Report

Ethics For The Practising Surgeon: an Interactive Workshop for Consultants and Registered Trainees Dunedin, March 14-16, 1997

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This workshop was organised by the Bioethics Research Centre and the Department of Surgery, Dunedin School of Medicine, and was supported by the Otago Postgraduate Medical Society. It ran for three days, and was designed to provide some formal instruction in aspects of bioethics, and a good deal of practical case work. Case work was carried out in small groups, which reported their deliberations and conclusions to the whole group. The organisation of the meeting was largely in the hands of Dr Katherine Hall, of the Bioethics Research Centre, assisted by Professor Grant Gillett, FRACS, and Professor Andre van Rij, FRACS, of the Department of Surgery.

Friday, 14 March was devoted to aspects of the doctor-patient relationship; Saturday, 15 March to informed consent and the role of the surgeon in clinical teams; and Sunday, 16 March to the problems of innovation, treatment choices and clinical freedom. Attendance at most of the sessions was confined to registrants, of whom there were about 12. Those who came ranged in age and experience from retired surgeons with long contact with ethical problems (Professor John Morton, Professor Pat Molloy, and Mr Michael Shackleton) to first-year advanced trainees. A debate on informed consent on Saturday morning was opened to the public and about 50 people attended.

I do not propose to report the conference session by session, but instead to pick out those issues which recurred most frequently.

Both the formal presentations and the case work gave excellent background to the nature of moral thinking. The essential indeterminacy of moral reasoning was frequently encountered, and the important legal point made that adequate consideration of the moral issues would be likely to assume more importance to the courts than the actual decisions reached in situations of moral conflict. In this context, the ethicists stressed that individual moral intuition or conscience was important, but was more reliable if well informed.

The role of the surgeon in treatment teams was an issue which provoked some of the liveliest discussion. Surgical leadership was discussed several times, and it became clear that leadership, power, authority and responsibility were often conflated and confused. Surgical leadership was felt to be the most important of these categories, and it was recognised that leadership could, and often did, exist without power. Former patients were present at several sessions. They confirmed the continuing importance of the dyadic relationship between a patient and a doctor, and asked those present to emphasise in their teaching the importance to the patient of a relationship of care between patient and surgeon.

Several major issues emerged from discussion of the doctor-patient relationship. The concept of patient autonomy was confirmed as important, but several pleas were made for an examination of deeper meaning. The social determination of the ideal of the atomistic individual was criticised, and the social situatedness of both patients and doctors emphasised. Indeed, the existence of the health system depends on the values placed on individual life within liberal western societies. This fundamental value needs to be re-examined frequently in any discussion of health and welfare.

A related issue emerged several times. Should surgeons (and other health care workers) draw a distinction between moral and clinical indications for treatment or modifications in management? This arose most sharply in discussions about the care of Jehovah's Witnesses. This issue also sharply delineated the similarities and differences between morality and the law.

Senior surgeons in particular were emphatic that honesty towards patients was more important than defensive practice when medical mishap or misadventure occurred. There was much discussion of the new Code of Health and Disability Services Consumers' Rights, which has just emerged with qualified legal force in New Zealand. The Code begins with the contentious statement that 'Consumers' have rights and providers have duties.' A series of consumer rights is then enunciated, which would fit with many commonly held ideals of good practice. The most interesting part of the document, however, was considered to be Clause 3, which defines qualifications to the Code, including a release from responsibility under the Code for various circumstances, amongst which were 'the provider's resource constraints'. The implications of the current New Zealand 'points' system for determining treatment priorities were also discussed. Briefly, this system assigns points to varying levels of disability in order to determine who shall be dealt with and in what order at public hospitals. Those whose disability points do not reach a critical level will never be dealt with in the public sector, while those with high scores will have priority of access. The legality and equity of this scheme have yet to be determined.

The doctrine of informed consent was debated with some vigour at a public forum on Saturday morning. The audience at least was convinced that the rigorous doctrine of informed consent was flawed, and that the process of discussion that arose from the transaction that goes on between patient and doctor should generate both trust and understanding, and that these elements had more meaning than the concepts of 'full disclosure', 'competence' and 'fully autonomous choice'.

Clinical freedoms and innovation were the subject of some vigorous discussion. In the context of rationing, there was some division of feeling about the conflicting needs to collaborate with management and the duty to continue to act as advocates for patients. The conflict between economic exigency and best practice remains unresolved, but there was general agreement that this conflict is now a real part of every day practice, and that the moral issues are still not fully defined. It was interesting to note that throughout the workshop, the participants had used three different structures for examining ethical problems – principle-based ethics, virtue ethics and rights and duties. This was perhaps not made quite explicit, and some formal presentation of structures that can be used for ethical thinking might well be incorporated in future workshops of this kind.

In summary, this excellent workshop achieved several things. It made surgeons more aware of the essentially aporetic nature of moral thinking, and of the complex interrelationships it has with the law. It emphasised strongly how important ethical thinking will become, as economic stringencies increasingly influence medical practice. It delineated some of the matters peculiar to the discipline of surgery, and reinforced the College's wisdom in entering the ethical field so publicly. The workshop concluded with the hope that the College would continue to expand its ethical activities and its liaison with the various centres for ethics and bioethics.

Dr Hall and her colleagues deserve our thanks for both the excellence of the organisation of the meeting and its content.

Article

The Cloning of Dolly: Heralding the New Future of Biology?

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The creation of Dolly, the sheep cloned from the mammary cells of her 'mother', as heralded much international interest. But what is cloning, and why has it generated so much interest? The terminology was first coined at the beginning of this century, and the technique itself, at least in horticulture, has been with us for a long time. Its botanical use refers to the propagation of plants carried out by using grafts, cuttings and bulbs, and more recently tissue cultures etc. For instance, advances in the technology of radiata pine propagation are enabling the development of clonal forestry in New Zealand. But its wider use in biology refers to the asexual reproduction of organisms that normally reproduce sexually.

What this means is that the genes or DNA from one organism are copied and a new organism – a genetic replica – created from it. Like many things in science that grab the public imagination, cloning is not new. In 1952 researchers took an embryo from a frog and cloned it creating an exact copy of the original frog. In the 1980s they took a red blood cell from a frog, copied the DNA and created tadpoles. However, these tadpoles died at about the time they would have been expected to develop into adult frogs. Similarly, in 1996 researchers in Scotland reported that they had cloned sheep from an embryo cell line. This has been repeated for the second time only in New Zealand this year by the Molecular Embryology staff at AgResearch Ruakura. This year the Scottish group of researchers reported that they had cloned Dolly, from the DNA contained in the mammary cells of Dolly's 'mother'. Human embryos were also apparently cloned in 1993. They were provided by an infertility clinic and were defective and due to be discarded. The cells of the embryos were separated and a few individual cells developed into 32-cell embryos.

Identical twins are in a sense clones, since they share the same genetic material. Identical twins may in fact resemble each other more closely than clones since, unlike Dolly and her 'mother', identical twins develop from eggs with similar cytoplasmic constituents, they share the same uterine environment and they may share similar environments after birth. In contrast, Dolly and her 'mother' developed in separate breeds of sheep and grew up in a research environment some six years apart.

Forms of embryo cloning

The cells of the early embryo are considered to be undifferentiated. This means any cell has the potential to grow into a bone cell, or a brain cell, or a liver cell, etc. However, once differentiated, it's generally accepted that a bone cell cannot grow into a liver cell, nor can a brain cell grow into an ear cell. It is this feature which gives rise to the different forms of cloning. In embryonic cloning, the undifferentiated embryo can either be bisected to form two identical embryos or the cells can be separated and individual or small groups of cells, allowed to multiply, growing into many copies.

Alternatively, the technique of nuclear transfer can be used. Here, the nucleus of each of the cells, containing exact replicas of the DNA or genetic material of the original embryo, say a sheep embryo, is then transferred into surrogate unfertilised egg cells from which the nucleus has been removed (while the recipient egg is enucleated, the mitochondria in the cytoplasm still contains their own DNA). These are fused and activated by a small pulse of electricity and then grown and implanted into foster sheep, resulting