

or teaching paediatric ethics would be well advised to consider this book carefully.

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## Reproductive Genetics and the Law

S Elias, G J Annas, 323 pages, Chicago, London, Boca Raton, £22.75, hbk, Year Book Medical Publishers Inc, 1987.

There is a rapidly increasing range of techniques for prenatal detection of genetic diseases and a rapid increase in the number of conditions which may be so detected. Similarly, therapeutic procedures of varying degrees of effectiveness and acceptability are continually being added to the medical repertoire. The methods of regulating reproduction by manipulating fertilisation and the early embryo are used to bypass human infertility and to make transgenic animals. All these technical developments have potential effects on human reproduction and development, make it possible to have choices with regard to particular genetic diseases or fetal damage and clearly have ethical and legal implications. Finally the number of drugs, industrial and agricultural products which may be teratogenic to the human fetus is also increasing beyond the capacity for testing. The rights and needs of society, the family, the mother, and the fetus differ, and may even be in apparent opposition, so that some basis for evaluation and decision is required.

Some knowledge of genetics and medical techniques is necessary for lawyers and legislators, and some knowledge of the law for genetic counsellors, researchers and scientists concerned with resource allocation. Professors Elias and Annas represent medical genetics and health law respectively, and their book offers a sustained and solid effort to appraise and educate. The book is enjoyably lucid throughout and covers a wide range of theoretical and technical matters. It deals with fundamental aspects of DNA structure and replication, meiosis, chromosomal behaviour and defects, genetic segregation, and the response to teratogens. It deals with screening, counselling, (and sensitivity to clients) prenatal diagnosis, embryo transfer

perinatal surgery, and methods of inserting genes into eggs or cells. It also deals with legal problems involved in counselling, abortion and treatment; analysing and commenting on case law and on the problems involved and it discusses quality of life criteria, relative risks and conflict of rights.

It must seem ungrateful to wish that some problems which are touched upon too briefly or not at all had been discussed more fully. Since the main issues of the book all touch upon human need and human suffering and since the quality of life argument is an important part of the debate, (relevant to abortion versus treatment for example) then a better discussion of therapy would be in order.

Therapy is possible, in principle, for many metabolic diseases. It is less likely for those involving brain cells directly and seems unlikely for defects in structural proteins such as the collagen disorders.

Specific dietary restrictions are outlined briefly for three genetic conditions, and perinatal surgery for a few more. Nothing is said of unpleasant treatments which may prolong life for a time, but are palliative only; for example, weekly blood transfusions and daily injections of an iron-chelating agent for thalassaemia. The quality of life is also affected by conditions which are not lethal for infants but which lead to severe pain such as sickle cell anaemia or Fabry's disease.

Changes to brain function may occur at teratogen levels too low to cause visible morphological change. A potentially normal fetus is irreversibly damaged in a phenotypically rescued mother homozygous for PKU, but the treatment they suggest is not properly tested and in any case prevention of microcephaly would not exclude possible deficits in intelligence and behaviour. With respect to industrial teratogens, exposure of a population may require wholesale offers of abortion to all pregnant women, as at Seveso.

More discussion on late onset genetic diseases would be valuable. An infant with Tay-Sachs will be soon dead, one with Duchenne muscular dystrophy will survive for several years, and Huntington's Chorea typically has a late onset. Arguments based on the number of valuable years of life must consider temporal gradations but the subjective experience of life before and during the degenerative period and the impact on the family also needs to be considered.

There is only a brief mention of resource allocation, yet decisions in this

area may have an enormous effect on most of the issues discussed.

I hope that someone will write a book as clear and pleasant to read as this one, to illuminate English and Scottish laws, as this one has, for me, illuminated American law.

There is a reasonable index, a good list of chapter references and several useful tables.

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## Saggi di Medicina e Scienze Umane

(Published in Italian) E Mascitelli, A Ponsoetto, N Luhmann, M G Lombardo, H J Helle, R Contardi, 339 pages, Milano, Lire 30,000, Istituto Scientifico S Raffaele di Milano, 1984.

The essays collected in this book were presented as lectures delivered at an experimental course held at the University Hospital S Raffaele in Milano (Italy) in the academic year 1982-83. The aim of the course was to include some teaching of humanities in the curriculum of the Faculty of Medicine and this book is interesting as it represents a Catholic proposal to deal with this matter. Papers included are of different quality but all of them try to widen the horizon of medicine in the attempt to 'humanise' the general perspective. This approach is similar to the one advanced by E D Pellegrino and his group in the English-speaking world.

In this review, I shall focus my attention on N Luhmann's paper as it is the most interesting one and provides a good insight into the book's objectives.

According to Luhmann's systemic functionalism, society is an articulation of different partial systems. These partial systems are autonomous and independently developing. Medicine is one such partial system, with its own unique feature.

According to this view when a functional system has routine questions to answer the system is self-sufficient and can provide the decision using its own rules.

But when the (partial) system has to face exceptional questions then such

choices are influenced by other (partial) systems, so that authority of the (first) system is constrained. For instance, if a therapy for cancer costing 10 million dollars per person were discovered then medicine would fall prey to politics, and the choice of which patients should be cured would not be left to doctors.

According to Luhmann when such a situation takes place, there is a need for a further reflective thinking in the partial system. However, in the case of medicine the situation is difficult because medicine has not developed any reflective style resulting in a 'theory of medicine' as for example economics, or law, which have developed sophisticated 'theories of economics' and 'theories of law'.

Luhmann suggests that the development of a theory of medicine could provide a way of looking at new problems arising in medicine, and that such a way could be a viable alternative to the introduction of ethical committees, which is sometimes suggested.

Finally, he tries to point towards such a new theory of medicine, saying that the concept of health is too wide and fuzzy to be helpful, and that a more suitable framework would be provided by the problem of pain, as this reveals the special relationships between the individual's conscience and his body.

I am not so sure that Luhmann's suggestion of a more developed theory of medicine would suffice to solve the new problems arising in medicine. As an economist is not necessarily a good businessman, so it is not certain that a theoretician of medicine can come up with better practical solutions. Bearing this in mind I do not agree with Luhmann's strong opposition to ethical committees, which in my judgement can be useful.

Luhmann's view is interesting however because it suggests a way of facing the new ethical problems arising in medicine. He thinks that a widening of the perspective is sufficient for medicine to find the solution. In this sense the end of a narrow technicalism is enough for the beginning of a more humane medicine.

This general view seems to be adopted by some proponents of the Catholic position; whilst in non-religious factions, the new problems are given a different solution from traditional ones, for example, the S. Raffaele Hospital's proposal is to put such new problems in a new setting of 'widened' medicine so that hard choices are softened. I am not sure that such an approach will produce good results, as I

do not agree with Cardinal C M Martini when, in his contribution to the book, he says that contemporary democratic non-religious societies are unable to present ethical values in their educational systems. I think that a secular society can and will produce a more humane medicine, more fitted to solve the new moral problems that we have to face.

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## Case Studies in Nursing Ethics

Robert M Veatch and Sarah T Fry, 312 pages, New York, \$17.50, hbk, J P Lippincott Co, 1987.

The text is based on the premise that nursing ethics is a discrete sub-category of bioethics, using the same principles and discipline of analysis but applied to issues of particular relevance to nurses and their work.

In this book, underlying ethics and values in nursing are initially explored with a sound account of ethical conflicts in caring for patients, followed by a discussion of the nurse and moral authority. However, the main thrust of this book and, to my mind its special contribution, is contained in Part II where ethical principles are described and illustrated at length by case examples. Part III then becomes rather more familiar as problem areas, such as abortion, technical innovations, experimentation and informed consent are covered.

There is little doubt that the combination of expertise from an ethicist and a nurse has resulted in a particularly stimulating book. They have succeeded in relating the discipline of ethical analysis to several areas of health care which are relatively poorly recognised or understood. Guidelines for adjudicating ethical disputes are provided with care and with full reference to the role of codes in decision-making. Although they employ a conventional framework for applying ethical principles (such headings as fidelity, avoiding harm, justice, autonomy, veracity being used) for a wide range of dilemmas the presentation of case material makes this original, stimulating and educational.

In all, one hundred and fifteen actual cases are used, with legal references provided as appropriate. Some pertain to quite basic issues of how to allocate time for care between patients, while

others concern disagreements between the values and actions of other professionals. In all cases the analysis from a moral, legal and clinical viewpoint is penetrating and clear. As one might expect, the reader is left to adjudicate and decide the verdict, which certainly extends the period one requires to devote to this work.

While Veatch and Fry have contributed well to the literature on nursing ethics, it would be sad if others in health care were excluded from readership. Despite the specific nature of some American case material, this work should really benefit the broader field of health-care ethics on both sides of the Atlantic.

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## Medicine in Contemporary Society: King's College Studies 1986-7

Peter Byrne, Editor, 156 pages, London, £16.95, hbk, King's Fund Publishing Office, 1987.

This book has been compiled from public lectures given at King's College, London in the spring of 1986, and covers issues contemporary to that time, many of which continue to be prominent in ethical discussions. Thus, as always, anything to do with sex – abortion, *in vitro* fertilisation, the pill for under-age girls, sexual abuse of children and women's place in medicine – is well to the fore. As usual arguments on these issues seem to have been formed after, and not before, judgements.

It is a pleasure, therefore to come across some of the other issues contained within this volume. The question of the use of animals in medical research is considered by Peter Byrne and by putting it alongside the use of children for research, I think that he illuminates the subject with a welcome dose of common sense. The logical consequence of the anti-vivisectionist argument is the use of sub-standard humans – the lame, the halt and the blind – instead.

Arnold Simanowitz is also topical on the question of 'no-fault' compensation for medical accidents. He unearths the fact that prior to the current massive increase in defence organisation