and a consensus within evidence-based medicine holds that homeopathy fails the established criteria by which a therapy is viewed as an effective intervention.

That being the case, homeopathy should be placed very low on the priority list of interventions to be promoted or funded. One of the principles of evidence-based medicine is that when a therapy is demonstrated to be ineffective or unsafe, practitioners will adjust their practice in accordance with that evidence. This example raises serious questions about how willing proponents would be to implement the findings of evidence-based medicine when it doesn't support a therapy's effectiveness or safety.

Research Priorities

The problem with lack of definitional clarity in the Report has been mentioned several times. A place where this limitation becomes glaringly obvious is regarding the priorities that must be set by public policy in addressing CAM. In spite of admitting that much within CAM is unproven, either in effectiveness or safety, the Report calls for significant investments in CAM research.

However, research funds are limited. When agencies make decisions about which proposals to fund, they need to abide by fair guidelines. Proposals for CAM therapies must be evaluated against all other proposals and funding distributed on merit, not ideology. As the two Commissioners wrote in the dissenting letter, "Asking for more research money to investigate an approach, practice or product simply because it is 'CAM' is an ideological, not evidence-based approach to science." Once again, the Report fails to uphold the very principles it calls on others to implement regarding CAM.

Funding agencies need guidelines by which they can decide which proposals to fund, and this Report provided no help in developing these guidelines. The Report made recommendations for a huge amount of research, but they neither explained why CAM therapies should be pursued in preference to conventional therapies, nor which CAM therapies should be prioritized for research.

One such guideline would be to begin with a thorough review of previously conducted research. An example of the importance of this was already given with homeopathy. The fact that so much evidence exists that homeopathy is no more effective than placebo must be used to give homeopathy a lower research priority than some other therapy with promising preliminary research results.

A second criterion by which research priorities could be set is by evaluating the plausibility of the therapy against well-known scientific observations. For example, the NHS homeopathy review points out that "given the absence of a plausible mechanism of action, it has been argued that the existing evidence base represents little more than a series of placebo versus placebo trials."¹⁰

In the categorization scheme suggested earlier, the scientifically implausible basis for homeopathy would move it into the scientifically questionable category, not the unproven one. If a CAM therapy has little evidence of effectiveness, and is based on scientifically questionable principles that contradict well-established scientific principles, that proposal should receive a low priority.

In spite of a central aspect of the Commission's mission being to lead coordination of CAM research, the Report provided no guidance here, other than a general call to fund CAM.

Educational Priorities

The Report's recommendations on CAM education are similarly given without guidelines for selection. No priorities are established for choosing the CAM therapies to be taught in conventional medical schools, included in medical

conferences or written about in journals. The medical school curriculum is already over-flowing. Physicians have so much to learn, priorities must be established that facilitate selection of curricular material.

The Report calls for the inclusion of CAM practitioners on medical faculties and in medical conferences, journals, and review boards. However, this should only happen after the CAM practices and practitioners have shown themselves to be qualified by evidence-based guidelines. The Report gives little guidance on how CAM practitioners should be chosen and validated. As with research and the therapies themselves, there is an assumption that CAM practitioners should be included within conventional medical schools without assistance in determining whom to include.

The Report does address an existing problem in the teaching of CAM in conventional medicine. Referring to CAM courses in conventional medical schools, it notes that, “While many CAM courses are taught from either an advocacy or neutral view, all CAM courses should be taught critically.” This tendency is apparent throughout CAM, and is even evident in the Report itself. This is one reason why the Commission itself should have been composed of a broad spectrum of medical practitioners, not just those who were primarily proponents of CAM.

The Report sets out excellent general criteria by which CAM should be taught: “CAM taught in the context of conventional medical education should be evidence-based.” Given the Report’s own admission that very little in CAM rises to this standard, medical schools would seem justified in not spending large amounts of time or resources on CAM. Yet the Report calls for significant investment in the teaching of CAM in conventional medical schools and to physicians in continuing education.

At the same time, the Report calls for the inclusion of conventional medical training within the training programs of CAM practitioners. The Report’s hope seems to be that CAM practitioners will become primary care providers in a future healthcare system. However, given the completely different nature of the training of physicians and even other conventional healthcare professionals, it seems irresponsible to add some coursework to a CAM practitioner’s training and hope to turn out adequately trained primary care providers. As the dissenting letter from two of the Commissioners states, “Efforts to equate their [CAM practitioners] degree of training, or the scientific basis of their practice, with that of the designated primary care specialties puts the public at risk of receiving unvalidated and non-evidence based primary care.”

Inclusion of Spirituality within CAM

One of the distinctive characteristics of CAM that the Report identifies is concern for spirituality. The inclusion of one’s worldview as a form of CAM represents a significant broadening of the scope of medicine. This aspect of the Report is of great concern to an organization like the Christian Medical Association. Many people have entered the healthcare profession because of religious and spiritual beliefs about the importance of helping other people. Religion and spirituality strongly influence a person’s worldview and lifestyle. Decisions based on religious and spiritual beliefs therefore influence a person’s health.

Acknowledging the importance of religion and spirituality for health and healing is one thing. Viewing spirituality as part of CAM is something else. The dissenting letter from two of the Commissioners disagrees with the designation of spirituality as CAM. “When spirituality is so designated, ‘CAM’ prevalence grows dramatically. The truth is that spirituality transcends any arbitrary designation of conventional and non-conventional medicine and cannot be claimed by any particular group.”

Medicine and religion have been intertwined throughout history. Modern medicine is unique in being a secular enterprise. It has sometimes made itself excessively ‘secular’ by refusing to even acknowledge spirituality. But the existence of hospital chaplains is one reminder that conventional medicine does see a place for spirituality. Conventional medicine has not usually provided spiritual care. Physicians and caregivers should see the importance of recognizing patients’ spiritual needs and ensure that, if they are not trained or experienced in providing spiritual care, these needs are addressed by someone qualified to do so.

Many within CAM seek to reintroduce spirituality into modern healthcare. The inclusion of spiritual teaching along with CAM therapies is commonly viewed as important to address a person’s holistic needs. However, this raises a number of ethical problems that are rarely addressed by CAM practitioners, and are not discussed in the WHCCAMP Report.

The Report describes spirituality relatively infrequently, and primarily raises it in the chapter on wellness. However, as with other crucial aspects of the Report, the term is not defined. This would have been especially important given the deeply personal nature of a person’s spirituality and how it frequently borders on one’s religious beliefs.

An example of how this is relevant is with the concerns that some raise about whether certain CAM therapies are of potentially harmful spiritual origins or are covertly religious. If so, they raise serious concerns about how they ought

to be offered to patients, and whether or not federal funding of some of these practices might interfere with the principles of separation of church and state.

The Report gives examples of several CAM wellness programs that it would welcome seeing in hospitals, community centers, public schools, and workplaces. The Report selects positive studies of several stress-reducing therapies and wellness promoting therapies such as yoga, tai chi, and meditation. Yet the Report makes no mention of the spiritual conflicts that some people have with these therapies.

For example, yoga is described as being able to contribute to the general health of the nation, and children using yoga are said to have increased concentration, reduced impulsive behavior, and increased self-esteem.¹¹ Yet no mention is made of the controversy surrounding the spiritual roots of yoga, a term that literally means “union.”¹² “Yoga practices yoke—or unite—the self to God. . . . Yoga is a means towards realizing God, a spiritual, mystical path toward higher consciousness.”¹² Although the spiritual roots of yoga are often ignored in America, Hindu practitioners claim this strips yoga of its true value. *Yoga Journal*, a popular publication for yoga enthusiasts, recently devoted its cover story to the question of whether or not yoga is religious.¹³ The journal acknowledged that in the eyes of many devout Christians, Jews, and Muslims, yoga would be offensive and incompatible with their religious beliefs.

Whatever one’s perspective on this issue, this sort of controversy should be acknowledged and discussed in a public policy document such as the WHCCAMP Report. The Report’s endorsement of these types of therapies carries with it an obligation to consider the potential conflicts that these therapies generate.

The Report similarly suggested that meditation should be considered a legitimate option within CAM. Yet the Report does not define what it means by meditation, which can be anything from resting one’s eyes to transporting oneself into a spiritual plane to contact spiritual beings.⁴ A Federal Court ruling on Transcendental Meditation is directly applicable here, and has been used to establish that an employer cannot require employees to practice or attend programs they deem religious in nature. The practices listed include meditation, yoga, guided visualization, self-hypnosis, therapeutic touch, biofeedback, walking on fire, and inducing altered states of consciousness.¹⁴ Many of these are now viewed as forms of CAM. Although proponents of these CAM therapies may claim they are not religious, the Federal Court decision on Transcendental Meditation ruled that, “the subjective characterizations by individuals of teachings as religious or not religious in their systems of categorization cannot be determinative of whether or not the teachings are religious within the meaning of the first amendment.”¹⁵ For these reasons, careful deliberation is needed on the ethics and legality of introducing religious or spiritually-based CAM into schools, places of employment, and public health facilities. The Report did not acknowledge the need for such deliberations, which were mentioned in the two Commissioners’ dissenting letter.

More generally, the view that spirituality is a therapy of any sort is offensive to some people. It promotes a view of spirituality as a means towards an end, usually good health or a longer life. However, many spiritual and religious traditions view spirituality as an important end in itself. For them, inclusion of spirituality as a CAM therapy distorts the very essence of what spirituality or religion is all about.

Concerns have also been raised about whether it is appropriate for medicine to include the provision of spiritual care.¹⁶ Claims are made that healthcare professionals do not have the training in spiritual care. Some claim spirituality should be viewed like a person’s marital or financial status: these have health implications, but should not be regarded as within the proper domain of medicine.

The relationship between physician and patient is not one in which both are on equal footing. The patient is often weak and vulnerable, and in many ways wants to do what the physician desires. Religious and spiritual topics must be raised with great care. Those in positions of power must be concerned not to pressure those who are vulnerable into accepting their beliefs and personal practices. On the other hand, these concerns should not lead healthcare professionals to ignore or dismiss spiritual concerns.

Besides, there is significant evidence-based literature documenting the health benefits of addressing spiritual issues.¹⁷ Other studies show that patients want their primary care physicians to discuss spiritual issues with them. What is needed is adequate training so that spiritual care can be given ethically and effectively.

Therefore, guidelines are needed to help healthcare professionals raise and respond to spiritual issues in ethically appropriate and sensitive ways. Informed consent is central to good medicine, and should apply here too. Patients should be asked for their permission to address spiritual issues. They should be told of the spiritual basis of any practices or guidance being offered. Those offering spiritual practices, or suggesting that certain spiritual beliefs are beneficial, should be knowledgeable of the evidence supporting those claims. Further, careful dialogue is needed on how spirituality can and should be incorporated into modern healthcare.

A spiritual or religious practice should not be introduced to patients as if it was just another therapy or remedy. People have reported finding out about the spiritual roots of a CAM therapy long after it had been provided. Such

covert promotion of spirituality must be addressed. The WHCCAMP Report missed an opportunity to encourage this discussion by simply viewing spirituality as another CAM therapy.

Issues of Justice

The Report claims that CAM might effectively address inequities currently within the US healthcare system. Some people do not have access to conventional medicine, and some do not have access to CAM. The Report hopes that CAM:

- may provide benefits to vulnerable populations who do not have adequate access to conventional medicine,
- may lower healthcare costs and thereby improve access to conventional medicine, and
- help solve problems of equity and quality.

The Report gives little support for its optimism in these areas. Given the complexity of the healthcare system, and the reasons for its current inequalities, adding the provision of CAM would seem to be an unlikely solution. Yet the Report states, “While it is too early to judge the effectiveness of CAM in addressing their health care needs, CAM nonetheless offers the possibility of a new paradigm of integrated health care that could affect the affordability, accessibility, and delivery of health care services for millions of Americans.”

Given the lack of information on CAM’s effectiveness and safety, such sweeping optimism seems unwarranted. The first priority should be to help poor and vulnerable populations gain access to what has already been demonstrated to be safe and effective. The Report’s suggestion that providing CAM first could alleviate some problems runs the risk of supporting an unjust two-tier healthcare system. For those who can afford effective healthcare, conventional medicine will be provided. For those who are vulnerable and poor, unproven CAM will be provided.

The Report’s recommendations also assume that CAM will be more cost-effective than conventional medicine. This has not been demonstrated, and there is some evidence that CAM can be more expensive. For example, the costs of caring for acute low back pain were compared between patients who saw chiropractors, primary care physicians, and orthopedic surgeons.¹⁸ The time to recovery was essentially the same for all three forms of care. The lowest mean cost per episode was provided by the primary care physicians. The cost of care from chiropractors and orthopedic surgeons was about the same, and much more than that from primary care providers. Clearly, what is needed before any recommendations can be made about what should or should not be promoted, and what might help the healthcare system, is research on the effectiveness, safety, and costs of selected CAM therapies.

Safety Issues

The lack of information on the safety, effectiveness, and costs of CAM was acknowledged throughout the Report. Statements were frequently made about the importance of evidence-based practice to determine whether or not specific CAM therapies were safe. But at the same time, calls were repeatedly made for increased funding of CAM research, increased coverage of CAM by insurance, and increased use of CAM in wellness programs. The enthusiasm with which these recommendations were made suggests that public safety was not given the priority it deserves. Issues of safety must be addressed before widespread implementation of CAM therapies.

Safety of dietary supplements was one area where the Report had several helpful suggestions to improve the current situation. Given the poor quality of many herbal products on the US market today, steps are urgently needed in this area. However, safety must also be evaluated with all CAM therapies. Meditation was mentioned as a form of therapy that might be beneficial. No mention was made of the several published reports of adverse effects from meditation.^{19,20} Among the spiritual therapies, practices based on ‘life energy’ or ‘qi’ have been associated with psychological problems.²¹ If CAM is to promote the idea of holistic health, then the possibility of “holistic harm” must also be investigated.²²

Conclusion

The WHCCAMP Report strongly endorses the principles of evidence-based medicine. It makes it clear that the way forward for CAM is to address the important issues of effectiveness and safety. The most reliable way to evaluate any therapy or remedy, whether conventional or alternative, is through the research methods developed over the last

century. These sorts of studies allow the identification of therapies and remedies that have the ability to promote human health and cure illness.

While the Report endorses evidence-based medicine, it shows significant weaknesses in the Commission's willingness to implement this approach. Significant failings were pointed out here in the way the Report endorses therapies, or at least suggests their strong likelihood for benefits. Positive studies were selectively cited rather than using the results of systematic reviews of the therapies.

These, and other factors, gave the Report a degree of optimism regarding CAM that the evidence currently does not support. The Report itself states that much of CAM does not have the studies to support its effectiveness or safety. Therefore, the primary recommendations of the Report should have been to call for the collecting or generating of the needed evidence, and implementing evidence-based practice.

Given the vast array of therapies within CAM, and the limited funds available for all healthcare research, the Report should have developed ways to prioritize research funding. Calls for massive funding of CAM research in general need to be limited and orderly. A prioritizing scheme would have benefited those interested in funding the studies most likely to produce patient benefit.

While establishing an excellent basis upon which CAM might move forward, the Report leap-frogs beyond the obvious step of collecting evidence to steps that belong much further down the road. The tone of the Report is one in which sweeping changes are called for, everything from adding courses in CAM to medical schools, provision of CAM within federal programs, and coverage of CAM by insurance programs. Such recommendations are premature until a sufficient foundation of evidence-based reviews becomes available on what works, what is safe, and what is affordable.

The inclusion of spirituality within CAM is of particular concern. Spiritual concerns are important to patients when they are ill. These questions should be addressed by healthcare professionals. The forms of spirituality frequently encountered within CAM are often those that claim to be non-religious. This is a controversial claim to make and support. What should be acknowledged is that spiritual practices have the potential to be offensive to some patients, especially if they are not informed ahead of time of the spiritual roots or religiousness of a practice. Therefore, patients should be told clearly of the nature of any spiritual teachings that may underlie a CAM therapy. The Report missed an important opportunity to address these issues by failing to even acknowledge them.

The Report provides a welcome endorsement of the importance of evidence-based medicine in evaluations of CAM. However, the Report arrived at many of its other recommendations in ways that are not supported by evidence-based medicine. The Report also failed to address some of the significant issues that need to be addressed before CAM should be promoted within the US healthcare system.

*—Dónal P. O'Mathúna, Ph.D. is a Fellow of The Center for Bioethics and Human Dignity in Chicago (www.cbhd.org) and a Professor of Bioethics & Chemistry at Mount Carmel College of Nursing in Columbus, Ohio. His Ph.D. research involved drug development from herbal remedies (pharmacognosy) and he has an M.A. in theology focused on bioethics. He is the co-author with Walt Larimore, M.D. of *Alternative Medicine: The Christian Handbook* (Zondervan, 2001).*

References

1. Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rompay M, Kessler RC. Trends in alternative medicine use in the United States. *J Am Med Assoc* 1998;280:1569–1575.
2. Druss BG, Rosenheck RA. Association between use of unconventional therapies and conventional medical services. *J Am Med Assoc* 1999;280:1569-1575.
3. White House Commission on Complementary and Alternative Medicine Policy. Final Report. Accessed on March 28, 2002 at <http://www.whccamp.hhs.gov/finalreport.html>.
4. O’Mathúna D, Larimore W. *Alternative Medicine: The Christian Handbook*. Grand Rapids, MI: Zondervan, 2001.
5. National Center for Complementary and Alternative Medicine. Expanding Horizons of Healthcare: Five Year Strategic Plan, 2001-2005. Accessed at <http://nccam.nih.gov/strategic/> on April 15, 2002.
6. Levine M., Rumsey SC, Daruwala R, Park JB, Wang Y. Criteria and recommendations for vitamin C intake. *J Am Med Assoc* 1999;281: 1415–1423.
7. van Montfrans GA, Karemaker JM, Wieling W, Dunning AJ. Relaxation therapy and continuous ambulatory blood pressure in mild hypertension: a controlled study. *BMJ* 1990;300:1368-1372.
8. O’Mathúna DP. Evidence-based practice and reviews of Therapeutic Touch. *J Nurs Scholarship* 2000;32:279-285.
9. Bertera R. Behavioral risk factors and illness day changes with workplace health promotion. *Am J Health Promot* 1993;7:365-373.
10. NHS Centre for Reviews and Dissemination. Homeopathy. *Effective Health Care* 2002;7:1-12. Accessed on March 11, 2002 at www.york.ac.uk/inst/crd.
11. The website given in the Report to support these findings was not available when access was attempted for this paper. Another important principle in evidence-based medicine is that the results of studies should be submitted for peer-review and made readily available.
12. Narayan S. Stripping the soul out of yoga? Accessed on April 15, 2002 at http://www.beliefnet.com/story/12/story_1217.html.
13. Reder A. Reconcilable differences. *Yoga Journal*. March/April 2001:80-85, 156.
14. Equal Employment Opportunity Commission. Notice 1988;N-915.022.
15. *Malnak v. Yogi*, 440 F. Supp. 1284 (1977).
16. Sloan RP, Bagiella E, VandeCreek L, Hover M, Casalone C, Jinpu Hirsch T, Hasan Y, Kreger R, Poulos P. Should physicians prescribe religious activities? *N Engl J Med* 2000;342:1913-1916.
17. Larimore WL. Providing basic spiritual care for patients: should it be the exclusive domain of pastoral professionals. *Am Fam Physician*. 2001;63:36, 38-40.
18. Carey TS, Garrett J, Jackman A, McLaughlin C, Fryer J, Smucker DR. The outcomes and costs of care for acute low back pain among patients seen by primary care practitioners, chiropractors, and orthopedic surgeons. *N Engl J Med* 1995;333:913-917.
19. Otis LS. Adverse effects of Transcendental Meditation. In Otis LS, Shapiro DH Jr, Walsh RN (eds.), *Meditation: Classic and Contemporary Perspectives*. New York, NY: Aldone, 1984, pp. 201-207.
20. Shapiro DH Jr. Adverse effects of meditation: a preliminary investigation of long-term meditators. *Int J Psychosom* 1992;29:62-66.
21. Ng, B.-Y. Qigong-induced mental disorders: a review. *Aust NZ J Psychiatry* 1999;33:197–206.
22. O’Mathúna DP. Therapeutic Touch: what could be the harm? *Sci Rev Altern Med* 1998;2:56-62.