During the Cold War, the US government used its own citizens as fodder for a wide variety of secret radiation experiments. The studies included injecting inpatients with plutonium, administering radioactive tracers to children living in institutions, exposing patients who were terminally ill with cancer to total-body irradiation, irradiating the testicles of prisoners, putting soldiers in close proximity to atomic-bomb blasts and intentionally releasing radioactivity into the environment. The extraordinary tale of these experiments, and their implications for the conduct of research today, is detailed in this report.

To understand the genesis of these experiments, and to judge them fairly, we have to look back to the early days of the Cold War. At the time, many in the US government thought that nuclear confrontation with the Soviet Union was inevitable. Little was known about the effects of radiation on humans, and there was substantial concern for the safety of workers in the rapidly expanding nuclear industry. Also, radiation seemed to hold great promise as a tool for scientific inquiry and medical therapy.

What went wrong? It is clear from the detailed analysis of individual experiments that most of the studies placed subjects at minimal risk. Much of the harm stemmed from the veil of secrecy surrounding experiments conducted in the name of national security. Subjects were often not informed about the true nature of the experiments because aspects of the research were classified. Even when subjects were informed, though, disclosure was often inadequate as a result of the investigators' and institutions' ignorance of the rules governing research at the time, which were contained in the Nuremberg Code.

What lessons can we learn? Since Canada is now revising its own guidelines governing research, this is a timely question. Although the book is devoted exclusively to US research, Canada's involvement in mind-control experiments funded by the US Central Intelligence Agency in the 1950s, and, more recently, in placebo research in psychiatry indicates that we too are willing to sacrifice individual research subjects to the "greater good." One lesson from the radiation experiments is that informed consent alone is inadequate protection for study participants. Research conducted in the interest of national security poses problems that have received little consideration to date. If aspects of research are secret, how can they be reviewed for ethical and scientific acceptability? Similarly, how can subjects be informed adequately? Perhaps secret research ethics boards must ensure that studies are scientifically sound and offer a favourable balance of benefits and risks before potential subjects are approached for consent.

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Advances in biomedical technology seem to many to outpace society's capacity to manage and control their social and ethical implications. From sheep cloning to new reproductive technologies to the aggressive interventions undertaken in intensive care units, medical technology and engineering seem to have lives of their own, driving patient care in unforeseen directions. Can we harness such technology, or are we its slaves?

The editors introduce this collection of essays with the suggestion that we need to rethink "cherished values about the moral status of animals, children, the dying, the mentally compromised, and... those who are..."
healthy.” This in turn should lead to reflections on the nature of personality and the virtues and moral theories that we need to espouse. These are ambitious goals. The editors see scientific discoveries as challenging our basic values and hope their book will help educated readers deal more openly with the issues raised by the new medical culture.

Certainly, this book covers a diverse range of topics, from “birth to death”: genetics, new reproductive technologies, neonatal care, transplantation, aging, dying, euthanasia, medical research and the environment. Each section begins with a scientific sketch of the area and ends with several articles on the ethical issues involved. Many of the contributing authors are well known: Dan Callaghan, Eric Casell, Ronald Cranford, Raanon Gillon, Al Jonsen and Robert Levine. The best written and informative section is that on human medical research; the poorest and least comprehensive sections are those on transplantation and the environment. The section on transplantation has a lot to say about paying for organs and almost nothing to say about scarce resource allocation. The essays are, unfortunately, largely American in focus.

The scope of the ethical articles tends to be general, and there is little empirical content. These articles would be most helpful as introductory material for those with little or no familiarity with the topics. Many topics commonly discussed in medical ethics textbooks — truth telling, confidentiality and consent — are missing here. Although the editors acknowledge the importance of moral theory in grappling with the difficult issues of modern medicine, there is a surprising lack of discussion of it. Readers must look elsewhere for such direction.

Birth to Death also lacks case discussion and the application of moral theory to real patient problems, which is often the most difficult aspect of medical ethics. This omission makes it difficult to know whether these essays would help general readers exert more control over the influence of medical technology in everyday life. Readers will gain familiarity with the topics, but the aims of the book are only partially fulfilled.

There are many collections of essays on medical ethics. Birth to Death can be recommended as a helpful and succinct introduction to important topics in advanced technological medicine; it gives readers up-to-date knowledge of these topics and covers the ethical issues in a general way. However, it contains little moral reflection and little concern with the resolution of ethical dilemmas. It is most appropriate for premedical students or as a textbook for an introductory course in medical ethics.

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What to Do in a Paediatric Emergency


Overall rating: Fair to good
Strengths: Puts together the basics; reasonably readable and easily portable
Weaknesses: Some lapses in information and some misinformation
Audience: General practice physicians and junior residents

This 48-page manual is aimed at guiding the management of pediatric emergencies on the basis of the recommendations of the UK Advanced Life Support Group.

The manual provides a basic review of the stabilization and emergency management of children. The authors have selected reasonable, but not comprehensive, scenarios. The basics are appropriately reiterated in each section. However, the authors neglected to include some common scenarios, such as near-drowning, head and cervical spine injury, and drug overdose. There is an overemphasis on some of the cardiac arrhythmias, particularly since ventricular fibrillation and ventricular tachycardia are uncommon in critically ill children.

The authors make effective use of tables, flow charts and simple illustrations. These are well placed and easy to follow. A section on practical procedures is very helpful. However, the section includes such procedures as femoral nerve block and saphenous cutdown, yet neglects to give basic guidelines on the materials and technique required to provide intubation in a child.

I have some concerns about some of the information in the text, which is misplaced, missing or misleading. The following are a few examples.

• The manual fails to mention that, in a patient with asthma, a low saturation should prompt the physician to perform a chest radiograph to rule out pulmonary or pneumothorax.
• The use of intravenously administered phenobarbitol in patients with acute seizures is well substantiated, yet it is not included in the flow chart of drugs to be used in the management of status epilepticus.
• The use of diagnostic peritoneal lavage in children is discussed, despite the fact that its use is exceptionally rare.

The information in the manual is generally relevant and easy to use. I believe that the target audience for this manual includes general practitioners who need a quick reference
before contacting specialists for more expert advice and junior residents who need a quick reminder of the basic principles before checking a more comprehensive source.

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Cardiology


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