During international deployment in contexts where military, humanitarian and development missions coexist, the roles of military healthcare professionals (referred to as HCP, these include the following: physicians, nurses, medical technicians, allied health professionals) often overlap and at times conflict. Military HCP may be asked to undertake the work of healers, soldiers, and development workers simultaneously or in succession which can create challenging ethical conflicts that go beyond those commonly dealt with in the medical ethics literature. In these situations, the principles of medical ethics apply but may be prioritized differently by various actors due to varying internal and external influences and perceptions. For example, triage and just resource allocation, treatment protocols and standards of care, informed consent, patient autonomy, and the protection and promotion of human rights may diverge depending on the situation. These issues become all the more pronounced during armed conflicts, where military HCP have to consider both their patients’ interests and those of the fighting force. HCP may feel pressure: To participate in medical caravans in order to “win hearts and minds”; to certify soldiers as fit for combat when this might be debated; to violate patient privacy for military ends; or to treat soldiers, combatants, or civilians against their will. The potential for and variety of dilemmas is further amplified in coalition settings where multiple militaries, each with their own codes and procedures, are cooperating on deployments, including sharing medical facilities. Questions thus arise regarding the moral responsibility of military HCP in armed conflict: To which institution or profession do they owe primary allegiance? Which professional code(s) should guide their behaviour? And what should they do when they are bound by multiple and sometimes conflicting moral commitments?

These are not easy questions. The literature in bioethics – and military medical ethics in particular – can be a helpful starting point, but it is diverse and even polarized regarding the appropriate roles and responsibilities of military HCP. Further, this literature tends to be grounded in conceptual analyses, with little reference to empirical studies. In 2010, we – the Ethics in Military Medicine Research Group (EMMRG, www.emmrg.ca) – initiated an empirical bioethics project, with the support of the Surgeon General’s Office of the Canadian Armed Forces, to study the ethical tensions and dilemmas experienced by HCP who had been deployed on international missions. The ultimate goal of EMMRG is to develop ethical tools or guidance to help military HCP be better prepared to respond to the ethical tensions that arise in professional practice by increasing ethical competence and confidence, which will in turn enhance the care they provide for patients. Here, we present a summary of the findings from our study

What the medical ethics literature tells us

The literature on military medicine often discusses the political and social roles of HCP as well as their roles in relation to their patients. Views on military HCP roles can be grouped into three (not mutually exclusive) categories: 1) primacy of classic bioethics principles, 2) adherence to professional codes of ethics, and
3) conflicts arising from dual/double professions and loyalties.

1. The primacy of classic bioethics principles
   According to this view, in all circumstances and at all times, military HCP should act as HCP: Prioritizing patients’ needs as required by medical ethics. This perspective has led some to consider it unethical for physicians to be in the military, and others to plead for a return to medical professionalism founded on the pacifist nature of the profession. Dilemmas arise when, because of perceived operational requirements and priorities, HCP feel obliged to subordinate patient interests or are not able to provide what they consider appropriate care. Military principles that aim to maintain the fighting force and obedience thus conflict with principles that underlie medical ethics, such as respect for patient autonomy and non-maleficence. There is a tension between the military and medical contexts and there is a tendency to assume that this opposition is the primary source of ethical problems for military HCP.

2. A problem of divergent ethical norms
   Others believe that traditional bioethics principles are difficult to apply in situations such as military operations, where collective needs are also at stake, namely national security. Medical ethics, it is argued, cannot be the same in times of conflict as in peacetime. Ethics in times of war or in public health emergencies is special because it must be directed at a common good. The practical aspects of healthcare – including the technologies being used, the resources available, the diversity of patient populations – are also becoming increasingly complex. In the case of armed conflicts, HCP in the military must sometimes balance conflicting priorities regarding operational readiness or national security with medical ethics. Yet, according to the World Medical Association (WMA),

   “Medical ethics in times of armed conflict is identical to medical ethics in times of peace [...] If, in performing their professional duty, physicians have conflicting loyalties, their primary obligation is to their patients; in all their professional activities, physicians should adhere to international conventions on human rights, international humanitarian law and WMA declarations on medical ethics.”

   HCP may thus have conflicting directives and norms in situations involving collective needs, between those of their employer (the military) and their profession (medicine, nursing, etc.).

3. A problem of dual professions
   For some scholars, the ethical challenges of military medicine are due to the fact that two distinct professions are involved, each having its own code of ethics and specific roles; these cannot always (or ever) be reconciled. Conflicts between professional values and ethics create difficult tensions labelled as “dual loyalty” or “dual role” situations. However, the concept of dual loyalty includes a range of different concepts that require further definition, such as profession, professionalism, values, role conflict, conflict of interest, social/political responsibility, and the role of human rights in health. How and to which profession are HCP to identify when they are called upon to be (either separately or at the same time) healer, soldier, or development worker? And must this invariably be a choice between one and the other, or is it possible to be both military and healthcare professional?

Synthesis
   One of the major limitations of the literature, however, is that the key actors (e.g. military HCP, combatants, non-combatants, governments) involved in the ethical challenges are often presented individually, without pointing to their dynamic interrelations, or with insufficient regard to contextual factors that shape military HCP experience of ethical dilemmas and tensions. Dilemmas are often examined independently and not presented in their full complexity. Consequently, in almost all cases,
the HCP-patient relationship is viewed in opposition to other stakeholders (e.g. military organization, state, and society). Stereotypical judgments are often applied with regards to medicine and other healthcare professions (idealization) or the military (utilitarian approach, over-identification with combatants, authoritarianism). Discussions focus on different ethical obligations or responsibilities of HCP, but the limits of these responsibilities are rarely made explicit. Ethical tensions are raised to defend a point of view, either to: a) emphasize the pressure of military priorities on HCP, b) highlight the inconsistency of rules, codes of ethics, and humanitarian law with the military reality, or c) discuss policies and ideologies (human rights) that justify or reject the participation of HCP in armed conflicts. Finally, theoretical analysis is often based on reported facts and anecdotal evidence (e.g. physician participation in interrogation) or conceptual analysis of problems (e.g. triage). In some rare cases, military physicians have written articles, books, and blogs to present their views or share their experiences. Few studies have asked military HCP about the kind of ethical dilemmas or conflicts that they face while working in a military context; there have, however, been comparable studies of humanitarian HCP that provide pertinent insights.

What our empirical findings tell us

To better understand the nature of and means for dealing with ethical tensions and dilemmas arising in the context of military medicine, we interviewed 50 HCPs working in the Canadian Armed Forces who had been deployed in situations of armed conflict, natural disaster, or during peacekeeping missions. Our participants included physicians, nurses, physiotherapists, medical technicians (MedTechs), and a physician’s assistant; the vast majority were officers; and they had experience on missions in Afghanistan, Bosnia, the Golan Heights, Haiti, and Sri Lanka. We noted early in our analysis that the sources of ethical challenges could be broadly grouped into the same four major categories identified by Schwartz and colleagues in their study of the ethical challenges faced by humanitarian health workers: 1) resource scarcity, 2) historical, cultural or social structures, 3) policies and agendas, and 4) professional roles. These sources of ethical challenges were made particularly complex because of the nature of working in conflict zones or as part of multinational forces and for variable mission lengths (e.g. weeks or months).

**Source 1: resource scarcity**

Participants frequently talked about the challenges posed by resource scarcity, both in terms of medical equipment and personnel. For example, many physicians and nurses who were used to practicing medicine in Canada found it difficult to accept that they could not provide the same level or continuity of care “in-country” that they would expect to provide “back home”. Additionally, our participants described tensions associated with the best allocation of available resources. For example, MedTechs on patrol or physicians at a Forward Operating Base in Afghanistan recounted dilemmas about limiting or withholding treatment from local nationals (civilian, police, military) because they had to conserve resources for Canadian or coalition (i.e. NATO) casualties. Others recounted examples of what they judged to be “problematic” heroic measures being provided by colleagues to locals or unnecessary or futile medical interventions on soldiers.

**Source 2: historical, cultural, or social structures**

Differences in cultural or religious beliefs were noted by many to be a source of important ethical challenges in the provision of care. In particular, issues around religious views about bodily integrity (e.g. amputation, end of life) were troubling or sources of discomfort for military HCP. Gender was also a concern, in three distinct ways: Female military profes-
sionals working in highly patriarchal contexts facing challenges to their professional authority, HCP treating local female patients who had been the clear victims of gender-based violence, and the lack of autonomy of local female patients. Many participants were also frustrated (and even distressed) by the inequity in access to health services between Canadians and local nationals caused by the absence of more robust local health services, particularly when they knew that transferring patients to local health services would mean the patient’s death due to a lack of resources, training, personnel, and infrastructure.

Source 3: policies
International laws and conventions provided background ethical guidance, but the primary policies that participants referenced were the Medical Rules of Eligibility (MROE) because this guide provided practical and clear decision-making criteria. For example, in Afghanistan, the MROE prioritized treatment of soldiers and detainees (but with inter- and intra-force differences), and restricted HCP interventions to the preservation of “life, limb, or eyesight”. While providing clarity, the MROE created tensions, particularly when HCP were deciding whether to treat victims of collateral damage or sick or injured civilians. The application of the MROE (e.g. in discharge policies) also sometimes changed depending on the physician in charge, so HCP sometimes experienced conflicting views of what was considered “ethical care”. This was exacerbated in cases where healthcare was treated instrumentally (e.g. for trust-building). Others described frustration and worry about patients for whom continuity of care was impossible. Finally, a recurring concern was the challenge (and distress) of providing care for children given that pediatrics is not part of standard military care and was outside the MROE.

Source 4: professional roles
The mixed nature of international combat forces and HCP, as well as tensions between the different HCP roles, created important differences in expectations and professional norms about the treatment of different types of patients (e.g. combatants and non-combatants), with particular tensions arising with US forces due to the involvement of US military HCP in interrogation. Interestingly, and unlike the emphasis placed on this issue in the literature, few of our participants mentioned problems with dual loyalty or not identifying themselves as part of the Canadian Armed Forces. While some clearly stated that they were HCP first, they also accepted that they worked for the military institution; others did not see any problem with being both HCP and members of the military, feeling that the two were integral parts of their professional identity.

Conclusion
Our findings clearly illustrate the complex nature of the ethical issues associated with international deployment for military HCP in situations of war, disaster, or peacekeeping, and how these issues are shaped by the professional identities of HCP and the military institution. HCP experience significant ethical challenges in the field, and for which they may sometimes feel ill prepared. Although distinct from mental health issues, in extreme cases and if not effectively resolved, ethical issues or dilemmas can become sources of moral distress resulting in refusal to go on future deployments and can contribute to symptoms or cases of PTSD or result in HCP leaving the military or, worse, causing harm to themselves or others; this then also affects the chain of command, the team, and military organization as a whole (i.e. retention rates).

Further, in comparing the bioethics literature (and specifically that focused on ethics in mili-
tary medicine) with the experiences of Canadian military HCP who participated in our study, we noted a disjunction in some areas regarding what constitutes the “real” ethical problems facing HCP in their practice. For example, the issue of dual loyalty, so widely discussed in the literature, was not a primary source of concern. Instead, major challenges arose regarding issues that are also common in public health and especially in humanitarian contexts; that is, dealing with resource scarcity and inequity, the inability to ensure continuity of care, and having to accept that the level of healthcare provided “back home” is often impossible to deliver in international deployments. Where there is a clear alignment between our empirical findings and the bioethics literature is with regards to the lack of and need for better ethics education.

While Canadian military HCP undertake the same ethics training as the rest of the Canadian Armed Forces, military medical ethics training was felt to be ad hoc and inconsistent. As one participant noted, “[HCP] take it upon themselves to do some sort of medical ethics training if there is somebody on the team that decides that’s something they should do” but “a lot of ethics in healthcare falls back to what you learn in … school, which is poor, it’s poor at best.” That it is being provided at all, often at the initiative of individuals who have had previous deployment experience, is a testament to the need for and value of providing more specialized ethics training for military HCP.

Ethics training must be grounded in the complex realities faced by military HCP working in diverse environments (e.g. whether in conflict zones or in response to natural disasters). Case studies based on such experiences would be excellent teaching tools to develop and use in pre-departure and continuing ethics education. Further, a recurring theme in our interviews was the importance of having both formal and informal opportunities (i.e. where “rank doesn’t matter”) to discuss as a team – pre-departure and in-field – the ethical challenges that arise in practice and to debrief following particularly difficult situations. Building on this, it would be possible, for example, to design mechanisms that reinforce dialogue as an integral part of ethics training (group discussions) as well as being the basis for in-field problem solving and decision-making.

Our study reinforced our initial conviction (partial as it may be, coming from a group of bioethicists!) that military HCP can benefit from context- and profession-specific ethics training. Our objective, now, is to find opportunities to continue working with the Canadian Armed Forces (and other militaries) to develop innovative ethics training tools (e.g. mixing in-class, mobile, and online formats) that are specifically designed to meet the needs of military HCP, both in terms of content and format. The ultimate goal is to be able to give military HCP the ethics training and tools they need to develop the ethics competencies necessary to navigate their various (and potentially conflicting) professional, social, and political roles while effectively addressing the ethical challenges that they encounter in practice.

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