professionals to match their technological advances with a heightened sensitivity to the humaneness of terminal care make this a valuable book for anyone who cares about the manner of a person's dying.

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Genetic Intervention in Human Subjects


The Catholic Bishops' Joint Committee on Bioethical Issues has worked hard and earnestly at discussing the possibilities and problems which could arise from the application of genetic engineering and related techniques in the areas of human potential, health and welfare.

This booklet falls into two main sections; the genetic and the ethical. The committee sought medical and scientific advice, and their outline of genetics, cell biology, recombinant technology, and gene therapy for particular conditions is simple but succinct, and they have provided a glossary. There are two appendices, one on the legal questions which might arise from genetic intervention and one of extracts from Vatican documents.

It is the section on ethics which is the core concern of the book, and this rests in part on the advice the bishops received on technical and medical matters, but most importantly on the basic assumptions derived from their beliefs and philosophy.

There are two major premises which determine their conclusions, so it is important to examine these premises in order to understand their arguments. Their first premise is that: "On current evidence the human whole appears to originate at fertilisation" (page 17), and therefore that: "...not only the infant but the fetus and embryo have morally significant interests..." (page 18). Inferring that the zygote at the moment of fertilisation is morally equivalent to an infant, and should be accorded the same respect and value leads to the conclusion that in vitro fertilisation, prenatal screening, and abortion at any stage are all equally ethically objectionable, because they involve selection and therefore rejection of those not chosen: any manipulation is an act of domination and treats the child as a commodity. The bishops do not appear to know that a high proportion of human zygotes are normally spontaneously lost, and that the majority of these losses are probably genetically and developmentally grossly abnormal. A significant proportion of "late" menstruations in sexually active unprotected women may actually contain a rejected early conceptus. Nor do the bishops consider the possibility that human biochemistry is not the same as human personhood: you can't have a human without a human genome, which holds the potential for a person, but this has to become actual through the processes of differentiation and development; so that it does not inevitably imply a person. An anencephalic has human DNA but few, if any, would regard it or cherish it as a person. It should never be attempted, but if, hypothetically, a human were to be derived from somatic cell DNA, as Dolly the sheep was recently derived, would this origin negate the humanity?

They do not accept that the relationship between genome and personhood lies on a continuum from a potential to a person during development, yet they effectively admit to a continuum in the relationship between the individual and the amount of the genome which may be modified. The uniqueness of a person is not tied to the individual's genome (page 32), but "thoughtless manipulation" of gametes or embryos could transform species-specific sequences and alter "the spiritual and physical integrity" of the individual (page 58). I agree with them that we are all imperfect, and that state support for the disabled is a moral requirement. However, screening to prevent the development of a severely disabled fetus, whether for genetic or developmental reasons, is not incompatible with cherishing and caring for a disabled child from birth onwards, although it is established that couples with a disabled child are statistically more likely to break up and that other, healthy, children of the marriage may become damaged by feeling neglected and unimportant. The bishops recommend that genetic counsellors should "be obliged to work with disabled children...outside of the clinical context" (how—as the parent of a disabled child?), and that they should be "trained in advocacy for the disabled" (page 27). This might be thought by some, including myself, to be different from counselling as it is generally understood, and to have an element in it of the domination of parents who are anxious and vulnerable, because it is the parents, not the counsellor who will be responsible, and probably unsupported, in the years to come.

Their second premise is that the only morally acceptable way to produce a zygote is by the unimpeded and unprotected intromission of a penis into a vagina. This would seem to make loving sex and rape both morally superior to in vitro fertilisation. An act of rape is an act of domination and uses the woman as a commodity, yet it is in vitro fertilisation which troubles the bishops: they write that it treats a child as a commodity, and is, therefore, domination; yet infertile couples may turn to it in hope and longing and greatly cherish the child so conceived. Throughout the bishops are concerned that any manipulation which is therapeutic in intent must not involve screening embryos nor require anything other than normal intercourse, which can be assisted but not prevented or replaced. To do otherwise fails to accord dignity to all involved. They approve genetic therapy to restore reproductive potential, for individuals with genetic diseases (including treatment of the very early embryo with replacement in the fallopian tube), and would accept screening and subsequent genetic therapy of gametes or their precursors. For example, unfertilised ova, they suggest, could be treated and then be replaced in the fallopian tube, ready to meet sperm as a result of "normal intercourse" which, they say, would be "safer and simpler than alternatives" (page 43). Unless the mother is treated by hormones, one would expect only one ovum at a time. How would unfertilised ova be screened? Surgery would be required to access the ovum and then to replace it in the fallopian tube, and normal intercourse should not be delayed. The bishops are concerned to respect the dignity of the conceptus and the human and penile dignity of the husband, who, one hopes will remember to say "That
was wonderful, dear. How was it for you?”

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Health Care for an Aging Population

Edited by Chris Hackler, New York,
State University of New York Press,

Allocation of health care resources and access to them is a widely debated issue throughout the world. This book is a collection of essays by multiple authors in response to Daniel Callahan’s book Setting Limits: Medical Goals in an Aging Society. Callahan proposed withholding life-saving treatment from the very elderly as a form of rationing. The discussion relates to the American health care system although the broader issues are applicable elsewhere, with future resources being more limited and with ever-expanding numbers of elderly patients requiring treatment.

There is consensus amongst the authors that the US health care system needs reform, with universal right of access for all to basic health care but that non-basic care is not a universal right. The specific health needs of the elderly must be met ahead of high-technology acute care, with special reference to long-term and home care with palliation and relief of suffering. The positive image of aging needs to be promoted, stressing the large contributions that elderly people have to make to society, in the face of the current climate of inter-generational conflict that is so pervasive.

Rationing of health care will become imperative as there is increasing demand, but in an era of cost containment resources are finite and therefore will be limited. The methods by which rationing can be applied and savings achieved are addressed in this book, with a variety of proposals. Rationing can be resource-based, applied by government, legislators or administrators, or it can be patient-centred, performed at the site of delivery by physicians. Callahan’s proposals are discussed in detail in chapter 6 where the scarcity of resources is stressed and the importance of allocating such resources effectively and with maximal medical benefit is seen as paramount.

Some authors think age-based rationing is ethically immoral, taking care away from those most deserving and most in need. Callahan and others have agreed that it is a form of discrimination against the elderly, but contend that the alternatives may be even worse, limiting health care to younger individuals who have not yet achieved their full potential in life. He feels that the elderly themselves would see the sense of his argument if the issues were properly addressed. Stysma thinks that Callahan has used age wrongly, when quality-of-life considerations actually underlie his argument. If a natural lifespan is adopted for rationing, then it ignores the significant quality of life possible for the healthy elderly person with an eminently treatable infection.

Perhaps the most important issue to be discussed in this book is the nature of rationing. In the present climate, rationing does occur in an implicit manner which is not perceived as iniquitous, such as lack of provision of nursing-home beds or lack of availability of dialysis facilities. Callahan has merely brought rationing to the attention of a wider audience and has provoked much discussion as to how it should be applied. There is little doubt that in future rationing will have to be explicit, with widespread discussion and debate in a democratic fashion. The community to which it will be applied will have to be prime movers so that the self-imposition of such rationing is acceptable. Alternative proposals should not be discounted out of hand since much current policy has not been subjected to the same scrutiny. Flexible categorial rationing which has been the subject of public debate may be a good compromise, setting priorities clearly but allowing for discretion by the physician in individual cases. However, more fixed targets may be required if budgetary constraints are to be met reliably.

Dr Hackler has edited a fascinating collection of opinions from leading ethicists, philosophers and physicians. Their concerns for the future of the American health care system can be extrapolated to all societies, since the aging population and the provision of health care to increasing numbers of elderly patients is a worry for all concerned. This book is thought-provoking and whilst not reaching a consensus opinion, aims to provide several possible alternative strategies to deal with this daunting problem for all providers of health care.

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The Ethics of Human Gene Therapy

Le Roy Walters and Julie Gage

Such is the pace of development in genetic research that books on the subject become outdated almost before they are timely. It is for this reason that Walters and Palmer’s book has been ten years in the writing.

The authors have endeavoured to strike a balance between giving readers the details of what is currently (or imminently) available, and raising some of the ethical challenges it poses. It is a short book on a vast topic and is obviously written with a view to attracting a wide readership. It is unlikely to be of interest to specialists, either in the field of human genetics or in medical ethics. Where it may be of benefit is as a primer, either at undergraduate level, or else for use with trainee health care professionals within the context of a broader introduction to medical ethics. The authors clearly have one eye on the popular science market but as the book is presently only available in hardback, and given its brevity in relation to its price, it would require significant revision to achieve mass appeal.

They begin with the true story of the life and death of David, “the boy in the bubble”, afflicted with severe combined immune deficiency (SCID). Although this represents a laudable attempt to personalise the debate often dominated by technicalities, the account teeters dangerously close to Dickensian sentimentality.

This is compounded by the fact that there is little done to relate this section to the later chapters. The authors stated intention here is to show “that the field of human gene therapy is important” (page xvi). However, it is unclear that anyone disputes this. Certainly nobody who chooses to read this book would. Moreover, the