
Title: Framework Negotiations: Diagnostic Insights among Alternative Medical Practitioners Participating in Integrative Medicine Case Conferences
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Framework Negotiations: Diagnostic Insights among Alternative Medical Practitioners Participating in Integrative Medicine Case Conferences

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Medical anthropology concerns itself with cultural interpretations of health and illness in complex pluralistic societies whose members incorporate multiple strategies to address health issues. This research explored the variety of complementary and alternative medicine (CAM) topics introduced into biomedically structured clinical evaluation. A field study of routine case conferences held within a clinical fellowship program in integrative medicine (IM) provided the ideal setting to explore contrasting conceptualizations of disease. Study results yielded five core sources of information sought by CAM practitioners, typically not addressed in biomedicine: social relations history within family of origin, emotional health, energetic health, spiritual health, and in-depth nutritional evaluation. [medical pluralism, integrative medical education, disease etiology]

Introduction

Medical anthropology has classically concerned itself with cultural interpretations of health and illness, whether in locales dominated by medical traditions considered exotic by Western medical standards or in complex, pluralistic societies whose members incorporate multiple strategies to address health issues. The United States exemplifies pluralistic medicine, due in part to its diverse population who bring traditional medical practices with them as they immigrate. Integrative medicine (IM) is the process of integrating imported medical practices into the established biomedical system, and grounds the research described here.

This study explores alternative frameworks of disease etiology located within what biomedicine terms "complementary and alternative medicine" (CAM) that form the basis of IM. These alternative frameworks are typically unfamiliar to biomedical practitioners yet are increasingly employed by biomedically trained physicians seeking to integrate their clinical practice. "Integrative" medicine being defined in U.S. medicine as a form of medical practice distinct from family medicine or any of the other coexisting whole systems of medicine such as naturopathic, Ayruvedic, or traditional Chinese medicine (TCM). These longstanding medical traditions have transitioned in and out of popularity at various points in U.S. medical history and are now within the gaze of the currently dominant biomedical system. CAM's emergence in biomedicine a decade ago was brought to the attention of the biomedical community by a landmark study detailing CAM's popularity in the general public (Eisenberg et al. 2001). This was followed by analysis of the trend in unconventional medicine in subsequent biomedical literature (Kaptchuk and Eisenburg 2001a, 2001b).

Since then, clinicians and social scientists from multiple disciplines have been interested in how to define IM, as biomedical and CAM practices can be integrated in a number of ways (Boon et al. 2004; Caspi et al. 2003; Grace et al. 2008; Hamilton et al. 2008; Jones 2005; Maha

and Shaw 2007; Mizrachi et al. 2005; Vohra et al. 2005). Some practices enjoy parallel inclusion in biomedical settings (e.g., meditation or acupuncture may be offered in cancer treatment centers), while others do not. Choices regarding which therapies to include and exclude appear to be implemented case by case, driven by preferences of those institutions and physicians who choose to incorporate alternative therapies.

As biomedical physicians gain more knowledge of CAM practices, they face choices of how to identify those therapies they will incorporate. As CAM and biomedical practitioners continue to produce collaborative clinical spaces, the nature of information exchanged in these environments accompanied by resultant professional dynamics remains critical to this emergent form of medical practice. Foucault (1972) establishes a link between knowledge in power in the sense that knowledge cannot be contextualized without including the effects of the power that knowledge produces. The question in play at the beginning of the 21st century, then, is which therapies and practitioners will members of the biomedical establishment choose as partners in re-creating medicine?

Baer and Coulter (2008) remind us that as social scientists considering IM, we are obligated to examine its premise both as conceptualized on a theoretical level and as practiced at the clinical level, including deviations between the two. Echoing Baer and Coutler (2008), researchers within the field of IM (Adams et al. 2009) note that conceptual models developed over the last decade illustrating theoretical integration are of little value in the actual clinical environment: "In fact, empirical studies in health care settings demonstrate that the actual practices of IHC (Integrated Health Care) are very complicated and very seldom come near to the neat patterns prescribed by conceptual models" (Adams et al. 2009:794).

The research presented in the following pages examines one environment produced by the coexistence of multiple medical points of view, each competing with the other for political, economic, and social legitimacy. Although CAM is becoming more accepted into mainstream biomedical institutions as evidenced by medical school course offerings and increasing numbers of hospitals and health centers where CAM and biomedicine coexist, the concept of CAM itself is contested. Lack of consensus among physicians about what constitutes legitimate therapy among the range of therapeutic options available produces a subculture of medical professionals who choose to investigate and incorporate these therapies into their clinical practices without benefit of official best practice standards.

The notion of standards itself is equally problematic, particularly from a research standpoint, given the inherently individualistic nature of many CAM therapeutic approaches. It is often difficult to produce results meeting acceptable scientific criteria using therapies that rely on treatment tailored to the individual, rather than standardized to a diagnosis. Although some professionals are attempting to establish credentialing for integrative medicine physicians, such as the Consortium of Academic Health Centers for Integrative Medicine (www.imconsortium.org/home.html), for the most part clinicians must determine for themselves, through clinical reasoning, which therapies are legitimate and appropriate for their patients.

Physicians practicing IM must be licensed to practice medicine under an MD or Doctor of Osetopathy degree, and most have additional training in some form of alternative medicine. By expanding the body of knowledge relevant to clinical practice through including CAM, the IM clinician has enhanced the capacity to structure the clinical encounter beyond standard biomedical topics. This allows physicians to expand the scope of information collected from patients and to decide which parts of the patients' history and symptom presentation should be

considered relevant (Salkeld 2005, 2008). While standards of practice guide diagnostic routine to some extent in biomedicine, incorporation of disparate sources of information into a single clinical encounter within IM prioritizes clinical reasoning as the foundation of practice.

Diagnosis and treatment define clinical reasoning, typically related to determination of etiology. Polanyi (1983 [1966]) examined the nature of clinical reasoning and decision-making by distinguishing between intuitive knowledge, which he termed "tacit knowledge" as opposed to explicit, quantifiable knowledge. Proponents of tacit knowledge (Greenhalgh et al. 2008; Henry 2010) favor an explanation of clinical reasoning as grounded in personal experience of clinical practice rather than externally quantified outcomes-based conclusions, such as clinical trial results. Although vast and diverse, biomedicine is conceptually uncontested in U.S. medicine as the legitimate source of medical knowledge. IM introduces an additional component by expanding the source of knowledge its practitioners consider legitimate. It remains unclear to what degree IM physicians have absorbed the tacit knowledge associated with the clinical practice of CAM. At issue is how knowledge that U.S.-based physicians borrow, produced in other contexts, will be incorporated into biomedical practice.

In related work within science and technology studies (STS), Knor Cetina (1999) links knowledge and practice in her exploration of epistemic cultures, or cultures of knowledge settings; she argues that it is "knowledge as practiced-within structures, processes and environments that make up *specific* epistemic settings" (1999:8, emphasis in the original). In the study presented here, the distinction between the structure of knowledge provided to clinical fellows by CAM practitioners and the active process (or practice) of the knowledge transfer is elucidated. This research compares the body of CAM knowledge in use in a postdoctoral clinical education program, with its structural position as secondary to biomedical information, as evidenced by presentational ordering and style. Drawing on Baer, Coutler, and Knor Cetina, I offer these data as one example of the mediating influence of structure on knowledge as IM is produced in the practice setting.

Background

Practitioners of biomedicine and CAM are working together more frequently in a variety of situations ranging from formal clinic-based interaction to informal referral networks and educational settings. Although clinicians and CAM practitioners typically collaborate in biomedical environments, the language and concepts are from distinctly different ideologies concerning disease etiology. Following the above discussion on clinical reasoning, tacit knowledge is produced in part by implicit information from the clinical practice culture associated with each therapeutic profession.

Studies indicate that when CAM practitioners participate in biomedically based contexts, the lingua franca is biomedical terminology. Even as biomedicine increasingly welcomes CAM into the realm of therapeutic solutions to ameliorate symptoms or side effects of standard treatment, the privilege of diagnosing disease, and therefore legitimizing disease, remains in the biomedical realm. Research focused on communication between the two groups concluded that biomedical parlance dominates (Hollenberg 2006) and that CAM practitioners can improve communication with physicians by engaging in structured training initiatives (Frenkel et al. 2004, 2007) and focusing communication on practical methods such as letters of referral. In a recent survey study with CAM practitioners and IM physicians, Ben-Arye and colleagues (2008) noted that within developing relations between these professional groups, physicians state

preference for physician-directed management of patient's cases, whereas CAM practitioners favor a more collaborative model. These studies collectively speak to an underlying issue within professional relations between physicians and CAM providers. The quality of these relations are reflected in communication patterns that privilege biomedical terms and referral patterns that give physicians prescriptive authority.

Anthropologist Claire Cassisdy sums up the relevance of language to the matter of integrating therapeutic approaches in the following way:

> Anthropology is highly sensitive to language issues, since language molds and guides the way people express their thinking. It reveals paradigm, power relationships, history, gender, education, preference, cultural awareness and many other details of being and occupation. Not surprisingly, language looms large in any study of alternative medicine … holistic medical practices posit processes and effects that do not easily fit the language or expectations of reductionistic science. [1995:28]

As the research here demonstrates, language in clinical education settings informs determination of therapeutic relevance. The diagnostic and therapeutic concepts presented here are not exhaustive, nor can they be considered representative of the whole of IM since the field is broad and undergoing rapid developmental change. However, these topics are not characteristic of those addressed in family medicine practice and therefore indicate an expansion of knowledge typically employed in biomedicine to evaluate and treat patients. This study portrays biomedically trained clinical fellows' exposure to concepts deemed relevant to clinical patient evaluation by CAM practioners. The unique opportunity afforded by this clinical education setting allowed the clinical fellows to hear comparative feedback from various practitioners in reaction to the identical case study. The experience of biomedical clinical fellows interacting with CAM practitioners so as to become familiar with alternative methods of clinical evaluation contributes to production of the tacit form of knowledge essential to clinical reasoning in IM at this stage of its development. The data presented here illustrate some types of new knowledge under consideration as IM expands the boundaries of what constitutes legitimate clinical information.

Setting

A clinical fellowship program in IM provided the ideal setting for exploring contrasting conceptualizations of disease etiology. Each of the four clinical fellows who participated in the study were experienced physicians, having attained their MDs several years earlier with additional years of clinical practice beyond their residencies. The scope of the program included four types of educational experiences: clinical seminars conducted by well-experienced integrative physicians, practical clinical experience in an IM clinic supervised by an attending physician, field experiences with CAM preceptors—or instructors—with whom they would observe clinical encounters, and a regularly held patient conference. The clinic where fellows received patients operated on a consulting model of practice. Neither the fellows nor the attending physicians functioned as the patient's primary care physician but rather as specialists in IM who would typically see a patient only twice, with limited telephone follow-up. Patients seen

at the IM clinic were sometimes physician referred but often self-referred and were able to pay on a fee-for-service basis.

Clinical fellows used patient conferences to describe cases and receive consultation about selected patients they had seen in the IM clinic: those whose cases were particularly complex or about whom they felt they could benefit from additional advice from the CAM experts. Biomedically trained clinicians attending the conferences consisted of two IM program faculty members and a psychiatrist, all MDs by training. CAM faculty available to the clinical fellows consisted of practitioners of naturopathy, TCM, energy medicine, botanical medicine, mind–body therapy, manual medicine, and a sleep hygienist. Various types of spiritually based practitioners were invited as well, including a Christian minister who represented multiple mainstream Christian denominations and a practitioner who specialized in Chakra balancing and past life regression therapy.

The case presentation process followed a typical pattern in which the fellow would describe the case according to preselected categories of information collected from the patient. As the case conference was organized, fellows neither accepted nor rejected suggestions on the spot but rather chose among suggestions in writing subsequent treatment protocols. The topics listed below in Table 1 were identified as relevant to IM clinical practice by the program's developers and required by the fellowship in which the clinicians were enrolled. The clinical fellowship was designed by an experienced MD whose interest in CAM developed over a period of 30 years in practice. Fellowship faculty physicians were also experienced MD-trained physicians who were the first few protégés of the program's founder.

Table 1: Categories of Information Designated by Patient History Protocol

Informational Category	Description
Biomedical Diagnosis	Detailed history of biomedical tests, procedures, diagnoses, current, and past pharmaceutical use.
Family Relationships History	Detailed family history including patient's experience of childhood, any traumatic events, current number, and quality of familial relations.
Religious Orientation	Exploration and assessment of patient's religious and/or spiritual orientation, including past and current affiliation with organized religious institutions or individual and independent spiritually oriented practices.
Nutrition	Extensive exploration of past and current dietary habits, including weight-loss attempts, special diets, and food allergies.
Experience with CAM	History of past or present use and self-reported success or failure with any type of CAM.

A detailed description of these categories and their purpose within the diagnostic process is included in the data section. Following the case report, participating practitioners were able to ask clarifying questions, which the fellow did his or her best to answer based on clinical notes; sometimes, though, the fellow did not have the information requested by the practitioner. After the presenter clarified participants' questions, various practitioners were invited to suggest therapeutic approaches that could be useful in resolving the case. Depending on the number of cases to address and amount of time allocated to each, residents invited some or all of the practitioners to comment on any particular case. The fellow would choose which practitioners to

contribute to any given case, depending on interest and seeming fit of the therapy represented. Sometimes practitioners declined to contribute advice in a specific matter, maintaining that their practice specialty had nothing to offer to the case. Other times, practitioners would volunteer information. Last, the attending faculty IM physician would wrap up the case with some final observations based on what all participants had said.

Periodically, practitioners would note that a presenting fellow had neglected to collect adequate information within a particular category. This deviation caused tension between fellows who were obliged to select the most pertinent information as they perceived it and practitioners who felt disadvantaged by this filtering process as they offered their diagnostic opinion. When the clinician had collected sufficient information, she or he would formulate treatment protocols to be shared with the patient at the next office visit. Conference group members did not receive information on the outcome of the case, nor did they have knowledge of what information the clinical fellows selected as useful to them during a clinical encounter.

Methods

The University of Arizona's Social and Behavioral Internal Review Board approved the research protocol. Data presented here are based on the 10 patient case conference sessions held during one semester of the residential clinical fellowship training in 2005. Patient case conferences were held weekly. They lasted from three to five hours each, depending on number and complexity of cases presented. Fellows selected cases for presentation based on especially challenging patients they had seen in the IM clinic during the previous week. Two to three cases were presented by each fellow at each conference, resulting in a total of 60 cases over the semester. These 60 cases comprised the data set for this study.

Prior to beginning the study, I distributed information sheets describing the research and its purpose to all panel members who attended the first meeting; I collected participants' verbal consent. At the next few meetings, I informed any previously absent members of the panel about the study using the same informational sheet. Panel members made no objections to my presence in the conference sessions, and my research fellow position in the same program normalized my attendance at these case conferences. All panel members attended each session as a rule, with an occasional absence by one or two members. Due to my nonclinical status within the clinical group, I observed but did not participate in discussions. Audio recording was not feasible for this study because of the size and variability of the group, the configurations of the room, and the preference of the participants. Using a laptop, I typed notes verbatim as various speakers contributed to the discussion, and frequently jotted field notes on the same screen.

I loaded files of case conference field notes and clinical fellow interviews directly into Atlas.ti software program. Using Atlas.ti, I categorized notes topically and coded according to therapy to detect profession specific patterns. Through cross-coding topics with sources, I determined which practitioners were regularly addressing which topics. Similarly, I established whether practitioners from other professions and physicians offered any types of advice that were typically associated with a specific therapeutic approach. Performing a simple sorting exercise and counting topics frequencies regardless of source, I determined final categories that appeared significant to multiple practitioners. The resulting domains contained data from various professionals whose commentaries were thematically related, despite epistemological and etiological differences. These final categories constitute the data on which I based my analysis.

To represent these final categories in context, I revisited each case to determine which cases contained the greatest number of final categories and represented a variety of professional opinions. I chose these cases to illustrate the framework of clinical investigation taught to and used by the IM clinical fellows.

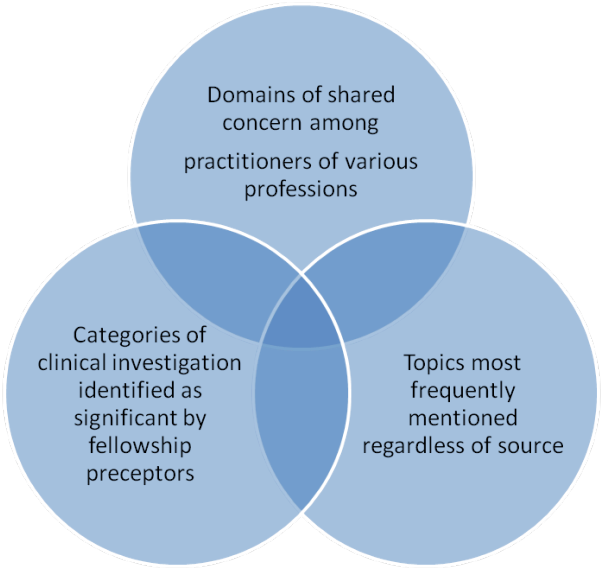
I must add a caveat here by pointing out that the very nature of holistic medicine at times causes difficulties in creating functional taxonomies. Although panel members self-identified as representing different professions, their shared holistic orientation created an inclusive approach that was difficult to parse out for analytical purposes. For example, therapists who identified themselves as practitioners of energy therapy also considered spiritual and emotional issues in their approach.

As the clinical fellowship concluded for that semester, I interviewed each fellow regarding their overall reaction to the case conference exercise and its benefits and disadvantages. Due to the fellows' time restrictions, I interviewed each at semester's end when all cases were concluded. Although the clinicians and I attempted to reconstruct outcomes for each case they had presented during the conferences, that task proved insurmountable as they themselves had incomplete clinic notes. Since the cases they presented had been only a fraction of the patients they had actually seen in the past 16 weeks, it was difficult for them to select the appropriate patient based only on my back-description of the case. This inability to comply with the initial research design (to match specific case presentations with eventual prescriptions made by the clinical fellows to a given patient) limits the clinical significance of the study.

Results

The structure of the patient history protocol developed for the clinical fellowship designated that several categories of inquiry be covered at the initial patient visit. These categories ranged from previous biomedical diagnoses of the patient's presenting symptoms to spiritual orientation and family structure and relations. Figure 1 illustrates the relationship among program structure, clinical process, and patient narrative content.

Figure 1. Structure and Process Relations Informing Analysis



The following results section is organized both by process and content, mirroring the clinical investigational protocol, coupled with observed significance of domains to the ensuing discussion of cases. Table 2 lists from left to right: categories of information deemed important by the CAM practitioners to be collected in each initial patient visit; frequency count of topics mentioned in case conferences regardless of source; domains of shared concern among the fellowship's CAM practitioners; weighting of categories based on observed significance to the case conference participants.

Table 2. Data Interrelationships

Informational Categories Designated by Fellowship Protocol	Topics Listed with Frequency Count from Atlas.ti Output	Domains of Shared Concern among CAM Practitioners	Weighted Categories of Observed Significance
Biomedical Diagnosis (if any) Family Relationships Religious Orientation Nutrition Experience with CAM	(218) Social Relations (138) Mind–body (85) Psych (73) Energy (55) Spiritual (39) Alcohol (28) Emotional (8) Biomedical Diagnosis (2) Diet (1) Alt Med Use (1) Patient Expect of IM (1) Intuition	Social Relations Mind–Body/Psych/Emotional Energy Spiritual Biomedical Diagnosis	Biomedical Diagnosis Family Relationships Mind–Body Energy Religion/Faith/Spirituality Nutrition

This table depicts quantitatively derived topics from an Atlas.ti frequency count, regardless of location or source in the data set, with observed significance from research fieldnotes of any given topic. Thus, the framework of patient history protocol overlaid on the data set appears in column one of Table 2, followed by a frequency count in column 2. The third column of Table 2 rearranges and collapses topics into domains of shared concern, and column four introduces comparative weighting of topic frequency, within the original framework of required patient history content. This analysis illustrates differences between the conceptual model of IM clinical investigation, mediated by the concerns and interests of the practitioners and fellows. In summary, the data table indicates that although the clinical fellowship was structured to position biomedical diagnosis as central to the clinical investigation, most dialogue during the conferences focused on social relationships and mind–body topics, some of which are difficult to distinguish from classical psychology, except by their context.[1]

The role of each categorical inquiry is described next, including examples of how various CAM practitioners interpreted and situated information presented by the fellows. These

categories collectively represent major areas of diagnostic inquiry of interest to the CAM practitioners on the panel. Overall, very little debate, discussion, or challenging of information or suggestions took place either between CAM practitioners or between fellows, physicians, and CAM practitioners as it was the intention of this forum to treat each type of therapeutic intervention as equally valid.

Biomedical Diagnoses and Medical History

Each case presentation began with a biomedical history. The clinical protocol mandated inclusion of a biomedical history, but the fact of its placement at the start of each case seems significant. Given that only eight out of 60 cases contained a solid biomedical diagnosis, placement of this information at the start of each case suggests a biomedical orientation regarding assigned significance of clinical information.

Previous diagnoses within the biomedical system assisted physicians in understanding what tests and procedures other physicians had used in attempting to resolve the case and evaluated the appropriateness of previous test and intervention. In some cases, the IM faculty deemed additional biomedical testing necessary to secure diagnosis either by ruling out other possibilities (differential diagnosis) or because the standard battery of biomedical tests associated with the existing diagnosis had not been fulfilled. Examples of previously assigned biomedical diagnoses in patient conference cases include multiple sclerosis, emphysema, cancer of various types, and myasthenia gravis. Continuing with patient history, the clinicians noted other symptoms experienced in the past and present that may or may not have been related to the primary diagnosis. Not every case was presented with a solid biomedical diagnosis. Fellows portrayed other cases as unexplained symptoms, accompanied by a litany of biomedical tests, procedures, medications, and interventions had been prescribed with and without success.

Biomedical diagnoses were accepted currency within the group, although alternative explanations for specific symptoms were frequently discussed. I did not observe a case containing an argument for a biomedical diagnosis to be dismissed and replaced with a CAM-based etiological explanation. In general, the more solid the diagnosis, the more easily it was accepted as legitimate by the group. If appropriate tests were performed and the patient presented appropriate symptoms to the extent that it satisfied the physicians in the group, the biomedical diagnosis remained unchallenged by CAM practitioners. Commonly, this category of diagnosis was some type of cancer or a genetically related chronic disease such as multiple sclerosis.

Diagnoses that occupy the status of syndromes in biomedicine such as irritable bowel syndrome (IBS) or behavior-based conditions such as eating disorders were more open to interpretation, possibly due to the lack of definite corroborating laboratory data. Diagnoses not typically well understood within a biomedical framework are fertile ground for alternative explanations of disease etiology and treatment. In cases for which no clear biomedical diagnosis existed, or where the patient appeared to present too many symptoms to be reasonably accounted for, alternative frameworks such as TCM gained more prestige as a possible explanation. Since energetically based systems of medicine are able to account for multiple symptoms arising from a singular energy blockage, diagnostic and therapeutic strategies are better able to accommodate symptomatic variance both within and between patients.

Family Relationships

CAM preceptors taught the fellows to inquire in-depth about family history, relationships, and current family configurations. This information was of most interest to practitioners whose therapeutic orientation centered on age-related formation of essential energetic characteristics and to those interested in psychological or emotional issues regarding a patient's ability to cope adequately with interpersonal relationships. Going beyond basic questions about marital status and children, the fellows asked patients to describe and comment on their family of origin. Investigation into relationships was based on group members' interest in the quality of patients' relations with parents and siblings in their families of origin and on current relations with significant people in their lives.

Some patients remembered negative aspects of their childhood, ranging from alcoholic parents, displacement from their home or parents (such as being sent away to live elsewhere), moving from place to place frequently, or problems with siblings. Other patients described happy childhoods with good parental and sibling relationships. One patient's history noted:

> Patient's mother died when patient was four years old, and she was raised from then on primarily by her sister who was five years older. Patient never felt abused but never felt loved either. Her father was traumatized by his wife's death, and the family moved around the country a lot for his job. Her three siblings all seem to have mental problems as adults; the eldest died from self destructive behavior and the younger one recovered from alcoholism only to be killed in a car accident not involving alcohol. The sister that raised the patient seems to her to have lots of anger and anguish.

The individual above had come to the clinic for help with food allergies, including an ever-expanding list of foods she experienced as causing her allergic symptoms. Information about family happenings and relationships were important to CAM practitioners from an energetic stance. A physical or emotional disruption to a young person during a period of life vital to chakra formation could contribute to an inability later in life to develop the appropriate energetic capacity to cope with certain life situations.

Regarding this same case, the TCM practitioner noted,

> She has a barrier disease (based on previous life experiences) she is not taking in air and food is not working for her, she is not taking in nourishing life and not digesting her experiences. She has done a lot of things in her head, but is not doing earth based things; she needs more wei-chi from her liver, her wei-chi is hyper-vigilant and trying to protect her.

The past life therapist offered this assessment: "She is experiencing soul loss—her body is toxic to her. She needs to eliminate more often—anything that she takes in is getting turned into poison for her and is affecting her liver."

Although family practitioners do not generally consider early life relevant to a current case unless the history of medical treatment extends back that far, many CAM practitioners in this group considered this information critical to determining appropriate prescription. In cases

of physical, emotional, or sexual abuse occurring in childhood or other family dysfunction related to substance abuse, evaluations of the energy medicine practitioners included a chakra assessment.

Religion and Spirituality

Topics of religion and spirituality are not routinely included in a biomedical encounters. Preceptors advised fellows to consider inquiries about religious and spiritual practices and beliefs relevant in determining the proper prescription. CAM providers on the panel considered spirituality indirectly related to symptoms and considered inquiry about such topics one way to evaluate how connected to the community or how grounded or centered a person was in relation to life's difficulties. Speaking of a patient who was having difficulty on many levels living in the United States and connecting with others, the spiritual advisor in the group stated, "(She) is spiritual but not church going—(attending church) is important and (she) goes in Austria when she returns (to visit) but feels not so open here." This woman was suffering health problems and felt isolated in an unfamiliar environment that she experienced as hostile to her because of her background and living in a mixed-race marriage. In this case, the panel's spiritual advisor related the woman's difficulty in attending church, her discomfort in her life situation and neighborhood, and her physical symptoms of illness. This example illustrates the use of spirituality or religion as a measure of social connectedness.

One or two of the CAM practitioners considered spirituality more directly related to a person's illness and characterized reported symptoms in terms of spiritual maladies. Suggestions resulting from such a diagnosis frequently involved therapies to reorient or realign a person with the spiritual world. In a case of a 78-year-old woman with undetermined illness and whose medical history included a diagnosis of tuberculosis (TB) over 50 years ago, the past life therapist on the panel noted,

> She seems healthy, but early in childhood she "lost her legs" and lost her first chakra. TB is about breathing in life, which in her is compromised. She had a hard time breathing in her early life. Her blood levels are depressed and she has no energy. The first chakra is developed during the first four years of life, and gives a person the ability to stand on ones own and have self-esteem. She doesn't acknowledge a primary relationship. The second chakra is developed by age seven, relates to the inner self and outer world and is where the immune system starts. If there is not healthy immune system, a person get sick when something in life comes along that they can't deal with. Although she has done therapeutic touch in the past, that is an allopathic therapy developed by nurses and doesn't take into consideration the spiritual pieces of healing. She needs to see a healer in order to get back the pieces that have been left out.

The patient's personal history included reports of a happy childhood, a successful career, and never having been married nor having children.

Another prescription for spiritual healing related to a case of a 34-year-old man whose personal history included a physically abusive childhood and memories of a violence-induced injury that caused loss of consciousness. In response to the clinician's questions, the man responded that his greatest fear was the possibility of losing control of his thoughts and life. The

fellow stated that he was impressed with the patient's apparent disconnection from his own body, as if he didn't feel his body parts belonged to him. The mind–body therapist who practiced cranial–sacral therapy evaluated the patient for the fellow in the following excerpt.

> (Patient) needs spiritual healing, his spirit is not in his body and he has lost his sense of self. He has given you direction by telling you about the trauma to his head and the associated emotion. When (a person) is not in their body, other things in the environment can come in and influence them, interfering with their perception. (Patient's) greatest fear is of not being in control of his thoughts. This indicates that there is another presence and he must return that other presence to the universe, which will allow him to regain himself. He needs to see a shamanic healer to get the soul returned to the body and perhaps allow someone to do energy work long distance. The energy work can be accomplished long distance, but the soul retrieval must be done in person.

Based on this particular patient's professional background and position in a science-based service industry, the psychiatrist and the hypnotherapist disagreed that he should be directed to spiritual healing, even if he might ultimately benefit from such an approach. Although they supported the efficacy of spiritual healing for this issue if patients accept it, they were concerned that if spiritual healing did not make sense to a patient conceptually it should not be forced as it would be ineffective in that instance.

Finally, the majority of members had little tolerance for those who expressed lack of faith, religion, or spirituality in their lives. In relation to a 40-year-old woman exhibiting excessive anxiety, one practitioner stated, "reexamine her non-spirituality—nobody can get very far without a spiritual life even if not organized religion." Another offered up the opinion that "atheists are the greatest sufferers on the planet."

Religion and spirituality in this context represented a wide range of interpretations. Inquiry of this dimension of health was introduced into the patient's history based on the interests of both the Christian minister who represented nondenominational views and therapists who engaged in spiritual therapies to reconnect patients with either past lives, lost souls, or spirits of deceased persons of significance to the patient. From a psychosocial perspective, religious activity in a person's life was interpreted as evidence of social connectedness at the very a basic level. The group also interpreted religious activity or declaration of spirituality sans communal activity as a sign of spiritual health, as acknowledgment of dimensions of human existence beyond the self. Therapists who assisted patients in reestablishing spiritual connectedness with their own souls or those of others considered a variety of physical symptoms to be associated with either a lost soul or possession of a person's body with the soul of another deceased yet unsettled person.

Although spirituality, either with or without religious observance, was widely supported among members of the faculty including physicians, it was nonetheless a contested concept as well. One clinical fellow had a strong negative reaction to the inclusion of religion or spirituality in the clinical investigation, considering it irrelevant in determining diagnosis and treatment. The fellow considered it an insult to suggest to a person suffering with serious or chronic illness that a portion of their condition could be attributed to lacking spiritual health or a sign that their body's integrity might be compromised on the spiritual level.

Energy Medicine

The term "energy medicine" covers a vast spectrum of therapies and approaches. Since energy, mind–body, and spiritual issues are at times addressed in a singular approach (e.g., TCM), it can be difficult to isolate therapies from their contexts within systems of medicine.

One case involved a 68-year-old woman suffering from chronic bloating, flatulence, hyperthyroidism, and sleep problems. She sought a diagnosis for all her symptoms. The TCM practitioner pulled these symptoms together in this way:

> She has severe liver qi constraint, the liver invades the spleen and select emotions will not be released. Pent up emotions equal stagnation which creates wind and gives rise to flatulence and bloating that disturbs the chen from the heart. The liver is active between one o'clock and three o'clock in the morning. The rising energy is disturbing the chen spirit in the heart, causing restlessness. Her mind starts working and she can't sleep. The spleen is in charge of digestion, and disturbance of the spleen leads to digestive problems—high cholesterol is also related to spleen—and all the worrying she is doing affects her spleen as well. She could benefit from a mind–body therapy such as qi-gong, and should be evaluated by an acupuncturist and herbalist.

Sometimes a distinction was made between different sorts of energy medicine that could or would not be helpful to a patient. Prescriptions are specific to symptoms and situation. Regarding a 59-year-old man with a history of skin allergies and itching, the same practitioner suggests: "He has problems with kidney channel, it seems his underlying support system is comprised. Herbal consultation would be in order, but his problems would not be helped by acupuncture. His childhood trauma and hernia operation have compromised his energy channels."

Besides comparing therapeutic properties of acupuncture and herbal intervention, the above statement also illustrates the conjunction between alternation of the physical body and disruptions in energy pathways. Linking physical trauma with energetic disruption and inadequate development of chakras and other energetic components of the body is a hallmark of cranial–sacral therapy as well as TCM.

The structural therapist commented on a male of undetermined age suffering from IBS and long-term lower back pain that interfered with daily activities. At one time, he had been misdiagnosed with appendicitis and had also undergone gallbladder surgery.

> This is an interesting person, I've worked with a few people with reflexive system disorder (RSD), the nervous system is overwhelmed. He has lots of problems he has not dealt with since it doesn't "serve" him in life. This is a blue energy in the fascia problem, surgery has exploded the energy throughout his system and started pain throughout his body. People who have this are either told its all in their head, or they have surgery to cut the nerve … his autonomic nervous system is overwhelmed, massage and cranial–sacral therapy will help. Needs a long term gentle therapy to help him let go of things and feel comfortable so he can resolve things. Things never happen in the physical body without also happening in the emotional and spiritual body at the same time.

The above quotes illustrate the holistic nature of energy therapies in diagnosis and treatment: They often incorporate present and past physical and emotional problems, connecting physical and emotional trauma or considering spiritual dimensions. Energy medicine was a core concept in play during case presentations, albeit discussed as an incongruent concept among CAM practitioners. Agreement among members of this multidisciplinary group was neither expected nor required. Energy therapy was treated as adjunct therapy: If recommended, it was placed in conjunction with other therapies to effect a holistic approach to the treatment protocol. This seemed to be the case in spite of awareness that TCM is a complete system of medicine and, as such, has the theoretical framework and capacity to treat individuals comprehensively.

Mind–Body

Mind–body therapy was a particular interest to the fellows. One specialist officially representing mind–body therapy regularly attended the patient conferences, but many of the energy or spiritual practitioners as well as IM faculty and fellows had suggestions in this category. Most suggestions from practitioners, faculty, and fellows for mind–therapy focused on stress and anxiety reduction in conjunction either with the illness, or as a contributing or causative factor in the illness itself. The mind–body therapist commented on a 61-year-old woman diagnosed with liver cirrhosis and itching skin. This patient also had a turbulent marriage and family life due to drug and alcohol use by herself and other family members.

> Itching can be helped with mind–body teach her skills to take mind off (the) itch. She can learn different methods of putting positive images and ideas in mind to become messages for body to heal. With guided imagery she could visualize healing and she should have a regular daily practice to help her escape toxic personal life.

Mind–body advice for a woman with multiple sclerosis focused on developing ways to escape the physical limitations imposed by her condition. The mind–body therapist advised "self-hypnosis as way to experience freedom from body, to tap into moods and create inner experience. She can go back to Silva mind control of the 70s [the woman had experience with this years ago] or go with a shaman." Not every patient was considered appropriate for a mind–body approach. however, as illustrated by the comment associated with the case of a 50-year-old man diagnosed with bipolar disorder and recently with chronic lympocytic leukemia:

> Bipolar people don't do very will with mind–body techniques, although some might work OK. You could try an interactive psychodynamic approach—address falling out with friend/boss, and use visualization to enhance belief in healing—group therapy perhaps. Bipolar people have an underlying agitation, they tend to jump around and can't find and stay with centering path so they don't learn centering as easily.

The group essentially considered mind–body work an adjunctive therapy suggested for life imbalance. Imbalance could occur due to serious physical illness, psychosocial problems, or energetic blockages, and cranial–sacral therapists suggested mind–body therapy to assist with

rebalancing patients' lives. Practitioners of all types of mind–body work consider these therapies highly compatible with other types of treatments so it was deemed appropriate for most patients, with the exception of those certain psychiatric conditions.

Mind–body medicine occupied a status of a popular therapy; the fellows, clinicians, and practitioners considered it excellent for coping with the effects of illness. Occasionally, the idea of a connection between mind and body came to the forefront of diagnostic discussion as a cause of symptoms. This was the case especially in illnesses such as IBS or other cases in which the collection of symptoms presented did not produce a comprehensive single diagnosis or even two dominant diseases. Translation of emotional distress into physical symptoms (such as impotence, hives, or idiopathic digestive disorders), along with the potential to retrain the mind to control the body's reaction through changing thought patterns, was essential at times. In these cases, the mind–body connection was considered an "active" therapy. In most cases, however, mind–body was understood as useful but benign at the same time. Hypnosis or meditation were often recommended to assist individuals in dealing with aspects of their conditions they could not change, or to alter the ways in which patients related to their external environment. Interference of mind–body techniques with other treatments was not a topic that came up in the discussion, except in the case of the bipolar patient noted above. In that case, mind–body therapy was characterized as ineffective but not harmful.

Nutrition

Nutritional therapy played a large role in the clinical evaluation process taught to the IM fellows. Faculty mentors considered good nutrition essential to good physical health, and each patient seen at the clinic was evaluated in-depth regarding their dietary habits. Although in many cases, diet and nutritional needs played some role in determining cause or developing a treatment protocol, only two significantly featured nutritional problems as the core issue.

One case that did focus on nutrition was that of a previously overweight 40-year-old man who had received gastric bypass surgery in 2002 and presented with chronic back pain, depression, and alcoholism. He had lost the ability to care for himself in a private setting, and his sister had brought him to the clinic. The patient's relationship with food remained the focus of this case discussion, with one theory offered that he was improperly screened for mental health issues prior to his surgery, leading to postsurgical obsessions about food, resulting in anorexia. Aside from the sleep therapist's suggestion to remove caffeine from his diet and advice from the naturopathic physician to try bananas and sweet potato smoothies with added protein, the group unanimously agreed that psychiatric treatment was in order.

The only other case featuring nutrition involved a 24-year-old female premed student and former gymnast. Primary symptoms were external itching on her ears, starting after a round of antibiotics. She recently resolved a case of IBS with the help of a naturopath, but now routinely spent 15–20 hours weekly preparing food, which she experienced as socially isolating. The attending clinical fellow stated that she seemed afraid of food, refusing to eat new things, and wondered if she had an eating disorder. The group concluded she did not suffer from obsessive-compulsive disorder and suggested homeopathy would be appropriate for her to induce whole-system healing and move her away from food-based therapies. The herbalist concurred with recommending homeopathy but added she was unconvinced that the IBS was resolved and recommended the patient be reeducated on the connection between fiber and probiotics in addition to mind–body therapy for IBS. Nutritional therapy and food as medicine were

undisputed ideals among the members of the IM fellowship faculty and fellows, but nutritional therapy alone was rarely considered adequate to resolve a problem.

Interpretation of CAM Consultative Advice by Clinical Fellows

In the multidisciplinary setting of patient conference, various therapeutic contexts came to bear on interpretation of symptoms and assignment of meaning and validity. Under ideal circumstances, the fellows and attending physicians would explore each case in a methodical fashion, addressing each category of information systematically. In practice, each fellow gravitated toward some types of information and neglected others, based on the specifics of a particular case, willingness of the patient to share information, and the physician's comfort level with the topic area. Although fellows regularly collected information in each of the prescribed categories, some information was perfunctory and some was extensive based on the variables described above. Results of clinical interviews as reported in patient conference were diverse, and seemed to be partially guided by the fellows' clinical sensibility regarding importance of the topic to presenting symptoms.

Follow-up interviews with the clinical fellows indicated they found nutritional and mind–body information to be of most use with their patients. They had little use for spiritually based suggestions, feeling overall that their patients did not come to a physician seeking or expecting spiritual solutions. Although in some cases the clinicians were able to share specific patient recommendations from memory, the consultative model employed at the IM clinic limited their ability to follow-up. In most cases, the physicians themselves had no idea what had happened with the patient, or whether their prescriptions had been successful. All four fellows considered this situation a serious impediment to their learning about IM since they were unable to evaluate for themselves what had worked for any given patient in a situation and what had not.

Discussion

This study described topics of mutual interest between practitioners of biomedicine and CAM in a collaborative setting, with the goal of highlighting similarities and differences in the ways various practitioners defined and interpreted medical knowledge. In comparison to mainstream family medicine, the CAM practitioners invited consideration of subjects atypical to a standard clinical encounter. Participation of CAM practitioners in the seminars, expanded the range of medical knowledge available for consideration. Observing the case presentation made it clear that while CAM practitioners had been invited as participants, and indeed held roles in the clinical program as preceptors or teachers, the clinical fellows considered the practitioners more as consultants whose advice they were under no obligation to accept. The consultative role of the CAM practitioners was confirmed by the minimal exchange of ideas or discussion that took place during the presentations. Although the fellows accepted some information and dismissed other information as irrelevant on a case-by-case basis, a few themes emerged overall; namely, the privileged position of biomedical knowledge even within the egalitarian process of case presentation and diagnosis.

The status of biomedically relevant information was clear by virtue of its placement at the start of each recitation of information collected from patients and its undisputed status during each seminar. Introduction of biomedical information at the start of each case report necessarily relegated subsequent information to a reactionary position. CAM practitioners offered alternate

explanations for patient's symptoms, but none ever challenged a biomedical diagnosis in this study. The pattern of professional dynamics exhibited in this environments suggests that alliance between the biomedical and CAM practioners was limited to information exchange and not elevated to a truly collegial enterprise. Perhaps the CAM practitioners felt unqualified to challenge a physician regarding the meaning of examination results and laboratory tests or possibly these particular indicators held little relevance for the CAM practitioners within their own frameworks. Possibly a more authentically clinical investigative method would have been to discuss presenting symptoms absent a biomedically legitimized diagnosis, or alternately, rotate each case introduction among disciplines.

From a practical standpoint, the physicians needed to assess the probability that the case could be resolved within a biomedical context and to evaluate the extent to which any alternative therapy could offer improvement. In essence, clinicians used biomedical data as a framework for both selecting which alternative therapies to use and to adjust the intensity of their presentation to the patient about the necessity or usefulness of alternative approaches. To that point, Cassidy's (1995) observation about the importance of language in holistic medicine is illustrated by the case of the 34-year-old man described in Religion and Spirituality. Although the group concluded this was a spiritually based problem, two members dissented on describing the problem in that manner to the patient, concerned that the man's scientific orientation would be a barrier to his accepting a diagnosis in spiritual terms.

Conflict did exist at times between what fellows deemed important to explore in the clinical encounter, and what practitioners would have preferred. Physicians periodically failed to report data in categories important to practitioners. For instance, the physicians often overlooked religious activity as they gathered case histories, although several practitioners considered this information to be fundamental to comprehensive patient evaluation. The clearest example was the fellow who considered religion and spirituality issues to be inappropriate to clinical encounters under any circumstance. This rift between practitioners and clinicians regarding religion exemplifies the physicians' reassessment of information provided by practitioners. By virtue of their socially designated roles as medical professionals in comparison with CAM practitioners, the clinicians claimed the authority to determine which information should be considered legitimate in the clinical encounter and which should be dismissed as irrelevant. As IM clinicians, these physicians had to determine which of the CAM therapies that they had at their disposal could be helpful to patients.

Returning to the concept of tacit knowledge in clinical reasoning, it seemed evident that the fellows were more comfortable with concepts that could be most easily considered complementary rather than alternative in the sense of providing a nonbiomedical explanation for the clinical symptoms. Mind–body techniques to enhance coping skills or improving nutrition to increase biophysiological function were more feasible for these physicians to incorporate into a treatment protocol. Data analysis documented the regular inquiry on these topics, yet physicians consistently failed to target mind–body and nutritional issues as primary to patient symptoms, despite routine inquiries.

Subjects such as spiritual misalignment or energy blockages were even more difficult concepts for the physicians to usefully assimilate into their practice. These observations are consistent with a biomedical orientation and suggest that the fellows did not fully grasp the framework of tacit knowledge in use by their CAM preceptors.

Returning to Baer and Coulter (2008) concerning the divergence between conceptual models of IM in comparison to actual practice, it seems evident that although fellows in this case

conference study felt comfortable incorporating select complementary therapies, they were reluctant to adopt explicitly different explanations for disease etiology. By considering the differentiating characteristics of epistemic cultures as contextualizing knowledge within structure and practice, we can conclude that the introduction of CAM practices into U.S. biomedicine is producing a new genre of medicine that is different from any previous version.

Conclusion

While resembling aspects of biomedicine produced in the West and retaining aspects of those originating cultures in which many practices were conceived, the repositioning of the practice of CAM within biomedicine that results in IM produces a new form of medical practice. Drawing on links between knowledge and practice, coupled with the unbounding of locally produced knowledge from local settings, the practice of IM in the United States is poised to introduce a challenge to biomedicine to force a reconsideration of competent medical practice. The point at which this may happen, however, is dependent on necessary critical mass as IM moves beyond the level of individual practice. It is unclear at this point in which direction IM is progressing and a currently absent theoretically cohesive framework is necessary to achieve such critical mass.

Note

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1. Nutrition and psychological or emotional topics are not uncommon in biomedical practice, especially family medicine. As used within this clinical education setting, the distinction between mind–body and psychology centers on etiology and assumed mechanism of action. Regarding nutrition, the distinction is one of degree, and the differentiation exists between standard USDA-backed nutritional advice versus large-dose nutraceutical therapy based on a food-as-medicine orientation.

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