

## Editorial

# Ethics and critical care in the new millennium

Laura Hawryluck\* and David Crippen†

\*Assistant Professor, Critical Care Medicine, University Health Network, Member, Joint Centre for Bioethics, University of Toronto, Ontario, Canada

†Associate Director, Departments of Emergency and Critical Care Medicine, Saint Francis Medical Center, Pittsburgh, Pennsylvania, USA

Correspondence: Laura Hawryluck, [laura.hawryluck@utoronto.ca](mailto:laura.hawryluck@utoronto.ca)

Published online: 11 January 2002

*Critical Care* 2002, **6**:1-2

© 2002 BioMed Central Ltd (Print ISSN 1364-8535; Online ISSN 1466-609X)

### Abstract

Attempts to improve survival demand that intensivists practice at the forefront of technology. In the present millennium, ethical challenges will arise during the development and use of emerging therapeutics, and when helping patients and families to decide how these tools should be used in the context of individual and societal goals, values and beliefs. The future of critical care depends on our abilities to think critically through the ethical challenges posed by the exciting therapeutics that draw us to the field. In the coming months, *Critical Care Forum* will explore the ethical issues that so profoundly affect our ability to provide meaningful health care.

**Keywords** bioethics, critical care, education, research ethics

As the critical care community enters the new millennium, it will continue to encounter ethical challenges with regard to allocation, application, and use of newly emerging therapeutics. *Critical Care Forum* accepts this challenge and, in the coming months, will feature regular articles on ethical issues specific to the field.

The evidence found in medical literature suggests that during the past 30 years we have learned a great deal about critical illness and how to keep patients alive. Unfortunately, buoyed by these successes, we have lagged behind in helping patients and their families to decide how our therapeutic tools should be used in the context of individual and societal goals, values, and beliefs. For instance, our technological advances have enabled us to maintain moribund patients in a state of suspended animation for prolonged and sometimes indefinite periods; however, just because we can, does that mean we should? We have also not yet decided how to ensure that any potential benefits are fairly and equitably accessible to the greatest number of patients, if indeed the greatest number is the best test of ethical use of our resources.

As critical care medicine continues to advance we will develop more and more therapeutics – some of which will be expensive to administer – that may be beneficial to patients. In the face of limited health care budgets all over the world,

however, we need to talk more about how these advances will affect the interests of the population as a whole; otherwise we risk reaching a point at which marginal gains to individuals threaten the welfare of the majority.

Dilemmas arise when one practices medicine and designs research at the forefront of technology, for clinicians and ethics review boards alike. Research and development of novel therapeutics demand that investigators address the ethics of their proposed methods when determining how treatments should be used. Much of the research intensivists perform depends on recruiting patients with similar spectra and severities of illness. Researchers often struggle to design trials within these constraints, and often depend on multicentered trials in order to achieve sufficient statistical power to detect differences in outcomes. However, the same researchers are often frustrated by the seemingly variable decisions made by research ethics boards. If a research proposal is designed according to ethical standards, such as those outlined in the Declaration of Helsinki, then why does such variability exist? Should it exist? Is such variability perhaps protective of research subjects? How can it be avoided or overcome? Furthermore, what responsibility do researchers and research ethics boards bear when the interventional treatment being studied carries significant risks for the subjects? Also, if a pharmaceutical company is

involved in the design and/or funding of a project, then what are the responsibilities and obligations of the investigator to future subjects and to the research ethics board if adverse events occur?

Unfortunately, little guidance exists to help, but these are only some of the challenges we confront as we seek to expand our knowledge in critical care. If we fail to respond to these challenges, or fail to anticipate and/or respond to the ethical issues and questions posed by research ethics boards, then we risk failing to discover more novel therapeutics and to explore how these may best be used to improve further the survival and decrease the morbidity of our patients.

Until recently, few critical care training programs included structured teaching in bioethics; of those that do, most quote principlism (autonomy, beneficence, nonmaleficence and justice) as the sole guiding light. However, as critical care practitioners, we confront more ethical dilemmas (both in clinical practice and research) than do our colleagues in other fields. Often we are challenged either to facilitate decision-making or to resolve conflicts between the health care team and the patient/substitute decision-maker over whether our life-sustaining tools should be used or we should offer as yet experimental therapies in a last ditch attempt to save a life. What costs to the patient who must undergo our therapies; to the health care team, who must perform often invasive, painful procedures when the chances of survival are very poor; and to society are we all willing to accept? Moreover, the acuity and severity of critical illness means, more often than not, that we have little time to resolve these ethical dilemmas. We must discard the notion that the skills to approach and resolve ethical dilemmas are innate in all intensivists, and instead strive to create and develop our ability to think critically in bioethics so as to confront the unique challenges that lie ahead.

In a perfect world there would be a perfect balance of supply and demand between health care providers and the public; a balance between the health care the public needs and that which its want; and a balance between what health care providers want to provide and what the public wants to be able to access. This balance clearly does not exist, especially in critical care. Largely due to the media, the general public is aware that current technology is capable of indiscriminately maintaining some vital bodily functions, but they may not understand that this same technology does not always heal the underlying disease. As intensivists, we must be able to discuss these issues with as much facility as we do the expensive magic bullets for systemic sepsis.

The future of critical care and how we get we get there depends directly on our abilities to think critically through the ethical challenges posed by the exciting therapeutics that draw us to the field. We also need to think critically about our ability to reconcile the interests of society, patients, their

families, and critical care practitioners, using logic and reaching agreement on common goals. In the coming months, *Critical Care Forum* will explore these and the other ethical issues that so profoundly affect our ability to provide meaningful health care through debates, case discussions, roundtable discussions, and thought-provoking articles.

### **Competing interests**

None declared.