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A Case Study in Integrative Medicine: Alternative Theories and the Language of Biomedicine

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ABSTRACT

In this case study, a diverse panel of 6 practitioners of mainstream and/or alternative medicine plus a moderator convened as an experiment in practicing integrative medicine to examine, diagnose, and prescribe for a patient suffering from chronic, severe, treatment-resistant back pain. Although panel members represented a wide range of theories of health and healing, they were able to communicate easily with one another by limiting themselves to the scientific language of biomedicine. From the perspective of medical anthropology, this can be interpreted as an unplanned and unconscious process of cultural imitation in a medical marketplace in which cultural differentiation formerly prevailed. Although the shift from differentiation to imitation was limited in this experiment to the sharing of a single language of discourse and to recommendations of mutually compatible treatment options, it raises an important question. With the institutionalization of integrated medical practice, will alternative medical systems survive only if they are stripped down to being no more than alternative therapeutic modalities?

WORKING TOGETHER

In less than decade, an unprecedented openness to radical change has witnessed the establishment of many new programs designed to encourage and institutionalize the sharing of patients across the historically unbridgeable medico-political chasm that used to, and often still does, rigidly separate physicians and surgeons from practitioners of alternative medicine (Angell and Kassirer, 1998). This new way of practicing is often referred to as integrative medicine.

The integrated medicine centers one reads about are usually associated with medical schools and well-known medical centers such as the Cedars-Sinai Medical Center in Los Angeles, the Stanford University Medical Center, and the UCLA Center for East-West Medicine. Little attention has been given to grass-roots efforts, locally driven without the benefits of special funding and well-paid staff. I report here on one such bootstrap operation. Known as the Health Medicine Forum (HMF), it has been meeting since 1996 at John Muir Medical Center in Walnut Creek, California. The HMF is directed by a specialist in internal medicine who himself shifted to an alternative way of practicing medicine by emphasizing nutritional and lifestyle counseling. From 3 to 6 medical doctors and about 50 to 75 unorthodox practitioners now meet monthly and in an annual sum-

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mer convention to investigate how they might create new options for healing by learning to work together on a basis of mutual understanding and respect. Although the eventual goal is to share patients, the major effort to date has been to demonstrate what each kind of practitioner might contribute if they were to share responsibility for care of the sick.

As a way to demonstrate how motivated practitioners reliant on local, private initiative are beginning to work toward integrating their practices, I report on one of these meetings in which a 35-year-old white female supermarket clerk suffering from chronic, severe, treatment-resistant low back pain was examined and evaluated by each of 6 different practitioners who then formed a panel, moderated by the director, to discuss her health problems before an audience of 40 other practitioners and the patient herself. Because this was exploratory, all were providing volunteer expertise. On the panel (in addition to the moderator) were an orthopedic surgeon; a physician boarded in family medicine who specializes in a form of alternative, nonsurgical practice known as orthopedic medicine, which includes the practice of spinal manipulation and prolotherapy (the administration of sclerosant injections to create an inflammatory response); a psychologist specializing in biofeedback; a chiropractor; a practitioner of traditional Chinese medicine (TCM) who emigrated from China less than 2 years earlier; and a body worker. The purpose was to allow each of the 6 to explain what he or she might offer this patient if they were to collaborate.

As a medical anthropologist, I have been a member of the HMF since shortly after it was founded. I believe that an anthropologist has a contribution to make when practitioners who specialize in different healing traditions meet together to explore how they can coexist to the benefit of themselves and of people in need of healthcare. I offer this case study in order to raise one main question that must be answered if integrative medicine is to become a reality. How can practitioners share a patient if they evaluate and diagnose in terms of explanatory models (EMs) that constitute radically different alternatives to one another?

DISCOURSE IN THE SHARED IDIOM OF BIOMEDICINE

The potential for ideological confrontation over differing medical theories was inherent in this meeting. Yet, dialogue among practitioners proceeded smoothly. Alternative theories were not contested. In fact, they were not even discussed as part of what panel members shared or disputed with one another. In a couple of instances when elements of non-mainstream or non-Western theory did surface, they were allowed to stand without comment, unchallenged and ignored.

Rather than confrontation, every one of the panel members discussed diagnosis in terms of a biomedical conceptualization of the anatomy, physiology, and tissue pathology involved in this case of spine-related pain and disability.

Orthopedic medicine, orthopedic surgery, and psychology

The orthopedic physician, who presented the patient as one he had been treating with only limited success, and the orthopedic surgeon who spoke after him, set the stage for this acceptance of the medical EM when they each stated that, as medical doctors, they were in agreement on a diagnosis of ligamental instability in the right sacroiliac joint compounded by secondary effects including trochanteric bursitis and emotional instability. The psychologist, whose EM resonates comfortably with that of mainstream medical practice, also accepted that diagnosis.

Chiropractic

Just over a century ago, chiropractic was founded on the basis of a competing EM, which doctors and chiropractors disputed fiercely for most of the twentieth century (Keating, 1990; Anderson, 1997). Chiropractors taught that back pain and other diseases result from misalignments (subluxations) of the spine, and therefore, that the only treatment needed for many diseases was to skillfully and precisely determine the direction and force needed for a hands-on thrust to re-position a subluxated vertebra and relieve nerve pressure. Most chi-

ropractors have moved away from the limitations of this overly simplistic explanation, having adapted and modified the original paradigm so that it is consistent with current explanations based on medical anatomy and physiology (Haldeman, 1992).

The chiropractor on the panel, as part of his training, completed courses in both medical and chiropractic subjects. It is not surprising then, that he demonstrated an easy familiarity with medical thinking and obviously experienced no difficulty in agreeing that the basic pathology was a strain of the sacroiliac ligaments. He did offer a further chiropractic point of view, but it was justified by biomechanical reasoning consistent with the findings of scientific anatomy.

Chinese medicine

In discussing this patient, the doctor from the Peoples' Republic of China did not say anything at all about meridians, Qi, the law of five elements, yin and yang, or any of the other defining concepts of Chinese medicine that he would undoubtedly have invoked were he discussing the case with other practitioners of Chinese medicine. Nor did any member of the panel or audience ask him to do so. Contemporary practitioners of TCM, like chiropractors, complete courses in medical subjects as part of their training, whether in China, North America, or elsewhere. This practitioner was obviously accustomed to providing a biomedical rationale for how he practices, and did so with ease.

The TCM practitioner did deviate markedly from the medical paradigm, and from orthodox theory in TCM as well, when he explained that the patient was a scorpion/ox and therefore was romantic, with an emotional need to allow herself to sing, as he put it. He also located the pain between the kidneys, which, he said, are like 2 generators, left and right, male and female, their interaction producing bioelectricity. He clearly considered the astrological concept and the concept of gendered kidneys as an energy generator significant, but made no attempt to explain why, and no one queried him on either issue. The TCM practitioner also accepted the challenge to be one of healing painful ligaments in the sacroiliac spine, conceptualized in Western rather than traditional Chinese anatomic terms.

Body work

The next practitioner spoke without direct reference to any alternative system of thought. She stated that she had a background in body work of all kinds, including Eastern and Western, and that she currently does "Berry Work," (a version of body work taught by Lauren Berry, now deceased). I learned later as part of my one-on-one follow-up with panel members that she was also trained in Chinese medicine and practiced as a licensed acupuncturist. In her presentation on the panel, she explained her thinking almost solely in terms of basic anatomy and physiology. The one exception was a passing reference to energy that implied a nonbiomedical concept of vital energy or a system of thought alternative practitioners, including those in Chinese medicine, often refer to as energetics. This practitioner agreed completely that the culprit was sacroiliac strain.

In summary, the biomedical paradigm, drawing on basic clinical sciences, was used by every panel member as a minimal shared language of discourse they all easily accessed for characterizing this patient's health problems. Specific explanatory concepts from alternative medical systems were not articulated. Nor, it would appear, were they felt to be required in order to confer as colleagues. By this acquiescence, however, they inadvertently colluded, apparently without awareness, in a remarkable shift from an approach in which each might offer an alternative medical paradigm of diagnosis and treatment to proposals of isolated therapy modalities wrenched free of theoretical justifications other than those of biomedicine.

PROVIDING CARE IS WHAT COUNTS

Without being instructed in advance on how they were to proceed, the attention of the panel members spontaneously oriented to treatment

options rather than explanatory models, beginning with the orthopedic physician who spoke of the multiple treatments he had already provided for this patient, including analgesic medications and an injection of the sacroiliac joint with an anesthetic-corticosteroid medication: both standard medical procedures. The injection resulted in complete but temporary relief of all pain symptoms, which confirmed the diagnosis but did not provide a cure. Although the patient's pain appeared to be about 30% less than it was at the start 6 months earlier, she was not progressing and was therefore invited by her doctor to participate in this experimental program as a free service so that the two of them could learn what other practitioners might have to offer.

As will become clear in what follows, successful communication among practitioners stood in contrast to a communication breakdown between each of the practitioners and the patient. This breakdown was not distinctive for involving alternative healthcare providers. On the contrary, it instantiated an all too familiar inability of patients to know what doctors are talking about when medical terminology is used and the pace of explanation is rapid. Probably all of the members of the panel are experienced in avoiding this kind of failure in daily practice, but under the circumstances of that evening, they tended to address each other and the audience rather than the patient who, in a sense, was merely one among many in attendance.

The HMF now convenes two integrated panels a week, but communication with patients appears to be less of a problem than it was in this case, in part because outside observers are no longer admitted, and in part because panel members, based on this case study, have been alerted to the importance of making themselves intelligible to each patient.

As concerns the participation of panel members, while it is true that discussions of theory did not occupy them, it is equally true that each one evaluated treatment options on the basis of divergent theories and training. As the orthopedic physician put it in his opening remarks, neurologists tend to treat nerves, chiropractors tend to treat spinal joints, and prolotherapists tend to inject ligaments.

Orthopedics

That comment was prescient, starting with the orthopedic surgeon, whose first thought was whether surgery might produce a definitive cure. He determined, however, that it was not appropriate in this case, so that option was immediately disregarded.

In its place he recommended an assortment of conservative treatment options widely applied in his profession. Interestingly, although he characterized the bursitis as probably a reaction to the primary lesion at the SI joint, his first thought was that he would aggressively treat it with corticosteroid injections, backed up with manual stretching of the overlying iliotibial band. For the sacroiliac joint as such he recommended a vigorous physical therapy program, including coaching in posture and movement (stabilization of the lower back). He also thought she should be enrolled in a weight reduction program, because she had become somewhat obese.

Among other things, he said he would prescribe an "antipsychotic." (That choice of words was unfortunate. His reference was to a class of drugs known as tricyclic antidepressants, which are widely prescribed by psychiatrists for nonpsychotic as well as psychotic patients suffering from depression. They are often prescribed for back pain patients in small amounts because they have the paradoxical effect of reducing pain. In addition, that class of drugs may improve sleep, which is often disturbed and nonrestorative in back pain patients. They may also diminish depression, which is a common comorbidity of long-lasting back pain, even though the standard dosage for back pain is much less than that normally prescribed by psychiatrists for the treatment of depression as such.)

The patient's response

A year and a half after she had been interrogated, examined, diagnosed, and advised by the panelists, I met with the patient in her home to talk with her about how she had responded that evening and what she had experienced in the months that followed. Our conversation was recorded on audiotape. In this open-ended questioning I particularly wanted to know

whom if anyone, she had turned to for further care.

In discussing the recommendations of the surgeon, she remembered being distracted by the mention of surgery and horrified that he seemed to consider her psychotic. No doubt for those reasons, she was quite unable to recall any of his recommendations relating to injections, physical therapy, and weight reduction. "What he said didn't really make a lot of sense," she confided. "He didn't really get to know me. I didn't value his opinion much."

Part of the social dynamics of the evening for all participants was that they oscillated between speaking to the patient and addressing their remarks to fellow practitioners on the panel and in the audience (between speaking plain English and speaking in medical terms). The surgeon was well understood by all of the practitioners, several of whom particularly acknowledged that his brief history and rapid physical examination demonstrated enormous diagnostic skill that they admired and respected. Evidently, his success in dialoguing with practitioners was achieved at the cost of a failure to communicate effectively with the patient in that particular encounter.

Chiropractic

As he picked up the microphone, the chiropractor began by acknowledging that the surgeon's recommendations were worth considering, but then contributed recommendations of his own that he preferred. The patient should be enrolled in a low-stress, gentle breathing, exercise program, he suggested. As another possibility, he might refer her for Alexander training (in posture and movement) so that she could learn to reduce strain when walking, getting up from chairs, and so on. In particular, he recommended a method of pressuring and stretching of muscles to free them from possible adhesions, a practice known as myofascial release.

In addition, he explained that from "a chiropractic perspective" one does not adjust a hypermobile joint such as the patient's right sacroiliac. Adjusting allows a joint to move more freely, so it only makes a lax joint worse to manipulate it. However, the body seems to compensate for hypermobility in one of the joints of the spine or pelvis by developing compensatory hypomobility (tightness or bracing) elsewhere. To restore normal dynamics to the spine as a unified entity, the hypomobile joints alone should be adjusted.

Finally, drawing on chiropractic teachings on the importance of proper nutrition, including trace elements, for musculoskeletal and whole body health he would evaluate her need for nutritional supplements, including vitamins.

The patient's response

From prior experience with chiropractors, the patient was well disposed to these recommendations, although she understood very little about them. As with the surgeon, they were addressed to the audience, and not meaningfully to her. What she came away with was limited to the feeling that this chiropractor might help her with spinal adjustments.

In the months that followed, the chiropractor was the only practitioner she went to for treatment additional to that of the orthopedic physician, who was her primary provider for this work-related injury. As we shall see, she was very interested in seeking treatment from some of the others, but to do so was never a realistic possibility. Her medical bills were paid by workman's compensation insurance, and the only practitioners who could be reimbursed under that scheme were medical and chiropractic doctors. Her limited personal finances allowed for none of the other possibilities that were of interest to her.

Chinese medicine

The practitioner of TCM offered no criticism of the preceding medical and chiropractic recommendations, but clearly had priorities of his own. He recommended acupuncture, adding that in his view the patient would not respond well to that treatment until she was prepared for it by achieving emotional release.

In addition, this practitioner said that the patient needed to change her diet completely. In Chinese medical thought, an emphasis on diet is not exceptional. Two medical anthropologists concluded from their research in Hong Kong that, "If there is one thing universal in

Chinese medicine, classical or folk, professional or self-managed, that one thing is diet therapy. Modification of food patterns is part of medication, not to be separated from the use of drugs" (Anderson and Anderson, 1975; p 143). It is unusual in Chinese medical practice, however, that the recommendation be in favor of a strictly vegetarian diet, which this doctor advocated with passion for ethical as well as dietary reasons.

The patient's response

The recommendation for acupuncture went unnoticed, no doubt because it was offered only as a passing comment and without explanation of how it might impact on chronic pain. What impressed the patient was what she interpreted as the recommendation that she might be cured by shifting to a vegetarian diet. She was skeptical of that implied claim and was, in any case, totally unwilling to remove meat from her diet. She did acknowledge, though, that she needed to give attention to her diet.

The body worker

Until this moment, all of the panelists spoke from a sitting position at the speaker's table, but that staging suddenly changed as the body worker, microphone in hand, suddenly rose to her feet to say, "I agree with everything you said about her, *and I would teach her how to breathe* (speaker's emphasis). She does not know how to breathe, and until she learns how, she can't manage her own pain." "That's true," the Chinese doctor interjected, while the chiropractor nodded in agreement.

"The pain in the sacroiliac joint," she continued, "is an excess pain. That means I would not directly massage it, which would only make it worse. Massaging it made it worse when I examined her (and administered a trial of massage). And the reason it made it worse is, it's like pouring oil on fire. When you have a lot of energy in something and you massage it, then what happens is that instead of making it better it makes it worse."

Although theorized in energetic terms, her recommendation was consistent with that of the chiropractor, who for biomechanical reasons would not adjust the joint. However, where he would adjust related hypomobility in other joints, she took the position that for the pain to abate, new breathing techniques would be required. "I teach a class on pain management at a private hospital, and one of the main things I teach is how to breathe, and how to count while they are breathing so that they can get their pain under control. I would teach her how to work on herself so she could help me to heal her. Then after we got the pain a little better, then I would start rearranging her muscle structure so that the 'chief pathway' [not explained] could open. The work I do is Berry Work, which actually repositions and realigns the muscles. (Note the similarity to myofascial release recommended by the chiropractor.) It doesn't break them down like Rolfing does, though, but is a similar thing. It repositions the muscles through occasional movement."

In addition, she would refer the patient to someone else for a vigorous stretching and strengthening program known as Pilotes work, or alternatively she would refer for training in a Chinese form of movement and meditation known as Qigong.

Finally, the body worker introduced a theme that all of the others eventually were to come together on. What she should do would depend on the patient's interests and motivation. "I would communicate with her to find out who she can work with, including for the emotional stuff—find that person—she needs to be able to express herself—to have fun. There's a kid inside there who wants to get out."

The patient's response

In talking with her months later, I found that the patient consistently remembered one main recommendation from each practitioner and tended to ignore or forget all the others. What she remembered from the body worker was that she needed to learn how to breathe. She wished she could have been taught that, but assumed that the cost would not be reimbursed and therefore gave it no further thought. As a compromise, she attempted on her own initiative to change her breathing habits, but without notable success.

Psychology

Finally, the biofeedback specialist offered his suggestions. "Using a bunch of equipment I

don't carry in my back pocket," he said, "I would look at muscle fatigue, especially on the right side, and some compensating muscle action on the left side. Secondly, I would look at what happens cortically. Many with fibromyalgia have problems not supposed to be neurologically centered—a lot of high amplitude, low frequency activity that's monitorable in the cortex—and that can be inhibited with biofeedback training."

He then added, "I know it's not popular, but I would suggest real aggressive passivity: about 6 weeks in bed." (This recommendation appealed to no one, and was challenged by the surgeon.) After extended immobilization, he would want her to get into a strengthening program and to be coached in ways to pace herself at work so that she wouldn't further injure herself.

The patient's response

What she recalled from the psychologist's recommendations was not biofeedback, about which she understood nothing, but that he would order bedrest for a month or two. That is exactly what she would have liked, but workman's compensation would not authorize it and her employer insisted that she return to work, so it was never an option.

In sum, the treatment suggestions for this patient were quite numerous. They included steroid injections, stretching of tendons, posture and movement training, antidepressive medication, a weight reduction program, prolonged bed rest, an exercise program (including Pilotes or Qigong), Alexander training, myofascial release, Berry work, spinal adjustments, nutritional supplements, a vegetarian diet, acupuncture, psychological counseling, coaching in how to breathe, biofeedback, and learning to pace herself in order to move within the constraints of a disability.

UNITING BEHIND A PLAN

At this point, as participants confirmed when I spoke with them afterwards, we were all quite overwhelmed by the many different possibilities proposed as treatment options. "How," the moderator asked, "are we going to work together as a team?"

The consensus was that the patient herself, in consultation with her attending physician, would have to decide which recommendations she should follow. A week or two later, she and her doctor agreed that she might profit from additional chiropractic care, which she subsequently received for several weeks. With her spine thus 'tuned up', as one observer put it, her doctor then administered a series of sacroiliac injections of a caustic (sclerosant) agent that appears to strengthen and toughen ligaments (see Klein and Eek, 1997). When I interviewed her I found that she had responded well to the prolotherapy, although she still experienced moderate intermittent pain after clerking for several hours at the checkout counter of the supermarket where she was employed. Her family life had returned to normal and her job responsibilities on the whole were easier because her employer had replaced some of her clerking duties with office work. She is very pleased with her experience in integrated medicine.

SOMETIMES ALL MEDICINE IS ALTERNATIVE

In the management of chronic low back pain, mainstream medical approaches, surgical and nonsurgical alike, often fail or are of uncertain value (Deyo, 1991; Tollison et al., 1989, p 63; Postacchini et al., 1988). The scientific literature on treatment efficacy is suggestive rather than definitive, because back pain is a category of diseases rather than a firm diagnosis (van Tulder et al., 1997). As concerns treatments recommended by this panel, spinal manipulative therapy performed by chiropractors or orthopedic physicians has been shown to result in quicker recoveries for patients with acute or chronic nonspecific low back pain involving dysfunctional vertebral joints, but no trial has targeted sacroiliac dysfunction as such (Anderson et al., 1992; Mead et al., 1995). Some empirical studies suggest that acupuncture may be beneficial for musculoskeletal pain but again, sacroiliac problems are not specifically identified (National Institutes of Health, 1997). Although many other recommendations made by the panel for the management of generic back pain sound reasonable on logical grounds, no solid evidence supports any of them unequivocally.

However, it should also be noted that research has not demonstrated that the recommended treatments are useless or harmful. The one exception is prolonged bed rest, which would only be suitable for someone in extreme pain, which was not true of this patient (Bigos et al., 1994).

Because the voiced recommendations of the panel were couched in general terms, some would need to be evaluated in greater detail if they were to be implemented. One must be alert to the possibility that, just as with prescribed drugs, certain herbs, vitamins, and dietary regimes can be harmful. For example, comfrey is an herb that can be taken internally for back pain, but it is dangerous because it can harm the liver (Anderson, 1992). Similarly, when recommending vitamins, overdosing with oil-soluble vitamins such as vitamin E can cause sickness and death. Again, in working out dietary regimes, extreme vegetarian diets can lead to pernicious anemia.

More precisely, as concerns this case study, no medical, surgical, or alternative research provides scientific guidelines for the treatment of chronic or recurrent sacroiliac instability, although a single case study of treatment with sclerosant injections does provide one example prior to this one of achieving a good outcome for a patient (Frost, 1994). Where efficacy cannot be demonstrated for any one form of treatment, every form of treatment that clearly does no harm becomes an alternative one may want to consider.

ALTERNATIVE THEORIES: DO THEY MATTER?

Ideally, all members of the HMF are expected to make themselves knowledgeable about the diverse theories and methods that inform each of the alternative approaches represented in their association. However, as this case study demonstrates, it is quite possible to collaborate in the absence of such understandings because, under the impact of globalization, the biological sciences widely if not universally provide a shared basis for discourse that is adequate, if not perfect, for integrated practice. Moreover, I would postulate that for mutuality to work, differing explanatory models must not be allowed to become symbols of confrontation and differentiation, as predictably happens when interaction is based on competition rather than collaboration.

The example of the HMF panel described here can be taken as indicative of what may be occurring on a widespread basis. It seems to document a shift from alternative medical systems as we have known them in the past toward a future in which highly divergent underlying theoretical bases may become increasingly subsumed as variations or versions of basic biomedicine with its foundations in scientific anatomy, physiology, and pathology. Alternative systems may well survive in integrated settings, in other words, as treatment modalities, as alternative therapies, but not as highly differentiated ways of conceptualizing ill health and healing. If they are to survive as unique medical systems, as truly different paradigms, perhaps they must be practiced in a competitive environment rather than one of integrated medicine.

Whether it is better to work toward integration and imitation or toward competition and differentiation is an issue that would take us beyond what can be attempted in this article.

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