CHAPTER 14 DECOLONIZING KNOWLEDGE: BIOMEDICAL BELIEFS AND INDIGENOUS MEDICAL PRACTICE

RONNIE G. MOORE* School of Public Health, Physiotherapy and Sports Science and School of Sociology, University College Dublin, Dublin 4, Ireland *E-mail: Ronnie.g.moore@ucd.ie

ABSTRACT Critical discussions about medicine and medical practices are cognoscente of the evolution of such practices and the historical and cross-cultural developments of healthcare systems, or arenas. in a seminal text, Charles Leslie outlined some of the key examples in terms of comparative (Asian) healthcare systems. This sets the scene for future generations of researchers to apply a more comparative understanding, not just to Asian medical systems but to any such cross-cultural analysis of medicine and health care. The text also brings into sharp relief the relative merits and potential drawbacks of applying a unified homogenized overarching approach to medical practice. This chapter therefore concerns itself with the idea of healthcare systems rather than any notion of a single universally agreed medical practice and the meaning this has for "modern medicine" in the contemporary world in the (post) industrial West and in the so-called developing societies.

Contemporary currents of Western medical thought and practice illustrate a particular cognitive trajectory and scholars have outlined linkages between medical knowledge and dominant (social) ideas in what have been described as "medical cosmologies."20 in this regard, medical endeavor may also be construed as a sociological and anthropological endeavor.37 Medical traditions are born in antiquity and are, by definition, ethnocentric. They are defined by the immediate circumstances and surroundings of individuals in context, that is, the socioeconomic, environmental, and cultural circumstances from which they emerge. We may regard these healthcare systems as profoundly personal and tied to such things as cosmological canopy, belief systems and ritual, organized religion, kinship structures, local topography, indigenous ethno pharmacological practices, food, and lifestyle behaviors. The point here is that when we come to look at such practices historically and cross-culturally, we see common themes, such as how individuals, groups, and societies respond to health chances 1 to relieve specific ailments or conditions. This is context based. We see this through, for example, organizational responses to care, within the family; or in the community; or through national, regional healthcare services; or via the use of indigenous pharmacological substances or ritualistic behavior or performance and symbolic meaning (such as prayer, penitence, or sacred offerings). However, we also see important variations. Different cultures (and healthcare systems) rely on specific knowledge. These are often dependent on local resources and local notions of health beliefs and associated practices. These are derived from, and embedded in, tradition and culture. These beliefs and practices, while they may make sense locally, may not be easily translated to circumstances beyond the immediate environment. The classic anthropological example of this is Evans-Pritchard's now-famous discussion surrounding the transmission of medical (magical) knowledge among the Azande.11, p 186) We also see trends. For example, dominant ideologies and power structures drive and legitimate practice, thereby giving license to practice and define authenticity. Nowhere is this truer than within the rise of "modern medicine," particularly in the West. This "is embodied in and comes with the day-to-day rational-scientific practices associated with the work of doctors in the hospital or clinic" (Ref. [6], p. xii). Such everyday practices contribute to the (social) construction and reproduction of a particular world view or what some have termed a "biomedical discourse" or "clinical gaze."12 in the so-called advanced industrial world of the late 18th and early 19th centuries, health care made a profound move from within the community, to the more alienating hospital-clinic-based medicine that linked the "bench, the bedside, and the production plant," and this came to characterize modern medicine (Ref. [25], p. 118). This development was tied to wider social, historical processes of the period, such as the growth of towns and cities amid rapid capitalist expansion in the West.20,32 in addition, medical knowledge and health practice also progressed rapidly in the wake of various (more notably, colonial) conflicts. The world wars were also significant here. We see, for example, the "accelerated and intensified collaboration between biologists, clinicians and industrialists, a development exemplified by the wartime production of penicillin.... and the rapid growth of the pharmaceutical

industry" (Ref. [25], p. 117). World War II, in particular, is seen as a key juncture in terms of the "biomedicalization" process. 14.1

"MODERNITY," EUROPEAN ETHNOCENTRISM, AND THE RISE OF "NEW" SCIENCE
As a social scientific concept, "modernity" is problematic. However, the notion is often popularly (loosely) held to mean a kind of evolved development. in this sense, there has been an increasing emphasizes on "modern science" (essentially stemming from the European Enlightenment). Cartesian (1596–1650) philosophy, Newtonian (1642–1727) experimentation and observation, the notion of the body as machine, and later germ theory are central aspects of this approach. "Contributions in science have been made ever since man [sic] acquired the ability to hand on his [sic] experiences with nature; but in the case of medical sciences, at least, such advances as were made down to the 14th century were upon the whole unimportant, and for the most part casual" (Ref. [10], p. 136). There is now a cultural dominance of science that never existed before. With these developments we see "historical and historiographical relationships, and the diminishing utility of distinctions between science, medicine and technology" (Ref. [33], pp. 97–99). We now talk of "scientific medicine" and with this the emergence of (bio) power. It is no coincidence that the recent burgeoning of biomedicine and the expansion of high-tech, high-spec industries have arisen in tandem. In contrast, earlier European epochs were characterized by a variety of medical or health practitioners (many of whom were women), and the emphasis was on locally derived experiential knowledge (incorporating locally practiced scientific principles) and holistic medicine. This was organically and community based, and incorporated multiplex features. With the development of increasingly specialized (and arguably more myopic) biomedical knowledge, the relationship, and the power nexus between the patient and the physician began to change. The doctor became subordinate to "medical knowledge" as medicine developed as a key site for scientific research within the clinical setting. "From somewhere in the mid-ninetieth century, doctors did not just evoke 'science,' they increasingly relied on laboratory science" (Ref. [25], p. 117). Crucially, the patient moved from the object of care, to the subject of care. The enlightenment as a legitimizing principle for medical practice may therefore be regarded as relatively new. With this, the concept of (personal) Illness is declined in relevance and (scientific) disease, that is, the physiological and chemical processes became the central focus, while psychosocial, cultural, behavioral, and environmental factors were effectively underplaying or ignored. It is this notion of modern, Western "new" science that underpins the rise, development, expansion, and (colonial and capitalist) exportation of scientific medicine. Biomedicine has come to be regarded as the "one true medicine" in terms of power, authority, significance, prestige, and legitimate practice, whereas traditional indigenous medical systems have largely been ignored, derided as quackery, fraudulent, irrelevant, and/or dangerous. This has given rise to two broad categories: formal and informal medicine.27 Formal science (involving broad intellectual theorizing) arguably existed in other places and, at other times, predating modern incarnations.2 informal science (empirical experimentation, i.e., trial and error) was also commonplace. Arguably, there is a science in discerning edible mushrooms from poisonous toadstools (Anglicized).3 14.2 BIOMEDICINE AS IMPOSTER? Historical and ethnographic research problematizes modern medicine as imposter. At the center of the discussion is the notion of what counts as legitimate knowledge, and on the concomitant power structures and associated discourse. in the West, biomedicine, arguably, replaced religion as a key source of power and authority in modern society. This points up historical and cultural processes and begs the question. Why did this not happen at other times, or in other places, such as China or in the medieval Middle East? The period of Enlightenment in the European context forged a whole new way of thinking about the world. The context was that religious ideas and the church were predicted to become less important as new scientific, anthropological, and biological theories began to question the old order of things. indigenous health beliefs were replaced by new ideas that increasingly utilized new inventions and technology. Superstitious beliefs, it was suggested, have given way to rationality, the observed and the testable. These ideas had even permeated the classical social-science literature. Max Weber, for example, famously espoused the disenchantment theory and the seemingly unstoppable rise of rationality. This has even been taken up by contemporary writers of history such as Thomas.40 A modern scientific biomedical discourse expanded. Ever since, biomedi-cine has assumed considerable power, authority, and prestige. The positive aspects of biomedicine today are universally celebrated. But there are now

numerous exponents of the shortcomings and failures within biomedicine, and there are growing critical voices calling out the dangers of such pre-eminent, privileged, and guarded knowledge. A key concern remains. What do we regard as authentic medicine? This compels us to consider the relationship between biomedicine and other organic healthcare systems such as folk or indigenous medicine. We therefore need to unpack some critical issues at the heart of the often-abrasive interface between the critical social sciences in medicine and modern, Western dominated notions of "scientific" biomedical practice. The ensuing conflict between lay and professional perceptions of health and healthcare practices in the West, exposed by Parsons, 31 for example, continues to be highlighted by the numerous academic papers on the physician/patient relationship.18. The problem is that much of the critique leveled at indigenous medicine and folk medicine holds for biomedicine. For example, the iatrogenic aspects of biomedicine are continually being exposed and, if anything, often present a greater challenge in terms of scope, magnitude, and consequences. Some historical examples include the thalidomide scandal; blood transfusions scandals; various mal practice cases, ranging from misdiag-noses, unintended or willful neglect but also extend to organ marketing35; in vitro fertilization misinformation; unnecessary operations4; drug trial deaths; to the premeditated murder of patients.5 The medical doctrine of Primum non nocere is called into question, as modern medicine moves into (arguably idealized and Westernized) notions of body image and body enhancement procedures. The "new science" and biomedicine are not only complicit but also appears to be unashamedly active in promoting these rapidly developing and lucrative markets. Conflicts are underscored not only by social scientists but also by a range of prominent biomedical physicians. Kleinman23 crucially points up the significance of a range of alternative healthcare arenas.6 Others have suggested that biomedicine has made key category errors that have affected the health and human rights of individuals.38 While yet others question the role, effectiveness, and even morality of biomedical training. Now, more than a decade after I told Mr Lazaroff's story, what strikes me is not how bad his decision was but how much we all avoided talking honestly about the choice before him. We had no difficulty explaining the specific dangers of various treatment options, but we never really touched on the reality of his disease. His oncologists, radiation therapists, surgeons, and other doctors had all seen him through months of treatments for a problem that they knew could never be cured. We could never bring ourselves to discuss the larger picture about his condition or the limits of our capabilities, let alone what might matter most to him as he neared the end of his life. If he was pursuing a delusion, so were we (Ref. [13], pp. 5–6). The scientific and biomedical paradigm now dominates globally, and it is this Western centric, privileged, and expert knowledge that is exported to the rest of the world with the associated mantras of "evidence based," "scientific testing," and "randomized controlled trials." and there is continued deference to biomedicine as the gold standard by which other healthcare systems are judged. However, the evidence that the Western scientific paradigm has usurped the role and importance of cosmology, religion, and folk medicine is unconvincing. It would be a mistake to assume that the developing biomedical system meant that there was no reference to magic, superstition or "otherworldliness." Within the British colonial context, the celebrated doctor Livingstone of Africa, physician and Christian, exemplified the West's best efforts to heal both the person and the soul. With this, we see not just rapid culture contact, but the resultant growth and exportation of a raft of Western ideas, including Western scientific biomedical and cosmological ideology. There is significant contemporary literature demonstrating that rather than running counter to science, superstition actually continued to operate alongside science. Magical7 ideas were just as alive in Elizabethan London as in central Africa.21 It is argued here that there is a central problem with modern scientific discourse. Current biomedical practice and modernity have eradicated indigenous healing. The recognition of the importance of cosmology and magic in health care may have been eclipsed by the rise of biomedicine3 but it did not die. The empirical evidence suggests that superstition coexisted and continues to exist with biomedicine. These ideas are profound, ubiquitous, and embedded not only in lay beliefs and religion but are also incorporated into biomedical practice.27 Biomedicine and folk medicine (often presented as incompatible modalities) are mutually dependent not only in the developing societies but also in high modernity. Biomedical science collides, colludes, and collaborates with indigenous healthcare systems. This is evidenced by historical21 and by contemporary ethnographic accounts in the non-Western1 and Western contexts.27 (. . .) ritual healing is not officially referred to as a healing practice and is segregated as 'superstition' (Chin. mi xin; Tib. mongdé). Yet in practice, medicine

and healing have not become scientized in every domain, as the existence of healing Tantrists (ngagpa) or diviners (mopa) or some traditionally oriented senior lineage doctors of Tibetan medicine demonstrates. This does not mean that they are not in contact with Western medicine.Rather, they mediate between their healing and biomedicine in relation to their patients, some of whom might receive the latter form of treatment.... Sometimes, biomedicine might appropriate ‘religious ‘ or rather ritual traits, often glossed as the ‘placebo effect ‘ in the literature. For example, multicolored biomedical pharmaceuticals might have a color-based effectiveness and might be placed in front of an altar or Buddha image .. and pertains to a cultural logic of healing in which ‘medicine ‘ and ‘religion ‘ are intertwined and not juxtaposed. Sometimes, however, they just exist side by side (Ref. [1], p. 161). Within the Western context, folk and alternative medicines have become revitalized in recent years. These systems are not as some believe, “New Age” medicine, but have coexisted with the rise of biomedical science. The noted decline in importance of the established church and the dominance of biomedicine do not mean that people are less spiritual. Modernity has never really been without magical sentiment. in fact we now see a multiplicity of spiritual inspired expression in the form of New Age Movements, some of these have a Christian flavor but others that do not. The likelihood is that these will proliferate and compete for state recognition and resources (as CAM8 currently do), and the state will seek to enforce regulation and control. This is not, as Kuhling suggests, ‘New Age re-enchantment’ in a post-Celtic Tiger Ireland (Cited in Cosgrove et al, 2012:201–220), since disenchantment did not happen/28Another central problem is that while Western scientific biomedicine attempts to debunk other (historical and/or culturally unacceptable) forms of knowledge as “fake” or quackery, it appropriates and uses such practices that cannot be considered to be scientific. The most extreme example of this is what anthropologists often refer to as witchcraft or magic. in modernity, this is reframed by biomedicine as placebo/nocebo. The expansion of biomedicine as an ideology and practice also coincided with the great historical efforts of many European states in their drive for self-identity and nationalism and for colonial growth and domination. This also raises a number of important questions in regard not only just epistemological concerns but also in terms of sociopolitical and economic factors and to what science means for (Western and non-Western) societies. The postcolonial experience of india is an exemplar of how the ideological power of science (and thereby biomedicine) has come to remain dominant even when the British Empire receded. in this regard, india in the immediate postcolonial phase offers a useful example of both the potency of Western biomedical ideology and the problematic nature of biomedicine set in this context (since it derides other healthcare systems). While the postcolonial experiences of countries are as diverse as the nations, ethnic groups, and peoples involved, some commentators have asked, “Where is the post-colonial history of science?” (Ref. [2], p. 360). After all, in the immediate postcolonial period, Nehru regarded science, “as heroic” (Ref. [2], p. 363). It is seen as a gift from the British, as a positive legacy, having qualities that had the potential to liberate a postcolonial india from backwardness. It was believed that Western science would contribute to the possibility of a new, modern, international, self-defined, and assured nation state. as developing societies incorporate more and more biomedical features this raises important questions in relation to continued or nouveau colonialism9? (The) “introduction of allopathic drug [sic] during British era and neglecting indian traditional medicine by British ruler (sic) are responsible for significant erosion of indian traditional medicine” (Ref. [34], p. 2). There are also concerns in relation to attempts to biomedicalize, folk or alternative healthcare systems. in China today, the theoretical distinctions made in public health arenas and by different official representatives of biomedicine, Tibetan medicine and Chinese medicine alike, all belong to a global modern discourse that aims at legitimizing and professionalizing these systems and their medical practices by using biomedical standards (Ref. [1], p. 161). orthodox medicine in the West also demands that alternative folk practices be subjected to scientific testing.36It should also be remembered that in Western professional medicine, scientific hegemony and practice are relatively new.10 Surgeons, apothecaries, and physicians (formerly apprenticeships) came together in 1858 in Britain banning all other practitioners outside the new profession. The new medical profession established itself professionally in relation to a cash nexus economy and in so doing lost its personalized and community-based nature. It largely treated those who could best afford it (Ref. [29], p. 38). in contrast, Chinese, Ayurvedic, Unani, Sidda, Amchi, and Folk medicines provide significant examples of important complex systems where organic and indigenous medical practices exist that

display a different and self-sustained logic base tied to community beliefs and expectations, yet may also be viewed as scientific in terms of efficacy and in how treatments are observed and practiced (although some of these buy into or “compliment” biomedicine to some degree or other). These, however, do tend to be more personalized or bespoke in nature. in modernity, these ancient systems largely fall outside the orbit of the new biomedical science and they are associated with industries in the West. Middle Eastern medicine (e.g., Avicenna’s medical cannons) is not referenced within Western medical discourse. Biomedicine appears to trump all other healthcare systems and historical medical practices. While the annual William Harvey11 Day is celebrated at the oldest biomedical hospitals in England (St Bartholomew and the Royal London Hospitals), there is no such praise, pomp, or ceremony for the writings of Avicenna.12 As a medical system, biomedicine goes largely unquestioned in its training, its effectiveness in treating aliments and conditions and in helping to control and manage pain. At the same time, indigenous health beliefs and practices (in traditional, so-called “developing,” “traditional,” and “modern societies”) are largely dismissed off hand (in the West at least) as inherently nonscientific. Folk or indigenous medicine remains “odd,” “irrelevant,” “iatrogenic,” and “dangerous” (as are its practitioners). Such informal medical systems are viewed as the remnants or survival of a superstitious past that are best forgotten. These positions have largely defined medical systems in the modern era, particularly in the industrial or postindustrial West. Biomedicine became so dominant as to mask Western folk medical practices and remove virtually all traces from official discourse. However, contrary to concerted attempts to remove, make illegal, or to do down organic healthcare systems in the West, there is no compelling evidence to show that such beliefs and practices have been eradicated anywhere. Comparative literature illustrates that, biomedicine, did not hold a complete monopoly over or displace other healthcare practices in either modern or modernizing societies. Even in the most hostile environments such as the former Soviet Union, these practices appear to have remained and coexisted.27 as various historical and contemporary anthropological data suggest, it is difficult to dispel the use and significance of folk medicine in advanced or “post-industrial” societies. and it is the non-discussion of these other systems that remains the biggest “elephant in the room.” Within the biomedical establishment, we observe public disavowal (yet, for many practitioners, private belief in, and/or acceptance of the role of informal healthcare practices) offers itself as an ardent critique of biomedical ideology. The evidence suggests that it is intermingled with and even dependent on other systems. The evidence suggests a contingency and fluidity between biomedicine and other healthcare systems in the West,28 and in developing nations.1 14.3 DEMOCRACY AND ACCOUNTABILITY The contemporary significance of this is the rise in the recognition of the failings in biomedical health practice in the West and in the reluctance in replacing trusted indigenous practices with biomedicine. in the West, patient dissatisfaction is fast becoming a problem for biomedi-cine. Affordable computer technology and the internet revolution have helped accelerate the democratization of knowledge, including medical knowledge. Public concern and lay uneasiness with many aspects of biomedical practice have begun to undermine the epistemological superiority accorded to biomedicine, has led to the rise of patient activitism, and have helped reinvigorate folk, complementary, and alternative medicine (CAM).7,30 Some have argued that this has also made alternative medicine more acceptable, “increasing accountability and the legitimacy afforded to patients’ wishes in Western Medicine and the increasing acceptance of some ‘alternative’ practices” (Ref. [33], p. 98). The literature points to increased public awareness in new (modern) forms of risk and a realist perspective in relation to the benefits and limits of biomedicine. A canon of literature has emerged4,8,26,39 and risk, trust, and health chances have now emerged as dominant themes in the sociology/ anthropology of health and public health.5,22. Public understanding of science and medicine is now fast becoming a commanding feature and is currently afforded a high consideration in research, including biomedical research.14,15 14.4 THE FUTURE OF HOLISTIC HEALTH CARE While biomedicine has been interpreted as offering respectability to emerging nations, the scientific foundations it claims, as well as its efficacy, are questioned not just in the developing societies. Health care in the West is, in truth, characterized by eclectic medical practices.9,16,17,19,30 Much of the recent literature discusses how different epistemologies and practices intersect and coexist. Moore, for example, illustrates with ethnographic work conducted in Ireland, showed the importance of “the cure” or “the charm.” It is widely believed that some individuals with “the charm” have the ability to cure an illness or multiple illnesses. This knowledge is largely secret and hidden, only discussed at times of crisis,

but it is well understood locally and utilized when necessary by many ordinary people, professionals, including a wide range of health professionals. in Ireland, this has its roots in pagan health belief systems, and it transcends both the religious and social class divide. I have an open mind on them, because I have seen them work both in my professional capacity and in our private life.... I remember the doctor sending me to an old man who lived more or less like a hermit in an old shack and the doctor said to me. “You may go down and do the best you can,.... for that man has shingles, and just get the clothes off him and treat him with Gentian Violet”. So on my way home that evening I called and I really never saw anything like it in my whole professional career.... He says, “Will you quit worrying nurse. I’m going for the charm tonight”. I said to myself. Oh, does he think he is going to get ride of this in a day or two. But quite honestly, within a week he was completely cured and I couldn’t see it in a month. (Madge, Senior Community Nurse, in Ref. [27], p. 117). The ethnographic evidence shows that even those trained in biomedicine referred people to curers. in reality, ordinary people when faced with health problems will utilize whatever resources are available, that are trusted and seen to work, or at the very least offer solace or hope. This includes practices that may be regarded as more occult: Illness can affect all levels of the body—the individual, social, environmental and cosmological—even though one might need at times more attention than the other. in times of crisis and depending on the local situ-atedness, to cover all options and levels at the same time might be simplythe most efficacious. Therefore, mantra and ‘syringe ‘ do not exclude each other, and ritual healing can play an equally important role in patients ‘ health-seeking behaviour alongside the influence of institutionalized medical practice and public health policies (Ref. [1], p. 177). These practices are more personal and holistic in nature and include bioscience as one aspect of the caring process. 14.5 CONCLUSION While closing this chapter, I hoped to illustrate not only the acceptance, importance, and centrality of enduring local, more holistic indigenous health systems but also their resilience in the face of modernity and amid powerful historical forces, ideological discourse, and authority. in returning to Leslie’s text, we should note not only the importance between different healthcare systems but also the overlap of medical practice between various healthcare systems in various contexts. This discussion illustrates, for example, how informal, folk, and holistic medicine and biomedicine do not simply coexist, but importantly, have historically been and remain codependent on one another.27 as in the case of the nascent state of india, biomedical practices, that appear modern and progressive, may rather have degenerative consequences and this is a warning to other such nations and cultural configurations. Similarly, it should be recognized that, in the West, folk and alternative medicine is experiencing a serious revival, and this is currently stimulated discussion and debate within biomedicine about the role and salience of these alternative systems. in response, some have sought to medicalize (and therefore control) indigenous healing practices. Others highlight the importance and the (pragmatic, functional, social, and spiritual) value of alternative healthcare resources. One thing is clear. The discussion points to medical pluralism as the norm rather than the exception for health care for most people in the modern world. Progressive biomedical commentators call for a tentative understanding of alternative medical practices with a view to some kind of accommodation since the alternative, the status quo, is clearly problematic for both biomedicine and folk medicine. KEYWORDS medicine science indigenous anthropology colonial cross-cultural 1 Mortality and morbidity. 2 in Europe, predating, for example, Roger Bacon (around 1220–1292). 3 The original German translation being Todestools or “death stools.” 4 Dr. Michael Neary carried out 129 of 188 peripartum hysterectomies carried out in an Irish hospital over a 25-year period, needlessly removed 129 women’s wombs. 5 Dr. Harold Shipman was convicted of killing his patients in England. 6 Kleinman’s seminal analysis views health and health care as “a local cultural system composed of three overlapping parts: the Popular, Professional and Folk sectors.” The model suggested that the Popular sector referred to the lay, culturally specific treatment of sickness. The Professional denoted organized healing professions, and the Folk captured the specialist, nonprofessional sector encompassing secular and sacred healers. Kleinman identifies overlap and ambiguity between the sectors (see Ref. [24], p. 50). Moore and McClean27 however suggest that Kleinman’s category of folk medicine begs refinement in the West at least. They make the distinction within Kleinman’s folk sector as folk medicine being distinctly separate category from CAM and other forms of healing (such as religious healing) and treatment where monetary payment or prestige is involved.29 7 For ease of reading magic hereafter refers to superstition and practices that may not be scientifically explained but may also refer to established practices that might be deemed as

indeed scientific, such as taking ancient remedies for illness. 8 Complementary and alternative medicine (CAM). 9 Tibet, for example, began to embrace biomedicine in the 1980s. 10 Darwin's "On the origin of Species" was belatedly published in 1859 and in 1858. A formal Act in Britain brought together of apothecary, surgery, and physicians, formalizing medical care and thereby created a monopoly for Western scientific knowledge and medical practice. 11 William Harvey (1578–1657). 12 Avicenna (Ibn Sina, around 980—1037). REFERENCES Adams, V., Schrempf, M.; Craig, S. Medicine Between Science and Religion: Explorations on Tibetan Grounds; Berghahn: New York, Oxford, 2010. Arnold, D. Nehruvian Science and Postcolonial india. Isis 2013, 104 (2), 360–370. Bakx, K. The Eclipse of Folk Medicine in Western Society. Sociol. Health Illness, 1991, 13 (1) 20–38. DOI:10.1111/1467–9566.ep11340307. Beck, U. Risk Society. Toward a New Modernity; Sage: London, 1992. Barrett, R.; Moore, R. G.; Staines, A. Blood Transfusion in Ireland: Perceptions of Risk, A Question of Trust. Health Risk Soc. 2007, 9 (4), 375–388. Bunton, R.; Petersen, A., Eds. Foucault, Health and Medicine, Routledge: London, 2002. Cant, S.; Sharma, U. Alternative Health Practices and Systems. in Handbook of Social Studies in Health and Medicine; Albrecht, G., Fitzpatrick, R., Scrimshaw, S., Eds.; Sage: London, 2000; pp 426–439. Douglas, M. Risk and Blame: Essays in Cultural Theory; Routledge: London, 1992. Eisenberg, D. M.; Kaptchuk, T. J.; Laine, C.; Davidoff, F. Complementary and Alternative Medicine—An Annals Series. Ann. intern. Med. 2001, 135 (3), 208–208. Erlanger, J. The Past and the Future of the Medical Sciences in the United States. Science 1922, 55 (1415), 135–145. Evans Pritchard, E. E. Witchcraft, oracles and Magic among the Azande; Clarendon Press: Oxford, 1976. Foucault, M. The Birth of the Clinic. An Archaeology of Medical Perception; Tavistock: London, 1973. Gawande, A. Being Mortal: Illness, Medicine and What Matters in the End; Profile Books: London, 2014. Gobat, N. H.; Gal, M.; Francis, N.; Hood, K.; Watkins, A.; Turner, J.; Moore, R.; Webb, S. A. R.; Butler, C. C.; Nichol, A. Key Stakeholder Perceptions about Consent to Participate in Acute Illness Research: A Rapid, Systematic Review to inform epi/ Pandemic Research Preparedness. Trials 2015, 16 (1), 1. Gobat, N.; Gal, M.; Butler, C. C.; Francis, N. A.; Anthierens, S.; Bastiaens, H.; Godycki-ćwirko, M.; et al. Public Attitudes Towards Research Participation During an infectious Disease Pandemic: A Qualitative Study Across Four European Countries. Lancet 2016, 388, S51. Hand, W. D. The Folk Healer: Calling and Endowment. J. Hist. Med. Allied Sci. 1971, 26 (3), 263–275. Hand, W. D. Magical Medicine: The Folkloric Component of Medicine in the Folk Belief, Custom, and Ritual of the Peoples of Europe and America: Selected Essays of Wayland D. Hand. Univ. of California Press: Berkeley, 1980. Heritage, J.; Maynard, D. W. Problems and Prospects in the Study of Physician– Patient interaction: 30 Years of Research. Annu. Rev. Sociol. 2006, 32, 351–374. Hufford, D. J. Folk Medicine and Health Culture in Contemporary Society. Prim. Care 1997, 24 (4), 723–741. Jewson, N. D. The Disappearance of the Sick-Man from Medical Cosmology, 1770–1870. Sociology 1976, 10 (2), 225–244. Kassell, L. Medicine and Magic in Elizabethan London. Clarendon Press: Oxford, 2005. Kawachi, I.; Kennedy, B. P.; Lochner, K.; Prothrow-Stith, D. Social Capital, income inequality, and Mortality. Am. J. Public Health 1997, 87 (9), 1491–1498. Kleinman, A. Patients and Healers in the Context of Culture: An Exploration of the Borderland between Anthropology, Medicine and Psychiatry; University of California, Press: Berkeley, 1980. Leslie, C., Ed. Asian Medical Systems: A Comparative Study; University of California Press: Berkeley, 1977. Löwy, I. Historiography of Biomedicine: "Bio," "Medicine," and in Between. Isis 2011, 102 (1), 116–122. DOI:10.1086/658661. Luhmann, N. Risk: A Sociological Theory. Routledge: New York, 2002. Moore, R. G.; McClean, S., Eds.; Folk Healing and Health Care Practices in Britain and Ireland: Stethoscopes, Wands and Crystals. Berghahn: New York, Oxford, 2010. Moore, R. Beyond Religion, Science and Secularism: Health Beliefs and Complex Diversity in the North of Ireland. RECODE, Online Working Paper No. 23; 2014. http://www.recode.fi. McClean, S.; Moore, R. Money, Commodification and Complementary Health Care: Theorising Personalised Medicine within Depersonalised Systems of Exchange. Soc. Theor. Health 2013, 11 (2), 194–214. McQuaide, M. M. The Rise of Alternative Health Care: A Sociological Account. Soc. Theor. Health 2005, 3 (4), 286–301. Parsons, T. The Social System; Routledge & Kegan Paul: London, 1951. Pickstone, J. V. Sketching Together the Modern Histories of Science, Technology, and Medicine. Isis 2011, 102 (1), 123–133. DOI:10.1086/657506. Pickstone, J. V.; Warboys, M. Focus: Between and Beyond 'Histories of Science' and 'Histories of Medicine. Isis 2011, 102 (1), 97–101 (The University of Chicago Press). http://www.Jstor.org/stable/10.1086/658658 (accessed Dec 20, 2016). Sen, S.; Chakraborty, R.

Revival, Modernization and integration of indian Traditional Herbal Medicine in Clinical Practice: Importance, Challenges and Future. J. Tradit. Complement. Med. 2017, 7 (2), 234–244. Scheper-Hughes, N. Parts Unknown Undercover Ethnography of the organs-Trafficking Underworld. Ethnography 2004, 5 (1), 29–73. Sharma, U. Using Alternative Medicine. Health Visitor 1991, 64 (2), 50–51. Sigerist, H. E. Preface to Volume IV. The History of Medicine and the History of Science. An Open Letter to George Sarton, Editor of Isis. Bull. History Med. 1936, 4, 1. Szasz, T. The Myth of Mental Illness: Foundations of a Theory of Personal Conduct. Secker: London, 1961. Sztompka, P. Trust: A Sociological Theory; Cambridge University Press: Cambridge, 1999. Thomas, K. Religion and the Decline of Magic; Penguin: London, 1973.