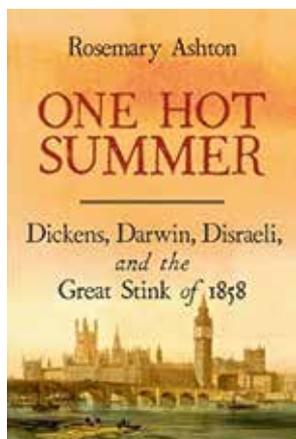


Book reviews

David Bennahum, MD, and Jack Coulehan, MD, Book Review Editors



One Hot Summer: Dickens, Darwin, Disraeli, and the Great Stink of 1858

Rosemary Ashton
Yale University Press,
July 18, 2017, 352 pages

**Reviewed by Jack
Coulehan, MD (AQA,
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You may not be able to tell a book by its cover, but sometimes a book's subtitle is irresistible. In this case, "*Dickens, Darwin, Disraeli, and the Great Stink of 1858*" immediately caught my attention. What was this mysterious "great stink?" And, how did these three historical characters get involved with it?

By 1858, London's population had topped 2.5 million, and its sewers dumped all of their excrement into the Thames River. Much of the untreated feces settled on river banks and around the bases of bridges. The stench in central London had become almost unbearable. In *Little Dorrit* (1857) Charles Dickens wrote that the Thames is "a deadly sewer...not a fine, fresh river." During the exceptionally hot and dry summer of 1858, the odor became so bad that many businesses closed, and at one point Parliament had to shut down because members could no longer tolerate the atmosphere.

At the time, the miasma theory of disease transmission prevailed. It was thought that an accumulation of polluted vapors caused diseases like cholera and dysentery. Although John Snow had published his paper on cholera and the Broad Street pump in 1854, his work was almost completely ignored. Pasteur, Koch, and confirmation of the germ theory were decades in the future. Consequently, the primary cause of alarm in London, aside from olfactory trauma, was that the great stink—not floating feces—constituted a dangerous miasma. Joseph Bazalgette, the city's chief engineer, developed a plan to extensively reconfigure the sewage system, but until the summer of 1858, Parliament refused to adopt it because of the £5.4 million price tag.

Benjamin Disraeli was Chancellor of the Exchequer, and leader of the House of Commons in Lord Derby's

government during that stinky summer. He marshaled a number of important pieces of legislation through Parliament in 1858—the India Act, which transferred governance of India from the privately-owned East India Company to the British state; the Divorce and Matrimonial Causes Act, which made divorce available to the middle class, and for the first time allowed women to sue for divorce; and the Medical Practitioners Act, which standardized medical education and examinations. *One Hot Summer* tells the story of his wheeling and dealing to push through the Thames Purification Act.

Disraeli argued that experts who had studied the problem were in a better position to accomplish the goal than members of Parliament. The bill did not propose a specific remedy for the sewage problem other than to ensure the effluent was outside the city limits. However, it did give the independent Metropolitan Board of Works authority to choose which plan to implement, and to borrow the necessary funds. The Board of Works adopted Bazalgette's system, which began construction in 1859. It involved 82 miles of new interconnecting sewers, and more than 1,100 miles of street sewers.

Meanwhile, Dickens was suffering more from a personal crisis than from the Great Stink. In 1857, he met an 18-year-old aspiring actress Ellen Ternan, and suddenly developed "acute restlessness." Later that year, he came to the conclusion that his marriage to Catherine Hogarth had been a tragic mistake despite their 22 years of a presumably happy life together and 10 children. During the summer of the Great Stink, Dickens resolved to separate permanently from Catherine, and he embarked on the first of his famous reading tours which occupied much of his time and energy during the final 12 years of his life. The drama surrounding these developments makes lively reading.

Charles Darwin did not set foot in London during the summer of 1858. In fact, he rarely left his home in Kent. He was working on his theory of evolution by natural selection for more than a decade, but avoided publishing it because of his obsessive drive to get every detail right, as well as anxiety over causing his religious wife to suffer.

On June 18, 1858, Darwin received a letter from his naturalist friend Alfred Russel Wallace. Writing from the East Indies, Wallace described his theory of evolution by natural selection, and attached a short paper. By that time, Darwin had partially completed *The Origin of Species*, but was proceeding in a very slow and cautious fashion. What should he do? He neither wanted to minimize

Russel's contribution, nor abandon his rightful claim to precedence.

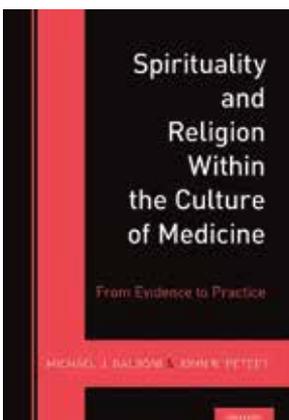
Darwin's friends, Joseph Hooker and Charles Lyell, offered a solution. They arranged for a joint presentation at the Linnean Society on July 1, even though Darwin could not be present. They read two short pieces by Darwin (dated 1844 and 1857) describing natural selection, then followed with Wallace's paper.

Meanwhile, Darwin completed *The Origin of Species*, which was finally published in 1859.

The stories of Disraeli, Dickens, and Darwin are fascinating, and are supplemented by numerous minor characters who share the summer of the Great Stink. Nonetheless, the central literary conceit of *One Hot Summer* is rather strained. While Disraeli was intimately involved with the social and political consequences of the sewage catastrophe, Dickens and Darwin had no impact on the situation. Dickens smelled it, but was otherwise occupied. Darwin spent his summer far from the scene. Likewise, minor characters, like Wilkie Collins and Karl Marx, have nothing to say about the stink. However, none of this detracts from the enjoyment of reading *One Hot Summer*. Rosemary Ashton is a fine storyteller, and she has engrossing stories to tell.

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Spirituality and Religion Within the Culture of Medicine: From Evidence to Practice

Edited by Michael J. Balboni, and John R. Peteet, MD (AQA, Columbia University, 1973), Oxford University Press, New York, 2017, 432 pages

Reviewed by Jack Coulehan, MD (AQA, University of Pittsburgh, 1969)

As far as I'm aware, *Spirituality and Religion Within the Culture of Medicine* is the first text for physicians that provides a systemic and comprehensive survey of the role of spirituality in medical practice, from research findings to clinical interventions. As such, it should have considerable impact among the growing number of physicians who believe that patients' religious or spiritual beliefs have an important bearing on their experiences of illness and healing.

Editors Michael J. Balboni and John R. Peteet begin their introduction by observing that an academic text on this topic would have been unthinkable 40 years or 50 years ago. However, since then, at least three factors have reduced the traditional gap between academic medicine and religion. One is the persistence of the existential pain and suffering of illness despite remarkable progress in diagnosis and treatment. The second is the impact of women and minority practitioners on the culture of medicine. And third, is the accumulation of sophisticated studies demonstrating associations between religious affiliation/practice and positive health outcomes.

The editors make clear that their book is designed to be of practical use in managing patient encounters. Religion and spirituality have important implications for good medical care, and are not exclusively the province of chaplains and other clergy.

Part I contains chapters on obstetrics/gynecology, pediatrics, family medicine, psychiatry, internal medicine, surgery, gerontology, oncology, palliative medicine, and other specialties. Part II chapters summarize spirituality and medicine from the perspectives of psychology, sociology, anthropology, law, history, philosophy, and theology. Part III presents a summary and synthesis.

Balboni and Peteet instructed the authors of each chapter to address research findings regarding religion or spirituality pertinent to their field; areas for future research; issues that commonly arise in patient encounters; and best practices in their specialty as they pertain to religion or spirituality. Most chapters include case examples.

Nearly every chapter is informative, well-organized, and competently-written. Categorization by specialty allows the authors to emphasize issues relatively specific to their field, e.g., contraception and abortion in obstetrics/gynecology, or mental disorders in psychiatry. The book serves as a unique clinical resource.

However, compartmentalization by specialty and discipline does lead to weaknesses, both of repetition and fragmentation. Repetition is particularly evident in sections dealing with best practices, where items like active

listening, careful assessment, respect, supportive engagement, and becoming aware of one's own biases and beliefs recur again and again. Fragmentation also occurs. For example, only five of 10 specialty chapters explicitly discuss spiritual assessment or screening tools, like FICA (Faith, Importance, Community, Action), a well-validated four question screening instrument developed by Christina Puchalski, MD (ΑΩΑ, George Washington University, 2009, Faculty), and her colleagues at Georgetown.^{pp285-6}

The volume, variety, and increasing sophistication of research on the association between religion/spirituality and mortality, morbidity, and medical care are striking. The best place to get a handle on the meaning of this literature is Tyler VanderVeele's final chapter, "Religion and Health: A Synthesis." Numerous well-controlled studies have shown that active participation in religion (attendance at services, etc.) is associated with significantly lower all-cause mortality, fewer episodes of depression, and less suicide. Evidence links religious participation with a protective effect against hypertension, cardiovascular and endocrine disease, and lowered immune function. However, there is little evidence that self-reported spirituality, in the absence of actual practice, affects health outcomes. The observed associations between religion and health have been attributed to a variety of factors, including social support, healthy lifestyle, access to social and religious resources, positive emotional experiences, and caring role models.

There is less evidence regarding the possible effect of integrating religion or spirituality into medical care. For example, psychiatric interventions, like cognitive behavioral therapy (CBT), modified to reflect the patient's religious beliefs may yield higher recovery rates than standard CBT. Research has been focused on spiritual care at the end-of-life, where it has been associated with better quality of life and patient satisfaction, as well as less aggressive treatment and lower costs.

VanderVeele also summarizes the results of randomized studies of prayer as therapy, a controversial area of investigation. The results of numerous blinded studies (the patients didn't know they were being prayed for) are mixed. Two sequential meta-analyses performed by the Cochrane Collaboration showed a significant protective effect of prayer on mortality in the first analysis, but not in the second.

There is a chapter on medical education written by Marta Hershkopf, Najmeh Jafari, and Puchalski. The general content of this chapter is to be applauded, however, the practicality of the comprehensive list of competencies

and behavioral objectives (National Initiative to Develop Competencies in Spirituality for Medical Education, Table 13-1)^{pp198-200} is questionable. The list consists of 59 specific behaviors by which spiritual care competence may be assessed. The items range from "Describe methods of reimbursement for spiritual care," to "Demonstrate the ability to be engaged and fully 'present' with patients." Such lists are useful for provoking reflection and discussion, but attempts to implement them as items required to be checked-off by preceptors tends to reduce them to busywork.

In the chapter on surgery, the authors raise the question, "How should you respond when a patient asks you to pray with him?"^{p99} There is a session on spirituality in the Medicine in Society course for first year medical students at Stony Brook, and this question makes for spirited discussion in small groups. While many students are comfortable with the idea of praying with patients, or at least maintaining a respectful silence, some claim that it would be inauthentic for them to pray because they are non-believers. Others feel that prayer at the bedside is somehow unprofessional, or simply impractical because of time constraints. The authors contend that a refusal "should be worded in such a manner as to honor the request....And if the physician does agree to participate in prayer, there appear to be no boundaries violated..."^{p99}

Spirituality and Religion Within the Culture of Medicine is an up-to-date resource for practitioners and medical educators. The book's organization by medical specialty or academic discipline leads to some repetition and fragmentation of material, but overall, its strengths far outweigh its weaknesses.

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