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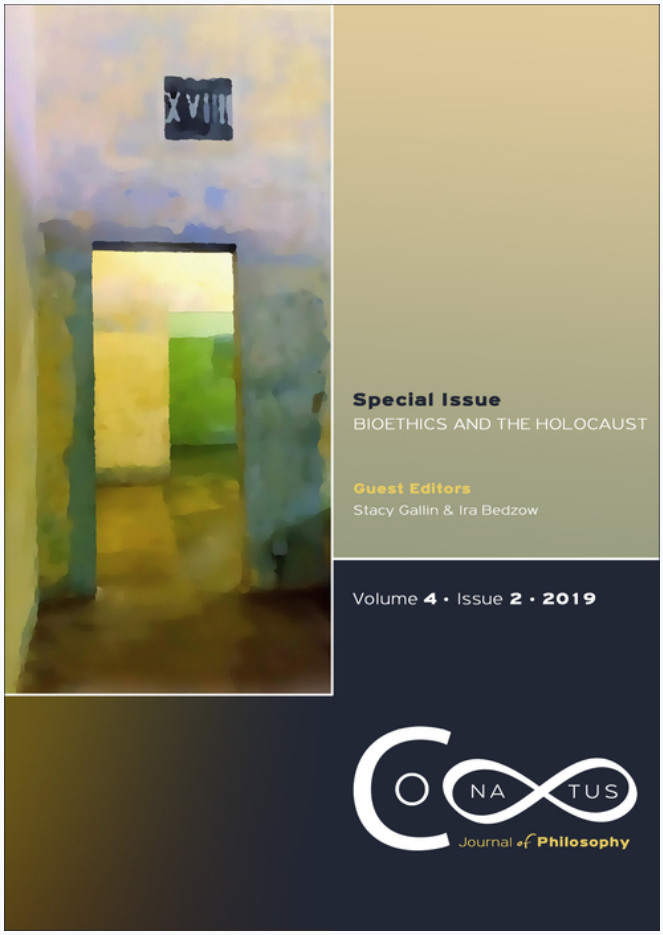

Pertinent Today: What Contemporary Lessons Should be Taught by Studying Physician Participation in the Holocaust?

Mark A. Levine, Matthew K. Wynia, Meleah Himber, William S. Silvers

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Pertinent Today: What Contemporary Lessons Should be Taught by Studying Physician Participation in the Holocaust?

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Abstract

The participation of physicians in the atrocities of the Holocaust exposed vulnerabilities in medicine's moral commitment to patients' best interests that every health professional should recognize. Teaching about this history is challenging, as it is extremely complex and there are no common standards for what basic historical facts students in health professions training programs should learn. Nor is there guidance on how these historical facts can or should be related to contemporary ethical issues facing health professionals. To address these problems, we propose a set of core historical facts about health professional involvement in the Holocaust that every student in a health professional training program should learn. We then identify three ethical lessons from the Holocaust that are pertinent today as physicians struggle to maintain their moral compass and earn the trust of patients and the public: 1) The lesson of commitment to science; maintaining balance between reason and skepticism in the search for truth, (2) The lesson of clinical detachment; maintaining balance between necessary professional distance with a commitment to humanism and intimacy with patients, and 3) The lesson of competing loyalties; maintaining balance in upholding medicine's multiple responsibilities, including to individual patients and the larger community. Embedding these facts and lessons into the education of health professionals is challenging yet critically important. Today's physicians struggle with some of the same ethical tensions as did German physicians in the Nazi era, albeit in a much-attenuated fashion. Awareness of these tensions and taking active measures to maintain them in balance are necessary components of humanistic health care, which should be an integral part of health professional training programs.

Key-words: *Holocaust; medical ethics; health professional education; trust; scientific method; competing loyalties; professional detachment*

Some academic health centers host elective activities intended to teach health professional students, educators, researchers, and clinicians about the horrific medical crimes during the Nazi era. But only 16 percent of North American medical schools have any required curricular elements in this regard.[1] The degree of exposure and awareness of other health science students and faculty (nursing, pharmacy, dentistry and others) is unknown, though it is unlikely to be great. Outside of academic centers, awareness among health professionals of the complex factors that enabled Nazi medical abuses is likely even less.

"Never Again!" is a common message of Holocaust remembrance programs, including those focused on medical crimes. Presumably this reflects a concern that such events, or lesser versions of them, might recur if they are not remembered.[2] Indeed, there have been subsequent attempted genocides and other war crimes, including some led by medical professionals, and the threat of health professionals following a broken moral compass seems ever-present. In this article, we argue that teaching this history to health professional students is important because it can and should inform their understanding of three core ethical issues that remain as pertinent today as they were prior to and during World War II.

First, we briefly recount some key historical facts about medical participation in the Holocaust that we believe all health professional students should learn during their training [Table I].

By the end of medical training, all health professions students should be able to:
1) Describe the theory of eugenics and its relationship to racism.
2) Describe at least 3 socioeconomic factors that made the German medical profession of the 1930s especially prone to subverting the needs of individuals to the perceived needs of the German state.
3) Describe the Nazi program of forcible sterilization and its relationship to similar programs in the US.
4) Describe the child euthanasia and T4 programs and how they related to later programs of mass murder in the Holocaust.
5) Describe at least 2 rationales used by German physicians to justify unethical human experimentation on prisoners.

Table I

[1] Matthew K. Wynia, et al., "How Do U.S. and Canadian Medical Schools Teach about the Role of Physicians in the Holocaust?" *Academic Medicine* 90, no. 6 (2015): 699-700.

[2] Arthur L. Caplan, *When Medicine Went Mad: Bioethics and the Holocaust. Contemporary Issues in Biomedicine, Ethics, and Society* (Totowa, NJ: Humana Press, 1992).

These basic historical facts focus on understanding the professional and social factors that played critical roles when Nazi era physicians abandoned their professional commitment to respect human life and protect patients from harm, and they form a core set of historical learning objectives for all health professions students. Next, we present a perspective on three core ethical issues that continue to challenge physicians today and can be illuminated by understanding this history [Table II].

Students should have the opportunity to explore how these historical facts can illuminate contemporary ethical challenges facing health professionals, including:
1) The lesson of commitment to science – maintaining balance between reason and skepticism in the search for truth;
2) The lesson of clinical detachment – maintaining balance between necessary professional distance and a commitment to humanism and intimacy with patients; and
3) The lesson of competing loyalties – maintaining balance in upholding medicine's multiple responsibilities, including to individual patients and the larger community.

Table II: Lessons from the Holocaust Pertinent to Contemporary Ethical Challenges in Medicine

These ethical issues are complex. Using this history to explore them is admittedly difficult both for teachers and learners. Yet we propose that using this tragic history to better understand these issues can provide critical and powerful insights with a potentially lifelong impact for anyone entering the healing professions. Finally, we discuss several practical challenges and opportunities of integrating these lessons into the curriculum of health professional education and training.

I. Key historical facts that students should know

A great number of historical forces were involved in the origins of the Second World War, but most of these are not of special interest to health professionals. A history of the Nazi era that focuses on the roles of health professionals should highlight a few factors that are especially important for understanding the roles that health professionals played so that students can understand how to mitigate those factors in the future.

To start, students should understand that the German military required a large number of physicians to support their troops during World War I, but upon returning to civilian life many struggled to eke out a living in private practice due to Germany's severe post-war economic contraction. No longer valued as military officers, many physicians experienced a dramatic decrease in status and respect as they struggled to support themselves. While there

was a long-standing system of "sickness funds" that covered workers and their families, contracts to care for patients enrolled in these funds were difficult to obtain, and many physicians were excluded. As a result, physician unemployment soared, and many experienced great frustration and anxiety; some blamed Jews, Communists and Socialists for their plight, following a popular belief that these groups had "stabbed in the back" the prior German government, causing the loss of the war. Meanwhile, the Weimar republican government largely ignored physicians' complaints while increasing the number of workers covered by the sickness funds. This removed these workers and their families from the private market, further restricting physician economic opportunity.[3]

Many physicians joined the new National Socialist Physicians League, in part attracted by the Nazi focus on "race hygiene," eugenics and social Darwinism, which offered a view of physicians as potential national heroes who could use biological "science" as a political instrument to improve the nation and create a master race.[4] Beliefs about race hygiene and eugenics were also common in the US, Britain and elsewhere, but Hitler's urgent plea to physicians – "You, you National Socialist doctors, I cannot do without you for a single day, not a single hour. If not for you, if you fail me, then all is lost..."[5] – was particularly effective. Students should also know that German physicians flocked to the Nazi party sooner and in greater proportion than any other profession.[6]

Under the Nazis, the goal of the medical profession was to help "heal" the state and rid it of "vermin," i.e. people deemed to pose a genetic threat to the larger community. An early step in this process was to implement a requirement that physicians report patient health data to state public health offices, genetic health courts and research institutes where decisions were then made to forcibly sterilize those assumed to have genetic traits that could pollute the German gene pool.[7] This reporting structure required physicians to set aside the ancient obligation of patient confidentiality in what physicians were told (and presumably believed) was a critical service to their

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[3] Michael H. Kater, "Professionalization and Socialization of Physicians in Wilhelmine and Weimar Germany," *Journal of Contemporary History* 20, no. 4 (1985): 677-701.

[4] Robert J. Lifton, *The Nazi Doctors: Medical Killing and the Psychology of Genocide* (New York: Basic Books, 2000), 34.

[5] F. Bartels, "Der Ärzt als Gesundheitsführer des deutschen Volkes," *Deutsches Ärzteblatt* 68 – Supplement (1938) 4-9; cited in Robert N. Proctor, *Racial Hygiene: Medicine under the Nazis* (Cambridge, MA: Harvard University Press, 1988), 64.

[6] Donald W. Light, "Values and Structure in the German Health Care Systems," *The Milbank Memorial Fund Quarterly. Health and Society* 63, no. 4 (1985): 615-647.

[7] Paul Weindling, *Health, Race, and German Politics between National Unification and Nazism, 1870-1945* (Cambridge; New York: Cambridge University Press, 1989), 549.

nation. It also distanced the reporting physician from direct responsibility for the resulting ”medical” decisions.

Of note, students should learn that eugenic policy was not unique to Nazi Germany. About 70,000 Americans were also forcibly sterilized between 1908 and the 1980's, through state laws, which were endorsed by the US Supreme Court in the infamous *Buck v. Bell* decision. This was based on ”scientific” assertions regarding economic, social, and racial “worthiness” that were supposedly genetic.[8] In Germany, the forcible sterilization law was very aggressively implemented through the creation of hereditary health courts, which comprised two physicians and one jurist and which typically passed judgment after only cursory review of written patient records. Ultimately, around 400,000 people were sterilized under this program. While some physicians attempted to protect their patients by falsifying reports to these courts, most simply complied. This program arose in the first six months of the Nazi era, well before the later pogroms and other terror-state tactics, so fear of reprisal for non-compliance presumably was low. Yet still there was a striking absence of resistance.[9]

The forcible sterilization program in Germany was the first step toward an eventual series of increasingly aggressive “euthanasia” programs, initially targeting newborns and children under the age of three who were perceived to be severely disabled, then expanding as the “T4 program” to target adults as well, including the mentally ill and “incurable,” i.e. those said to be experiencing “lives not worth living.” Soon included were the antisocial, the unproductive and eventually Jews, Roma, homosexuals, prisoners of war and other undesirables whose murder was required to cure the “disease” supposedly afflicting society.[10] About 300,000 people were killed in the T4 program, and at least another 5,000 people were killed in the so-called “child euthanasia” program.

These were the first mass murder programs implemented by the Nazis, preceding the Holocaust by more than five years. A large number of German physicians and scientists helped design and oversee the operation of these mass killings under the guise of euthanasia (an obvious misnomer, since the victims of these mass killing programs were not seeking a “good death”), and many more participated by sending individuals to killing centers to be murdered. Others performed inhumane and even lethal research on these “undesirables,” sometimes arguing that they were to die anyway. There is record of only a few individual physicians speaking out or resisting these actions,

[8] Proctor, 97.

[9] Victor W. Sidel, “The Social Responsibilities of Health Professionals. Lessons from Their Role in Nazi Germany,” *Journal of the American Medical Association* 276, no. 20 (1996): 1679-1681.

[10] Proctor, 177.

the majority of these being Jews or socialists who were swiftly eliminated.[11] There was virtually no organized resistance from academia or medical organizations – either in Germany or in any other country. Students should also learn that physicians actively contributed to the development of novel technologies involved in the medically-driven "euthanasia" programs, including specialized gas chambers and crematoria, which eventually were used in the creation of industrialized killing centers such as Auschwitz and Treblinka. Notably, a physician who trained in the T4 program was for a time the commandant of the Treblinka killing center.

Finally, students should know that the Nazi experience is certainly not the only historical instance of physicians disgracing the profession. In fact, the Nazis were arguably inspired by "scientific racism" among physicians in the US and Britain, and especially by anti-miscegenation and forced sterilization programs in many American states.[12] Nazi Germany was also not the only place where medical research subjects were abused; it has occurred repeatedly in the United States, before and since the Nazi experience.[13] Even in recent years, physicians have actively supported and in some cases been the leaders of other genocides, for example in Syria, Haiti, Bosnia, Albania, Rwanda, and Argentina.[14] Physician involvement in human rights abuses, such as torture, facilitation of executions and abuse of medicine for political purposes, remains distressingly prevalent.[15,16]

On learning these facts of history, students today often struggle to comprehend how physicians could ever repeat these errors and again desecrate their profession. Yet some do, suggesting that this history or its lessons are not always learned, or, if learned, are not applied to contemporary challenges. If we are to succeed in helping students apply their (perhaps newfound) knowledge of this history to contemporary medicine, we will also need to be clear about the core lessons from this history that remain important today.

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[11] Michael H. Kater, *Doctors under Hitler* (Chapel Hill and London: The University of North Carolina Press, 1989), 74-84.

[12] James Q. Whitman, *Hitler's American Model: The United States and the Making of Nazi Race Law* (Princeton, NJ: Princeton University Press, 2017).

[13] Henry K. Beecher, "Ethics and Clinical Research," *New England Journal of Medicine* 274, no. 24 (1966): 1354-1360.

[14] Jeremy Hugh Baron, "Genocidal Doctors," *Journal of the Royal Society of Medicine* 92, no. 11 (1999): 590-593.

[15] British Medical Association, *Medicine Betrayed: The Participation of Doctors in Human Rights Abuses* (London: Atlantic Highlands; NJ: Zed Books, 1992).

[16] Nicholas Casey, "Trading Lifesaving Treatment for Maduro Votes," *New York Times,* March 17, 2019, https://www.nytimes.com/2019/03/17/world/americas/venezuela-cuban-doctors.html.

II. What are the core lessons of this history for today's health professionals?

The lessons of the Holocaust pertinent to the medical profession have been considered previously with some misleading if not erroneous conclusions. For example, Wynia and Wells have already shown that one should not think that the evils of Nazi medicine and science were due to German medicine being primitive or underdeveloped; that the trial of the Nazi doctors at Nuremburg and the resulting Nuremberg Code led directly to modern codes of medical research ethics; and that strongly-worded ethical codes are sufficient protection against the medical profession once again abandoning its core commitment to protect patients.[17]

However, if these are not the core lessons from this history for health professionals, what then are the lessons that should be learned from this tragic legacy? This question is not merely academic or philosophical in nature. It carries a great deal of pragmatic importance. Any effort to bring the lessons of medical involvement in the Holocaust into contemporary medical curricula will need to come with clear application to challenges facing medicine today, not just learning objectives focused on knowing historical facts, as important as those facts are [Table I].

We propose that there are three core issues in contemporary medical professionalism and ethics [Table II] that should be explored with students through their engagement with the tragic historical facts noted above. We acknowledge that there are many other lessons from the participation of physicians in the Holocaust that remain pertinent today, many of which are specific to a given perspective, such as medical research or public health practice. Yet the three core lessons described below and in Table II apply broadly and universally to the health professions and we consider them to be critically important to embed into the education and training of all aspiring health professionals.

Lesson 1: The proper calibration of scientific skepticism

Medicine bridges the gap between science and society.[18] The Physician Charter for Medical Professionalism in the New Millennium states in part, "Much of medicine's contract with society is based on the integrity and appropriate use of scientific knowledge and technology. Physicians have a duty to uphold sci-

[17] Matthew K. Wynia, et al., "Light from the Flames of Hell: Remembrance and Lessons of the Holocaust for Today's Medical Profession," *Israeli Medical Association Journal* 9 (2007): 186-188.

[18] Royal College of Physicians, "Doctors in Society. Medical Professionalism in a Changing World," *Clinical Medicine* 5, no. 6 – Supplement 1 (2005): S5-S40.

entific standards, to promote research, and to create new knowledge and ensure its appropriate use. The profession is responsible for the integrity of this knowledge, which is based on scientific evidence and physician experience."[19] Scientific standards preclude accepting a theory as fact before there has been sufficient rational experimentation. Absent objective observation there is not science, only faith garbed in pseudoscience. The acceptance of a theory – and implementing radical social policies in accord with the theory – because it just "seems right" is a violation of the principles of science. The Nazi implementation of public policy based upon the theory of Social Darwinism absent reasoned observation – and even in the face of evidence disproving it – is an example of such abuse of science, one with heinous consequences. The current American anti-immigration controversy provides several examples of public policy at variance with objective evidence, such as the discredited notions that immigrants bring disease or are more likely to commit crimes, as well as a reminder of the racist history of American immigration policy.[20]

Conversely, rejection of well-reasoned science on grounds of scientific skepticism is also a breach of scientific standards. A pernicious misuse of the scientific method is to reject well-established science because "it's just a theory."[21] Recent decades' debate over teaching evolution and today's public dialogue regarding climate science are reminders that objective observations can be ignored in favor of preconceived ideology[22] reflecting a dangerous misuse of scientific skepticism.[23]

Increasingly, the public gets information on science from a growing number of non-scientific sources.[24] Rogue medical journals and ideologically biased blogs overload the public with information of dubious scientific validity that is then redistributed and amplified on social media platforms. The information may become common knowledge absent any basis in truth. This appears to be the situation of the anti-vaccination movement, which thrives in the face of overwhelming scientific evidence against it. Physicians must

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[19] Project of the ABIM Foundation, ACP-ASIM Foundation, and European Federation of Internal Medicine, "Medical Professionalism in the New Millennium: A Physician Charter," *Annals of Internal Medicine* 136, no. 3 (2002): 243-246.

[20] Daniel Okrent, *The Guarded Gate: Bigotry, Eugenics, and the Law that Kept Two Generations of Jews, Italians, and Other European Immigrants out of America* (New York: Scribner, 2019).

[21] Peter Godfrey-Smith, *Theory and Reality: An Introduction to the Philosophy of Science* (Chicago: University of Chicago Press, 2003).

[22] John Cook, et al., "Rational Irrationality: Modeling Climate Change Belief Polarization Using Bayesian Networks," *Topics in Cognitive Science* 8, no. 1 (2016): 160-179.

[23] Lawrence Torcello, "The Ethics of Belief, Cognition, and Climate Change Pseudoskepticism: Implications for Public Discourse," *Topics in Cognitive Science* 8, no. 1 (2016): 19-48.

[24] Paul Hitlin, et al., "The Science People See on Social Media," Pew Research Center, https://www.pewresearch.org/science/2018/03/21/the-science-people-see-on-social-media/.

evolve new strategies to regain the public's trust in the scientific foundation of medicine and strengthen their role in bridging the gap between science and society.[25]

As humanistic scientists, physicians have a moral duty to defend the scientific method and prevent social misuse of science through either premature acceptance of an unproven hypothesis or rejection of a well-substantiated one. As we have learned from the Holocaust, abuse of pseudoscientific theories can harm people, sometimes with horrific consequences.

Lesson 2: Empathy and detachment during medical training

Despite the need to frequently witness and sometimes even to cause pain and suffering in the course of medical practice, compassion and empathy toward patients are prerequisites to strong clinical relationships. It is perhaps inevitable that, in the course of training, medical students learn to tamp down their empathetic responses to human suffering. In fact, studies regularly demonstrate that the empathy of aspiring physicians declines through the course of medical education and training.[26] Concurrently, "clinical detachment" increases as students are exposed to the objectivity of medical science and as they adopt it as a protective mechanism against emotional overload.

But the history of Nazi physicians shows – in the most extreme way possible – the terrible cost of becoming so distant from patients that one can consign people to suffering and death with no remorse. Teaching about this history provides a unique opportunity to openly discuss the careful balance that practicing physicians must strike between personal empathy and professional distance. There must be a caring patient-doctor bond that is strong enough to overcome the pressures of malicious authority and the clinician's myriad competing interests and loyalties. But there must also be limits on the physician's intimacy with patients, lest emotional attachments themselves become competing interests and compromise clinical objectivity. Effectively caring for patients suffering with distress, pain, advancing disease and death requires some distancing, but it must not quash empathy. An equilibrium of empathy and detachment is necessary for physicians to be fully functional and retain their humanity.[27]

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[25] Richard J. Baron, et al., "Mistrust in Science – A Threat to the Patient-Physician Relationship," *New England Journal of Medicine* 381, no. 2 (2019): 182-185.

[26] Melanie Neumann, et al., "Empathy Decline and Its Reasons: A Systematic Review of Studies with Medical Students and Residents," *Academic Medicine* 86, no. 8 (2011): 996-1009.

[27] Christine Montross, *Body of Work: Meditations on Mortality from the Human Anatomy Lab* (New York: Penguin Press, 2007).

Lesson 3: The challenge of competing loyalties

Perhaps the most compelling, and most complex, contemporary lesson from physician participation in the Holocaust is the need for physicians to balance their multiple and sometimes competing roles. A physician's commitment to an individual patient's best interest exists concurrent with loyalty to the best interests of other patients, to the larger community, to the health institutions and clinics where they practice, and sometimes to legitimate personal, political or commercial obligations that come with taking on other roles, such as citizen, parent, spouse, or employee. Physicians need to maintain their primary responsibility to patients while concurrently being responsive to other interests, including, for example, the need to serve as responsible stewards of the resources entrusted to them.

Though it is tempting to say, "the patient always comes first," the reality of navigating the challenge of competing loyalties is not that simple. Instead, we have criteria embedded in professional codes of ethics to help us wrestle with circumstances when it may be appropriate to, for example, breach patient confidentiality. Health professionals should always feel a bit uncomfortable when asked to act as agents of the government or for the sole sake of the community, even when it is well justified, and especially when it means potentially harming an individual. But sometimes it is justified, and that is what makes this such a complex and difficult lesson to learn.

Ethical codes in medicine are intended to create a set of explicit, reciprocal responsibilities based on mutual trust between the profession and society and reflected in mutual trust between individual patients and physicians. In Nazi Germany, trust between patients and physicians was only possible within the Aryan culture of Nazism. All others were abandoned.

It must be noted that American medicine in the early- to mid-20th century was similarly exclusionary. African Americans, Jews, Catholics and other minorities were discriminated against as patients and as professionals.[28,29] Much has improved since the end of World War II, a great deal of this directly in response to the recognition of human rights and the value placed on them following the Holocaust. But mistrust based on mistreatment persists. Some of this is the shameful legacy of generations of exploitation, institutionalized racism, and professional disrespect of the poor and minorities,[30] and some is a

[28] Vijaya Rao, et al., "Why Aren't There More African-American Physicians? A Qualitative Study and Exploratory Inquiry of African-American Students' Perspectives on Careers in Medicine." *Journal of the National Medical Association* 99, no. 9 (2007): 986-993.

[29] Edward C. Halperin, "The Rise and Fall of the American Jewish Hospital," *Academic Medicine* 87, no. 5 (2012): 610-614.

[30] Harriet A. Washington, *Medical Apartheid: The Dark History of Medical Experimentation on*

reflection of today's persistent health care inequities across gender, ethnicity, socioeconomic and other lines.[31]

Medicine has become much less authoritarian and more respectful of individual autonomy. Yet public confidence in American medicine has dramatically eroded in recent years.[32] A recent report from the Pew Research Center finds that only 74 percent of Americans have a mostly positive view of medical doctors and only 57 percent believe doctors care about the best interests of their patients all or most of the time.[33] Patients need to be confident that their health and well-being is their physician's primary concern, not the physician's income or productivity, the bottom line of the health system that employs the physician, or the demands of government and regulators.

In summary, physicians today are exposed to many of the same influences as were German physicians during the Nazi era, albeit in a greatly attenuated fashion, in part because these pressures reflect intractable dynamics inherent to the complex roles of healers in society. In the end, gaining and maintaining trust between patients and physicians depends in large part on physicians learning how to balance their responsibilities to individual patients and the larger community. Exploring the history of Nazi medicine can put a very sharp point on these necessary and difficult conversations.

III. Using the history of the Holocaust to teach these lessons

There is a growing gap in public knowledge of the Holocaust. A 2018 study found that 41 percent of Americans and 66 percent of millennials said they had not heard of the Auschwitz concentration and extermination camps. In the US, 22 percent of millennials have not even heard of the Holocaust.[34] The youngest Holocaust survivors are approaching the end of their lives, leaving dwindling opportunities for in-person encounters and direct testimony. Currently only 11 states have mandates for Holocaust education in K-12 public

Black Americans from Colonial Times to the Present (New York: Doubleday, 2006).

[31] Frederick J. Zimmerman, et al, "Trends in Health Equity in the United States by Race/Ethnicity, Sex, and Income, 1993-2017," *Journal of the American Medical Association Network Open* 2, no. 6 (2019): e196386-e196386.

[32] Robert J. Blendon, et al., "Public Trust in Physicians – U.S. Medicine in International Perspective," *New England Journal of Medicine* 371, no. 17 (2014): 1570-1572.

[33] Cary Funk, et al., "Trust and Mistrust in Americans' Views of Scientific Experts," Pew Research Center, August 2, 2019, https://www.pewresearch.org/science/2019/08/02/trust-and-mistrust-in-americans-views-of-scientific-experts/.

[34] Conference on Jewish Material Claims Against Germany, "New Survey by Claims Conference Finds Significant Lack of Holocaust Knowledge in the United States," http://www.claimscon.org/study/.

schools.[35] As the Holocaust recedes from public awareness, it is increasingly important for academic institutions, including health professions training programs, to integrate this history and its lessons into the curriculum.

In medical training, Holocaust-related education is in competition for curricular time with a host of other required topics. Exacerbating this challenge is the fact that the history of health professional involvement in the Holocaust is both complex and emotionally charged; it cannot be presented quickly, and it requires time to debrief and discuss. Moreover, the teaching of any history of medicine has been dwindling in health professional education.[36] As a practical matter, we accept that required courses that focus directly on Holocaust-related topics are unlikely to flourish in today's medical training programs. Instead, the focus should be on building Holocaust-related themes into existing curricula.

There is also a dearth of teaching modules that address Holocaust-related medical topics. Those that do exist, such as the travelling *Deadly Medicine: Creating the Master Race* exhibit of the US Holocaust Memorial Museum,[37] are designed for focused and time-consuming attention which, as noted, seems unlikely to materialize in most schools. Establishing clear core standards for educational content, as we propose, can help with integration of these lessons into the existing curriculum, especially if the standards address key lessons from this history that can be directly applied to challenges facing the profession today, as ours do.

To implement these standard educational objectives, it will also be necessary to develop faculty sufficiently grounded in both bioethics and the history of health professional involvement in the Holocaust and provide them with ideas and tools for embedding the lessons within existing bioethics education. Some examples of creative approaches include a conscious effort to reference the rationale for avoiding eponymous labels on medical conditions associated with Nazi physicians, such as Reiter, Asperger and Wegener. Discussions of the care of patients with developmental disabilities and mental health issues can and should include reference to the murder and inhumane treatment that Nazi physicians perpetrated on patients with these conditions. Teaching the scientific method and research ethics should include examples of the misuse of the scientific method to promote social policy such as the Nazi aggressive implementation of social Darwinism.

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[35] Anti-defamation League, "Why We Need Legislation to Ensure the Holocaust is Taught in Schools," https://www.adl.org/blog/why-we-need-legislation-to-ensure-the-holocaust-is-taught-in-schools.

[36] Philip A. Mackowiak, et al., "The Case for Medical History in Physicians' Education: A Survey of What Physicians and Physicians-in-Training Think," *The American Journal of Medicine* 130, no. 4 (2017): 494-497.

[37] United States Holocaust Memorial Museum, "Deadly Medicine: Creating the Master Race," https://www.ushmm.org/information/exhibitions/traveling-exhibitions/deadly-medicine.

In sum, teaching the lessons of the Holocaust in health professional education is critically important to the development of an ethically responsible and humanistic health professional workforce, and some of the core challenges that faced physicians during the Holocaust are still with us today. But this teaching will not occur without conscious efforts by academic leaders to develop both competent faculty and a consistent and effective curriculum. This will require institutional and leadership commitment to education on Holocaust-related bioethics, and it will require greater clarity regarding the exact historical facts that need to be covered and the ways in which this history can – indeed must – resonate with and inform our deliberations on ethical challenges facing health professionals today.

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References

Anti-defamation League. "Why We Need Legislation to Ensure the Holocaust is Taught in Schools." https://www.adl.org/blog/why-we-need-legislation-to-ensure-the-holocaust-is-taught-in-schools.

Baron, Jeremy Hugh. "Genocidal Doctors." *Journal of the Royal Society of Medicine* 92, no. 11 (1999): 590-593.

Baron, Richard J., and Adam J. Berinsky. "Mistrust in Science – A Threat to the Patient–Physician Relationship." *New England Journal of Medicine* 381, no. 2 (2019): 182-185.

Beecher, Henry K. "Ethics and Clinical Research." *New England Journal of Medicine* 274, no. 24 (1966): 1354-1360.

Blendon, Robert J., John M. Benson, and Joachim O. Hero. "Public Trust in Physicians – U.S. Medicine in International Perspective." *New England Journal of Medicine* 371, no. 17 (2014): 1570-1572.

British Medical Association. *Medicine Betrayed: The Participation of Doctors in Human Rights Abuses*. London, UK; Atlantic Highlands, NJ: Zed Books, 1992.

Caplan, Arthur L. *When Medicine Went Mad: Bioethics and The Holocaust*. *Contemporary Issues in Biomedicine, Ethics, and Society*. Totowa, NJ: Humana Press, 1992.

Casey, Nicholas. "Trading Lifesaving Treatment for Maduro Votes." *New York Times*, March 17, 2019. https://www.nytimes.com/2019/03/17/world/americas/venezuela-cuban-doctors.html.

Conference on Jewish Material Claims against Germany. "New Survey by Claims Conference Finds Significant Lack of Holocaust Knowledge in the United States." http://www.claimscon.org/study/.

Cook, John, and Stephan Lewandowski. "Rational Irrationality: Modeling Climate Change Belief Polarization Using Bayesian Networks." *Topics in Cognitive Science* 8, no. 1 (2016): 160-179.

Funk, Cary, Meg Hefferon, Brian Kennedy, and Courtney Johnson. "Trust and Mistrust in Americans' Views of Scientific Experts." Pew Research Center. https://www.pewresearch.org/science/2019/08/02/trust-and-mistrust-in-americans-views-of-scientific-experts/.

Godfrey-Smith, Peter. *Theory and Reality: An Introduction to the Philosophy of Science*. Chicago: University of Chicago Press, 2003.

Halperin, Edward C. "The Rise and Fall of the American Jewish Hospital." *Academic Medicine* 87, no. 5 (2012): 610-614.

Kater, Michael H. "Professionalization and Socialization of Physicians in Wilhelmine and Weimar Germany." *Journal of Contemporary History* 20, no. 4 (1985): 677-701.

Kater, Michael H. *Doctors under Hitler*. Chapel Hill and London: The University of North Carolina Press, 1989.

Light, Donald W. "Values and Structure in the German Health Care Systems." *The Milbank Memorial Fund Quarterly. Health and Society* 63, no. 4 (1985): 615-647.

Lifton, Robert J. *The Nazi Doctors: Medical Killing and the Psychology of Genocide*. New York: Basic Books, 2000.

Mackowiak, Philip A., Donna Parker, and Lindsay D. Croft. "The Case for Medical History in Physicians' Education: A Survey of What Physicians and Physicians-in-Training Think." *The American Journal of Medicine* 130, no. 4 (2017): 494-497.

Montross, Christine. *Body of Work: Meditations on Mortality from the Human Anatomy Lab*. New York: Penguin Press, 2007.

Neumann, Melanie, Friedrich Edelhäuser, Diethard Tauschel, Martin R. Fischer, Markus Wirtz, Christiane Woopen, Aviad Haramati, and Christian Scheffer. "Empathy Decline and Its Reasons: A Systematic Review of Studies with Medical Students and Residents." *Academic Medicine* 86, no. 8 (2011): 996-1009.

Okrent, Daniel. *The Guarded Gate: Bigotry, Eugenics, and the Law that Kept Two Generations of Jews, Italians, and Other European Immigrants out of America*. New York: Scribner, 2019.

Proctor, Robert N. *Racial Hygiene: Medicine under the Nazis*. Cambridge, MA: Harvard University Press, 1988.

Project of the ABIM Foundation, ACP-ASIM Foundation, and European Federation of Internal Medicine. "Medical Professionalism in the New Millennium: A Physician Charter." *Annals of Internal Medicine* 136 no. 3 (5, 2002): 243-246.

Rao, Vijaya, and Glenn Flores. "Why Aren't There More African-American Physicians? A Qualitative Study and Exploratory Inquiry of African-American Students' Perspectives on Careers in Medicine." *Journal of the National Medical Association* 99, no. 9 (2007): 986-993.

Royal College of Physicians. "Doctors in Society. Medical Professionalism in a Changing World." *Clinical Medicine* 5, no. 6 – Supplement 1 (2005): S5-S40.

Sidel, Victor W. "The Social Responsibilities of Health Professionals. Lessons from Their Role in Nazi Germany." *Journal of the American Medical Association* 276, no. 20 (1996): 1679-1681.

Torcello, Lawrence. "The Ethics of Belief, Cognition, and Climate Change Pseudoskepticism: Implications for Public Discourse." *Topics in Cognitive Science* 8, no. 1 (2016): 19-48.

United States Holocaust Memorial Museum. "Deadly Medicine: Creating the Master Race." https://www.ushmm.org/information/exhibitions/traveling-exhibitions/deadly-medicine.

Washington, Harriet A. *Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present*. New York: Doubleday, 2006.

Weindling, Paul. *Health, Race, and German Politics between National Unification and Nazism, 1870-1945*. Cambridge; New York: Cambridge University Press, 1989.

Whitman, James Q. *Hitler's American Model: The United States and the Making of Nazi Race Law*. Princeton, NJ: Princeton University Press, 2017.

Wynia, Matthew K., William S. Silvers, and Jeremy A. Lazarus. "How Do U.S. and Canadian Medical Schools Teach About the Role of Physicians in the Holocaust?" *Academic Medicine* 90, no. 6 (2015): 699-700.

Wynia, Matthew K., and Alan L. Wells. "Light from the Flames of Hell: Remembrance and Lessons of the Holocaust for Today's Medical Profession." *Israeli Medical Association Journal* 9 (2007): 186-188.

Zimmerman, Frederick J., and Nathaniel W. Anderson. "Trends in Health Equity in the United States by Race/Ethnicity, Sex, and Income, 1993-2017." *Journal of the American Medical Association Network Open* 2, no. 6 (2019): e196386-e196386.