
MEDICAL EDUCATION

Improving awareness of ethical issues

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This is the eighth in a series on medical education.

Medical ethics embraces two broad issues.¹ First, the level of professional competence to deliver the best possible medical care. Second, ethical and moral concerns that are raised in the course of the investigation and management of medical disorders. Recent decades have seen an increase in the time given to instruction in medical ethics in the standard medical curriculum. In 1950 the General Medical Council (GMC) recommended that medical ethics be taught to all medical students.² In 1986 the British Medical Association called for all medical schools to provide curriculum teaching time for ethical and legal aspects of medical practice.³ In 1987 the Pond report gave detailed information on the current state of medical ethics teaching in British medical schools and made recommendations how this instruction might best be given¹; not as a subject with a set syllabus added to an already overburdened curriculum but by integration with all aspects of medical practice. In particular, local initiatives were to be encouraged – built on existing arrangements in individual medical schools.

In this paper we describe an education programme to help clinical students develop an awareness of common ethical issues and an appreciation of the frequency of ethical dilemmas in day-to-day paediatric practice.

Teaching methods

Students in the University of Wales College of Medicine in Cardiff currently study paediatrics and child health in eight week rotating block attachments, each containing about 30 students, in the second and third clinical years; this teaching takes place in the main teaching hospitals in Cardiff and in district general hospitals throughout Wales. There is no formal course on medical ethics in Cardiff but some lectures are given towards the end of the final year on medicolegal aspects of care.

At the beginning of the paediatric attachment an introductory one hour lecture is given by the senior hospital chaplain (RL-R) who has specialist knowledge and experience in medical and health ethics. The aim is to introduce a number of key issues in ethical decision making in paediatrics and to give students a framework around which ethical matters may be considered. The following aspects are emphasised:

(1) MORAL VALUES AND MORAL REASONING
Many students come to moral decision making

equipped only with influences from their personal background. We present moral values as the tools of moral reflection rather than prescriptive values. It is possible to show that good ethical review and the process of moral decision making is dependent on a sound methodological basis and a clear understanding of how key moral issues inter-relate.

(2) ETHICAL APPRECIATION AS A PART OF GOOD CLINICAL PRACTICE

There is an ethical element in almost every act of health care. Students need to be challenged to think of this ethical dimension not in isolation but as the cement that binds together both the skill of treating patients and the art of caring for them. Students are often unaware of the need to review continuously the ethical justification of particular modes of treatment; what is appropriate at one stage may need to be modified later. Ethical review, or, at the very least, the habit of reflecting on the continued validity of any decision that has been made, is stressed as part of good ethical practice. This includes the importance of having a clear understanding of how important health care decisions are made, allowing students to then argue and debate the way in which decisions are reached, and the influence of rules or the importance of consequences in the caring process.

(3) CORE ETHICAL VALUES IN HEALTH CARE

Presenting a list of core values in ethical decision is important, emphasising to students that these are not moral principles, ideal and fixed, but core values which compete, through ethical review, for appropriate priority in each specific case. The core moral values highlighted are: truth telling, dignity, autonomy, non-maleficence and beneficence and, overall, how to behave justly towards the patient.

(4) APPLICATION OF CORE ETHICAL VALUES

In making a judgment about priorities of the core values, students are challenged to think about how they use moral values in everyday living. Using the students' own experiences, examples are given of how ethical issues are used in public debate and to inform public opinion. The contrast is made between day-by-day decisions that are made on the one hand on the basis of rules and on the other by the

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influence of the potentially good outcome of a problem.

(5) LANGUAGE AND MEANING

Students are warned that it is important to have a clear understanding of the meaning that they, and others, attribute to language, especially how differing interpretation of the same language can be affected by its context and the status of speaker and listener. Use of poorly thought out language is illustrated by exploring the meanings attributed to the phrase 'best interests'; this particular phrase is highlighted because it is in common use by carers, patients, and their families. It also has care implications when used to refer to the best interests of society, or even a health authority. The presentation of the many uses of this phrase illustrates the wide variety of meanings that students can attribute to it. Questions that flow from this discussion include what the phrase 'quality of life' means to the student.

At the end of this introductory lecture the students are instructed to prepare and write up a case report of between 300 and 500 words on a particular ethical issue that they will have met during their paediatric placement – emphasising the nature of the ethical problem and how it might be resolved. They are told that in the final week of their attachment, when they return for a week of revision before their examination, about half a dozen of these cases studies will be selected and presented to the class to illustrate some of the key issues emphasised during their introductory week lecture. The students have about 15 minutes to present the problem and senior members of the teaching staff are present to facilitate discussion. The case reports are not marked but they are circulated to all members of the teaching staff to be read.

Students' perceptions of ethical issues

We have completed three years of this education programme. The types of problems identified by the students are many and extremely varied but seven broad categories emerge repeatedly and are easily identified. We provide an example of each category.

(1) *Desirability of prolonging life in a child whose brain has suffered severe damage in the perinatal period* – Example (i): a baby who has suffered prolonged asphyxia at birth needs continuous ventilation. Cerebral oedema later develops and the clinical course is further complicated by convulsions and septicaemia. Should life support continue?

Example (ii): a 2 year old child has microcephaly, spastic quadriplegia, blindness, deafness, and severe mental handicap resulting from birth asphyxia. She suffers from recurrent chest infections which require intensive treatment in hospital. Should antibiotics continue to be given?

(2) *The desirability of prolonging life in a child with a terminal illness* – Example: a 7 year old child with cystic fibrosis has advanced lung and liver disease and is regularly admitted with

serious lung infections. At what stage does the administration of antibiotics become unacceptable?

(3) *Dilemmas in management of an extremely immature preterm baby* – Example: a 25 week gestation baby develops severe respiratory distress syndrome, pulmonary haemorrhage, and bilateral intraventricular haemorrhage. Should total life support be continued? Will the benefits of life with treatment fail to outweigh its predicted burdens?

(4) *Dilemmas in the course of clinical management* – Example (i): a 10 year old girl is very short for her age. No organic cause has been found but the parents are desperate for her to be treated with growth hormone. Is it 'ethical' to treat 'physiologically short' children? This particular problem is closely linked with concerns about the allocation of resources – another constantly recurring theme with students; in this instance it is the expense of providing growth hormone when the money could perhaps be put to 'better' use.

Example (ii): a child of 9 years is diagnosed to have acute lymphoblastic leukaemia. How 'ethical' is it to enter the child into one of the various ongoing multicentre trials of leukaemia chemotherapy?

(5) *Issues of incomplete or partial truth telling* – Example: a 3 year old child has Kawasaki disease. Should the parents be told the exact reasons for cardiac ultrasound to investigate the possibility of a coronary artery aneurysm? Might this cause inappropriate anxiety from which the parents could be spared?

(6) *Social decisions* – Example: a pair of twins were failing to thrive for 'non-organic' reasons. The social services department had concerns about the mother's ability to care for them. Should the twins be fostered? Is it 'ethical' to take them away from their parents?

(7) *The validity of parental belief in patient management* – Example: a 5 year old girl with phenylketonuria has not been given the prescribed diet by her mother who believes the illness to be the will of God. The girl is at considerable risk of continuing cerebral damage. Should a care order be taken out to remove her from the family in order that she might be correctly treated? (Dilemmas posed by Jehovah's Witnesses are another example that regularly present in this category.)

Comment

Assessment of the students' short written assignments has shown us how students perceive ethical issues at a comparatively inexperienced stage of their training. This is an essential starting point for any continuing programme of clinical ethics' instruction. Two points in particular are worthwhile highlighting:

(1) Many students have difficulty in analysing ethical problems objectively. To help them in this we would recommend that the principles applying to ethical reasoning are included early in a medical curriculum. The development in Cardiff of a new integrated curriculum based on the GMC recommendations for change should facilitate this.

(2) Many students consider options in treatment as ethical issues. In fact, about one third present a therapeutic issue as their ethical problem. There does seem to be confusion between the choice of treatment in particular conditions (for example, which drugs should be used) and ethical dilemmas encountered in clinical practice. One student thought that treating asthma with steroids could be an ethical issue.

It is useful to compare our experiences with those from other medical schools. Numerous papers have been published describing the design and implementation of teaching ethics. There is a huge range of educational exposure but, almost universally, difficulties have been encountered – the main one being the problem of an already overcrowded timetable. There has also been found a widespread resistance from fellow medical professionals, including those on curriculum committees, to devote student time to ethics. The question of timing of the teaching of medical ethics within the curriculum has been tackled in many ways. Some ambitious centres have started in the preclinical years⁴ attempting to coordinate teaching of ethical issues as part of a foundation medical sciences course and continuing into the clinical years. These courses are exceptional, with dozens of hours devoted to timetable instruction in ethics. At the other extreme (and probably closer to the British medical school norm) are more modest efforts which amount to one or two sessions throughout the course. The range of material covered is correspondingly variable, covering, in some instances, a comprehensive framework of teaching on ethical principles and their widespread application to clinical problems and in others an informal and more spontaneous agenda on the main issues raised by students. In some medical schools ethics' teaching is the responsibility of one department; but, in most instances, instruction is more or less random, dependent more on the initiative of a few interested individuals than a concerted effort by a curriculum committee.

There is a need for structured teaching in medical ethics throughout the five years of medical training and using a multidisciplinary approach. But who should lead this instruction? Along with teachers drawn from clinical and social sciences should other professionals be involved – for example, theologians and lawyers? Parents and even children themselves could be involved. Clinicians who doubt their ability to justify their ethical judgments often benefit from this approach by learning in multidisciplinary settings. In turn, and for mutual benefit, non-medical people may gain greater insight into medical practice to help them better understand clinical ethical dilemmas as they really are. For example, Irwin *et al* have described how 'philosophers had overestimated the motivation and intellectual background of both students and doctors to understand ethical reasoning'.⁵ There does seem to be general agreement that the optimal format for teaching is one which

encourages student participation (particularly small group case discussions) led by a knowledgeable facilitator and based on actual cases. A need for an introduction to the basic concepts of medical ethics (however short) is also generally considered to be desirable. Especially important is that medical ethics are not perceived to be remote from day-to-day practice taught as a dry, academic subject in the lecture theatre.⁶

There has been little critical analysis of ethics teaching in medical education. Students have been reported to be enthusiastic in their participation, as we have indeed found (often in marked contrast with all too frequent passivity during other aspects of clinical teaching!) – although even the best students do very little of their assigned reading.^{7,8} Recognising these problems, the Pond report recommends that a formal examination or assessment be made in order to signal to students the importance of medical ethics.¹ In this assessment powers of ethical reasoning are to be emphasised. A number of tools have been described that enable aspects of a student's moral reasoning powers to be given an objective score – such as the ethical sensitivity rating in Toronto⁹ and Kohlberg's moral judgment interview.¹⁰ These devices do, however, seem rather contrived and clumsy to the average clinician. Also, who in the standard curriculum will make the formal assessment? Academic appreciation of ethics by the average clinical teacher is at best sketchy. Health ethicists who might be able to assess quality are few and far between. More valuable perhaps are subjective reports of medical students, the vast majority of whom are enthusiastic in the evaluation of their teaching and make a plea for more time to be set aside for it.¹¹

In the average medical curriculum the amount of time given to paediatrics and child health teaching is short. It is only when doctors are faced with making difficult decisions that the realities of ethical dilemmas become evident. But teachers of undergraduates must accept a responsibility for introducing students to the topic, explaining ways in which ethical reasoning can be conducted rather than presenting a specific moral belief system. We have been encouraged by our students' contributions and interest in debating many ethical issues. Maintaining this momentum is the responsibility of preregistration and postgraduate education. We believe that our teaching model could be a useful beginning to such continuing education.

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Prognosis in epilepsy

Data from a large prospective population based study (Oliver C Cockerell and colleagues, *Lancet* 1995; 346: 140-4) provide extremely useful information about the prognosis in recent years for people of all ages with epilepsy. Between 1984 and 1987 general practitioners in 275 practices throughout the UK enrolled 1091 patients newly presenting with a seizure disorder (not always after the first episode). At six month review a cohort of 792 patients with definite (564) or possible (228) epilepsy was defined. The rest had febrile convulsions (220) or other non-epileptic attacks (79).

After nine years a three year period of remission had been achieved by 87% of the 792 patients in the total cohort and 86% of those with definite epilepsy, and a five year remission by 71% and 68% of these groups respectively. At the time of the nine year assessment 57% of the total cohort and 54% of those with definite epilepsy had been fit-free for the last five years. Patients with remote symptomatic epilepsy had the same five year remission rate after nine years as those with idiopathic epilepsy (61%) but these figures are biased because fewer patients in the symptomatic group survived to be included in the nine year follow up figures. Only 27% of the total cohort were still taking anticonvulsant drugs at nine years.

Overall the patients with childhood onset seizures had lower rates of three or five year remission than older patients but these figures, too, should not be taken at face value because of the very varied nature of childhood epilepsy, the different mortality rates in children and older people, and the fact that some childhood epilepsies of good prognosis might not yet have remitted by the end of the study.

These data confirm that the overall prognosis for people with epilepsy is good and much better than you might think from experience in hospital outpatient departments for either adults or children.

ARCHIVIST