

The Science of Homeopathy: Part I

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Abstract: Conventional medicine is in a state of crisis. Skyrocketing costs and growing discontent pervade the field. Homeopathy is a centuries-old system of medicine that offers a unique solution to the current health care dilemma. The evidence base of the conventional allopathic and homeopathic medical systems are reviewed and contrasted. Ideological, practical and methodological impediments to the study of homeopathy are discussed. Part II (next issue of the *AJHM*) continues with an exploration of the scientific data on homeopathy, its benefits and safety.

Keywords: health care crisis, conventional allopathic medicine, classical homeopathic medicine, evidence-based medicine

A: Introduction

The Conventional Crisis

Conventional allopathic medicine is in a state of crisis. The cost of doing “business as usual” has become prohibitively expensive for both health care provider and health care consumer. Our nation spends over two trillion dollars annually on health care, more per capita than any other nation on earth, yet the net result is dissatisfaction from both physician and patient.(1) The U.S. has one of the most technologically advanced systems of health care in the world, yet more money is currently spent “out of pocket” for complementary and alternative medicine (CAM) than for conventional medicine.(2) This schism in health care reflects a huge amount of discontent between conventional medical physicians and their patients. It suggests that the conventional medical system is mired in its own problems and may be failing to address the needs of its practitioners or its patients.(3)

At least twenty-five percent of patients feel that their doctors aren’t looking out for their best interests. They express concerns that their physicians expose them to “unnecessary” risks, act like they “know everything,” fail in communication with them, are increasingly isolated, have differing treatment goals – physicians are interested in making diagnoses, while patients are interested in being tended to, listened to, cared for, and being well.(4)

Physicians are also at odds. The president of the Medical Society of the State of New York (MSSNY) recently remarked: “As we struggle to adjust to an in-

creasingly hostile practice environment, it is the medical profession itself that is in need of a doctor.”(5)

Physicians cite many frustrations in their business including gargantuan medical liability costs(6), struggles with managed care administrations, declining revenues and increasing overhead.(7) State medical societies and government agencies are concerned that physician attrition will outpace medical need even as federal and local governments struggle to provide universal health care access. Recent surveys predict that nearly half of the nation’s primary care physicians plan to stop practicing or reduce patient load in the next three years.(8) Among primary care physicians, a 14% nationwide shortfall is expected by 2030.(9) Some experts even argue that primary care physicians are an unnecessary commodity since the sum of allopathic medical expertise can be reduced to a series of practice protocols that can easily be delivered by trained paraprofessionals(10).

The elimination of primary care physicians might actually lead to an improvement in U.S. health care since the system is currently an inefficient albatross of expensive and damaging practices driven by a defensive litigious culture. The current system promotes ill health through unhealthy prescription practices and over-aggressive diagnostic testing. This approach is directly responsible for the increase in chronic illness as the overall health of our nation deteriorates. Nearly fifty percent of the U.S. population currently suffers

from some form of chronic degenerative illness(11). The allopathic system of medicine is built upon an entirely fallacious premise about the nature of health, that not only makes it impossible to be healthy, but it actually escalates health problems by prescribing unhealthy tests and unhealthy treatments. The system has finally imploded on itself through a regimen of waste and harmful practices. The public recognizes this and is beginning to turn its back on the failing system. The answer to our health care crisis is not just a matter of getting more people insured while ensuring that more physicians are happier and burdened less by debt. The healthcare system itself is sick and needs healing.

The conventional medical system is not only financially bankrupt, but it is ideologically impoverished as well. It was built upon erroneous and archaic concepts formulated centuries ago, but never revised. This system continues along a failing course despite mounting evidence demanding revision of its principles and philosophy. The current system recognizes that the body as nothing more than a physical-chemical machine. All problems are reduced to physical causes and only physical treatments are promulgated. The entire range of emotional, spiritual, psychic and energetic experiences explored by scientific investigation are either dismissed as "epiphenomenon" of physical chemistry and physiology or they are ignored and repudiated. In this way, science and medicine have stubbornly continued to deny the existence of energetic causes and solutions to health issues. This is an example of closed-minded rational thinking more akin to dogma, not science.

Conventional medicine's failure to recognize energetic phenomena outside physical explanation necessitates an overemphasis on a diagnostic framework based solely on pathology. The use of this focus justifies health care as a struggle, or a physical war ("us against them" – against cancer, against bacteria, against Alzheimer's, etc). This framework objectifies illness, thereby treating it as "something else," something outside of our bodies invading us. This objectification justifies the schism between a "good and bad" and "us and them" approach.

By painting the body white and the disease black, conventional medicine has utterly divorced the two. The failure to see the body as an integral part of illness and a predisposing receptive field limits the ability of medicine to treat illness and to maintain health.

Conventional medicine has been resistant to embracing any concept of an integrated ecology of the body/mind and the environment. The entire system of conventional therapeutics is built upon Cartesian principles of the separate and distinct functioning of different parts of the body and the environment. This system fails to recognize wholeness or "holism" since its methodology relies upon the reduction of the body into its unit parts for study. The body/mind is treated

as if it were made up of separate and noncontiguous parts. The isolation and treatment of one part with minimal regard for all the others is glorified as a scientific achievement, rather than understood as the folly it represented. Allopathic medicine chooses to ignore the interconnectedness of the body and the environment, mainly because doing so would concede an error in the course of medicine for the last 200 years.

The current medical system does not promote health; it fuels an ever-worsening spiral of more chronic illness and a more damaged and unhealthy environment. The history of medicine has been entirely clear and consistent on this point. Modern allopathic medical practices may offer targeted goals and objectives, but long-term results consistently fail to deliver these promises. What is generated are huge profits for large organizations, insurance companies, attorneys and pharmaceutical corporations. Allopathic medicine has become a vehicle for a health care industry. Advances have refined the practice, by making it appear more elegant and sophisticated, but these changes are superficial, masking the cataclysmic failure to actually deliver better health. High-tech developments are a smokescreen to distract us from the failure to actually provide better health. Conventional medical care is palliative; like antidepressants, they make us feel better, even though nothing has changed except our perception. Health measures in our society continue to demonstrate a consistent decline despite the most costly medical therapeutics on the planet.

The current system of medicine pays no more than "lip service" to illness prevention. It utterly fails to take responsibility for its own iatrogenic role. Rather than looking objectively at the long-term effects, this system of therapeutics blatantly ignores evidence suggesting its own culpability and causation.(12)

Allopathic medicine has exceeded its own bounds. It has become a behemoth without internal balances or constraints, without culpability and without responsibility for the damage it generates. Physicians are pawns in this system, themselves the object of indoctrination, which begins early in medical school.(13) Physicians have unwittingly played a role in the process of their own obsolescence. They are now replaceable cogs in a physical system.

The current crisis of medicine is really about a return to health care and the repudiation of an industry that is bent on its own self-promulgation. This job necessitates that we return to what is scientifically known in medicine, not what has been filtered and controlled by an industry bent upon profit and control. The new paradigm of medical thinking must actually incorporate the breadth of knowledge that already waits for integration. The new system will be truly health promoting, self-sustaining, and environmentally and ecologically viable if it follows truly scientific investigation wher-

ever it leads. The new system of medicine will address more than just the physical aspects of illness, but also the deeply psychological, emotional and spiritual causes and effects. It will empower individuals in the promotion of health rather than just react, too late, to the final stages of illness.

A New Paradigm

Homeopathy is an individualized, psychosomatic system of medicine based on more than two centuries of clinical observation and carefully conducted trials. It relies on an extensive data-base of clinical treatment, evidence built on successfully treated patients, clinical and toxicological research. It diverges from conventional allopathic medicine in several key areas:

Homeopathy postulates a psychosomatic body-mind connection not described by the allopathic medical model.

Homeopathic treatment provokes an innate healing response in the body that is disputed by conventional medical theories.

Homeopathy adjusts its approach and individualizes treatments to individual patients.

Homeopathy utilizes natural medicines, many of which have been in continual use for over two hundred years.

Homeopathy recognizes that even non-material factors and non-material dilutions of medicines provoke profound healing effects in the body.

Homeopathy is based upon direct clinical research that incorporates both objective and subjective viewpoints.

Evidence of clinical effectiveness in homeopathy arises, not from the laboratory, but from an unusual source: the patient. Fundamentals of homeopathic proof arose directly out of a series of clinical experiments and trials that were verified by cured cases. Samuel Christian Hahnemann, MD, the founder of homeopathy, was one of the first physicians in modern times to demand verified results in clinical cases before allowing any of this therapeutic system to be taught or disseminated.

Homeopathy was one of the first medical disciplines to utilize analytical statistics in the evaluation of therapeutic efficacy.(14)

A study conducted by the Swiss government over seven years demonstrates many benefits of homeopathic medical care. Their study showed that measures of quality of life and satisfaction with care were both significantly higher when homeopathic versus allopathic treatments were utilized. At the same time, health related costs were lower by a factor of 50% with the use of homeopathy.(15)

The United Kingdom performed a six-year study of 6,544 patients receiving homeopathic treatment in the National Health Service (NHS) and arrived at similar results. Outcome data showed that homeopathic intervention was beneficial in a substantial proportion of patients with a wide range of chronic diseases. The authors concluded that: "Additional observational research, including studies using different designs, is necessary for further research development in homeopathy."(16)

A study at the Royal London Homeopathic Hospital found that the clinical improvement rate of patients treated homeopathically was 81% with a satisfaction rate of 90%.(17)

Homeopathic evidence is gathered through direct clinical observation, reflection and retesting of therapeutic hypotheses until all doubt is removed. It is these same principles that continue to guide homeopathic practitioners today. It is precisely this issue which is at the heart of the dispute between conventional allopathic medicine and homeopathy.

B: Evidence-Based Medicine

"Legitimate standards of medical practice are rooted in competent and reliable scientific evidence and experience. However, these standards are subject to continual change and improvement as advances are made in scientific investigation and analysis."(18)

Evidence-Based Medicine (EBM) refers to a process of "integrating individual clinical experience with the best available external clinical evidence from systematic research."(19)

Homeopathy has been criticized for what appears to be a lack of scientific evidence base.(20) The problem is actually much greater since conventional allopathic therapies also seem to be lacking in this base. A group of information specialists and statisticians at the British journal *BMJ Clinical Evidence*.(21) who reviewed over 2,500 conventional allopathic treatments in 24 categories (see Figure 1) of illness, found that:

Only 13% of conventional treatments were "beneficial" when the clinical evidence supporting their use was investigated,

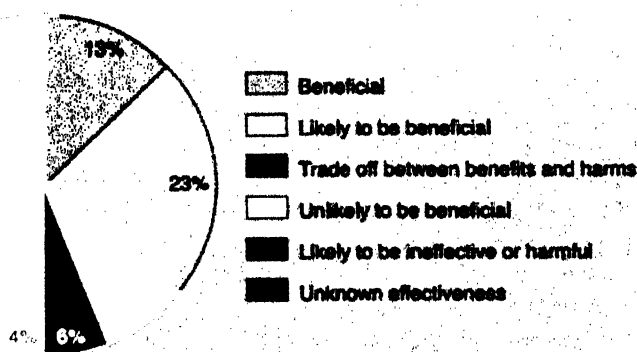


Figure 1. Indicates the percentages of conventional medical treatments that are supported by scientific evidence.(21)

23% were “likely to be beneficial”, but evidence was inconclusive,
8% were “a trade off between benefits and harm,”
6% were clearly “unlikely to be beneficial,”
4% were “likely to be ineffective or harmful,”
and 46% were rated as being of “unknown effectiveness.” The clinical data supporting their use was simply nonexistent.

The BMJ authors concluded that most conventional medical treatments (87%) do not rest on principles of EBM, but on the “individual preferences of clinicians,” unsupported by science. This finding shows that the label of “scientific medicine” is *improperly* applied when it is used in conjunction with conventional allopathic practices. Only a small percentage of these treatments (13%) in the allopathic armamentarium are backed by scientific evidence demonstrating beneficial results.

In 2001 researchers looking at data previously cited in favor of many conventional medical practices uncovered additional problems: Re-analyzing 160 conventional studies initially performed by the prestigious Cochrane Institute the authors concluded that the scientific evidence initially interpreted in support of many practices was far less robust than the initial reviewers had claimed. The authors determined that the Cochrane interpretations tended to be “highly subjective” in their analyses.(22) In other words, many of the studies that were originally cited as scientific justification for particular conventional practices did not actually support, or only weakly supported, the treatments in question, but the original reviewers had adopted unjustifiably favorable positions on a large number of these studies. They found that in these instances the conclusions drawn from the Cochrane reviews were fundamentally flawed, prejudicial and not scientifically grounded. This data shows that the claims to an evidentiary and scientific basis for allopathic medicine may be grossly exaggerated.

Numerous reports in the literature have shown that scientific data interpretation is frequently flawed. Some research results have been fabricated (23) and falsified by researchers.(24) In other instances unfavorable information was simply withheld from publication.(25) Pharmaceutical companies routinely “bury” negative results,(26) disguise negative studies inside more positive ones, and continually “blur the lines between science and marketing.”(27) Studies performed by researchers financially linked to pharmaceutical companies have been shown to have consistently more positive results than those published by independently funded researchers.(28) Conflict of interest, even in the hallowed halls of science, corrupts objective studies and contaminates the results.

An expert at the Johns Hopkins School of Public Health recently analyzed the research and publication

strategies of the Pfizer pharmaceutical company, finding that:

- “Pfizer’s tactics included delaying the publication of studies that had found no evidence the drug worked for some other disorders, “spinning” negative data to place it in a more positive light, and bundling negative findings with positive studies to neutralize the results...”(29)

- More than half of the clinical trials conducted for drugs approved by the FDA were never published and only 43% of drugs approved by the FDA between 1998 and 2000 had published trial results. This means that data on more than half the pharmaceuticals on the market today isn’t even available to independent reviewers. This data may be tainted and incomplete, but we have no way of knowing. The FDA has been cited for its role in failing to ensure that drug trials are conducted properly.(30) At least 33% of physicians overseeing drug trials have a conflict of interest and receive support from the pharmaceutical company conducting these trials. These conflicts of interest may lead to a distortion of scientific objectivism, may favor of the economy of the pharmaceutical industry and may jeopardize public health and safety.(31)

- Other evidence in the tangled relationship between science and marketing strategies include:

- The drug manufacturer Wyeth admitted paying ghostwriters to produce medical journal articles favorable to its products.(32)

- The manufacturer Merck “downplayed” dangers of its drugs, concealed the true authorship of articles and hired ghostwriters without revealing their financial ties to the industry.(33)

- GlaxoSmithKline pharmaceuticals paid over \$1.3 million to an influential psychiatrist hosting a National Public Radio (NPR) health program. The support was not divulged publicly and the psychiatrist neglected to report the income to his university affiliate. The psychiatrist recommended pharmaceutical treatments on his show.(34)

- A congressional investigation revealed that several drug manufacturers, including Johnson & Johnson, paid large sums of money to world-renowned physicians for public advocacy of their products on a large scale.(35)

- Forest Laboratories was charged with Fraud by the U.S. Department of Justice for failing to report negative studies of the drugs Celexa and Lexapro in children.(36)

- The pharmaceutical giant AstraZeneca “buried” unfavorable studies of its \$4.4 billion drug Seroquel in an attempt to hide side-effects, including weight gain and diabetes.(37)

Reviewers of these cases agreed that these events could not have taken place without the collusion of “researchers, authors, journal editors, peer reviewers

and the FDA.” They concluded that: “Public trust in clinical research is in great jeopardy.”(38)

These actions represent a type of covert lobbying that clearly violates the public trust. These activities should raise serious questions regarding the safety of the entire conventional medical formulary. These revelations are extremely serious and they weaken the argument that the conventional medical system is scientific or even efficacious. Certainly the EB of conventional medicine requires extensive review and reanalysis.

Classical Homeopathy, in sharp contrast, is not subject to the same degree of industry-based bias. Homeopathic medications are natural products that are produced at a fraction of the cost of conventional medicines. These products are usually given as single medicines and repeated infrequently. Several months’ supply of homeopathic medicine costs less than even a day’s supply of allopathic drugs. Since homeopathic medicines do not involve significant alterations of natural substances, their use cannot be licensed or patented, which further reduces the profit motive which drives most research and development in the field of medicine. In fact, it is precisely because of this lack of profitability that homeopathy has suffered in our capitalistic system. Very few investors are attracted to homeopathic ventures since the chance of profit is so unlikely.

Homeopathic treatment must be, by definition, individually prescribed and matched to each specific individual. This simple fact reduces the profit motive and even more dramatically lowers the risk that conflicts of interest and desire for profit will motivate researchers to falsify test results.

The evidence base of homeopathy is derived from data gleaned directly from clinical practice in cured cases, clinical provings, and industry-based toxicity reports.(39) Homeopathic evidence is gathered from real patients treated by real physicians in real life situations. Additional data which comes from clinical provings explores the activity of each homeopathic medicine when it is administered to healthy volunteers. Data from toxicity reports and poisonings also add vital information relating to the potential of each drug to address more serious pathology.

Homeopathy is built upon a centuries-old collection of evidence that integrates the subjective clinical experience of the patient along with the objective clinical observations of the physician.(40) The practice of homeopathy involves administering individually selected homeopathic medicines that most closely match the totality of symptoms of the sick patient in a highly dilute (“potentized”) formulation. Homeopathic drug information (and homeopathic prescribing) is based on the empiric science of clinical observation. This data has been repeatedly confirmed and substantiated over more than two centuries. It demonstrates internal

consistency unbiased by internal individual or external market forces.

Allopathic medical science is allegedly based upon unbiased, objective clinical observation, but this report suggests that it has been heavily corrupted by “conflict of interest” and a pharmaceutical industry with deep ties to physicians, researchers and an “academic industrial complex”(41) representing world-wide financial interests in the trillions of dollars.(42) The ethics, science and objectivity of these industries are riddled with examples of flagrant betrayal of science and abuse of the public trust.(43)

Homeopathic and allopathic routes diverged more than two centuries ago. Allopathic practices have slowly evolved and reflected the newest technological advances, while homeopathy has barely changed at all except to add more clinical verification and proof to its growing storehouse of information. At its root, homeopathy still maintains the same philosophy, core of medicines and method of practice, while allopathic practices appear to continually shift by adding new and discarding older methods. This “failure” of homeopathy to change is evidence that the system is extremely successful, safe and effective. The continual changes in the allopathic field reflect the unstable ground on which the profession is built.

The success of allopathic medicine dominating the market economy in the U.S. and Europe is also a measure of how poorly homeopaths have promulgated their own field. The answer to how and why this has happened is addressed elsewhere, but some explanation for the failure of homeopathy to prove itself in a world forum must be reviewed.

C: Impediments to Research in Homeopathy

Ideological Problems

Homeopathic research is not accepted by mainstream medical institutions today mainly because of ideological conflicts, misunderstanding and prejudice, not lack of clinical effectiveness. Because homeopathy lacks a clear explanation for how it might work, it has been repeatedly derided and ridiculed by proponents of the allopathic medical model. The problems endured by homeopaths trying to prove the effectiveness of their practice to allopathic colleagues stem mostly from prejudicial and ideological bias, not lack of clinical proof. Allopaths simply do not *believe* that homeopathy could work:

“The problem with homeopathy is that the ‘infinite dilutions’ of agents used cannot possibly produce any effect. A randomized trial of ‘solvent only’ versus ‘infinite dilutions’ is a game of chance between two placebos.”(44)

Allopathic “scientists” frequently refuse to even look

at, let alone accept, what the science of their own studies on homeopathy demonstrates. They refuse to look at the data because they have already pre-judged and made up their minds that homeopathy is “simply not possible.” This attitude does not represent scientific inquiry, but dogmatic rigidity.

Despite many reasonably good studies performed on homeopathy, and a tremendous amount of observational data from patients, the allopathic community continues to stubbornly insist that homeopathy cannot possibly work. Hard data showing homeopathy’s effectiveness is met with mockery, dismissal and outright refusal to consider the implications.

One investigator remarked:

“Either the studies show what they seem to show – that homeopathy is working – or they demonstrate the Random Controlled Trial’s capacity for predictable, reproducible, significant false positives – a conclusion that may be even more challenging in its implications for today’s medicine than the conclusion that homeopathy works.”(45)

Conventional allopathic medical researchers are simply too prejudiced against homeopathic practice and research to accept its validity. Allopaths have continually refused to seriously consider the scientific data. Their reasoning that further research would be futile is justified by the argument that homeopathy is simply implausible:

“...the scientist must question whether the diversion of significant resources to support these trials [of homeopathy] can be justified when a rational basis for choice of homeopathy, or any particular modality of it, is lacking.”(46)

As a result of this prejudice, financial support for homeopathic research and academic appointments has suffered. Medical history in the United States has been unequivocal on this subject: The American Medical Association was founded, in part, to fight an ideological and financial “turf war” against homeopathy.(47) Until medical scientists are able to suspend ideological prejudice and look objectively at the results of all medical trials, there will be continued corruption in medical thinking and no greater acceptance of effective scientific disciplines like homeopathy in the future.

Practical Problem

Apart from the huge ideological gap separating homeopathic from allopathic medical thinking there are still many practical obstacles facing the study of homeopathy:

1. *Lack of Funding.* A double-bind exists here since funding is usually limited to therapies that already have a proven track record of effectiveness. Obtaining funding for homeopathy is more difficult due to the existing bias against homeopathy. Gaining access to the necessary financing to prove itself is twice as difficult when

access to insurance coverage and research funds are limited. In the UK only 0.08% of the NHS research budget is devoted to CAM. In the U.S. 0.4% of the total operational budget of the NIH is devoted to the National Center for Complementary and Alternative Medicine (NCCAM). (Only two departments of the NIH receive lower funding than NCCAM, one of them being “Building and Grounds.”) The NCCAM budget is further divided between a diversity of CAM modalities, including homeopathy.

2. *Lack of Profit.* Homeopathic research suffers from a lack of profitability precisely because these medicines are inexpensive to produce and test. The homeopathic pharmacopoeia has changed very little since its inception, unlike the allopathic armamentarium, which requires constant annual revision. The single-ingredient homeopathic medicines, derived primarily from natural sources, can be produced, tested, developed and manufactured relatively inexpensively. Profit margins are extremely small in homeopathy. As a result, profit does not drive homeopathic research nor attract large investments, as it does in the allopathic pharmaceutical industry. The main incentive to support homeopathy arises from its health benefit not its investment return. Consequently, limited philanthropic support has dominated homeopathic funding.

3. *Lack of Research Skills.* Most homeopathic schools and training programs lack consistent standards or academic rigor, and most fail to offer electives or training in research. In the U.S. there is no centrally designated authority governing the academic program in these schools. The Council on Homeopathic Education (CHE) has attempted to unify and improve these standards, but there is still a long way to go.(48)

4. *Lack of an Academic Infrastructure.* Homeopathic training programs lack connection with university training programs or medical schools. This limits funding, support and visibility in the academic community. The American Medical College of Homeopathy (AMCH) in Phoenix, Arizona is an example of an attempt to correct this situation, but it remains under-funded and unaccredited.(49) Only six universities in the United Kingdom (and none in the U.S.) currently offer Bachelor of Science degrees in homeopathy.(50) Homeopathic medical schools imparting the M.D. degree still exist only in India. Only naturopathic schools formally offer accredited training in homeopathy in the U.S. and only at introductory levels.

5. *Lack of Patients.* According to recent studies between 1-3% of the U.S. population has utilized homeopathy. This number is growing steadily, but the public is still largely unaware of the benefits of homeopathic treatment. This is in stark contrast to the situation in the late 19th century, when homeopathy enjoyed wide public support, a broad political backing, and an academic infrastructure with homeopathic medical schools, hos-

pitals and clinics across the U.S.

6. *Lack of Practitioners.* Medical practitioners typically provide direct patient care, but also form the pool of researchers who generate clinical data. Research performed by homeopathic clinicians who have chosen to investigate some aspect of homeopathic treatment in their private practices is extremely limited. Existing practitioners who elect to perform such research find themselves spread extremely thin since the number of homeopathic physicians in the U.S. is very low. The American Institute of Homeopathy (AIH), the flagship professional homeopathic organization, currently boasts less than two hundred physician members nationwide.

Methodological Problems

Besides the ideological and practical problems that prevent homeopathy from gaining greater acceptance and recognition, methodological problems in medical research add to the difficulty of objective validation of homeopathy.

The “gold standard” of homeopathic medicine is direct clinical experience, initially through the clinical proving, and subsequently by attending to clinical outcomes – the resolution of disease states following individualized homeopathic treatment.

Allopathic medicine considers the Randomized Controlled Trial (RCT) to be the “gold standard” of medical research. However, since this is based on massing large amounts of data on the basis of diagnostic categories of diseases, it has limited applicability when applied to homeopathy, which is based on individualized treatment and does not treat patients based on disease diagnosis categories.

Homeopathy is not focused on whether a particular medication statistically impacts a disease category. It is interested in finding the right remedy for the individual person. However, each person is unique, as is their affliction, obviating the value of research based on categories of disease. Holding the RCT as the “gold standard” in such a circumstance automatically discredits homeopathy from the outset and is the root problem blocking the objective validation of homeopathy in medical research.(51)

Homeopathy cannot be studied through randomization unless homeopathic principles are violated. It is difficult to apply the RCT to homeopathy because homeopathic treatment is (by definition) individualized to the person, not the diagnosis or the condition. Finding the cure for individual patients with their individual illness is based on the explicit position that they are unique and do not fall into groups. Patients in homeopathic treatment cannot be compared or randomized into treatment/non treatment settings the same way as patients in groups representing disease categories can be. Homeopathy is not applied on the basis of a diag-

nostic category in practice; so studies of homeopathic treatment based upon analysis of results with disease categories is meaningless. Homeopathy requires a separate in-depth interview and psychosomatic analysis of each individual case to determine the correct individual prescription. The basic premise of the RCT approach is in conflict with the basic premise of homeopathy.

According to the *Liga Medicorum Homeopathica Internationalis*: “any work that aims to demonstrate the evidence of Homeopathy based on clinical trials designed to prove efficacy of a particular homeopathic medicine exclusively over a specific disease will fail... because it ignores the intrinsic homeopathic principles.”(52)

The RCT is not sensitive to individuals. These studies typically test a single medicine on a large number of patients with a single diagnosis. This approach ignores the way that homeopathy is practiced, which is by individualizing medicine choice to the unique and total clinical pattern of each patient. The RCT is an example of linear reductionism which eliminates the differences between patients, but homeopathic treatment is actually based upon accentuation of those very differences! The RCT therefore cannot be an adequate test of the effectiveness of the homeopathic approach as it deliberately eliminates the complexity and individualization inherent to the homeopathic prescription.(53)

The RCT tests simplified objective events and filters out detailed information about how individuals fare from treatment. Homeopathic treatment makes a difference in precisely those criteria that are not measured in the RCT: quality of life, long term measures of improvement, energy and vitality. The endpoints of homeopathic and allopathic treatment are different. Observational studies of homeopathic clinical outcomes are what is needed to evaluate the efficacy of homeopathy, not RCT's.(54)

The RCT is not based on real life experience, real-life conditions or practical considerations of patient's daily lives. Conditions investigated in clinical trials are rarely representative of those treated in actual practices. Researchers typically select conditions that are relatively easy to investigate and recruit large numbers of patients. Researchers select simple cases that have one or two easily measurable short-term outcomes. This is frequently not representative of the populations treated in clinical practice where cases are always more complex and varied.

Judging homeopathy by the RCT approach is an inappropriate and inadequate measure of homeopathy's true potential. Statistical trends can be measured by the RCT, but not a system of medicine based upon the complexities of the individual.

D: Conclusion

Conventional medicine is in a state of crisis. Costs

of medical care are skyrocketing and indices of chronic disease are rising. Physicians and patients are dissatisfied with the practice and results of this system. The evidence base of conventional medicine is not based on scientific evidence and it is riddled with potential conflicts of interest. Not only is public safety in jeopardy, but so is public finance of this cancerous system.

Homeopathy is a unique medical system that offers an opportunity to return to a truer definition of scientifically-based health care. Homeopathy is evidence-based, by definition, and has a well-established history of use worldwide. Many problems have thwarted formal academic research into homeopathy, but they can be overcome if truly objective action is achieved. Part II of this investigation takes up the question of therapeutic efficacy with data from controlled studies and reviews the safety of homeopathy.

This paper was first presented at the **Systems and Symbiosis Conference** hosted by New York Medical College, The American Institute of Homeopathy (55) and The Homeopathic Medical Society of the State of New York (56) in Tarrytown, New York on October 23, 2008.

References

- (1) Parker-Pope T. Well. Doctor and Patient, Now at Odds, The NYTimes, July 29, 2008:F6.
- (2) Eisenberg DM, et al. Trends in Alternative Medicine Use in the United States, 1990-1997 Results of a Follow-up National Survey *JAMA*. 1998;280:1569-1575..
- (3) Cassedy JH. American Medicine and Statistical Thinking, 1800-1960. Cambridge, Mass. Harvard university Press. 1984.
- (4) Parker-Pope T. Well. Doctor and Patient, Now at Odds, The NYTimes, July 29, 2008:F6.
- (5) Rosenberg MT. Is There a Doctor in the House? President's Column. Medical Society of the State of New York, News of New York. 2008; 63(8):4.
- (6) Sorrel AL. Defensive medicine widespread among Mass. Doctors. Am Med News. 2009, Jan 5:9.
- (7) www.physiciansfoundation.org
- (8) Am Fam Phys. AAFP New Now. 2009;79(1):5.
- (9) Henry TA. State societies warn of primary care shortages. Am Med News. 2008. December :12.
- (10) <http://covertrationingblog.com/primary-care-in-america/we-may-have-enough-primary-care-docs-after-all>
- (11) <http://www.restministries.org/invisibleillness/statistics.htm>
- (12) <http://www.nvic.org>
- (13) Wilson D. Patching a Wound. Working to End Conflicts at Harvard Medical. New York Times, Business Day. March 3, 2009: B1, B6.
- (14) Cassedy JH. American Medicine and Statistical Thinking, 1800-1960. Cambridge, Mass. Harvard university Press. 1984.
- (15) Wolf U, et al. Prevalence, use, effectiveness and appreciation of CAM among patients and physicians in Switzerland. A search of the current literature... 12th Annual Symposium on Complementary Health Care -- Abstracts: 19th-21st September 2005, Exeter, UK. Focus on Alternative & Complementary Therapies (FOCUS ALTERN COMPLEMENT THER), 2005; 10: Supplement 1: 58-9.
- (16) Spence DS, Thompson EA, Barron SJ. The Journal of Alternative and Complementary Medicine. October 1, 2005, 11(5): 793-798.
- (17) The evidence base of complementary medicine 2nd Edition, The Royal London Homeopathic Hospital, 1999.
- (18) Model Guidelines for the Use of Complementary and Alternative Therapies in Medical Practice, Approved by the House of Delegates of the Federation of State Medical Boards of the United States, Inc. Special Committee for the Study of Unconventional Health Care Practices (Complementary and Alternative Medicine): 2001-2002.
- (19) Sackett DL, Rosenberg WM, Gray JA, et al. Evidence based medicine: what it is and what it isn't. *BMJ*. 1996;312:71-72.
- (20) Benefits and risks of homoeopathy. www.thelancet.com; 370 November 17, 2007: 1672-73.
- (21) *BMJ Clinical Evidence handbook*, BMJ Publishing Group, London, UK, 2007.
- (22) <http://clinicalevidence.bmj.com/cweb/about/knowledge.jsp>
- (23) Ezzo J, Bausell B, Moerman DE, Berman B, Hadhazy V. Reviewing the reviews. How strong is the evidence? How clear are the conclusions? *Int J Technol Assess Health Care*. 2001 Fall;17(4):457-66.
- (24) Harris G. Doctor Admits Pain Studies Were Frauds, Hospital Says. New York Times. March 11, 2009:A22.
- (25) <http://nytimes.com>. April 22, 1986.
- (26) <http://www.wired.com/medtech/health/news/2005/07/68153>.
- (27) Martin B. Suppressing Research Data: Methods, Context, Accountability, and Responses. *Accountability in Research*, Vol. 6, 1999, pp. 333-372.
- (28) Saul S. Experts Conclude Pfizer Manipulated Studies. An Epilepsy Drug Known for Off-Label Uses. *NYT Business*, 2008; October 8:B4.
- (29) Moncrief J, Kirsch I. Efficacy of antidepressants in adults. *BMJ* 2005;331:155-7.
- (30) Harris G. F.D.A. Is Lax On Oversight During Trials, Inquiry Finds. *NY Times*. 2009, Jan 12: A10.
- (31) Landers SJ. Data from drug trials often not published. *Am Med News*, 2008, Oct 13: 24-25.
- (32) Wilson D. Investigation Links Wyeth to Articles on Its Drug. *NY Times*. 2008, Dec 13: B1, B8.

- (33) DeAngelis CD; Fontanarosa PB. Impugning the integrity of medical science: the adverse effects of industry influence. *Preview JAMA: Journal of the American Medical Association*, 2008 Apr 16; 299.
- (34) Harris G. Drugmakers Paid Radio Host \$1.3 Million for Lectures. *NY Times*. 2008, Nov 22:A14.
- (35) Harris G. In Documents, Ties Between Child Psychiatry Center and Drug Maker. *NY times* 2008, Nov 25: A22.
- (36) Meier B, Carey B. Drug Maker Is Accused of Fraud. *The New York Times*. Feb 26, 2009: B1,B3.
- (37) Wilson D. Drug Maker's E-Mail Released in Se-roquel Lawsuit. *New York Times*. Feb 28, 2009. <http://www.nytimes.com/2009/02/28/business/28drug.html?partner=rss&emc=rss>
- (38) Landers SJ. Studies suggest drugmaker skewed clinical trial reports. *Am Med News*. 2008, May 12:21-22.
- (39) <http://www.fhsc.salford.ac.uk/hcprdu/projects/homeopathic.htm>.
- (40) Mathie RT. The research evidence base for homeopathy: a fresh assessment of the literature. *Homeopathy* 2003; 92: 84-91.
- (41) Culliton BJ. The academic-industrial complex. *Science*. 216(4549):960-2, 1982 May 28.
- (42) Pharmaceutical R&D Spending: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Survey, 2001. NIH Budget. [WWW.nih.gov](http://www.nih.gov),2001.
- (43) Abramson J, Starfeld B. The Effect of Conflict of Interest on Biomedical Research and Clinical Practice Guidelines: Can We Trust the Evidence in Evidence-Based Medicine? *JABFP* September–October 2005;18(5):414-18.
- (44) Vandenbroucke JP, Commentary. Homeopathy trials: going nowhere. *Lancet*. 1997;350:824.
- (45) Walsh N, Alternative Medicine, An Evidence-Based Approach. Homeopathy: Does it Have a Role?. *Int Med News*; Nov 1, 2001:13.
- (46) Langman MJS, Commentary. Homeopathy trials: reason for good ones but are they warranted? 1997;350:825.
- (47) Coulter, HL, *Divided Legacy*, Vol 1, North Atlantic Books, Berkeley, CA.
- (48) <http://www.chedu.org>.
- (49) <http://www.amcofh.org/>
- (50) www.thelancet.com; 370 November 17, 2007:1677-78.
- (51) Weatherley-Jones E., Thompson EA, Thomas KJ. The placebo-controlled trial as a test of complementary and alternative medicine: observations from research experience of individualized homeopathic treatment. *Homeopathy* 2004; 93: 186-9.
- (52) <http://www.lmhint.net>
- (53) Bell IR The Evolution of Homeopathic Theory-Driven Research and the Methodological Toolbox. *American Homeopath*. 2008:56-74.
- (54) Milgrom LR, Is homeopathy possible? *J R Soc Health*. 2006;126(5):211-8,
- (55) <http://www.homeopathyusa.org>
- (56) <http://www.hmssny.org>
- (57) <http://www.homeopathicmd.com>

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