ORIGINAL RESEARCH

A Gentle Ethical Defence of Homeopathy

David Levy • Ben Gadd • Ian Kerridge • Paul A. Komesaroff

Received: 24 June 2013 / Accepted: 22 December 2013 / Published online: 19 July 2014 © Journal of Bioethical Inquiry Pty Ltd 2014

Abstract Recent discourses about the legitimacy of homeopathy have focused on its scientific plausibility, mechanism of action, and evidence base. These, frequently, conclude not only that homeopathy is scientifically baseless, but that it is "unethical." They have also diminished patients' perspectives, values, and preferences. We contend that these critics confuse epistemic questions with questions of ethics, misconstrue the moral status of homeopaths, and have an impoverished idea of ethics—one that fails to account either for the moral worth of care and of relationships or for the perspectives, values, and preferences of patients. Utilitarian critics, in particular, endeavour to present an objective evaluation—a type of moral calculus—quantifying the utilities and disutilities of homeopathy as a justification for the exclusion of homeopathy

from research and health care. But these critiques are built upon a narrow formulation of evidence and care and a diminished episteme that excludes the values and preferences of researchers, homeopaths, and patients engaged in the practice of homeopathy. We suggest that homeopathy is ethical as it fulfils the needs and expectations of many patients; may be practiced safely and prudentially; values care and the virtues of the therapeutic relationship; and provides important benefits for patients.

Keywords Homeopathy · Ethics · Utilitarian · Patient values and preferences · Evidence · Evidence-based medicine (EBM) · Outcomes

D. Levy (⋈) · I. Kerridge

Centre for Values, Ethics and the Law in Medicine, School of Public Health, Faculty of Medicine, University of Sydney, 92-94 Parramatta Rd., Camperdown, NSW 2006, Australia e-mail: David.c.levy@sydney.edu.au

I. Kerridge

e-mail: Ian.kerridge@sydney.edu.au

B. Gadd

Homeopath, London, UK e-mail: ben@minimumdose.com

I. Kerridge

School of Public Health, Faculty of Medicine, University of Sydney, Royal North Shore Hospital, Sydney, NSW, Australia

P. A. Komesaroff

Monash Centre for Ethics in Medicine and Society, Monash University, Melbourne, Australia e-mail: Paul.komesaroff@monash.edu

Introduction

For many years, critics have argued that the evidence base for homeopathy is insufficient and that efficacy cannot be broadly demonstrated. More recently, however, utilitarian critiques have asserted that the practice of homeopathy is *unethical* on the basis that its knowledge claims are not commensurable with scientific principles, particularly those of evidence-based medicine (EBM). While acknowledging that homeopathy might include utilities such as non-invasiveness, costeffectiveness, holism, and agent autonomy, Smith (2012a), for example, considers several ostensibly negative features of homeopathy and concludes that the benefits are minimal when compared to these negative features. He identifies these as the failure to seek effective health care, the waste of resources, the promulgation of

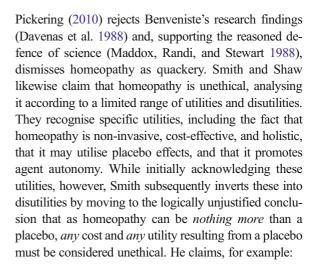


false beliefs, and a weakening of commitment to scientific medicine. Parker (2007b) makes a related point that the multitude of postmodern multicultural-pluralistic systems of complementary medicine, such as homeopathy, are not commensurable with EBM and that the lack of evidence for these therapies generally poses unacceptable levels of uncertainty and unpredictable breaches of beneficence and non-maleficence. Other critics claim that homeopathy cannot work other than as a placebo (Shaw 2010) (a claim posited as both a scientific and an ethical challenge to the practice of homeopathy) and that homeopaths deceive their patients—a substantial moral charge. In this paper, we examine the logic of moral critiques of homeopathy and argue that homeopathy is ethical because: it offers significant value and benefits to patients; it facilitates a diagnostic process that culminates in treatment or referral; it is founded upon a caring, therapeutic relationship between the clinician and the patient; and it is guided by the freedom of choice of consenting patients.

Utilitarian Claims: Ethical Defences

Homeopathy undoubtedly presents an epistemological challenge to conventional medicine with regard to its plausibility and clinical evidence base. This paper will not endeavour to resolve this challenge. Even if we were to accept the claims of critics, including Smith 2012a, b, Shaw (2010), and others (Goldacre 2007; Pickering 2010; Freckelton 2012) that the efficacy of homeopathy has not been sufficiently substantiated, such claims do not logically or convincingly translate into a valid ethical critique: the claims that homeopathy should not be practised; that it should not be taught in medical schools; that government spending should not be committed for the conduct of research; that the public should not have the right to choose homeopathic treatment; and, finally, that homeopathy is therefore unethical. Each of these claims relies on errors in logic and an impoverished understanding of ethics.

The utilitarian evaluation of homeopathy relies on a reductionist moral calculus that assumes that all of homeopathy—its theory, principles, and practices—can be evaluated by the consequences of its actions. Smith (2012a, b) and Freckelton (2012), for example, conclude that the apparent lack of scientific evidence in support of homeopathy renders it not only epistemically unaccountable *but also morally indefensible*.



Ethical problems present further difficulties for the homeopathy-as-placebo argument. Placeboonly treatments depend axiomatically on the patient being led to believe an untruth: that the proffered treatment actually causes a physiological change. Thus, homeopathy-as-placebo would have to be based upon, in effect, lying to patients (Smith 2012a, 403).

This idea, that any practical utility accorded to homeopathy is neither clinically nor ethically valid because it is "nothing more than" the placebo effect, permeates critiques of homeopathy. We suggest, however, that not only does this misconstrue the function and meaning of "placebo" as a valid and distinct feature of clinical practice, it also presents an insufficient basis for a logical leap from the claim that homeopathy has no scientifically "independent" benefit to the claim that homeopathy is unethical.

The Claim of Holism: Utility or Disutility?

The criticism made of homeopathy—that any benefit is nothing more than a placebo effect—is often coupled with another criticism of homeopathy: that the claim that homeopathy, unlike other areas of health care, offers holistic or patient-centred care is invalid. Holism, critics argue, is central to all modern, patient-centred care and so does not constitute a particular or exclusive strength of homeopathy. Both parts of this claim are true, as while homeopathy acknowledges that patients seek a holistic approach to health care (Clark-Grill 2010;



Milgrom and Chatfield 2011; Eyles, Leydon, and Brian 2012), the same is true of some conventional medical practice (May and Sirur 1998) and of integrative medicine (Grace and Higgs 2010). Nevertheless, the commitment of homeopathy to holism is not irrelevant (as Smith 2012a, b would claim) and is certainly a more prominent feature of homeopathy and other forms of complementary and alternative medicine (CAM) than of conventional medicine, which is characterised by reductionism, atomism, and fragmentation (both in its scientific foundations and in its practical delivery) rather than holism. The utilitarian interpretation of homeopathy, indeed of any health profession, struggles to take account of the holistic dynamism and complexity of health care, its philosophical foundations, and its various clinical applications and modes of delivery. Homeopathy, as with other forms of practice, encompasses complex therapeutic interventions containing interconnected elements that may be difficult to disaggregate in order for them to be analysed (Milgrom 2006; Thompson and Weiss 2006; Milgrom and Chatfield 2011). These comprise nonpharmacological contextual factors, including the clinical setting and the therapeutic relationship between the homeopath and her patient, which are also recognised as being important in conventional medical care. Indeed, the impact of these aspects of practice may be far greater than is currently accepted or understood. A homeopathic study of rheumatoid arthritis patients (Brien et al. 2010) has suggested that patients derived benefit from the consultation and the therapeutic context rather than from the homeopathic medicines prescribed. This may be a function of the considerable time spent in homeopathic consultation by homeopaths in developing and incorporating an understanding of the patients' lifeworlds as the contexts for their illnesses. This research is consistent with the literature on the placebo effect (Finniss et al. 2010; Miller and Brody 2011; Relton 2013) that suggests that relational aspects of practice have important therapeutic benefits. It is a mistake, however, to conclude either that this effect is valueless or irrelevant (because it is the "placebo effect") or that it is equivalent across all health care contexts or health care disciplines. Indeed, it may be the case that some practices—perhaps because they privilege time, listening, and therapeutic relationships—exert a greater placebo or dyadic effect than others and that much of contemporary biomedical practice is systematically unable to attend to these domains of care and so to manifest these benefits (Agledahl et al. 2011). In any case, what these studies make clear are that therapeutic relationships are greatly valued by patients and that the context and clinical setting cannot be disentangled from patients' experiences and their treatment outcomes.

The Claims of Harm and the Failure to Seek Effective Care

There is no question that, in some instances, homeopaths have failed to refer patients for conventional treatment and that this has led to adverse events (Freckelton 2012). Likewise, there is little question that deaths have occurred as a result of homeopathic treatment (Freckelton 2012; Posadzki, Alotaibi, and Ernst 2012). It is also true, however, that many patients have died as a consequence of conventional medical practitioners practicing negligently, or failing to refer or recognise the limitation of their own expertise, or failing to follow up with patients. Many thousands of patients die each year due to medical errors or other adverse events related to conventional medical treatments (Richardson and McKie 2007). While, in each case, these are disutilities, it does not necessarily follow that this makes either form of practice unethical, let alone disreputable or illegitimate. Further, even where a therapy has no proven benefit but may carry some harm—as is the case with many innovative biomedical therapies or interventions (Oktay and Hui 2012; White 2013)—it still does not follow that these are, by definition, unethical. Indicting all of homeopathy on the basis of the errors of a few homeopaths, or all of conventional allopathic medicine on the basis of the actions or decisions of a few physicians or surgeons, is logically untenable; except, of course, if one includes the commitment to an ideal such as the scientific method (Pickering 2010) as a core utility or if one adopts a highly constricted notion of "benefit." Because utilitarianism requires a clear moral calculus, it must first articulate what constitutes "harms" and "benefits," how these are to be measured, what value each has, and how they are to be made commensurable. And this is neither simple nor value-free. One must make clear how the harm (through the action or inaction) of a homeopath, or doctor, or surgeon, is to be weighed against other outcomes, including those much larger number of people who are not harmed or who experience some benefit. The deaths attributed to homeopaths (Freckelton 2012) or to the British general practitioner



Dr. Harold Shipman (Batty 2005) or to Australian surgeon Dr. Jayant Patel (Brisbane Times 2012) do not sustain an argument about the morality of all homeopaths, GPs, or surgeons or about the ethics of homeopathy, conventional medicine, or surgery. The interests of multiple stakeholders must always be considered in determining the value of each of these actions. Utilitarianism provides no easy answer to this complex of problems and cannot easily provide this moral calculus. We should therefore neither accept the exclusion of values and benefits that are ill defined, difficult to measure, or deeply subjective from such deliberation nor the (implicit) inclusion of meta-values, such as concordance with biomedical episteme. The utilitarian argument collapses because the determinants and parameters of this type of moral calculus cannot be reasonably, objectively, or ethically determined.

In relation to homeopathy, there are limited data that report harm and some data that report measurable benefits, primarily, but not limited to, assessments of satisfaction with care and improvements in subjective assessments of health (Spence, Thompson, and Barron 2005; Marian et al. 2008). What, then, is the harm of homeopathy that makes it, according to a utilitarian calculus, unethical? For Smith and others, one of the principal harms of homeopathy is that it, and the homeopaths that care for patients, divert patients from the care they need. There are a number of problems with this argument. First, it rests on a series of unsubstantiated empirical claims: that homeopaths "fail" to refer or that patients "fail" to attend for conventional care because they are diverted/distracted by homeopathy; that patients do not receive the treatment they "need" in a timely manner; that these treatments are proven to be effective; and, finally, that patients are harmed. There is little evidence to support these claims. Second, it gives little heed to the fact that homeopaths, like other health practitioners, are guided by both moral and professional virtues in their practice. And, finally, it does not acknowledge the autonomy, or agency, of the patient and consumer.

As with professionals in other health disciplines, homeopaths are bound by codes of ethics and practice, regulatory frameworks designed to ensure the highest standards of professional practice. Indeed, the homeopathic physician, like other carers, is exhorted to place the interests of patients above all else—with the alleviation of suffering enshrined as the central moral virtue of homeopathy since its inception 200 years ago (Hahnemann 1982). Given this, the claim that homeopathy

systematically and malevolently misleads consumers (Freckelton 2012; Smith 2012a, b) is an important one because it runs counter to the very moral core of the profession (as it does with any health profession). However, while it is undoubtedly true that some homeopaths may mislead patients/consumers (or overstate their claims of efficacy), the same might be said of many conventional medical practitioners. In both cases this would provide evidence that the individual practitioner was behaving unethically, but in neither case would it support the idea that all homeopaths or doctors are behaving unethically or that the entire field of practice is unethical. This turns not only on the virtues that guide professional practice but also on the scope of practice and the claims of efficacy and expertise upon which practice is based. All fields of practice may be efficacious in some situations, may have no benefit in other situations, and in others may actually be harmful. Bone marrow transplantation may be beneficial for acute leukaemia (Martino et al. 2013) but may be harmful or unproven in breast cancer (Berry et al. 2011), while homeopathy may be beneficial for muscular pain or fibrositis (Fisher et al. 1989) but may have no role in the treatment of cancer (Milazzo, Russell, and Ernst 2006). In each case, what would compromise the ethics of the discipline or the field of practice would be claims of efficacy for the entire field of practice, i.e. "bone marrow transplant works" or "homeopathy works," or claims of efficacy in situations where there is no evidence to support them, i.e. "bone marrow transplant works for breast cancer" or "homeopathy works for colorectal cancer." Importantly, however, while these sorts of claims demand evidence, as is the case with any therapy or intervention, the absence of evidence may not mean that the therapy does not work, just that there is no evidence that it does; i.e., "lack of evidence" is not equivalent to "evidence of lack" (Kerridge 2010). This insight is critically important, both because many accepted health practices are not based on definitive evidence (ClinicalEvidence 2014) and because there is often confusion about what it means to say that something lacks evidence.

Homeopathy as Deception

Some critics of homeopathy contend that the absence of "high quality" evidence in support of homeopathy (generally defined in terms of large-scale randomised



controlled trials and systematic reviews with or without meta-analyses) and the fact that homeopathy can only act as a placebo means that the practice of homeopathy is misleading and deceptive and is, thus, unethical. Such claims, however, overstate the place of particular forms of evidence in medicine and misunderstand both the ethics of clinical practice and the importance of patient agency. The absence of data from randomised controlled trials (RCTs) may not mean that homeopathy does not "work" and, irrespective of whether the effects of homeopathic therapies can be disentangled from any placebo effect associated with their use, they may still be chosen by patients with particular needs and particular health-related goals in mind, may still be provided by homeopaths in good faith, and may still achieve outcomes that the patient values. There is no ethical requirement for definitive explanations of mechanisms, knowledge of molecular effects, or epidemiological "proof" from large-volume RCTs for consent to any health care intervention to be valid, and the notion that the absence of these things makes homeopathy by definition deceptive, coercive, or unethical is morally and clinically incoherent.

Homeopaths, like other health practitioners, generally practice with the best interests of patients at heart, privilege the virtues of clinical relationships (Flanigan 2012) care, respect for human dignity and vulnerability, veracity, confidentiality, and so forth-and acknowledge the needs, beliefs, attitudes, and values of the people who seek their care and their right to make health care choices (see, e.g., The Society of Homeopaths 2012). Indeed homeopathy, as with some other forms of health care practice, privileges patients' values, goals, and preferences (Plunger 2007, 2008) and gives meticulous attention to patient-practitioner communication (Eyles, Leydon, and Brian 2012). The choice to seek care from a homeopath can be just as valid and as ethically sound as any other health care choice that a patient or consumer makes, and the notion that consent or agency is untenable in respect to homeopathy (Grill and Hansson 2005) is deeply paternalistic and challenges the very idea of moral autonomy (see, e.g., Friends of Science in Medicine, www.scienceinmedicine. org.au). Contestation about the risks and benefits of homeopathy—arguments that should rightly be the focus of public discourse—should not be used to deny patient agency, and polemical, unsubstantiated concerns about the adverse social impacts (Smith 2012a, b) of homeopathy should not be used to restrict patients' rights. To do so, once again, conflates an epistemological position with questions of logic and ethics. We suggest, instead, that autonomous health care consumers should have the right both to choose from a diverse range of therapies and services, including homeopathic treatment, and to engage in public discourses about homeopathy without fear of socio-political or moral retribution.

Conclusion

Homeopathy, like all other domains of health care, should be evidence based. But, in this regard, homeopathy, like every other field of health care, should not be measured simply by the precepts and standards of EBM. Instead, what is needed is a more sophisticated approach to evidence in medicine. This approach would recognise that what constitutes evidence can be defined and measured in different ways by different people or groups and that judgements about competing epistemes are ultimately statements about the "value" of particular data or outcomes. When looked at in this way, it then seems completely appropriate that congruence with patients' values, goals, and preferences as well as their reported experiences and outcomes from homeopathic interventions should be included in any comprehensive evaluation of the efficacy of homeopathy (Thompson and Weiss 2006). Parker (2007a) subsequently accepts that evidence—in the form of EBM—is not the only element of clinical practice, yet he continues to assert that probabilistic reasoning is the currency of EBM, which much of CAM cannot provide. But epistemic arguments should not be conflated with ethical ones, and the contention that the evidence base for homeopathy is insufficient does not mean that homeopathy is, by definition, unethical. We suggest that the majority of professional homeopaths (and health professionals more generally) behave ethically, work for the good of their patients, practise virtuously, have integrity, and privilege their clinical interactions with patients and that their care provides valued outcomes for the people who seek their care and expertise.

Utilitarian critiques of homeopathy that are founded on unsophisticated notions of evidence, that adopt narrow perspectives on health care assessment, and that overstate the personal, social, and ontological harms of homeopathy add little to our understanding of the epistemology of medicine. But when they are used to



denounce the *ethics* of homeopathy, they are not only ill considered and counterproductive, but philosophically and socially perverse. Let us debate the evidence base for homeopathy without resorting to exaggerated, unsupported, and illogical claims that it is inherently unethical.

Acknowledgments The authors wish to thank Gary Levy, Ph.D., Research Fellow, Faculty of Arts and Education, Deakin University Melbourne, for his helpful and critical suggestions on a number of iterations

References

- Agledahl, K.M., P. Gulbrandsen, R. Forde, and Wifstad. 2011. Courteous but not curious: How doctors' politeness masks their existential neglect. A qualitative study of videorecorded patient consultations. *Journal of Medical Ethics* 37(11): 650–654.
- Batty, D. 2005. Q&A: Harold Shipman. *The Guardian*, August 25. http://www.guardian.co.uk/society/2005/aug/25/health. shipman. Accessed October 29, 2012.
- Berry, D.A., N.T. Ueno, M. Johnson, et al. 2011. High-dose chemotherapy with autologous hematopoietic stem-cell transplantation in metastatic breast cancer: Overview of six randomized trials. *Journal of Clinical Oncology* 29(24): 3224–3231.
- Brien, S., L. Lachance, P. Prescott, C. McDermott, and G. Lewith. 2010. Homeopathy has clinical benefits in rheumatoid arthritis patients that are attributable to the consultation process but not the homeopathic remedy: A randomized controlled clinical trial. *Rheumatology* 50(6): 1070–1082.
- Brisbane Times. 2012. Freed Patel awaits decision on new trial. August 25. http://www.brisbanetimes.com.au/queensland/freed-patel-awaits-decision-on-new-trial-20120824-24qj0. html. Accessed October 25, 2012.
- Clark-Grill, M. 2010. When listening to the people: Lessons from complementary and alternative medicine (CAM) for bioethics. *Journal of Bioethical Inquiry* 7(1): 71–81.
- ClinicalEvidence. 2014. Learn, teach, and practise evidence-based medicine. clinicalevidence.bmj.com/ceweb/about/knowledge.jsp. Accessed November 6, 2012.
- Davenas, E., F. Beauvais, J. Amara, et al. 1988. Human basophil degranulation triggered by very dilute antiserum against IgE. *Nature* 333(6176): 816–818.
- Eyles, C., G.M. Leydon, and S. Brian. 2012. Forming connections in the homeopathic consultation. *Patient Education and Counseling* 89(3): 501–506.
- Finniss, D.G., T.J. Kaptchuk, F. Miller, and F. Benedetti. 2010. Biological, clinical, and ethical advances of placebo effects. *The Lancet* 375(9715): 686–695.
- Fisher, P., A. Greenwood, E. Huskisson, P. Turner, and P. Belon. 1989. Effect of homeopathic treatment on fibrositis (primary fibromyalgia). *BMJ* 299(6695): 365–366.
- Flanigan, J. 2012. Three arguments against prescription requirements. *Journal of Medical Ethics* 38(10): 579–586.

- Freckelton, I. 2012. Death by homoeopathy: Issues for civil, criminal and coronial Law and for health service policy. *Journal of Law and Medicine* 19(3): 454–478.
- Goldacre, B. 2007. Benefits and risks of homeopathy. *The Lancet* 370(9600): 1672–1673.
- Grace, S., and J. Higgs. 2010. Practitioner–client relationships in integrative medicine clinics in Australia: A contemporary social phenomenon. *Complementary Therapies in Medicine* 18(1): 8–12.
- Grill, K., and S.O. Hansson. 2005. Epistemic paternalism in public health. *Journal of Medical Ethics* 31(11): 648–653.
- Hahnemann, S. 1982. The organon of the rational art of healing. New Delhi: B Jain. Originally published as Organon der rationellen Heilkunde nach homöopathischen Gesetzen (Dresden: Amoldischen Buchhandlung, 1810).
- Kerridge, I. 2010. Ethics and EBM: Acknowledging bias, accepting difference and embracing politics. *Journal of Evaluation in Clinical Practice* 16(2): 365–373.
- Maddox, J., J. Randi, and W.W. Stewart. 1988. "High dilution" experiments a delusion. *Nature* 334(6180): 287–290.
- Marian, F., K. Joost, K. Saini, K. von Ammon, A. Thurneysen, and A. Busato. 2008. Patient satisfaction and side effects in primary care: An observational study comparing homeopathy and conventional medicine. BMC Complementary and Alternative Medicine 8: 52. doi: 10.1186/1472-6882-8-52.
- Martino, R., L. de Wreede, M. Fiocco, et al. 2013. Comparison of conditioning regimens of various intensities for allogeneic hematopoietic SCT using HLA-identical sibling donors in AML and MDS with <10 % BM blasts: A report from EBMT. Bone Marrow Transplantation 48(6): 761–770.
- May, C., and D. Sirur. 1998. Art, science and placebo: Incorporating homeopathy in general practice. Sociology of Health and Illness 20(2): 168–190.
- Milazzo, S., N. Russell, and E. Ernst. 2006. Efficacy of homeopathic therapy in cancer treatment. European Journal of Cancer 42(3): 282–289.
- Milgrom, L.R. 2006. Entanglement, knowledge, and their possible effects on the outcomes of blinded trials of homeopathic provings. *The Journal of Alternative and Complementary Medicine* 12(3): 271–279.
- Milgrom, L., and K. Chatfield. 2011. "It's the consultation, stupid!" ... Isn't it? *The Journal of Alternative and Complementary Medicine* 17(7): 573–575.
- Miller, F.G., and H. Brody. 2011. Understanding and harnessing placebo effects: Clearing away the underbrush. *The Journal* of Medicine and Philosophy 36(1): 69–78.
- Oktay, M.H., and P. Hui. 2012. Molecular pathology as the driving force for personalized oncology. *Expert Review of Molecular Diagnostics* 12(8): 811–813.
- Parker, M. 2007a. Rejoinder. *Journal of Bioethical Inquiry* 4(2): 29–31.
- Parker, M. 2007b. Two into one won't go: Conceptual, clinical, ethical and legal impedimenta to the convergence of CAM and orthodox medicine. *Journal of Bioethical Inquiry* 4(1): 7–19.
- Pickering, N. 2010. Who's a quack? *Journal of Bioethical Inquiry* 7(1): 43–52.
- Plunger, P. 2007. "She is a human being I can talk with in an ordinary way": Users' experiences with homeopathy. *Forschende Komplementarmedizin* 14(Suppl 1): 1–53.



- Plunger, P. 2008. Homoeopathie in der Betreuung chronisch krander Menschen—die Perspektive der Patientinnen. ICE 7 InHom: 47–52.
- Posadzki, P., A. Alotaibi, and E. Ernst. 2012. Adverse effects of homeopathy: A systematic review of published case reports and case series. *The International Journal of Clinical Practice* 66(12): 1178–1188.
- Relton, C. 2013. Implications of the "placebo effect" for CAM research. *Complementary Therapies in Medicine* 21(2): 121–124.
- Richardson, J., and J. McKie. 2007. Reducing the incidence of adverse events in Australian hospitals: An expert panel evaluation of some proposals. *Monash University Centre for Health Economics* 19: 1–38.
- Shaw, D.M. 2010. Homeopathy is where the harm is: Five unethical effects of funding unscientific "remedies." *Journal of Medical Ethics* 36(3): 130–131.
- Smith, K. 2012a. Against homeopathy—a utilitarian perspective. Bioethics 26(8): 398–409.

- Smith, K. 2012b. Homeopathy is unscientific and unethical. Bioethics 26(9): 508–512.
- Spence, D.S., E.A. Thompson, and S.J. Barron. 2005. Homeopathic treatment for chronic disease: A 6-year, university-hospital outpatient observational study. *The Journal of Alternative* and Complementary Medicine 11(5): 793–798.
- The Society of Homeopaths. 2012. Code of ethics and practice. http://www.homeopathy-soh.org/attachments/2012/10/Code-of-Ethics-and-Practice.pdf. Accessed November 1, 2012.
- Thompson, T.D.B., and M. Weiss. 2006. Homeopathy—what are the active ingredients? An exploratory study using the UK Medical Research Council's framework for the evaluation of complex interventions. *BMC Complementary and Alternative Medicine* 6: 37. doi: 10.1186/1472-6882-6-37.
- White, R.A. 2013. Advisory statement on clinical use of modified aortic endografts from the Society for Vascular Surgery. *Journal of Vascular Surgery* 57(3): 832–833.

