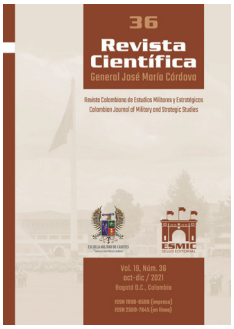

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Medical Ethics for the Military Profession

Ética médica para la profesión militar

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Abstract. This paper summarizes medical ethics in the military profession to raise military leaders' awareness of Military Medical Ethics (MME) and the ethical issues that may impact their medical services and personnel. First, it summarizes core concepts, including the four principles of medical ethics (autonomy, beneficence, non-maleficence, and justice), the two legal frameworks for the use of military force in war, *jus ad bellum* and *jus in bello*, and the concept of *dual loyalty*. It then examines MME issues during conflict, in garrison healthcare, and during the COVID-19 epidemic. Finally, it concludes by arguing that MME is an important domain of military ethics that should be taught to military leaders to complement the detailed education of MME military medical professionals.

Keywords: COVID-19; dual loyalty; medical ethics; military; medical professionals; principles of bioethics

Resumen. Este documento resume la ética médica en la profesión militar para sensibilizar a los dirigentes militares sobre la ética médica militar (EMM) y las cuestiones éticas que pueden afectar a sus servicios y personal médico. Primero, resume los conceptos básicos, incluyendo los cuatro principios de la ética médica (autonomía, beneficencia, no maleficencia y justicia), los dos marcos jurídicos para el uso de la fuerza militar en la guerra, *jus ad bellum* y *jus in bello*, y el concepto de *doble obligación*. Seguido, examina las cuestiones relativas a la EMM durante el conflicto, en la asistencia sanitaria de guarnición y durante la epidemia de COVID-19. Concluye argumentando que la EMM es un dominio importante de la ética militar que debería enseñarse a los líderes militares para complementar la educación detallada de los profesionales médicos militares de EMM.

Palabras clave: COVID-19; doble lealtad; ética médica; militares; principios de la bioética; profesionales de la salud

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Introduction

Reflection over the conduct of recent military operations, particularly in Iraq and Afghanistan, has increased the prominence of the ethical aspects of the military profession of arms. A previous paper in this journal examined professional military ethics from the Canadian experience in the Afghanistan conflict (Imbeault, 2018). In this work, Imbeault assessed the ethics of the Canadian forces' combat behaviors in military operations, emphasizing the consequences to the local civilian population. The 2020 Brereton Report into the conduct of the Australian Special Air Service also posed earnest questions on the integrity and professionalism of key members of the Australian Defense Forces (Behm, 2020). And, the legal and ethical aspects of constraining violence to set post-conflict justice and reconciliation conditions have been considered in a recent collection of essays reviewing experiences from Afghanistan, Bosnia, Colombia, and Iraq (Mileham, 2020).

This paper provides an overview of military medical ethics (MME) as a parallel domain of knowledge to military ethics, highlighting key ethical issues that impact the practice of military healthcare professionals, including those that constrain their role as a member of the armed forces. Alongside their combatant colleagues, military medical personnel may also face some very challenging ethical decisions during combat operations; however, their perspectives might clash with those of combat soldiers, even if they wear the same uniform and carry weapons. It is written to inform non-medical military leaders of the ethical issues that military medical personnel might face in their duties to avoid the risk of issuing illegal or unethical orders.

Based on a presentation given at the International Seminar on the Contribution of Military Ethics to Global Sustainability hosted by the *Escuela Superior de Guerra "General Rafael Reyes Prieto"* in May 2021, this paper opens by introducing core concepts at the intersection of medical and military ethics. It then examines the ethical issues arising during conflict conditions, focusing on international humanitarian law (IHL) obligations and the Geneva Conventions. While MME might be considered the most challenging during conflict, the section that follows highlights that most issues actually arise during healthcare practice in garrison healthcare, including the ethics of biomedical research on military subjects or within military, scientific laboratories. The final section considers the ethical issues for military medicine arising from the COVID-19 epidemic. Finally, the paper identifies issues for further debate and the need for training and education in MME.

The paper will use the term *military medical ethics* to cover the ethical principles and practices that apply to all healthcare workers in the armed forces (doctors, nurses, allied health professionals, and non-professional military personnel assigned to medical duties). It will use the term *professional* to cover all healthcare workers whose license and accountability for practice is defined by a professional regulatory body (e.g., doctors, dentists, nurses, pharmacists, paramedics). This status contrasts with military personnel assigned to medical duties without professional qualifications (e.g., medics and designated first

aiders); they are only accountable to military authorities through military law and technical oversight by military health professionals.

Core concepts

Ethics is the system of moral principles that govern an individual's activities or behaviors. In medicine, starting with the Hippocratic Oath, there is a long history of stipulating the ethical standards by which doctors and other healthcare professionals practice their art. Medical ethics starts with the dictum "*first, do no harm*"; criticism of US personnel in the Abu Graib prison has publicly reinforced this for military medicine (Miles, 2004). Many medical ethicists use Beauchamp and Childress's four principles of bioethics as their foundation. They are autonomy (respecting the right of competent adults to make reasoned, informed decisions about their treatment), beneficence and its corollary non-maleficence (balancing the benefits of treatment against risks and harms), and justice (fairness of access to benefits and risks based on equality and non-discrimination) (Beauchamp, 2013). Consensus on medical ethics is derived from international bodies such as the Universal Declaration on Bioethics and Human Rights published by UNESCO in 2005 (Wolinsky, 2006) and the World Medical Association's Declaration of Geneva (Parsa-Parsi, 2017). Accountability for individual ethical behavior rests with national health profession regulatory authorities, although there is variation in ethical approaches between countries (Rheinsberg et al., 2018). Military healthcare professionals are accountable to their national healthcare professional regulatory bodies for their ethical practice alongside provisions contained within military law and regulations.

Ethics for healthcare professions contrasts with the *military profession* in which the state explicitly authorizes armed forces members to use violence and take life. Military ethics concerns the moral challenges and dilemmas of professional military practice (Cook & Syse, 2010). Even in war, there are limits to governments' use of violence, where accountability is vested in international organizations such as the International Criminal Court and the United Nations. The body of law concerning war is commonly separated into *jus ad bellum*, the legality of states to go to war, and *jus in bello*, the use of military force during war. The legal framework for *jus in bello* is commonly expressed as the Laws of Armed Conflict (LOAC) or International Humanitarian Law (IHL). Outside conflict, many legal and ethical aspects of military service constrain the freedom of armed forces personnel compared to the rights commonly afforded to national citizens. Examples include the duty to follow a legal order, restrictions on freedom of expression, and the legal authority to kill on behalf of the state.

Military health professionals have rights and duties unique to their profession. However, they are also subject to military law throughout their service in the armed forces, including when off duty. Thus, MME lies at the intersection of medical and military ethics. It is underpinned by the principle that medical facilities and personnel are not parties

to conflict, are fundamentally neutral actors undertaking humanitarian roles (although outside the definition of humanitarian), and have specific rights and duties, including protection under IHL. Explicitly, this allows military medical units and personnel to wear the Red Cross (or other distinctive emblems, Red Crescent and Red Crystal) to indicate that they are non-combatants and may not be targeted. Based on these principles from a conflict setting, MME also applies in the non-conflict military environment and reflects the importance of ethical medical practice in the armed forces' unique context. Military health practitioners need to understand the ethical principles and challenges of both the healthcare and military professions. For individuals, this has been termed *dual professional loyalty*, where there could be a conflict between following military orders and professional codes of practice. This situation has led to a debate over the relative primacy of each ethical framework (London et al., 2006; Olsthoorn, 2019). This dual perspective may cover many topics. For example, from decisions about the use of military medical resources for non-military patients to obligations in the care of prisoners, consent for medical interventions to protect against military threats (e.g., protective vaccinations against biological weapons), reporting an individual's medical fitness for military duty, and the governance mechanisms that protect participants in secret military research programs from harm. Military leaders need to recognize these obligations held by their medical services, including their right to refuse an illegal order.

Military medical ethics during conflict

Most countries with armed forces also have military medical services to care for military personnel who become sick or injured because of conflict or other duties. The Military Medical Corps Worldwide Almanac[1] hosts a comprehensive list of military medical services. In Europe, the arrangements for treating and evacuating military casualties from the battlefield were inadequate, leading to the creation of the Red Cross movement in the second half of the 19th century. Concurrently, the Geneva Conventions established the duty of states to provide medical care to the injured on the battlefield based on medical need and the neutrality of medical services (Harroff-Tavel, 1989). After the Second World War, the 4 Geneva Conventions of 1949 (and associated protocols of 1977) set the foundations for contemporary IHL. These re-confirmed the duties of parties to conflict (states and non-state armed groups) in providing access to medical assistance for the wounded, shipwrecked, prisoners, and civilians. The International Committee of the Red Cross (ICRC) provides commentaries on these conventions (Henckaerts, 2012) and a searchable database with easy access to relevant sections by topic[2].

In summary, IHL requires that all parties to conflict ensure that anyone (combatant, prisoner, shipwrecked, or civilian) wounded or sick shall be treated humanely. To the full-

1 Military Medical Corps Worldwide available at: https://military-medicine.com/
2 ICRC Customary IHL Database available at: https://ihl-databases.icrc.org/customary-ihl/eng/docs/home

est extent practicable, without distinction except on medical need, and with the least possible delay, they shall receive the medical care and attention required by their condition. Despite these legal obligations, medical personnel and facilities face violence and attacks from state and non-state armed groups in many conflicts (McKay, et al., 2020). Under the "Healthcare in Danger" initiative, the ICRC has recently released practical guidance for armed forces on their responsibilities to protect healthcare during conflict (ICRC, 2020). This document highlights the importance of distinction in the use of force, including identification of medical facilities to avoid them being attached and coordinating with the whole healthcare system to minimize disruption and damage to health facilities and patient access. The previous is an important reference for military commanders, their medical advisers, and their legal advisers.

A group of influential military, professional, and humanitarian organizations co-published the Ethical Principles of Health Care in Times of Armed Conflict and other Emergencies in 2015 (W. ICRC et al., 2015). This document represents an international consensus on core ethical principles and, through the collective influence of the International Committee of Military Medicine, is gradually being incorporated into national policies and practice across the armed forces. It is underpinned by the statement that "ethical principles of health care do not change in times of armed conflict and other emergencies and are the same as the ethical principles of health care in times of peace." Therefore, health professionals remain bound by the legal and ethical duties of their professions with their primary task "to preserve human physical and mental health and to alleviate suffering." In addition, the ICRC has recently published guidance on the responsibilities of healthcare personnel working in armed conflicts and other emergencies, applying to both military and civilian healthcare workers (Coupland, 2020).

While volunteers comprise some armed forces (e.g., USA, Canada, UK, Australia), many countries have compulsory military services through conscription (e.g., Russia, China, Brazil, Israel, South Korea). In these countries, healthcare workers are obligated to join the armed forces, so work within military medical services may not be voluntary. Military medical personnel and facilities may display the Geneva emblems (Red Cross, Red Crescent, and Red Crystal) to identify them as protected entities. However, these may be hidden if camouflage is needed to reduce their risk of being targeted. Military medical personnel, and those assigned to medical duties, must also carry a card that identifies their role so that, if they become prisoners, they are solely retained to care for casualties. Medical units and medical personnel may not undertake acts *harmful to the enemy*; if they do, they will have committed a war crime. Military medical personnel may only use *light individual weapons* in their own defense or the defense of the wounded and sick in their charge. They are prohibited from renouncing their protection (they may not choose to become combatants) and must not undertake medical or scientific experiments on the wounded or sick unless directly for the patients' benefit. Military medical personnel may refuse to obey unlawful orders or compel them to disregard medical ethics (e.g., they must

report any mistreatment of prisoners to the appropriate authorities). On this basis, it is not contrary to medical ethics for healthcare workers to be employed in the armed forces as they are not combatants. Military leaders need to be aware of their responsibilities in ensuring that medical personnel and units are free to undertake their duties during conflict without compromising their professional practice. Many of these provisions are contained in national military laws and also covered during generic training in LOAC.

Military healthcare personnel must be specifically aware of the application of IHL to the following topics: impartial provision of emergency care (Messelken, 2019), access to medical care (M. C. Bricknell & dos Santos, 2011), rights of specific groups of patients (especially prisoners) (Lillywhite, 2021), decisions to withdraw curative treatment in the face of catastrophic injuries (Bennett, 2016), the protection afforded to medical personnel (Goniewicz & Goniewicz, 2013; Waard & Tarrant, 2013), right to bear arms and self-defense, identification of medical units and personnel, and specific prohibitions that apply to medical personnel. Therefore, military medical personnel will need specific education in these topics and IHL provisions and medical ethics as part of their training for their operational role.

There are other MME topics during armed conflict for debate and further discussion. Perhaps the most important concerns different definitions of *humanitarian*. Although the Red Cross movement was created to establish the role and neutrality of medical services to treat wounded combatants and prisoners of war, the definition of a *humanitarian* organization has narrowed to cover the principles of impartiality, humanity, neutrality, and operational independence (Slim, 2020). Thus, state-based organizations that undertake humanitarian work (including armed forces units) lie outside this definition because they are, de facto, instruments of the state as a security actor. This condition has particular implications for the conduct of military medical units and the importance of ethical decision-making in the use of military medical capabilities to provide healthcare for non-military populations to comply with international guidelines (Horne & Boland, 2020). The next subject for debate is the potential clash of the *triage* (sorting) application of emergency patients for military healthcare. The conflict lies between prioritization based on clinical need versus prioritizing on the ability to benefit, even the military mission. This clash is at the heart of clinical decision-making for a mass casualty event and also in the process of writing and applying *medical rules of eligibility* (M. L. Gross, 2017; Schulzke, 2016). Finally, we believe that the topic of *risk to military healthcare workers* has not yet been significantly debated. The issue concerns the legality of a military order that would compel military healthcare professionals to be exposed to the risk of significant injury, illness, or death and how this risk compares to other military personnel or equivalent civilian healthcare workers. There was some debate on this subject in the context of the risk of contracting an infectious disease in response to Ebola (Clay et al., 2016; Draper & Jenkins, 2017), and it is likely to emerge in the reflections on the COVID-19 pandemic (Dunn et al., 2020).

Military medical ethics in garrison

While much MME emphasis is placed on IHL, its non-operational component must not be neglected, as the majority of a military healthcare professional's clinical career will be spent on clinical duties in garrisons. The military healthcare professional has responsibilities to both their patients and their employer. In the military environment, this means that, in addition to the patient, they are responsible to their Commanding Officer and their patient's Commanding Officer. Issues in military medical ethics in the provision of healthcare in garrison (or non-combat) situations are very similar to ethical issues in occupational medicine. However, provisions in Military Law may place additional duties on all military employees for their behaviors and specific obligations that protect national security and reduce personal freedoms compared to civilians (e.g., prevention of membership of a trade union or restrictions of communication with the press). This situation has implications for two key areas of medical practice: consent and confidentiality.

The basic principle of individual autonomy applies to *consent to treatment* within the clinical *doctor-patient* relationship (Ataç et al., 2005). However, a patient's perception of freedom of choice over medical treatment might be constrained by rank or other power differentials in this relationship if the healthcare provider outranks the patient or vice versa (Coleman, 2020). Restrictions on the choice of healthcare provider due to military rules or payment systems that prevent access to care outside the military health system may exacerbate this situation. Military personnel should not be ordered to receive a specific medical treatment, although they can be ordered to attend for medical care. Furthermore, military health services should ensure fair access to medical treatment compared to civilians (e.g., cancer treatment). Finally, military personnel may be required to receive preventive medicine measures as a condition to their specific employment or role (e.g., vaccinations, anti-malarial prophylaxis), requiring their informed consent (Murphy et al., 2006), or as a mandatory requirement for military service (Eagan & Eagan, 2020). Such policies would require careful consideration between military and medical experts to ensure that the benefits to both the military force and the individual outweigh the risks of harm (Eisenstein & Draper, 2020).

There are similar risks associated with confidentiality of medical information in which an individual's health status may have significant implications for their military role. While a Commanding Officer may wish to know about their personnel's physical health (e.g., a broken bone), mental health conditions (e.g., depression), and *social health* (e.g., drug or alcohol misuse, family breakdown), the patient may wish this information to remain confidential. Thus, a system is required for reporting an individual's health status to the military chain of command by the medical services based on the individual's fitness for military duties without revealing sensitive medical information (Ferguson, 2013; Gibson & Coker, 2002). Concurrently, military health professionals are responsible for identifying the impact of military service on the health of military personnel and ensuring

that the chain of command takes appropriate preventive measures (especially concerning musculoskeletal injuries and mental health). There may be other situations in which it may be necessary to break patient confidentiality for public health purposes, such as monitoring an infectious disease outbreak. Likely, the arrangements for ethical oversight of this aspect of dual loyalty would be contained within military law or ethical guidance from professional bodies. Military leaders need to be aware that it is illegal for healthcare workers to reveal confidential medical information on their patients.

Beyond the clinical role in barracks, appropriate ethical oversight is particularly important in biomedical research on military personnel undertaken by military research institutions. There have been occasions where biomedical research has been undertaken by military medical personnel that has been unethical or even barbaric (Mellanby, 1947; Mobley, 1995). The power differential between researchers and subjects is even more apparent if rank or other potential sources of coercion (loss of pay, among others) undermine proper informed consent (Gross, 2019).

Military biomedical research might be necessary for *defensive* security purposes such as antidotes to chemical weapons or vaccines against biological weapons. However, it becomes more ethically challenging if military health professionals use their technical knowledge to support *offensive* security objectives such as military intelligence, research into new weapons (e.g., biological or chemical agents, novel use of the electromagnetic spectrum), or biological augmentation of human performance (e.g., drugs reducing the demand for sleep or improving mental performance), especially if side effects exist. Furthermore, military biomedical research may be classified on the grounds of national security, limiting independent oversight. These issues require very carefully constructed governance arrangements to protect both the subjects and the institutions from harm or allegations of research misconduct (Schmidt, 2019a, 2019b). Military leaders need to understand the potential gap between what is scientifically possible versus that which is ethically appropriate in using biomedical science to enhance military capability.

Beyond these particular topics, there is a clear requirement for a strategic policy on the topic of MME for military medical services that covers the gap between policy issued by national professional regulatory bodies and the application within a military environment (Hooper et al., 2015; Vollmuth, 2016). For example, the North Atlantic Treaty Organization (NATO) doctrine publication on military medical support uses the term *ethic** on ten occasions, referring to the obligation to comply with IHL and national laws and regulations (NATO, 2019). This document implies that members of this Alliance should have underpinning guidance on MME for their armed forces. This guidance should cover MME both on military operations and in garrison within a governance framework for the whole system (Marinescu & Gheorghiu, 2019). Alongside the development of doctrine and policy in MME, it is essential to incorporate this topic in training and education for military leaders, probably within promotion courses at the level of company commanders and above.

COVID-19 and Military/Medical Ethics

The response scale required to meet the challenges of the COVID-19 pandemic has been compared to a war against the disease (Sabucedo et al., 2020). As a result, many countries have mobilized their armed forces to support their national response to the crisis (Meyer et al., 2021). This section will outline some of the military and medical ethical issues associated with using the armed forces this way. COVID-19 has had implications for the armed forces in three broad areas: the impact of COVID-19 on the health of military personnel and military activities; the use of armed forces in support of general population COVID-19 control measures alongside the police; and the use of armed forces (especially military health services) to support the national health response to the crisis (M. Bricknell et al., 2020).

The primary responsibility of military leadership during the COVID-19 crisis has been to protect the health of armed forces personnel and maintain the military capability following their normal legal and ethical duties. This effort has required the armed forces to implement the same measures to reduce the risk of infection from COVID-19 as the rest of the national population. These include social distancing, wearing masks, working from home, COVID-19 testing, and tracing and isolating cases and contacts. In the early stages of the pandemic, the risk was perceived to be so great that some nations reduced their military contingents from overseas operations to reduce the risk to personnel. However, some military activities had to be maintained, including security operations. Moreover, the armed forces have been used to augment population-facing government services (e.g., policing and health services), exposing some military personnel to the risk of contracting COVID-19 in the course of their duties. This situation has required specific COVID-19 risk assessments and training for military personnel and judgments using a similar risk-benefit balance as other high-risk employments such as healthcare workers (Segal et al., 2020).

The armed forces have many non-health capabilities that can contribute to governments' crisis response, including command and control, planning, CBRN decontamination, and general security duties. In many countries, this aspect of civil-military relations is under careful constitutional control to ensure civilian oversight of armed forces in internal security matters. These legal and ethical measures could be considered as equivalent to the role of national and international law in setting the parameters of *jus ad bello*. Certainly, there is some concern that measures being taken to monitor and control populations as part of the *restriction of movement* during the COVID-19 crisis might be a prelude to enduring constraints on individual freedoms and greater autocratic power by governments (Kalkman, 2020).

The COVID-19 pandemic has affected military medical services alongside civilian health services. In some countries, military hospitals have contributed to the capacity of the broader national health system, either as specific COVID-19 units or as a general aug-

mentation to respiratory care and intensive care capacity (Dutton et al., 2021; Pasquier et al., 2020). Some countries have deployed military field hospitals to areas of marked crisis or assigned military medical personnel as reinforcement to civilian hospitals. Other components of military health systems have also reinforced the response, including medical logistics, laboratory services, and military biomedical research institutions. The impact of the COVID-19 crisis on medical ethics has been widely discussed in the context of triage, the allocation of scarce resources, and the conduct of medical research (Dunham et al., 2020). Military health personnel have had to comply with national and international ethical guidance, and indeed, have some practical experiences in managing crises that have informed civilian decision-making. Looking to the future, it is likely that the COVID-19 pandemic will have long-term implications for the legal and ethical aspects of civil-military relations and the role of armed forces (including military medical services) in the national response to pandemics and other health crises (Wilén, 2021). It will be esssential to capture all the lessons from civil-military cooperation during the response to the COVID pandemic, including the ethical issues, and incorporate these into civil-military disaster response planning and training.

Conclusions

This paper has provided an overview of the subject of military medical ethics and its implications for the practice of healthcare workers within a military health system. It is argued that this subject is relevant in the broader context of military ethics for military leaders and of equal importance to biomedical ethical subjects for military healthcare workers. There are widely agreed fundamentals based on IHL, especially the Geneva Conventions and general medical ethics. However, the foundational challenge of *dual loyalty* between professions can create tensions for ethical medical practice. Beyond the individual topics discussed in this paper, there is a clear requirement for a strategic policy on MME for both military and military health professionals that covers the gap between policy issued by national professional regulatory bodies and the application within a military environment. For example, the North Atlantic Treaty Organization (NATO) doctrine publication on military medical support uses the term *ethic* on ten occasions, referring to the obligation to comply with IHL and national laws and regulations (NATO, 2019). This document implies that members of this Alliance should have underpinning guidance on MME for their armed forces. Policy guidance should cover MME both on military operations and in garrison within a governance framework for the whole system (Marinescu & Gheorghiu, 2019). It is unlikely that either the legal system or the professional regulatory system would accept ignorance as a defense. Therefore, military medical ethics is an important topic for general professional military education, as well as for military healthcare professionals.

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References

Ataç, A., Guven, T., Uçar, M., & Kir, T. (2005). A Study of the Opinions and Behaviors of Physicians with Regard to Informed Consent and Refusing Treatment. *Military Medicine,* 170(7), 566-571. https://doi.org/10.7205/milmed.170.7.566

Beauchamp, T. L. (2013). *Principles of biomedical ethics* (7th ed.). New York, New York: Oxford University Press.

Behm, A. (2020). War Crimes: Where does ultimate responsibility lie? Retrieved from https://australiainstitute.org.au/post/war-crimes-where-does-ultimate-responsibility-lie-only-a-royal-commission-will-determine-the-answer/

Bennett, R. A. (2016). Ethics surrounding the medical evacuation of catastrophically injured individuals from an operational theatre of war. *Journal of the Royal Army Medical Corps,* 162(5), 321-323. https://doi.org/10.1136/jramc-2015-000574

Bricknell, M., Homan, Z., Gheorghe, A., Gad, M., Kazibwe, J., & Quirk, E. (2020). *An Analysis of the National Responses to the COVID-19 Pandemic Through the Lens of Medical Military Support Requiremebts*. Norfolk, Virginia: NATO Allied Command Transformation Retrieved from https://www.openpublications.org/single-post/an-analysis-of-the-national-responses-to-the-covid-19-pandemic-through-the-lens-of-medical-militaryA., Guven, T., Uçar, M., & Kir, T. (2005

Bricknell, M. C., & dos Santos, N. (2011). Executing Military Medical Operations. *Journal of the Royal Army Medical Corps,* 157(Suppl. 4), S457-S459. https://doi.org/10.1136/jramc-157-4s-10

Coleman, N. (2020). The Impact of the Duty to Obey Orders in Relation to Medical Care in the Military. In *Ethics of Medical Innovation, Experimentation, and Enhancement in Military and Humanitarian Contexts*, 37-52, Springer.

Cook, M. L., & Syse, H. (2010). What Should We Mean by 'Military Ethics'? *Journal of Military Ethics,* 9(2), 119-122. https://doi.org/10.1080/15027570.2010.491320

Coupland, R. B., Alex. (2020). *Health Care in Danger: The responsibilities of health-care personnel working in armed conflicts and other emergencies*. https://www.icrc.org/en/publication/4104-health-care-danger-responsibilities-health-care-personnel-working-armed-conflicts

Dunham, A. M., Rieder, T. N., & Humbyrd, C. J. (2020). A Bioethical Perspective for Navigating Moral Dilemmas Amidst the COVID-19 Pandemic. *The Journal of the American Academy of Orthopaedic Surgeons,* 28(11), 471-476. https://doi.org/10.5435/JAAOS-D-20-00371

Dutton, L. K., Rhee, P. C., Shin, A. Y., Ehrlichman, R. J., & Shemin, R. J. (2021). Combating an invisible enemy: the American military response to global pandemics. *Military Medical Research,* 8(1), 8. https://doi.org/10.1186/s40779-021-00299-3

Eagan, P., & Eagan, S. M. (2020). From the Lab Bench to the Battlefield: Novel Vaccine Technologies and Informed Consent in *Ethics of Medical Innovation, Experimentation, and Enhancement in Military and Humanitarian Contexts*, 69-85: Springer.

Eisenstein, N., & Draper, H. (2020). Medical Prophylaxis in the Military: A Case for Limited Compulsion in *Ethics of Medical Innovation, Experimentation, and Enhancement in Military and Humanitarian Contexts*, 53-67: Springer.

Ferguson, A. H. (2013). Medical Confidentiality in the Military in *Military Medical Ethics for the 21st Century*, 209-224: Routledge

Gibson, T., & Coker, W. J. (2002). Medical Confidentiality: The Right of a Commanding Officer to Know. *Journal of the Royal Army Medical Corps,* 148(2), 130-136. https://doi.org/10.1136/jramc-148-02-05

Goniewicz, M., & Goniewicz, K. (2013). Protection of medical personnel in armed conflicts-case study: Afghanistan. *European journal of trauma and emergency surgery: official publication of the European Trauma Society,* 39(2), 107-112. https://doi.org/10.1007/s00068-013-0251-0

Gross, M. L. (2019). Military medical research in Britain and the USA: the challenge of informed consent. *Journal of the Royal Army Medical Corps,* 165(4), 298-302. https://doi.org/10.1136/jramc-2018-001023

Harroff-Tavel, M. (1989). Neutrality and Impartiality—The importance of these principles for the International Red Cross and Red Crescent Movement and the difficulties involved in applying them. *International Review of the Red Cross (1961-1997),* 29(273), 536-552. https://doi.org/10.1017/S0020860400074878

Henckaerts, J.-M. (2012). Bringing the Commentaries on the Geneva Conventions and their Additional Protocols into the twenty-first century. *Int'l Rev. Red Cross,* 94, 1551. https://international-review.icrc.org/sites/default/files/irrc-888-henckaerts.pdf

Hooper, C. R., Ryan, J., Pelham, E., & Mannion, S. (2015). Military medical ethics: a call to regulatory and educational arms. *Medicine, Conflict and Survival, 31*(1), 13-20. https://doi.org/10.1080/13623699.2015.1013391

ICRC. (2020). *Protecting healthcare: Guidance for the Armed Forces*. Geneva: ICRC.

https://www.icrc.org/en/publication/4504-protecting-healthcare-guidance-armed-forces

ICRC, W., ICMM, IFMSA, FIP, WCPT. (2015). Ethical principles of health care in times of armed conflict and other emergencies. https://www.icrc.org/en/document/common-ethical-principles-health-care-conflict-and-other-emergencies

Imbeault, M. (2018). The fate of the civilians in the new just war: a Canadian approach. *Revista Científica General Jose Maria Cordova,* 16(22), 23-36. https://doi.org/10.21830/19006586.322

Kalkman, J. P. (2020). Military crisis responses to COVID-19. *Journal of Contingencies and Crisis Management*. 29(1), 99-103. https://doi.org/10.1111/1468-5973.12328

Lillywhite, L. (2021). Medical services policy in respect of detainees: evolution and outstanding issues. *BMJ Mil Health,* 167(1), 23-26. https://doi.org/10.1136/jramc-2019-001156

London, L., Rubenstein, L. S., Baldwin-Ragaven, L., & Van Es, A. (2006). Dual Loyalty among Military Health Professionals: Human Rights and Ethics in Times of Armed Conflict. *Cambridge Quarterly of Healthcare Ethics,* 15(4), 381-391. https://doi.org/10.1017/S096318010606049X

Marinescu, A., & Gheorghiu, S. (2019). Ethics Controlling. Military Medical Practice. *Logos Universality Mentality Education Novelty: Philosophy & Humanistic Sciences, 7*(1), 51-77. https://doi.org/10.18662/lumenphs/18

McKay, D., Heisler, M., Mishori, R., Catton, H., & Kloiber, O. (2020). Attacks against health-care personnel must stop, especially as the world fights COVID-19. *The Lancet,* 395(10239), 1743-1745. https://doi.org/ https://dx.doi.org/10.1016%2FS0140-6736(20)31191-0

Mellanby, K. (1947). Medical experiments on human beings in concentration camps in Nazi Germany. *British Medical Journal, 1*(4490), 148. https://doi.org/10.1136%2Fbmj.1.4490.148

Messelken, D. (2019). The 'peace role ' of healthcare during war: understanding the importance of medical impartiality. *J R Army Med Corps, 165*(4), 232-235. https://doi.org/10.1136/jramc-2018-000982

Meyer, C., Bricknell, M., & Pacheco Pardo, R. (2021). How the COVID-19 crisis has affected security and defence-related aspects of the EU in *Part II - In Depth Analysis*: European Parliament. https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/653623/EXPO_IDA(2021)653623_EN.pdf

Mileham, P. (2020). *Jus Post Bellum: Restraint, Stabilisation and Peace*: Brill | Nijhoff.

Miles, S. H. (2004). Abu Ghraib: its legacy for military medicine. *The Lancet,* 364(9435), 725-729. https://doi.org/10.1016/S0140-6736(04)16902-X

Mobley, J. A. (1995). Biological Warfare in the Twentieth Century: Lessons from the Past, Challenges for the Future. *Military Medicine,* 160(11), 547-553. https://doi.org/10.1093/milmed/160.11.547

Murphy, D., Dandeker, C., Horn, O., Hotopf, M., Hull, L., Jones, M., . . . Wessely, S. (2006). UK armed forces responses to an informed consent policy for anthrax vaccination: a paradoxical effect? *Vaccine,* 24(16), 3109-3114. https://doi.org/10.1016/j.vaccine.2006.01.043

NATO. (2019). *Allied Joint Doctrine for Medical Support*. NATO Standardisation Office (NSO). https://www.coemed.org/files/stanags/01_AJP/AJP-4.10_EDC_V1_E_2228.pdf

Olsthoorn, P. (2019). Dual loyalty in military medical ethics: a moral dilemma or a test of integrity? *Journal of the Royal Army Medical Corps,* 165(4), 282-283. https://doi.org/10.1136/jramc-2018-001131

Parsa-Parsi, R. W. (2017). The Revised Declaration of Geneva: A Modern-Day Physician's Pledge. *JAMA,* 318(20), 1971-1972. https://doi.org/10.1001/jama.2017.16230

Pasquier, P., Luft, A., Gillard, J., Boutonnet, M., Vallet, C., Pontier, J.-M., Escarment, J. (2020). How do we fight COVID-19? Military medical actions in the war against the COVID-19 pandemic in France. *BMJ Military Health*, bmjmilitary-2020-001569. https://doi.org/10.1136/bmjmilitary-2020-001569

Rheinsberg, Z., Parsa-Parsi, R., Kloiber, O., & Wiesing, U. (2018). Medical oath: use and relevance of the Declaration of Geneva. A survey of member organizations of the World Medical Association (WMA). *Medicine, Health Care and Philosophy,* 21(2), 189-196. https://doi.org/10.1007/s11019-017-9794-x

Sabucedo, J.-M., Alzate, M., & Hur, D. (2020). COVID-19 and the metaphor of war (COVID-19 y la metáfora de la guerra). *International Journal of Social Psychology,* 35(3), 618-624. https://doi.org/10.1080/02134748.2020.1783840

Schmidt, U. (2019a). Creating a 'Father Confess': the origins of research ethics committees in UK military medical research, 1950–1970. Part I, context and causes. *Journal of the Royal Army Medical Corps,* 165(4), 284-290. https://doi.org/10.1136/jramc-2019-001206

Schmidt, U. (2019b). Creating a 'Father Confessor': the origins of research ethics committees in UK military medical research, 1950–1970. Part II, origins and organisation. *Journal of the Royal Army Medical Corps,* 165(4), 291-297. https://doi.org/10.1136/jramc-2019-001207

Segal, D., Rotschield, J., Ankory, R., Kutikov, S., Moaddi, B., Verhovsky, G., Karp, E. (2020). Measures to Limit COVID-19 Outbreak Effects Among Military Personnel: Preliminary Data. *Military Medicine,* 185(9-10), e1624-e1631. https://doi.org/10.1093/milmed/usaa112

Stahl, R. Y., & Emanuel, E. J. (2017). Physicians, Not Conscripts — Conscientious Objection in Health Care. *The New England Journal of Medicine,* 376(14), 1380-1385. https://doi.orghttp://dx.doi.org/10.1056/NEJMsb1612472

Vollmuth, R. (2016). Healthcare Professionals between Medical Ethics and Military Duties. 2/16. https://military-medicine.com/article/3198-healthcare-professionals-between-medical-ethics-military-duties.html

Waard, P., & Tarrant, J. (2013). Protection of Military Medical Personnel in Armed Conflicts. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2269600

Wilén, N. (2021). The Military in the Time of COVID-19. *Prism: a Journal of the Center for Complex Operations,* 9(2), 21-33. https://ndupress.ndu.edu/Media/News/News-Article-View/Article/2541745/the-military-in-the-time-of-covid-19-versatile-vulnerable-and-vindicating/

Wolinsky, H. (2006). Bioethics for the world. *EMBO Reports,* 7(4), 354-358. https://doi.org/10.1038/sj.embor.7400670