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■ Also in this issue: “Against Covert Moral Bioenhancement,” by Kevin Wilger ■

THE ETHICS OF NEW AGE MEDICINE

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Patients who face serious illnesses are sometimes attracted to alternative medicines, also referred to as “holistic,” “integrative” or “new age” medicines. These can include treatments like homeopathy, hypnosis, “energy therapies” like Reiki and acupuncture, and herbal remedies, among others.

These approaches can raise various medical and ethical concerns. An important 1998 editorial in the *New England Journal of Medicine* sums it up this way:

What most sets alternative medicine apart, in our view, is that it has not been scientifically tested and its advocates largely deny the need for such testing. By testing, we mean the marshaling of rigorous evidence of safety and efficacy, as required by the Food and Drug Administration (FDA) for the approval of drugs and by the best peer-reviewed medical journals for the publication of research reports. . . . Many advocates of alternative medicine, in contrast, believe the scientific method is simply not applicable to their remedies. They rely instead on anecdotes and theories.¹

These concerns become heightened when patients forgo standard and proven treatments in favor of alternative remedies, or when aggressive marketers end up reaping a windfall by promoting pseudo-remedies to desperate patients. Beyond the fact that their clinical efficacy has not earned a passing grade using ordinary methods of scientific investigation, the basic premise behind a number of alternative medicines can also be highly suspect, raising concerns about superstitious viewpoints or misguided forms of spirituality motivating certain therapies.

When we consider the medical use of acupuncture, this technique does appear to provide benefit in certain cases of

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pain control. Yet similar results have been reported using “sham” needles—tapping the skin in random places with a thin metal tube.² Brain scans have demonstrated that treatment with genuine needles, as opposed to the sham needles, does cause detectable changes in the brain. But when researchers ignored acupuncturists’ recommended “meridian placement” of needles and instead did random placement in the skin, measurable brain effects could still be observed.³ Although it remains unclear whether the results observed with acupuncture arise mostly from the well-known placebo effect, further research should help clarify its mechanism of action.

The potential magnitude of this placebo effect may be sizeable. An article reviewing some of the successes and failures of new age medicine notes how “alternative treatments such as acupuncture tend to produce a larger placebo effect than merely handing out sugar pills, presumably because alternative treatments involve more ritual, and thus further raise patients’ expectations. In other words, alternative practitioners tend to do a better job at ‘selling’ the placebo effect.”⁴

“Energy Principles” and Spiritual Concerns

Even if the observed effects are not, in fact, placebo related, acupuncture’s nonrational justification for its purported effectiveness remains a significant concern. It is based on energy principles that neither science nor faith affirm. Glenn Braunstein describes it in a critical vein as follows:

In Traditional Chinese Medicine (TCM), treatment is applied to the meridian (channel) that governs the site of the pain, not necessarily the place where the pain is being experienced. Ch’i, the invisible nutritive energy that flows from the universe into the body at any one of 500 acupuncture points, is conducted through the 12 main meridians [channels] in (ideally) an unbroken circle. Meridians conduct either Yin energy (from the sun) or Yang energy (from the earth). All maladies are caused by disharmony or disturbances in the flow of energy. Acupuncture treatment is meant to realign or reharmonize these disturbances, and on a more elevated level, to enable the realigned cells to unite with the cosmic energy of the universe.⁵

Clearly, then, certain alternative therapies, beyond the basic issue about whether they are efficacious, raise serious spiritual concerns as well.

Therapies involving yoga stretching exercises and meditation positions can similarly raise questions about problematic spiritual beliefs. Yoga meditation tends to encourage an inward-turning meditative stance, while Christian meditation encourages an outward turning and receptivity toward God. An online forum addressing the question of yoga explains some of the concerns about its potential for promoting misguided mysticism by noting,

If it is a matter, therefore, of simply using yoga positions for relaxation in preparation for Christian meditation, while not embracing *to any degree* the philosophy or explanation behind the posture, their use is theoretically possible. . . . The question of yoga, therefore, becomes “to what extent can yoga postures be independent of non-Christian religious motivation, as well as any intention to manipulate forces or energies described within a non-Christian worldview?” This is the same question which arises with respect to Reiki healing practices, which also depend on a non-Christian, indeed an occult, worldview.⁶

Reiki, developed in Japan in the late 1800s, puts forward the claim that sickness can be caused by a disruption or imbalance in a patient’s Reiki, or life energy. Reiki practitioners try to heal a patient by placing their hands in certain positions on the body in order to facilitate the flow of Reiki from the practitioner to the patient. A 2009 document from the Committee on Doctrine of the US Conference of Catholic Bishops emphasizes that “in terms of caring for one’s spiritual health, there are important dangers” that can arise by turning to Reiki. The document notes that because Reiki therapy is not compatible with either Christian teaching or scientific evidence, it would be inappropriate for Catholics to put their trust in the method, because to do so would be to operate “in the realm of superstition, the no-man’s-land that is neither faith nor science.”⁷

Requiring Solid Science

Scientific investigations of another new age therapy, the popular herbal remedy known as echinacea (taken early to ward off a cold), have revealed there was no difference between treatment with echinacea and a placebo in groups of either 407 children between two and eleven years of age or 148 college-aged students.⁸ Herbal remedies have become one of the most common forms of alternative medicine. While certain herbal remedies may be harmless and inert placebos, others may have more serious health consequences if ingested above certain dosages, because the potency of some of their naturally derived ingredients is unknown. Some of these remedies clearly have active ingredients, as turned out to be the case for the opium poppy, which had been observed to be of assistance with pain control and eventually led to the isolation of morphine. To assess whether particular herbal remedies may have therapeutic merit, careful epidemiological evaluation is required, particularly through randomized, controlled clinical trials that allow for the determination of safety, efficacy, and appropriate dosages of proposed treatments.

Sometimes a remedy can be borrowed from Chinese, Indian, or another medical tradition, but it ought to be selected by virtue of its verified efficacy, safety, and reasonable mode of action, consonant with biological mechanisms, and its use must not be in conflict with Christian teaching or principles of sound medical science. The decision to advert to such remedies should not be driven by an ideology that disparages modern science or a viewpoint that prefers to rely on what are purported to be ancient practices simply because they are ancient. These points receive particular emphases in the *New England Journal of Medicine* editorial:

There cannot be two kinds of medicine—conventional and alternative. There is only medicine that has been adequately tested and medicine that has not, medicine that works and medicine that may or may not work. Once a treatment has been tested rigorously, it no longer matters whether it was considered alternative at the outset. If it is found to be reasonably safe and effective, it will be accepted. But assertions, speculation, and testimonials do not substitute for evidence. Alternative treatments should be subjected to scientific testing no less rigorous than that required for conventional treatments.⁹

It is worth noting that some of the health improvements observed with alternative remedies may be due not only to the placebo effect but also to the added time, attention, and focused concern patients tend to receive from alternative practitioners compared to traditional physicians. This can translate into modified habits and changed lifestyles, leading to various health benefits.

Endnotes

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AGAINST COVERT MORAL BIOENHANCEMENT

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Moral bioenhancement is an area of bioethical and scientific research dedicated to altering or augmenting moral beliefs, will, and behavior through biomedical interventions. Small advances in the field have been made in recent years. Researchers have primarily focused on evaluating subjects' moral behavior or beliefs after administering certain drugs or stimulating suspected regions of interest in the brain.

For example, intranasal delivery of the neuropeptide oxytocin before performing an investment task was found to increase trust and prosocial behavior, but it could also cause subjects to behave less fairly in the same task.¹ Transcranial stimulation prior to reading a story has been reported to decrease participants' negative judgment of a character who caused accidental harm to another character.² Transcranial stimulation was even shown to increase "conservative" political beliefs, a particularly alarming observation for those interested in conspiracy theories.³

How to Bioenhance Morality

In his article "The Epistemology of Moral Bioenhancement," Parker Crutchfield writes that urgent ethical issues like climate change and terrorism warrant the use of a moral bioenhancement program, and that such a program would not be ethically dubious.⁴ However, his main objective is determining how to successfully implement an MBP that ensures lasting social change. Yet when the utilitarian basis of his plan is examined closely, MBPs would be not only ineffective but morally problematic.

Crutchfield states that such a program could not be administered voluntarily, because it is likely that few people would volunteer. Without a sufficiently large pool of participants, the program would not influence action on the most urgent moral issues, such as reducing carbon emissions to counteract climate change. Therefore, in his view, two methods are initially feasible for implementing MBPs: overt but compulsory administration akin to a public vaccination program or completely covert administration.

The author examines two types of moral enhancements that can be delivered overtly or covertly: manipulating a person's beliefs or manipulating his emotions and motivations. Crutchfield acknowledges that neither overt nor covert

manipulation of a belief will be effective unless subjects are provided with new evidence to support their modified beliefs. This is called the reflection problem: most people are aware of their previous moral beliefs and, in the absence of evidence, will be unable to justify their new beliefs. For example, "I used to believe abortion was licit. Now I believe that abortion is illicit, but I have no new evidence." Such a bioenhancement, in Crutchfield's view, will not bring about effective change in social action. Overtly planting new evidence that supports the new beliefs would also fail, because it would lead to a moral hallucination similar to knowing that one's visual representations are being manipulated.

In addition to the reflection and hallucination problems, the third flaw of overtly bioenhancing moral beliefs is the lack of a reliable manipulator, or moral expert. This is known as the trustworthiness problem: citizens are unlikely to trust the moral beliefs of the program administrators and would reject as indoctrination the authority of any new beliefs that arise within them.

The trustworthiness problem also creates difficulties when manipulating emotions and motivations, the second type of moral enhancement cited in the article. Crutchfield gives the excellent example of a person who is trying to quit smoking. When the person wants to smoke, he knows the source of his motivation is not his own reason or moral belief about smoking but rather the addictive nicotine from the cigarette. Thus, he does not smoke, because he rightly mistrusts his motivations.

Covert Moral Bioenhancement

One can conclude that the only way to circumvent the reflection, hallucination, and trustworthiness problems is to covertly administer an MBP. At first glance, such a proposal may be tempting to Catholics. Should we secretly drop a concoction into the water supply that causes most of the populace to believe abortion and euthanasia are wrong? Perhaps another way to formulate the question is, how should we treat human beings when conducting experiments or when administering therapy? After all, an experiment would be necessary to verify the efficacy of covert MBPs. Subsequently, all those who participate in the program would be patients, their illness a dysfunctional morality.

The Church in her wisdom has taught on the latter question. In its discussion of the fifth commandment, the *Catechism of the Catholic Church* teaches that human life is sacred because it is created by God, shares in a special relationship with God, and has God as its sole end.⁵ This sacredness entails a respect for human life that scientific and medical research is called to recognize. From respect for human life it follows that "experimentation on human beings does not conform to the dignity of the person if it takes place without the informed consent of the subject or those who legitimately speak for him."⁶ Therefore, "the free and informed consent of the person or the person's surrogate is required for medical treatments and procedures, except in an emergency situation when consent cannot be

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obtained and there is no indication that the patient would refuse consent to the treatment.”⁷

By this logic, ironically, a covert MBP must be deemed morally illicit. Refusing to obtain informed consent or, at a minimum, not disclosing the moral treatment administered would undermine the dignity of the human life toward which the desire to help the patient is directed in the first place. In more contemporary philosophical terms, it would mean treating the patient as a means to an end rather than an end in and of himself.

Moral Bioenhancement and Free Will

The final objection to covert MBPs challenges a fundamental misunderstanding of the connection between morality and free will. Moral acts do not exist without a truly free will. The Catechism, in discussing morality, teaches that “freedom makes man a moral subject. When he acts deliberately, man is, so to speak, the father of his acts. Human acts, that is, acts that are freely chosen in consequence of a judgment of conscience, can be morally evaluated. They are either good or evil.”⁸

The man who is coerced or chemically induced to behave a certain way is no longer the father of his own acts. Eerily, he becomes something of a puppet of the coercer, the master chemist. Therefore, covertly administered drugs could never morally enhance a person in the strict sense, precisely because the actions they induce do not originate with the man whose behavior is modified. An extreme example would be completely taking over the cognitive faculty of a man to more directly manipulate desired behaviors. Removing reason from a man is gravely illicit, because through reason, man “performs virtuous deeds and avoids sin.”⁹ The Catechism goes so far as to say that “the right to the exercise of freedom, especially in moral and religious matters, is an inalienable requirement of the dignity of the human person.”¹⁰ God himself does not make man an automaton

that only does his will but rather a rational being who is capable of loving him back.

At present, the MBPs presented by Crutchfield are either immoral or infeasible. Covert moral bioenhancement is illicit, because it fails to respect the dignity of the patients through informed consent. Although patients would consent to overt moral enhancement, it is logically incoherent to attempt moral enhancement through chemical coercion. These reflections demonstrate the dangers of the utilitarian worldview that is rampant in modern society. Almost any action carried out on the human person can be justified on the basis of a weak moral calculus and an imagined good. Such schemes are beneath our medical and scientific institutions, which exist for the sake of the dignity of man.

Endnotes

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