

Michael L. Gross, *Military Medical Ethics in Contemporary Armed Conflict: Mobilizing Medicine in the Pursuit of Just War* (Oxford: Oxford University Press, 2021), 304 pp. ISBN 978-0190694944, USD 48.68

The book *Military Medical Ethics in Contemporary Armed Conflict*, authored by Michael L. Gross explores the complex field of military medical ethics. As the author notes in the introduction, this discipline navigates a challenging terrain where ethical imperatives collide with practical constraints: things that must be done but may not be, things that can be done but need not, and things that should be done but often are not. The central focus of the book revolves around unresolved ethical dilemmas in military medicine. Gross adopts the role of a philosopher, and over the course of four chapters that flow like a mesmerizing river, he seeks to address numerous ethical questions, though many remain unresolved by the book's end.

The first section consists of three chapters: “Military Medical Ethics and Just War,” “Patient Rights and Practitioner Duties,” and “Moral Reasoning in Military Medical Ethics.” These chapters delve into the theoretical foundations of military medical ethics, a field formally recognized as part of the law of armed conflict by the Geneva Conventions in 1977. Gross emphasizes that while the ethical principles guiding military medicine—such as dignity, confidentiality, and impartial treatment—are consistent with those in peacetime, the realities of the battlefield present a starkly different scenario. He points out that civilian medical ethics is largely apolitical, whereas military medicine is inherently political. In this context, Gross grapples with the question of what is morally permissible in military medical practice, using the principles of beneficence and necessity to explore ethical decision-making in both humanitarian and defensive wars.

Gross argues that beneficence in military medicine is a broader concept than in civilian medicine, extending beyond individual care to encompass the welfare of the entire community involved in the conflict, similar to public health policies, though with key differences. Military-medical necessity, on the other hand, justifies actions that serve the war effort and collective welfare,

whereas clinical-medical necessity focuses on the costs associated with saving or improving a single life.

The second chapter of the first section discusses the delicate balance between patient rights and practitioner duties. Military medical personnel often face difficult decisions due to limited resources and the eligibility criteria for medical care, which directly impact the extent and type of care provided. Resource constraints necessitate triage, prioritizing the treatment of those who can quickly return to combat over critically injured soldiers. Gross contrasts the concept of patient rights at renowned institutions like the Mayo Clinic with those at Walter Reed Military Medical Facility in 2019. While patients in civilian contexts have the right to informed consent, informed refusal, privacy, and confidentiality—including the right to refuse treatment and die—soldiers are typically required to accept treatment that keeps them combat-ready. Moreover, “do not resuscitate” (DNR) orders are rare in military settings. Gross also explores the dual role of military medical practitioners, who must uphold both the modern Hippocratic Oath, which emphasizes the well-being of the sick, and their allegiance to the nation’s constitution. Gross contends that, rather than conflicting, these oaths can be interpreted in a way that reconciles their demands, citing Hippocrates’ refusal to assist Persian troops afflicted by plague as an example of moral aversion rather than ethical conflict.

While the first two chapters lay out the theory of military medical ethics, grounded in concepts of sovereignty and human rights, the third chapter offers practical examples of these principles in action. Gross critiques an existing decision model by Beam and Howe,¹ arguing that it fails to account for the complexities of different types of war. He proposes a more comprehensive model based on three pillars: defining the military and medical mission, articulating the ethical questions, and weighing the relevant moral factors.

Part II of the book *On the Battlefield: Caring for the Wounded of War* addresses a less frequently discussed topic: the postwar policies that impact both medical practitioners and soldiers, often due to the debilitating fatigue that sets in after war. This section begins with the concrete example of Iraq and Afghanistan in the aftermath of 9/11, ushering in a new chapter in the history of 21st-century warfare. The conflicts in Iraq and Afghanistan commanded an enormous budget, making them the most costly and prolonged wars of the era.

¹ See T.E. Beam, and E.G. Howe (2003). “A proposed ethic for military medicine.” In T.E. Beam and L.R. Sparacino (eds.), *Military medical ethics* (Falls Church VA: Office of The Surgeon General, United States Army), pp. 851–865, esp. 855.

The author divides the specific characteristics of these wars into three phases: invasion, transition, and reconstruction. Contrary to expectations that the invasion phase would incur the most expenses, the initial years' expenditures were sufficient to establish medical facilities. Between 2001 and 2004, U.S. forces in Afghanistan experienced 161 fatalities and 423 wounded, according to the author. What was not anticipated was the rising stress that developed in parallel with the growing insurgency. Improvised explosive devices (IEDs) caused severe injuries, including multiple trauma and traumatic brain injuries, necessitating significant resources. This situation forced military health services to establish eligibility criteria to manage the shortage of beds and reduce costs, ensuring that resources were available for combatants.

During the invasion phase, warfighters received care through a five-level healthcare system: Echelon I was the battalion station; Echelon II was the immediate surgical team; Echelon III included combat support hospitals in Qatar and Kuwait for more specialized surgical care; Echelon IV was the Landstuhl Regional Medical Center; and Echelon V comprised renowned medical centers in the continental U.S. and Europe, ensuring continued treatment in their respective countries.

However, alongside soldiers, many civilians were injured or killed during the invasions of Iraq and Afghanistan. Local regulations initially limited civilian access to military facilities, leaving them to rely on local hospitals. This situation evolved as the war progressed; for instance, by 2006, 80% of admissions were Iraqi soldiers, but this number dropped to 38% by 2008. The author highlights the differences in military medicine during the transition and reconstruction phases, with the latter being perhaps the most challenging, as it involves not only political reconstruction abroad but also rebuilding a safer and better home environment.

This section of the book clearly defines the medical term "eligibility" and the rules governing it, explaining the conditions under which civilians could be treated at coalition facilities. While discrimination should not exist, and care should be impartially offered based on medical need, preferential treatment for battlefield soldiers remains the norm. The author cites Stuart Gordon, who interviewed British military personnel and concluded that differential treatment based on nationality exists. The book continues with several cases where patriotism interferes with duties and gratitude.

In Chapter 6, the care of detainees and prisoners of war is discussed, emphasizing that to qualify for medical assistance, the enemy must refrain from any act of hostility. This highlights the disparity between civilian and

military medical ethics: it is not enough for detainees to have a severe medical condition—they must also refrain from hostility to receive treatment. Over time, to ensure quality care for detainees, they even enjoyed a higher level of healthcare than some allied forces. Interrogation techniques involving aggressive and suppressive methods, such as waterboarding, sleep deprivation, and stress positions, were part of the duties of medical personnel, as detailed in the *Report of the Senate Select Committee on Intelligence* on the CIA's Detention and Interrogation Program.

The fine line between standard interrogation and torture has sparked numerous debates, with the author referencing Sanford Levinson's three arguments that have dominated these discussions: that torture is impermissible, that enhanced interrogation techniques are not torture, and that torture can be seen as the lesser evil. The final chapter of Part II addresses a less frequently discussed topic: the civilian victims of war and how they should be compensated and cared for. While the Geneva Conventions provide clear guidelines for the treatment of wounded combatants and enemy forces, the care for sick and injured civilians—who are not involved in “armed forces”—is less clearly defined.

In the *Ethical Guidelines and Practices for US Military Medical Professionals* (Defense Health Board 2015: §4.4), the author notes that only low-risk interventions are recommended for civilians, excluding urgent treatments for those suffering from severe injuries such as limb loss or eyesight impairment. Additionally, the US Code, 10 U.S. Code 2006: §2734, denies compensation or liability for deaths or injuries resulting “from action by an enemy or directly or indirectly from an act of the armed forces of the United States in combat.” Determining whether an event was an accident or collateral damage is complex but crucial, given that accidents are unforeseen, avoidable, and entitled to compensation, whereas collateral damage is foreseen, unavoidable, and not clearly compensable.

In the third chapter, entitled “Military Medical Research and Experimentation,” Michael Gross addresses concerns regarding informed consent and the vulnerability of military personnel to experimental drugs. He provides examples of instances where guidelines were violated, as military service often limits soldiers' ability to refuse treatment, such as with the subcutaneous anthrax vaccine. Gross highlights that investigational drugs in military medicine serve different purposes compared to civilian medicine, specifically in preventing troop degradation, enabling soldiers to return to the battlefield, and supporting rehabilitative therapies such as prosthetics and mental health care. With new technologies, the survival rate

in Iraq and Afghanistan has increased to around 90%. However, military personnel may have their self-determination compromised due to rank disparities, fear of disobeying orders, and other pressures, leading the US to revise regulations to enforce informed consent, medical supervision, the right to end participation in an experiment, and the inclusion of independent monitors for research studies under the DoD Human Subjects Protection Regulatory Requirements.

Although one might expect an increase in randomized clinical trials, a table from the book reveals a predominance of observational and retrospective studies. This is partly because ethical protocols are inconsistent, and research gaps need to be addressed to reduce mortality, particularly in prehospital medicine. Another current and intriguing topic is that of warfighter enhancement—new technologies that improve soldiers' capabilities, thereby reducing the risk of death and disability. The Defense Advanced Research Projects Agency (DARPA) promises breakthrough technologies for national security, envisioning soldiers with fewer limitations as key to success in modern warfare, reminiscent of the concept of a “super soldier” or a modern Spartan.

The final chapter of Part III focuses on medical diplomacy and its potential to alleviate suffering and stabilize local regimes through reconstruction efforts, including front-line combat support hospitals, Medical Civic Action Programs (MEDCAPs), and Provincial Reconstruction Teams (PRTs). Despite the intended support for local populations, a persistent dispute existed between these organizations and NGOs, with the latter accusing PRTs of being involved in war development and corruption while neglecting local authorities. A retrospective evaluation reveals that combat support hospitals were effective, whereas MEDCAPs were largely unsuccessful. The top projects of the PRTs, as Michael Gross points out, were not centered on medicine but rather on microlending, government training, vocational education, and construction.

The last part of the book is dedicated to postwar justice and the responsibility to rebuild, arguably the most challenging aspect of war, as destruction is easy, but reconstruction is exceedingly difficult. This period, as the author notes, is marked by the transfer of security responsibilities from NGOs to local governments based on essential health packages, which refer to the goods and services that are *sine qua non* for a dignified life. While one might expect these packages to be universal, the World Health Organization leaves their definition to each nation, given the intimate connection between these packages and a country's resources. Iraq and Afghanistan are compared

in terms of health outcomes relative to inputs and outputs, concluding that Afghanistan performs well above other developing countries, while Iraq lags behind, illustrating the close relationship between human development and state-building.

Nicoleta-Monica Popa-Fotea

University of Medicine and Pharmacy "Carol Davila", Bucharest