

ETHICS & MEDICINE

AN INTERNATIONAL CHRISTIAN
PERSPECTIVE ON BIOETHICS

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Contributors are asked to follow the pattern of published material for length, subheadings and so forth. Different referencing conventions acceptable provided consistency is maintained within the paper. An outline c.v. should accompany each paper.

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C. Ben Mitchell, PhD

New Feature in *Ethics & Medicine*

Commencing with the January issue of *Ethics & Medicine*, we will print letters from our readers. We invite you to write or e-mail us in care of the editor (please note the change of address) to enter the dialogue on medicine and ethics.

Ethics is not a monologue. As the field of bioethics continues to develop, it is crucial that we foster dialogue in order to encourage one another to reflect more clearly on the issues before us. Because our readership is international in scope, it is especially important that we take advantage of opportunities for us to listen to one another and allow 'iron to sharpen iron'.

Happily, bioethics is a global enterprise. The Center for Bioethics and Human Dignity in the United States is increasingly becoming a respected voice in this enterprise. The Centre for Bioethics and Public Policy in London has long been at work in this arena and continues to sponsor major European conferences and symposia. Our newest sponsor, the Professor G.A. Lindeboom Instituut in the Netherlands, has been and is engaged in a number of original research projects which will provide important data for our reflection.

Beyond our sponsoring institutions, our readers represent scientists, physicians, nurses, ethicists, theologians, and students from all over the world, all of whom have something meaningful to contribute to our ongoing work. We need to hear from one another.

We have been very encouraged by reports of the journal being used in educational settings, at conferences, and as a vehicle for introducing (or reintroducing) Christian Hippocratism as a way of thinking about the intersection of medicine and ethics.

If the futurists are correct, the next century will be the 'biotech century'. As never before we shall be presented with both the promise and perils of biotechnology. The promise held out by a burgeoning biotechnology industry is truly breathtaking. Through advances in genetics we may see treatments for as many as 4,000 genetically-linked illnesses. Even though we hesitate to use the word 'cure', it is highly possible that some of these diseases may be eradicated in our lifetime. Few will question the fact that the quality of all of our lives has been improved through technological advances, including progress in biotechnology. Yet, this comes with a price. Not only is biotechnology relatively expensive, but these advances demand that we shift resources away from areas that might also provide improvements in quality of life. For instance, it is well-known that one of the most prevalent causes of mental retardation among children is malnutrition. Sinking

billions of dollars in research to treat relatively rare genetic disorders seems less promising in some ways than using those same dollars to feed starving children. At the same time, agricultural biotechnology has provided disease-resistant crops and heartier foods with which to feed these children. We will continue to face these important social justice issues in the next century.

Added to these dilemmas is that fact that, at least in the American context, public policy in bioethics is dominated by an utilitarian ethos. Decisions about what policies should or should not be adopted are made on the basis of a sometimes horrifying cost-benefit analysis. At the time of the writing of this editorial, for instance, the National Bioethics Advisory Commission, an advisory agency to the president of the United States, is recommending that public monies be used to fund research using human embryos on the grounds that the benefits to those suffering with certain illnesses outweigh the burdens of destroying embryos in the process. One group of human beings would be sacrificed for the benefit of another group. According to Harold Shapiro, chair of the agency, human embryos have merely 'symbolic value', not real dignity and worth. One suspects that the symbolism is all too clear.

We would like to hear from our readers and provide an opportunity for you to be involved in these discussions. Of course, we would prefer letters extolling the benefits of the journal and the erudition of the editor! But, we will print as many letters on as many topics as possible, even if they disagree with something in the journal. We hope you will engage the arguments presented in the articles. We learn best from one another when our ideas are sharpened, challenged, and sometimes affirmed.

We would ask that you keep letters brief and to the point. Space will be limited. Be perspicacious. So, if you have always wanted to write to *Ethics & Medicine*, but thought your letter would never see the light of day, now is your chance.

Finally, if you have been thinking about submitting an article to *Ethics & Medicine*, please know that we are more than willing to consider papers for publication. *Ethics & Medicine* is a peer-review journal. Members of editorial boards and others from time to time serve as reviewers to recommend publication or revision of the articles sent to us. Our reviewers often provide very helpful comments to authors and provide valuable service to the journal. We are grateful for their expertise and willingness to help. Further, the editor's relocation to the Center for Bioethics and Human Dignity should provide more efficient communications with those who write to and for the journal.

Also, our book review editors would like to hear from those who wish to review books. Feel free to contact them if you would like to review for *Ethics & Medicine*. In addition to the obvious academic benefits of book reviews, in a

world of too many books and too little money, the reviews help all of us to use our book-buying budgets more wisely.

Well, there is plenty to do, is there not? We look forward to your contribution to our mutual labours.

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Stanka Markova, MD, PhD, SM, Juliana K. Marinova, MD, SM, Svetlana M. Dimitrova, MD, SM, and Borislav D. Dimitrov, MD, MSc

Opinions and Attitudes of Medical Students Towards Basic Principles of the Hippocratic Oath

Abstract

The Hippocratic Oath symbolizes ethical issues and moral obligation in the doctors' professional endeavours. It is the basic frame for confidence between patient and doctor. New concepts in modern society (and in medicine as a part of it) raise, however, the question of updating medical ethics according to the recent achievements of medicine in this society instead of being 'summary' of old dogmas. Many authors have considered that: [1]. Main postulates of the Oath are archaic in the light of modern technologies in medicine (sustaining-life facilities, equipment for transplantation of organs, *in vitro* reproduction techniques, computer tomography, etc.); [2]. The Oath has introduced a prescription of *formal* behaviour rather than principles of ethical behaviour in medicine; [3]. New concepts in medicine deny the absolute prohibition of abortion and euthanasia; [4]. Modern understanding of the 'doctor-patient' relationship appeals against the Hippocratic paternalism because the former does not promote an active partnership between patient and doctor and is an obstacle to the idea of increasing the patient's responsibility regarding his/her own health (such a paternalistic view makes, especially the process of treatment decision-making, more difficult). Having in mind these misinterpretations of the Hippocratic Oath, we aimed to study opinions and attitudes of medical students regarding basic principles of the Oath. We addressed to students a questionnaire containing topics such as: 'Who does need to know the text of the Hippocratic Oath?', 'When should the Oath be declared—either at the beginning of the University or at graduation?', 'Should the Oath be proclaimed explicitly within a special public ceremony of graduation?', 'Do the doctors follow the Oath in their practice?', 'Which are principles of the Oath to be welcome to students?', 'Which of the basic

principles in the Oath are out-of-date?', 'Which are the texts of the Oath that sound archaic?', 'How do the students understand statements' such as: '... I will live honestly and saintly ...' and '... let me receive profits ...', etc. We also aimed to compare the opinion and attitude of students that had already studied 'Medical Ethics' and been aware of the Oath with those of students not passing through such an education yet. Subjects of the study were 2nd, 3rd and 5th year medical students from the Medical University of Stara Zagora, Bulgaria. Those of them who had not been previously taught 'Medical Ethics' served as a control group. The survey was constructed under the cohort study design with procedures to ensure complete anonymity. Statistical methods such as percentage distribution, ANOVA, non-parametric and confidence tests for data analysis were applied. The main conclusion of this study is that medical students have shown an attitude towards accepting, and aiming to work in the future according to the paternalistic model of 'doctor-patient' relationships.

Introduction

During the years of the Socialistic Government of the Republic of Bulgaria, there was a tradition for medical students at graduation to explicitly proclaim an Oath that corresponded to the moral code which then governed doctors in the Socialist Republic of Bulgaria. After democratic changes in 1989, all University Medical Schools in Bulgaria adopted for students the proclamation of the original Hippocratic Oath within a special ceremony at graduation. For this purpose, during the last year of undergraduate education all students were taught the basic principles of the Hippocratic Oath. In 1993, a new programme for teaching medical ethics was introduced in the curriculum of 2nd

year medical students, that was taught in the Department of Social Medicine and Public Health with Medical Ethics. Because students and the public seemed not to have been completely satisfied with some of the texts that sounded archaic in the original Hippocratic Oath, medical society came up with the idea of reformulating the Oath so as to correspond better with modern practices in medicine.

The Hippocratic Oath symbolizes ethical issues and moral obligation in the doctors' professional endeavours. It is the basic framework for confidence between patient and doctor. New ideas in modern society (and in medicine as a part of it) raise, however, the question of updating medical ethics according to the recent achievements of medicine in today's society instead of being 'summary' of old dogmas. Many authors have considered that:

1. Main postulates of the Oath are archaic regarding the modern technologies in medicine (sustaining-life facilities, equipment for transplantation of organs, *in vitro* reproduction techniques, computer tomography, etc.);
2. The Oath has introduced a prescription of *formal* behaviour rather than principles of ethical behaviour in medicine;
3. New concepts in medicine deny the absolute prohibition of abortion and euthanasia;
4. Modern understanding of the 'doctor-patient' relationship appeals against the Hippocratic paternalism because the former does not promote an active partnership between patient and doctor and is an obstacle to the idea of increasing the patient's responsibility regarding his/her own health (such a paternalistic view makes, especially, the process of treatment decision-making, more difficult).

Aim, Subjects and Methods

These misinterpretations of the Hippocratic Oath led us to study the opinions and attitudes of medical students towards the basic principles of the Oath.

Subjects of the study were 2nd, 3rd and 5th year medical students from the Medical University of Stara Zagora, Bulgaria. 2nd and 3rd-year medical students had been taught 'Medical Ethics' in the Department. 5th-year medical students served as a control group as they had been taught only the basic principles of Hippocratism and the Oath that they would have to proclaim at graduation, i.e., the latter had been aware of the paternalistic model of 'doctor-patient' relationship only.

This was a cohort survey with a questionnaire applied anonymously. A total of 379 students was approached—2nd and 3rd-year medical students ($N_1=181$) and a control group of 5th-year medical students ($N_2=198$). From this total, 194 were women and 185—men (Fig.1).

The mean age of the study group was 20.9 years while for the control group it was 24.4 years. Distribution by nationality was the following: 287 Bulgarians, 48 Greeks and 35 of other nationality. Main part of the students reported to believe in God (60.7%), about 23% did not and about 16% could not give an answer to this question. The distribution by religion was the following: Christian-Orthodox—88.9%, Christian-Catholic—3.6%, Muslim—7.4% and others—1.1%.

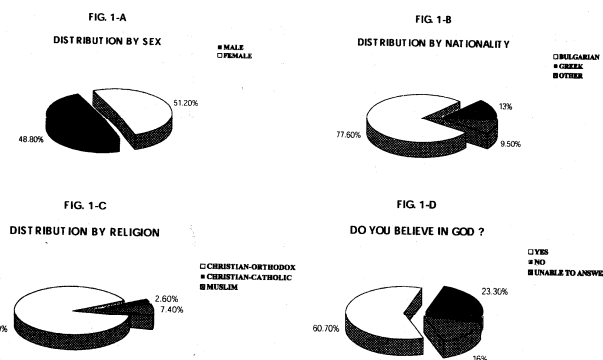


Figure 1

Different statistical methods such as percentage distribution, ANOVA, nonparametric and confidence tests for data analysis were applied.

Results and Discussion

Most of the students have considered that the Hippocratic Oath should be explicitly (by voice) (72.2%) proclaimed at graduation when receiving a medical degree (76.1%) which is the tradition in the Republic of Bulgaria. There is no statistically significant difference between the study group and control group ($p=0.5207$).

More than one-half of the students link the proclamation of the Oath at graduation with the idea that on that day they get their Diploma and also take on the responsibilities of the patient including the moral ones (62.3%). For most of the students (60%) from the control group (5th-year) proclamation of the Oath represents an important moral obligation for the graduating physician. A small number of the students consider proclamation of the Oath as either a formal behaviour (8%) or as a performance to the public (5.25%). The percentage of the latter is two-fold higher in the control group than in the study group ($p=0.0131$). The difference is statistically significant.

As for acceptability of the basic principles of the Hippocratic Oath by students, the distribution of answers has been the following (Fig 2):

1. Patient's secrets—acceptable for 89.2%, unacceptable—7.0%;
2. Use of treatment according to doctor's own ability and

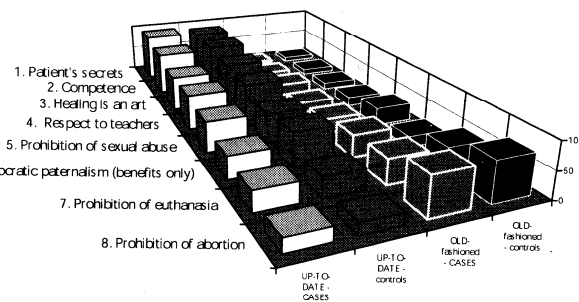


Figure 2: Acceptability of basic principles of the hippocratic oath by the medical students

- judgment—acceptable for 88.4%, unacceptable—4.4% ($p=0.05$);
3. Respect to teachers—acceptable for 86.7%, unacceptable—5.9%;
 4. Healing is an art—acceptable for 84.4%, unacceptable—6.9%;
 5. Prohibition of sexual abuse to patients and their families—acceptable for 61.0%, unacceptable—22.4% ($p=0.194$);
 6. Treatment of patients regarding their own benefits only—acceptable for 53.4%, unacceptable—32.6% (strong Hippocratic paternalism). The difference between the study group and control group is statistically significant ($p=0.0001$). The distribution of answers in the control group is the following: acceptable for 64.3% and unacceptable—22%. In the study group the distribution is almost equal: acceptable for 43.4% and unacceptable—42.3%. It is obvious that students from the study group (these having been previously taught 'Medical Ethics') have shown a less expressed paternalistic attitude than those from the control group ($p=0.0001$);
 7. Prohibition of euthanasia—acceptable for 28.4%, unacceptable for 46.1%. It should be noted that about 25% of the students did not give an answer to this question;
 8. Prohibition of abortion—acceptable for 13%, unacceptable for 75.1%.

Analysing answers to the question 'Which texts of The Hippocratic Oath are contemporary and which are not?' we have obtained results similar to those given above (Fig.3):

1. Patient's secrets—up-to-date for 89.4%, old-fashioned—7.1%;
2. Use of treatment according to doctor's own ability and judgment—up-to-date for 83.6%, old-fashioned—12.3%;
3. Healing is an art—up-to-date for 72.1%, old-fashioned—17.6%;
4. Respect to teachers—up-to-date for 69.7%, old-fashioned—19.1%;
5. Prohibition of sexual abuse to patients and their families—up-to-date for 55.7%, old-fashioned—30.2%;
6. Treatment of patients regarding their own benefits only (strong Hippocratic paternalism)—up-to-date for 52.8%, old-fashioned—30%;
7. Prohibition of euthanasia—up-to-date for 36.7%, old-fashioned—46.3%;
8. Prohibition of abortion—up-to-date for 21.9%, old-fashioned—72.2%.

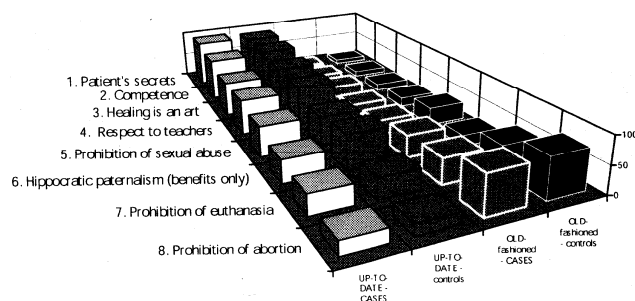


Figure 3: Which basic principles of the hippocratic oath are contemporary and which are not?

It should be noted that the similarity of two rankings as above indicates that students accept those basic principles of The Hippocratic Oath they found to be up-to-date.

As for the question 'Which are the parts of The Hippocratic Oath that sound archaic?' we have obtained the following ranking of answers:

1. 'I swear by Apollo Physician, by Asklepios. . . .'—this part sounds archaic to 50% of the students. It is noteworthy that the distribution of answers is quite different for students of the control group from that for students in the study group. Only 36.6% of the students in the control group consider this part to be very archaic while a two-fold higher percentage (71.3%) of students in the study group has the same opinion ($p=0.00002$);
2. 'To hold my teacher in this art equal to my own parents; to make him partner'—the second part sounds archaic to 48.6% of the students. The distribution of opinions regarding this part is also different for different groups. The percentage of students in the study group (63.3%) considering this part archaic is higher than the percentage of students (39.5%) in the control group ($p=0.00002$);
3. '... to impart precept, oral instruction, and all other instruction to my own sons, the sons of my teacher, and to indentedured pupils who have taken the physician's oath, but nobody else.'—this part sounds archaic to 50.9% of the students. The difference between the study group (68.5%) and control group (38.5%) is statistically significant ($p=0.00001$);
4. 'I will use treatment to help the sick . . . but never with a view to injury and wrong-doing.'—it sounds archaic to only 4.6% of the students with no difference between the study and control group ($p=0.1309$);
5. 'Neither will I administer a poison to anybody when asked to do so, nor'—this part sounds archaic to 27.9% of the students. It is interesting to note the difference between the study group (50.9%) and control group (15.1%) is statistically significant ($p=0.00001$);
6. '... I will not give a woman a pessary to cause abortion.'—this sentence sounds archaic to 56% of the students. This text might have been considered rather as a formulation (that in Bulgarian sounds to be very archaic!) than as a content. Otherwise, we could not explain the opinion expressed towards prohibition of abortion. The difference between the study group (72.5%) and control group (44.9%) is statistically significant ($p=0.00001$), as it is obvious that 5th-year students have probably understood the text rather as a content than a formulation;
7. 'But I will keep pure and holy . . . my life'—this part of the sentence sounds archaic to 25.6% of the students. The difference between the study group (44.9%) and the control group (16.1%) is statistically significant ($p=0.0001$). Probably, the positive attitude of 5th-year medical students (controls) towards paternalistic model has influenced their opinion regarding this text;
8. 'But I will keep pure and holy . . . my art.'—the part of the sentence regarding healing as an art sounds archaic to only 8.6% of the students. Although a few students consider that this part sounds archaic (study group—17.6%, controls—4.9%) the difference between groups

is statistically significant ($p=0.00042$) which means that almost all 5th-year medical students (95.1%), holding a paternalistic attitude, refer to this text as a contemporary one;

9. 'I will not use the knife, not even, verily, on sufferers from stone, but . . . '—this part of the Oath sounds archaic to 62.5% of the students. The difference between groups is statistically significant ($p=0.0315$) with a higher percentage for the study group;
10. 'Into whatsoever house I enter, I will enter to help the sick, and I will abstain from all intentional wrong-doing and harm, especially from abusing the bodies of man or woman, bond or free.'—this text sounds archaic to 18.4% of the students. Both groups, in their prevailing part, consider this sentence to be up-to-date;
11. 'Now if I carry out this oath . . . may I gain for ever reputation among all men for my life and for my art; . . . '—this last part of the Oath sounds archaic to only 14.3% of the students. The difference between the study group (30.3%) and control group (3.3%) is statistically significant ($p=0.0001$). This means that young students (2nd and 3rd-year of study, that is, at the beginning of education) do not expect yet to receive profits within their future practice while about 97% of graduating students (5th-year) refer to this text as a contemporary one.

Both groups of students have shown that they accept basic principles of the Hippocratic Oath. We may present the latter, according to their ranking, as follows: [1] Patient's secrets (89.9%); [2] Use of treatment according to doctor's own ability and judgment—competence (88.4%); [3] Respect to teachers (86.7%); [4] Healing is an art (84.4%); [5] Prohibition of sexual abuse to patients and their families (61%) and [6] Treatment of patients regarding their benefits only (strong Hippocratic paternalism). Both principles of prohibition of euthanasia and abortion are unacceptable to students (28.4% and 13%, respectively). Statistically significant differences between the study and control group have been obtained only for the strong Hippocratic paternalism (the benefit of patient), the latter being more peculiar to students who have not been previously taught 'Medical Ethics'.

It should be noted that students have reported that they accept those principles of the Oath that sound to them to be up-to-date. Students from both groups have considered the following parts to sound mostly archaic: 'I will not use the knife, not even, verily, on sufferers from stone, but . . .'; ' . . . I will not give a woman a pessary to cause abortion.'; ' . . . to impart precept, oral instruction, and all other instruction to my own sons, the sons of my teacher, and to indentured pupils who have taken the physician's oath, but nobody else.'; and 'I swear by Apollo Physician, by Asklepios . . .'. There are, however, clearly

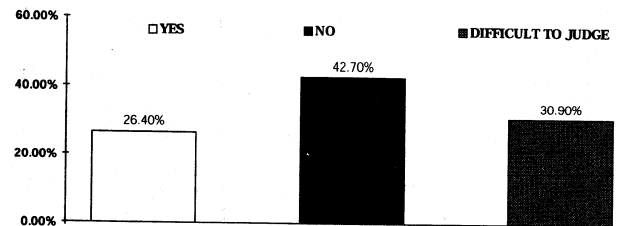


Figure 4: Does the hippocratic oath promote the idea of moral prohibition of receiving a remuneration from the patient?

expressed differences between the students from the study group who have been taught 'Medical Ethics' and the 5th-year students who have not and exhibit defined paternalistic attitudes.

As for distribution of answers to the question of whether the Oath as a whole promotes the idea of a moral prohibition of receiving a remuneration from the patient, we have observed that about 42.7% of the students say 'NO' and about 26.4%—'YES' (Fig.4).

The main conclusion of this study is that medical students have shown an attitude towards accepting and, working in the future after the paternalistic model of 'doctor-patient' relationships. Such a conclusion may help to the better orientation of and the setting-up of priorities in the teaching programme of 'Medical Ethics'. It should be also noted that since 1994, The Council of Ministries has adopted and introduced a new, up-to-date formulation of The Hippocratic Oath for the graduating students in all University Medical Schools in Bulgaria.

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Redefining the Active/Passive Euthanasia Debate—Part 1

Abstract

The debate about the morality of active versus passive euthanasia is confused in the American context because of definitional problems. In order to create an atmosphere for meaningful debate, redefinition is necessary. Furthermore, one of the chief proponents of removing the distinction between active and passive euthanasia has been James Rachels. Rachels fails to account for moral intuitions in making decisions about the morality of euthanasia. Part 1 of this article argues that Rachels's thesis is deficient and that both intention and situation are two moral notions on which the debate about euthanasia ought to focus.

The debate over the morality and legality of active euthanasia commands new prominence in American society. With the US Supreme Court ruling that the legality of physician-assisted suicide should be decided by each state, special interest groups are fervently attempting either to pass or block the legalization of active euthanasia. Despite the Court's ruling, the debate seems as murky and confusing as ever. There are, therefore, very good reasons to look for a new way to examine the issues surrounding euthanasia.

The Problem

In their attempt to determine the morality of euthanasia, individuals often analyse the morality of the actions or omissions involved in the actual performance of euthanasia.

Although there are many aspects of euthanasia over which arguments erupt (e.g. whether or not it is voluntary), the debate over whether the actual commission of euthanasia is morally acceptable or unacceptable is the most important issue. If euthanasia is generally acceptable, then the next question is, 'Under what conditions is euthanasia acceptable?' If euthanasia is generally unacceptable, then subsequent arguments are irrelevant.

No single notion is captured by the term 'euthanasia.' For example, *Webster's New Universal Unabridged Dictionary* defines 'euthanasia' as 'the act of putting to death painlessly a person suffering from an incurable and painful disease or condition'.¹ However, this is the way many persons would define active euthanasia, not euthanasia in general. James Rachels, for instance, defines 'active euthanasia' as 'taking some positive action designed to kill the patient'.² The *Encyclopedia of Bioethics* reports that there have been

'four long-standing meanings of euthanasia'.³ Only two of those meanings are included in the Webster's definition. Many people, including academics, doctors, lawyers, and activists, have diverse definitions of 'active' and 'passive' euthanasia. If the debate is to be meaningful, authors and speakers must clarify what they mean when *they* talk about euthanasia in order to avoid equivocation.

Definition and Methods of Euthanasia

Since much of the literature lacks concurrence, it is important to clarify the meanings of the terms used in this article. The term 'euthanasia' means any form of death which is caused either by an individual or party, usually in order to alleviate pain or suffering. The definition also entails circumstances when someone ends the life of someone else who is believed to be beyond recovery from their condition (i.e., someone in a persistent vegetative state), or when an individual or party fails to aid someone in these circumstances (usually at the end of life) who dies as a result of that failure. Based on this admittedly broad definition, there are two primary categories into which euthanasia is broken down: 'active euthanasia' and 'passive euthanasia'.

The term 'euthanasia' commonly includes many methods of death. Richard Higginson lists four different types of action or inaction that are usually associated with the term:

1. Administering drugs for the purpose of causing death.
2. Administering drugs for the purpose of reducing pain, which may, as a side-effect, cause death.
3. Discontinuing a particular treatment because it is believed to be no longer of any benefit to the patient, but also may accelerate death.
4. Withholding treatment from a patient because it is believed that death is imminent.⁴

Each of these actions or inactions is classified as 'active' or 'passive' euthanasia respectively. For *some*, these categories have provided a distinction between what is moral and what is not. For instance, Robert Campbell and Diane Collinson maintain that 'There is often made a distinction between *active* and *passive* euthanasia, and whether it matters morally which is involved. On the face of it, it would seem that it does.'⁵ The debate over the morality of actions resulting in euthanasia usually centres around these traditional categories.

'Active euthanasia' is commonly referred to as causing death by *commission*, that is, directly intervening in a

manner that not only causes a person to die, but in which death is the foreseen, desirable result of the action. Ronald Munson writes in his bioethics primer *Intervention and Reflection: Basic Issues in Medical Ethics* that 'active euthanasia' is when you 'kill someone [by taking] a definite action to end his or her life. Active euthanasia, then, is direct killing and is an act of commission.'⁶ On Higginson's typology, the first type of action/inaction (above) is considered 'active euthanasia'.

'Passive euthanasia' is commonly referred to as causing death by *omission*. There are a number of activities associated with passive euthanasia. These omissions include withholding treatment, withdrawal of treatment, and activities that have the side effect of causing death. Munson says, 'passive euthanasia' is 'to allow someone to die, by contrast, [and] take no steps to prolong a person's life when those steps seem called for. Passive euthanasia is an act of omission.'⁷ Thus, on Higginson's schema, types 2, 3 and 4 (above) all fit under the definition of 'passive euthanasia'.

For years people have used the active/passive distinction to evaluate whether or not euthanasia is morally acceptable under any circumstances. On this model, euthanasia may entail *doing* something to end a life or *omitting* something to end a life. J.P. Moreland adopts the traditional view of active and passive euthanasia in three parts:

1. The cause of death is different. In [active euthanasia] it is the doctor or other human agent. In [passive euthanasia] it is the disease or God himself.
2. The intent of the act is different. In active euthanasia it is the death of the patient. In passive euthanasia death is the (perhaps) foreseen consequence of an otherwise legitimate action whose intent may be to alleviate suffering, respect patient autonomy, cease interfering with the dying process and so forth.
3. There is a distinction between negative and positive human rights. The former state our obligation to refrain from harming another. The latter state our obligation to do something positive for another. Negative rights generally take precedence over positive rights. In passive euthanasia, one refrains from benefitting a person, but in active euthanasia one directly harms another.⁸

Moreland mentions three moral aspects of the active/passive categorization: cause of death, intent of an action which results in death, and the distinction between negative and positive rights. The interesting problem is that in order to include all three of these criteria in the debate over the morality of euthanasia, Moreland has to define the categories of 'active' and 'passive' to include them.

No matter what one's opinion concerning the morality of active or passive euthanasia, the manner in which the debate is currently structured makes it difficult to make moral judgments. This is because the categories 'active' and 'passive' do not easily include all the necessary concepts individuals intuitively use in evaluating the practice. Many believe that *intention* is almost always relevant in determining the morality of euthanasia. If intention is the defining moral characteristic of euthanasia then no one can make general moral conclusions about either active or passive euthanasia. Rather, we can make only general conclusions (e.g., passive euthanasia is acceptable) with corresponding general exceptions (when death is not

intended). The ability to form general moral conclusions is important because it lessens confusion about what certain terms mean when they are used without accompanying definitions. If it is true that the concept of intention is always involved in assessing the morality of a given case of euthanasia, then having specific categories which include intention would aid in helping people to make *more general* moral conclusions with *fewer exceptions*. The revised categories would facilitate debate by (1) clarifying concepts, (2) revealing moral presuppositions, and (3) communicating the moral grids of those who establish moral criteria for action to others who accept similar moral foundations. Granted, there will always be possible exceptions to any categories we create, but having categories that seem always to have exceptions is confusing and counter-productive to constructive debate.

The Issues at Stake

On December 4, 1973 the House of Delegates of the American Medical Association (AMA) adopted the following statement of principle on euthanasia:

The intentional termination of life of one human being by another—mercy killing—is contrary to that for which the medical profession stands and is contrary to the policy of the American Medical Association.

The cessation of the employment of extraordinary means to prolong the life of the body when there is irrefutable evidence that biological death is imminent is the decision of the patient and/or his immediate family. The advice and judgment of the physician should be freely available to the patient and/or his immediate family.⁹

This statement is based on the traditional view of euthanasia which argues that it is immoral to 'kill' a patient intentionally (and contrary to good medicine). Yet, the statement endorsed the belief that once someone is at the end of their life, it is morally acceptable to 'let them die'.

The AMA statement affirms the classic definitions of 'active' and 'passive' euthanasia and adopts the morally conservative stance opposing physician intervention to end life purposefully and prematurely. The 'intentional termination of life' is clearly forbidden. Harming patients violates ancient medical principles outlined in the Hippocratic Oath¹⁰ and is contrary to the principles of non-maleficence and beneficence.¹¹ According to these principles, the primary task of the physician is to help patients, not harm them. These principles provide one of the primary arguments against active euthanasia.

The statement is also very clear about the conditions under which a doctor no longer has to intervene to treat the dying patient. Those conditions fit the traditional definition of passive euthanasia. According to the statement, a doctor can discontinue 'extraordinary means to prolong the life of the body when there is irrefutable evidence that biological death is imminent.' The statement also seems to presume that it is the duty of the physician to continue treatment, regardless of the consequences of doing so, until all hope is gone. Once hope for recovery is gone, the doctor could not violate the principles of beneficence and non-maleficence because at that point help is beyond the

physician's power. This principle is the core of the AMA declaration against euthanasia.

It is easy to see why one might assume that to kill a patient is inherently worse than letting a patient die. However, this assumption is less than clear because there is not necessarily a moral difference between killing and letting die. Rather, it is on the basis of guidelines other than the action of killing or the action of letting die that the moral judgment is made. Those who assume a difference between killing and letting die are actually considering moral categories other than actions themselves. As Judith Jarvis Thompson asks,

Is killing worse than letting die? I suppose that what those who say it is have in mind may well be true. But this is because I suspect that they do not have in mind anything which is disconfirmed by the fact that there are pairs of acts containing a killing and a letting die in which the first is no worse than the second and also do not have in mind anything which is disconfirmed by the fact that there are cases in which an agent may not kill instead of letting die. So as I say, I think they may be right.¹²

James Rachels's Thesis

A year after the AMA's declaration, James Rachels published his short paper, 'Active and Passive Euthanasia', in the *New England Journal of Medicine* attacking the logic of the AMA's statement. Rachels provides four arguments against the AMA's statement; however, I will be concerned only with the argument that has been the most influential in eroding the moral distinction between killing and letting die. It is what has become commonly known as the 'bare-difference argument' or the 'Equivalence Thesis'.

In his article, Rachels sets up two identical cases with the only difference being that in one case the human agent kills the subject and in the other case the human agent allows the subject to die. He asserts that the bare-difference argument is the best way to evaluate if there is truly a moral difference between the two types of actions. He presents the following cases:

In the first, Smith stands to gain a large inheritance if anything should happen to his six-year-old cousin. One evening while the child is taking his bath, Smith sneaks into the bathroom and drowns the child, and then arranges things so it will look like an accident.

In the second, Jones also stands to gain if anything should happen to his six-year-old cousin. Like Smith, Jones sneaks in planning to drown the child in his bath. However, just as he enters the bathroom Jones sees the child slip and hit his head, and fall face down in the water. Jones is delighted; he stands by ready to push the child's head back under if it is necessary, but it is not necessary. With only a little thrashing about, the child drowns all by himself, 'accidentally,' as Jones watches and does nothing.¹³

In Rachels's scenarios, the only difference between the two cases is that Smith kills the child (by performing an action) while Jones lets the child die (by not acting—an omission).

The question Rachels seeks to raise here is whether it is correct to consider Smith morally culpable for 'killing his nephew' and not to consider Jones morally culpable for 'letting his nephew die'. Both men operated from the same motives, intentions, and with the same end in mind. Most would consider what both Smith did and Jones did not do to be morally objectionable.

What benefit does Rachels's thought experiment offer to the euthanasia debate? The benefit is *methodological* (rather than substantive). Even though his example is not a case of 'euthanasia,' it offers the chance to clarify the moral status of actions and omissions. Rachels's point is that 'active' and 'passive' can be either 'good' or 'bad' depending on the situation. Rachels's scenarios are meant to show that both actions and omissions can be bad. Depending upon the moral framework, many can find it easy to imagine some situations in which both actions and omissions are good. Tracy Isaacs avers that 'The distinction between killing and letting die is never doing the moral work'.¹⁴

Letting someone die is commonly considered less morally reprehensible than killing. Judith Jarvis Thompson asks, 'Does it matter whether a man was killed or only let die? A great many people think it does: they think that killing is worse than letting die.'¹⁵ However, as Rachels points out with his bare-difference argument, this is not *necessarily* the case. Unless, for example, we explicitly include intention in the debate, we risk people coming to conclusions that do not include this important moral feature.

Roy Perrett, in his article 'Killing, Letting Die and the Bare Difference', outlines Rachels's argument with the recognition that although there is no moral difference between killing and letting die, there must be other moral grounds on which the debate must turn. He concludes:

All that is required is that, in such cases, it is some feature other than the bare difference between killing and letting die that makes the moral difference. These other, extrinsic features are often present and do justify differential moral judgments.¹⁶

Perrett recognizes that the lack of moral difference between killing and letting die does not necessitate that there is no moral difference at all. He says,

What the Equivalence thesis tells us is just that the bare difference between killing and letting die is not in itself a morally significant difference, not that every case of killing is morally equivalent to every case of letting die.¹⁷

Perrett fails, though, to specify what any alternative moral criteria might be.

Intuition: Helping Define Moral Attributes

Some have argued in light of Rachels's original paper that his *substantive* argument (that if passive euthanasia is morally acceptable, active euthanasia should be acceptable as well) is verified by his *methodological* argument (that there is no intrinsic moral difference between killing and letting die). Others have countered intuitively, maintaining that although Rachels's methodological argument may be correct, his substantive argument is invalid

because he does not disprove the existence of other relevant moral criteria.

Rachels does mention that the lack of any moral difference between killing and letting die may seem counter-intuitive. How can I, by not sending money to feed starving persons overseas, be as morally reprehensible as someone who sends poisoned food to them? Rachels dismisses intuition out of hand by arguing that moral perception lacks the ability to be a foundational determinant of right and wrong generally. For Rachels, intuition cannot trump logical coherence.

Richard L. Trammell creates a counter-example in which he ties the issue of killing and letting die to moral perception, demanding that the conclusions of moral perception be accepted.

If someone threatened to steal \$1000 from a person if he did not take a gun and shoot a stranger between the eyes, it would be very wrong for him to kill the stranger to save his \$1000. But if someone asked from that person \$1000 to save a stranger, it would seem that his obligation to grant this request would not be as great as his obligation to refuse the first demand—even if he has good reason for believing that without his \$1000 the stranger would certainly die.¹⁸

Rachels concedes that this scenario is compelling. Yet, he is convinced that moral perception here is inadequate. This is because in both cases 'we end up with the *same* combination of lives and money, no matter which option the person chooses'.¹⁹ It should not make sense for life to be somehow less important or less worth saving merely because in one case I pull the trigger and in another case I do not give \$1000, even though *in both cases* I have the power to stop a death from occurring.

Trammell wants to argue that we should trust our moral intuition against active euthanasia. In so far as he means that we should use moral perceptions as a guide, I agree. But to the degree that he intends our perceptions to be a *defining moral base*, I cannot agree. Our moral perception cannot be made absolute. Moral perceptions change, depending upon differing winds of thought, fads, and needs. They can be (and usually are) influenced by the selfish nature of humanity. Any arguments which attempt to give too great a credence to moral perceptions should be rejected. All moral perceptions should be carefully evaluated through both clear, logical thought and a grid of moral foundations.

That being said, moral perceptions can be very helpful in recognizing when something is amiss in our logical reasoning and can help us insure that we allow a place for several moral concepts in the active/passive debate. Rachels states, 'Giving reasons is often not enough [to override our perceptions], even in philosophy. For if an intuition is strong enough, we may continue to rely upon it and assume that *something* is wrong with the arguments opposing it, even though we are not sure exactly what is wrong'.²⁰ Tracy Isaacs agrees, arguing that the intuitive difference we sense between killing and letting die is legitimate because 'there are other morally relevant considerations that we typically associate with killing, but do not typically associate with letting die, and that these are guiding our

intuitions about the distinction',²¹ not something intrinsic to killing or letting die themselves.

The intuitive difficulty that we have with Rachels's substantive argument most probably comes from the suspicion that there are other moral distinctives intimately involved in the debate which are beyond the action itself. Isaacs agrees, claiming that those who are concerned about the possible ill effects of jettisoning the traditional active/passive distinction should not worry because

other morally relevant features . . . are *always* what is doing the moral work. The distinction between killing and letting die is *never* doing the moral work. Thus, if active euthanasia is wrong, there must be some other way to explain its wrongness.²²

It should now be easier to understand why there has been such difficulty in articulating arguments in the euthanasia debate. Killing is not, in and of itself, morally worse than letting die, even though it probably is in the specific situations that those who might espouse such a view have in mind.

There are those who argue intuitively that action is not *just* an action or omission, but includes other things (e.g., intention) as well. With this I agree. However, in order to help us understand what other moral criteria have a part in the moral assessment of euthanasia, it is necessary to split action and related moral criteria from each other in order to evaluate how each one should function. Thus, I am not assuming that action is truly separate from morality, but I am merely using an analytical distinction to help us find out how best to structure future debate.

Tom L. Beauchamp, author of the landmark bioethics volume *Principles in Biomedical Ethics* (which outlined the two major principles used in defending the traditional view of euthanasia—beneficence and nonmaleficence) wrote 'A Reply to Rachels on Active and Passive Euthanasia'. His intent was specifically to attack Rachels's original article (in the *New England Journal of Medicine*). Beauchamp believes that Rachels's bare-difference argument is sound in and of itself; however, Beauchamp also leans on moral intuition as a basis for discounting the validity of Rachels's connection of the difference between killing and letting die to the difference between active and passive euthanasia. Yet, instead of committing the mistake of making moral intuition a foundation for moral consideration, Beauchamp notes that intuition tells us that there is still a moral issue concerning euthanasia that Rachels has failed to address by merely denying the sufficiency of the killing/letting die distinction for making moral judgments about euthanasia. Beauchamp illustrates a positive use of moral intuition by using intuition to guide him to other relevant issues that are integral to the debate at hand. Through his arguments we can see what other moral factors are at the root of the euthanasia debate and should be tied to the analytical concept of action mentioned earlier.

Beauchamp argues that there are issues of 'judgments of medical fallibility and moral responsibility' at stake.²³ In discussing the issues of medical fallibility and moral responsibility, there are two factors which are of primary importance in determining the morality of the proposed action. They are the *knowledge of the situation* and the *intention of the agents involved*. Even though Beauchamp

does not spell out these two factors, they are implicit in the factors he lists. These two factors are what cause his intuition to pause at Rachels's assertion that there is no moral difference between killing and letting die and thus no difference between active and passive euthanasia. Beauchamp knows there is a problem with Rachels's simplistic substantive thesis that insists there are absolutely no substantive moral differences between active and passive euthanasia. This is the case even though he knows what Rachels says methodologically about the lack of moral difference of the actions to be true. Beauchamp sees two concrete situations that illustrate the need for situation and intention to be included in any debate over active and passive euthanasia.

The two factors, intention and situation, are what I believe to be the two moral pegs on which the euthanasia debate turns and are what should be included in moral evaluation along with any concept of action. This tells us that these concepts should be utilized for making the moral evaluations about euthanasia, no matter what categorization scheme is used. For those who hold situation and intention to be important in any debate over euthanasia, the categories need to be broad enough to employ them as well to allow the establishment of general moral conclusions about them. Most other writers on this subject address the inability to include situation and/or intention in Rachels in one way or another.

In the next issue of *Ethics & Medicine*, I will examine situation and intention and propose a new structure to the euthanasia debate.

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Dame Cicely Saunders

The History of the Hospice Movement's Beginning

I think it is very interesting that a conference on 'palliative care—the way forward' should start with history. I happen to have just come back from California where I have been lecturing. I am slightly jet lagged and in the middle of the night I was listening to somebody from Armenia quoting the following, 'we learn about life and about history by

looking backwards but we have to live by looking forwards'. So although I am talking about history and looking backwards, I am all the time also looking forwards.

Each of us has come here from our own culture, from our own personal background and our own experience and training. But we have become interested in palliative care,

above all, I am sure by listening, listening to patients and listening to families. We have been moved by their need and their potential.

Let me tell you about our first patient, David Tatner, a polish Jew from Warsaw who died at the age of 40 in 1948. During the last couple of months of his life, I spent much time listening to him as his medical social worker. The three founding principles of hospital and palliative care may be summarised on the basis of two things he said and the conclusion that I came to. First, he told me that he would be a window in our home. He gave us a commitment to openness; openness to all who had come, openness to each other and also openness to challenge. To accept challenge has always been, I believe typical of palliative care. On another occasion he said to me, 'I only want what is in your mind and in your heart'. At the time, this seemed like a very personal exchange. However, on reflection I realised that our patients were only asking for what is in our heart. And then after he had died I felt convinced that he had made his way back to the faith of his fathers with his own quiet dignity in the freedom of the spirit. Thus, openness, care that comes from the heart and freedom of the spirit are, I think, the essentials of palliative care.

These three principles derive from the Judeo-Christian tradition, but they also belong to the humanist tradition and are accepted by anybody who looks at people with respect. After David died in February 1948, I went to work in one of the older homes for the dying. There were three or four in London at the time. I went as a registered nurse in the evenings. There I saw regular administration of morphine, a practice which dates back to about 1935.

The idea of giving of opiates regularly was not invented when St. Christopher's opened or when I started working in St. Joseph's in 1958. It goes back much further. The matron at St. Luke's at that time told me that she thought it was the nurses who did it. The doctors prescribed it. But it was the nurses who first introduced the idea that patients should receive their morphine regularly, whether or not they were in pain. I was working with a thoracic surgeon in those days and I kept on talking to him about it and made him visit a patient who was dying. It was this surgeon who finally convinced me to study medicine, which with the support of his medical school and my father I did, at the age of 33.

Back in 1935, Alfred Worcester of Harvard, a medical and a general practitioner was talking to the students and wrote a book of his three lectures 'The care of the aged, the dying and the dead'. I read that, I read a lot in the Royal Society of Medicine Library, finding out mostly anecdotes, very little, in fact practically nothing in the way of research. In 1958, having finished my medical training I was able to go to St. Joseph's, another of the old homes. I worked there for seven years. When I arrived it was virtually untouched by medical advance and I was able to introduce records. Very soon, I had analysed eleven hundred patients' notes which were held on a punch card system. Of course it was Irish Roman-Catholic run and so I was the only Protestant heretic in the house. It was pre-Vatican II, so it was enormously welcoming of them to let me in.

I read about their way of giving drugs on demand and putting them into a regular schedule. And I then realised, in the light of my previous training, that pain was not

only physical but emotional and mental. One may even say that pain has a relational and spiritual dimension. Pain is a search for the security to find meaning in one's own personal life.

It was often written in the books that if you gave opiates regularly the patient would become addicted. In fact it is just the other way around. If one is in pain and has to ask for an injection one is reminded every time of one's dependence on the drug and of the fact that one is dependent on the person who administers the drug. If, however the patient is given the drug regularly, he or she can forget about it.

The year 1959, to step back for a moment, was a very interesting year. Herman Fital in the United States edited a book called *The meaning of death*. Rene Fox, also from the United States, wrote a book called *Experiment Perilous*, a sociological study of the ward which first started using cortisone, the earliest sterile drug on patients with life threatening illnesses. The book dealt mainly with the stresses and strains of the patients and the doctors, and the way in which these interwove. It was fascinating reading. At the same time, 'Cruse', an association helping widows, started in this country and I was asked to write a series of six articles in the *Nursing Times* on the care of the dying, which was published as a booklet and sold. In 1963, John Hinton, a psychiatrist did a study on the physical and medical distress of the dying, comparing 102 dying patients with 102 patients who were also seriously ill but not terminal. This remains a detailed study of unique value. Professor Hinton, as he became, has since been working a lot with us. I recommend any work of his if you want to see comparative studies that have actually been carried out. In 1963 I also went to the United States and visited Calvary hospital. There I heard about Madam Jean Garnier who founded the first calvere and that the word 'hospice' was first used in France in 1842, to refer to places caring for dying patients. I also met people working with patients in their homes in New York as well as volunteers working in basic pain research.

The years 1957 to 1967 were a time of networking, of endlessly trying to work out where we were going, looking for new premises, and examining the research that had been carried out. The thousands of letters that I wrote at that time are presently being looked at by an archivist. Professor Clark from Sheffield has been looking at the history of the hospice movement. He has got all my archives with him at the moment. Apparently I wrote between 8 and 10 thousand letters in those 10 years. My motto for life dates from that time: 'What have you that you did not receive?'. This was because the ideas that came together were put together into a kaleidoscope of ideas and given a shake. What emerged was a new kind of palliative care.

In Canada, I met Noel Zack, and Patrick Moore invented the gate theory of pain. He was working on pain and we have had greatly appreciated links with his palliative care movement. It has been extremely important to keep talking with people in other branches of this whole field of pain, suffering and stress. During the 1970s Dr Teresa Vaniere, a French-Canadian, who was working at St. Christopher's went over to France several times. Last year, I had the pleasure of going to Paris for the opening of Madam Garnier maison and see their new building there and their palliative care movement.

St. Christopher's opened in 1967 as an in-patient unit of 54 beds, with plans for home care, starting with evaluative research and looking at patterns of distress in two of the boroughs in the neighbourhood. We had no visitors for the first six months. After that people started beating paths to our door. We never claimed to be the model. What we said was that we provided an example of an attempt to tackle the situation of the total pain of terminal distress, focusing on patients with cancer. If we had not focused on cancer patients and on their very real problems of pain, we would not have been able to undertake the evaluative research or the double-blind controls study between morphine and diamorphine-morphine, the results of which eventually made their way into the medical journals. Soon after we had got going, three people came over from North America on Sabbaticals and went back home and started working on different models of palliative care.

New Haven started the first home care service with no back up beds in 1974. After about 8 years we also started to provide beds, but continued to maintain an effective service for a great number of patients with very few beds. In New York, at St. Luke's hospital, they began a peripatetic hospital team which covered the Harlem area. Finally, in 1975, Professor Mouse started the first palliative care unit in the midst of a general teaching hospital, The Royal Victoria which I have just visited. It is exciting that despite our very different backgrounds, our very different cultures and philosophical and religious origins, we are very much talking about the same thing, provided we keep listening to the patients.

In 1997, we started an information service at St. Christopher's and we have links with people in nearly 80 countries. Anyone who is interested in what is happening in other countries and wants to become part of our network at St. Christopher's is welcome. The hospice bulletin, which comes out four times a year, contains articles from Lithuania, Russia, Brazil and other places where people are starting up new schemes. I think it is very important that people get to know what other people are doing.

As already mentioned, we undertook a double-blind study. That is to say, we invited Robert Twycross to come and do it at St. Christopher's. Dr Julia Addington Hall has recently completed a study of 3629 people. This is study across the country of how people spent the last year of their life and how they died, involving not only cancer patients but different kinds of patient. Professor Castor Brown, from the United States, and I, have just published a book on hospice movement internationally. We have stories from twenty-two different countries, telling how each started out in their own way. They each have their own strengths. What stands out are family values. Families do want to care for people, but often they need both information and continuing support. All have had problems and have had to fight in order to show that it is 'living till you die' that we are talking about. It is very much living! I am not denying death. No, death is our focus and a crown, but it should not be seen as a defeat. Lawrence van de Post wrote a wonderful book about being a prisoner of war in Japan in which he says, 'there is a way of winning by losing', that is a kind of victory in defeat.

There are many families who have ended by saying: 'You know it is extraordinary but it is one of the best times

we had together.' They found themselves leaving the hospice a strengthened family, But everybody, as I said, has met resistance, has had to be patient, has had to demonstrate what can be done with whatever drugs are available in their country. There are many countries in the world where drugs are not easily available. Much research is still to be done. Pain relief is certainly central and the WHO booklet on cancer pain relief, first published in 1986, is enormously valuable because it is simple. Research has shown how 80–85% of patients can be relieved of pain with this simple WHO system. But we are still learning. We provide better care than we did thirty years ago. And if we are not doing better ten years from now, it would be very bad.

Wherever one starts out, in whatever country, one has to be integrated in one way or another into one's own health system. And what is called for is for persistence, astute approaches, a lot of diplomacy but, above all, good hard evidence-based medicine, nursing and social work. Where we have been successful, the message has spread because we have been able in one way or another to give patients a voice, to give a voice to the voiceless—as has been said about Bishop Tutu in South Africa—to somehow enable people to hear what people are saying. We must listen to the dying. We are not the ones who are there teaching all the time. We are learning. It is fascinating learning in Japan. It is fascinating learning from nurses in Zimbabwe. We are learning from many quarters and have links with many, such as the International School for cancer care, British Association for hospices abroad. Many organisations twin up, there is a lot of support. Today there is so much literature—like the Oxford text book of Palliative Medicine, just into its second edition—that it is less important to meet but it is still good to do so.

People sometimes seem to think that we set out as a response to intensive care and say that there is another response to that, namely voluntary euthanasia. We are not denying suffering but we claim that the great majority of patients need not do so. Those of us who think that euthanasia is wrong have the right to say so as well as the responsibility to help to bring about relief of suffering. It is true that intensive care has sometimes been provided even when it was very inappropriate. This has added to suffering and made people ask for active euthanasia. What palliative care is offering is neither neglect nor euthanasia, but something as it were, in the middle. I have used the word hospice; I have used the phrase palliative care. They are not quite interchangeable. But palliative care grew out of the hospice movement. The phrase was in fact first used back in about 1900 by Dr Snow in the Royal Cancer hospital, now the Royal Marsden, and it was used for palliative radiotherapy a month later.

What we have wanted to do is to provide the relief, the support, the understanding early rather than wait until the last weeks or months before death. We believe that support and symptom control should be there from the beginning of the diagnosis of a life threatening illness at the time when chemotherapy, radiotherapy first begins. There is a specialist palliative care programme which is carried out in the 207 hospice units in this country and used by the majority of nurses working with patients in their homes. It is very specifically targeted and has been developed for patients needing crisis intervention towards the end of life.

We started our home care team in 1969. The last five years it has escalated so that today we probably have 420 patients in their own homes with thirty-five nurses available on a consultation basis, complementary to the ordinary community services. We have probably fifty-five patients in our sixty-two beds, and twenty patients coming to the day centre. The people we know at home we may know for months. We may discharge them and have them back. They may come in and out. We have a 40% discharge rate from our in-patient beds. There is a considerable amount of movement and an increasing rate of continuity of care visits from our consultants in the hospitals. This is to show patients that hospice does not only mean 'dying'; it means 'symptom control', it means 'support', it means 'respite care', it means 'coming in and going out again'. We are here as an alternative to intensive care, treating you as if you were getting better—or saying that there is nothing more to do.

I do feel very strongly that palliative care should never include assisted suicide or voluntary euthanasia. There is much misunderstanding and misrepresentation concerning hospice care. We are relieving distress, and if at times this does mean incidentally altering the time of death, then this is not the cause of death in any sensible use of the term. As Judge Devlin said in his speech to the jury in the Dobkin-Adams case, 'If the first purpose of medicine, the restoration of health, can no longer be achieved there is still much for a doctor to do and he is entitled to do all that is proper and necessary to relieve pain and suffering even if the measure he takes may incidentally shorten life. This is not because there is a special defence for medical men but because no act is murder which does not cause death. We are not dealing here with a philosophical or a technical cause but with the common cause, the cause of death is the illness or the injury. Proper medical treatment which is administered and has an incidental effect on determining the exact moment of death is not the cause of death in any sense or use of the term.'

I mentioned Dr Addington Hall's study of nearly 4000 patients. One of the questions that was asked was: Did the patient at any time in the last year say that it would have been good if death had come sooner? 24% of the patients, and 28% of the carers with a bias towards the younger—not the spouses but the children who were looking after the patients—said 'yes, they had said that.' The second question was: Did the patient ever ask for euthanasia? 3.6% of patients did.

I know this is the memory of the carers. I know euthanasia is not legal in this country. But adding it all up, I think we can say that only a small minority of people, right at the end of their lives are actually asking for euthanasia. These are not patients who were looked after by a hospice. These are patients right across the board, a random selection.

The House of Lords Select Committee on Medical Ethics and the Medical Association in America have pointed out that a change of law would mean that the line between voluntary and involuntary euthanasia would be very difficult to draw. And we know that it is not drawn in the Netherlands. There is evidence of this. And it was a visit from the House of Lords to the Netherlands which finally made up their minds for an unanimous decision.

But what about autonomy? People say, 'but surely I have a right'. Autonomy is not an absolute. We are part of society. I do not think we can bring in a law. The law is a very blunt instrument in a clinical situation.

To return to the history of the hospice, I have tried to show that its beginnings are people! If you can get across to each patient, however they feel, that they the essential hospice message: you matter because you are you; and you matter until the last moment of your life; and we will do all that we can not only to help you die peacefully but to live until you die!

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Reviving the Saracen's Head: A Commentary on the New Biotechnologies

Abstract

In an era increasingly marked by biotechnological development, the Saracen's Head, an image used by C.S. Lewis over a half-century ago, becomes a powerful interpretive

metaphor for understanding the hubris of contemporary biotechnology. Through an examination of recent developments in genetics, embryology, and reproductive medicine, the authors argue that only a Christian worldview perspective applied to science will keep us from repeating

the mistakes of the past. The article calls for Christians to reassert the sanctity of every human life as the reigning paradigm of science to avoid future tragedy.

As World War II came to a close in Europe, Allied forces liberated France and the rest of Europe. Upon entering Nazi Germany, the horrors of the Third Reich, previously hidden under cover of war, became terribly evident. Beginning in 1939 with 'mercy killing' of the sick, disabled, and mentally retarded, the Nazis systematically exterminated all those who did not fit into their vision of the 'Glorious Fatherland'. By the end of the war, their experiment in eugenics and social engineering had encompassed any who were not of Aryan descent, including Jews, blacks, and Gypsies (Holocaust Timeline, 1998). The folly of such scientific elitism was dramatically made clear with the death of six million Jews, and untold millions of others.

In 1946, C.S. Lewis wrote *That Hideous Strength*, partly in reaction to the flawed scientific philosophy of the Nazis. The book focuses on man's attempts to control nature and to redefine the very essence of man. A central metaphor of the book is the 'Saracen's Head', a nightmarish vision of an immortal, decapitated head, kept alive by biotechnology:

'It tells us something in the long run even more important', said the Director. 'It means that if this technique is really successful, the Belbury people have for all practical purposes discovered a way of making themselves immortal . . . It is the beginning of what is really a new species—the Chosen Heads who never die. They will call it the next step in evolution. And henceforward, all the creatures that you and I call human are mere candidates for admission to the new species or else its slaves—perhaps its food' (Lewis, 1965, 197).

The Saracen's Head speaks of the horror hidden behind materialist philosophy and eugenics. It is symbolic of man's desire to use biotechnology to achieve the ultimate control of the environment: his own immortality.

In this article, the metaphor of the Saracen's Head will provide a philosophical and historical framework from which to examine recent advances in biotechnology in the areas of genetics, embryology, and human reproduction. We will conclude with some additional comments from a theological perspective.

Background of the Saracen's Head

That Hideous Strength is actually the third in a fantasy trilogy, which began with *Perelandra* and *Out of the Silent Planet*. This final volume in the series describes the insidious attempt by a well-organized scientific faction to take over control of Bracton College, a small undergraduate college in England. On the surface, the members of this group seem to be kind, reasonable, and even-handed. In fact, their organization is called N.I.C.E.:

The N.I.C.E. [National Institute of Coordinated Experiments] was the first-fruits of that constructive fusion between the state and the laboratory on which so many thoughtful people base their hopes of a better world. It

was to be free from almost all the tiresome restraints—'red tape' was the word its supporters used—which have hereto hampered research in this country (Lewis, 1965, 23).

In this context, of course, 'red tape' is a euphemism for moral constraints. And so the kindly and beneficent members of N.I.C.E. gain financial control over Bracton. Their well-meaning appearance contrasts sharply with their goal: an elitist transformation of society, with 'the next step of evolution' in mind.

Lewis epitomizes this contrast with the striking image of the Saracen's Head. This metaphor is derived from the distinguished Arab radiologist 'who had cut short an otherwise brilliant career by poisoning his wife'. Because of his crime, he was executed by guillotine. Somehow, N.I.C.E. obtained the severed head and reanimated it through advanced medical technology:

[It] was a head . . . which had had the top part of the skull taken off . . . as if something inside had boiled over. A great big mass which bulged out from inside what was left of the skull. Wrapped in some kind of composition stuff, but very thin stuff. You could see it twitch . . . It was green looking and the mouth was wide open and quite dry . . . It was fixed up on some kind of bracket, or shelf . . . it had a neck and a sort of collar thing round it, but nothing below the collar; no shoulders or body. Only these hanging things . . . they were artificial. Little rubber tubes and bulbs and little metal things too . . . All the tubes went into the wall (Lewis, 1965, 181–182).

The men and women of N.I.C.E. are initially presented as kindly, almost loving people. Through his nightmarish image, Lewis transforms them into a horrible and evil force. In reality, the ulterior design of N.I.C.E. is a coercive transformation of the human race.

Many scholars regard *That Hideous Strength* as a fictional parallel of ideas Lewis put forth in a series of lectures, compiled into a book entitled *The Abolition of Man*. In *Abolition*, Lewis expresses his deep concern over the effects of scientific technology on personhood. He writes, 'What we call Man's power over Nature turns out to be a power exercised by some men over other men with Nature as its instrument.' Again he proclaims, 'Man's final conquest has proved to be the abolition of Man' (Lewis, 1947, 69, 77). Both *The Abolition of Man* and *That Hideous Strength* serve as a warning that the use of biotechnology without moral restraints may result in great evils for mankind.

It is worth noting that a major theme of *Abolition* is education. Understanding how technologies work and how they are used is an important first step in heeding the warnings presented by the ominous Saracen's Head. In this light, we will now discuss recent technological developments and consider their implications.

Questions Raised by Recent Developments in Genetics

The realm of genetics has provided the background for considerable ethical debate and speculation in recent years. For example, Columbia Pictures' recent movie

'GATTACA' depicts a future society in which the current explosion of genetic information is taken to a logical extreme. In a not-so-distant era, scientists have developed the ability to take small scraps of human tissue, such as hair, fingernails, or buccal mucosal swabs, and instantly determine the DNA sequence of that person's genome. Only the 'genetically perfect' are able to get top-paying jobs, and those with a high risk of certain diseases are the outcasts of society.

The movie's protagonist is a man who, against the normal mores of his society, has been conceived by natural means. He states, 'My mother put her faith in God rather than the local geneticist'. Because of a genetically defined high risk for heart disease, he is declared an 'Invalid', a member of a class of people considered unfit for any but the most menial of jobs. In reality, discrimination based on DNA sequence information is supposed to be illegal, but such laws are impossible to enforce.

It is hard to dismiss such a pessimistic view of the future of biotechnology as mere science fiction. In fact, the origins of such a scenario are already in place. In 1988, the federal government of the United States launched a massive research project called the Human Genome Initiative. This project is an international, multi-billion dollar laboratory exercise to map the exact location of every gene and its underlying code in human DNA. With approximately three billion letter-like codes to decipher, it is a phenomenal task, but one in which great strides have already been made. The genes responsible for certain devastating diseases have already been located.

With increased knowledge, however, comes increased responsibility. How will the knowledge of the genetic structure of man be utilized? Certainly an acceptable scenario would be the use of the new information in post-natal genetic counselling. The parents of children with genetically derived diseases, such as sickle-cell anemia or Tay-Sachs disease, can be advised of their chances of conceiving other such affected infants.

However, at present there is no cure for diseases diagnosed during the prenatal period by genetic screening. Upon finding a genetic abnormality, the 'treatment' of choice is usually abortion of the fetus (Meilander, 1996). In contrast to the historical tradition of curative medicine, such 'treatment' involves the obliteration of the patient.

At this point, an important distinction should be made. There are some *developmental* abnormalities that may be detectable at a prenatal stage. These should be contrasted with strictly genetic diseases. An example is hemolytic disease of the newborn, which results from anti-Rh antibodies of the mother (who herself is Rh-negative) attacking an Rh-positive fetus. This may be treatable by an exchange transfusion performed *in utero*. This has already been attempted, with varying degrees of success. Even fetal surgery has been attempted for some types of developmental disorders. An example is hydrocephalus, where it is now possible to perform a shunting procedure prior to birth to reduce the potential for devastating brain injury before it occurs. Though still a matter of ongoing research, it seems reasonable to cautiously welcome such possibilities (Pringle, 1989).

Yet, in diagnosing *genetic* conditions, the prevailing 'treatment' option continues to be abortion. A

counterargument can be made that prenatal detection of genetic abnormalities simply allows better eventual treatment of the affected infant. However, the record of prenatal testing indicates that it most often leads to an abortion if the results are abnormal. Some of the conditions diagnosed *in utero* include neural tube defects (anencephaly and spina bifida), Down's Syndrome, Turner's Syndrome, and Tay-Sachs Disease. Some of these diseases carry a grave prognosis, while some of these conditions may not be as debilitating. Yet, if detected by prenatal screening, most of these lives are ended by abortion. Given the current state of prenatal treatments for some conditions, it is ironic that the unborn child can be both patient and non-person at the same time.

As genetic knowledge and technology grow, it is not too difficult to imagine a world like that of the movie 'GATTACA'. Gender selection has already led to infanticide in such countries as China, Vietnam, and India. In a future era, not only gender, but also height, hair colour, tendencies towards obesity, and a host of other factors could form the basis for selection of 'acceptable' fetuses.

It is precisely because of the abuses that already exist that Christians should take a very sceptical view of prenatal genetic screening. Meilander has rightly said:

Because we know we should learn to love others as we have been loved, Christians ought to set themselves against prenatal screening, at least as it is currently practiced in this country in an increasingly routinized way. For it stands in conflict with the virtue that would say to another: 'It's good that you exist' (Meilander, 1996, 49).

On another front, technological developments in genetics may soon make it possible to manipulate the human genome itself. Generally, a distinction is made between somatic cell therapy and germ cell therapy. Somatic cell therapy involves introducing altered pieces of DNA into human somatic (non-reproductive) cells, perhaps by the use of a virus. The goal is to alter or replace a missing or defective gene, in order to treat a genetic disorder. Early trials of such techniques have already been attempted, and have met with limited success.

Similar techniques are also feasible with germ cells (reproductive cells), but this would have significant moral and ethical ramifications. Such an attempt goes beyond treatment of the individual, in that it has consequences for subsequent generations, with many potentially disastrous results. While somatic cell therapy is considered by most to be acceptable, germ cell therapy is generally regarded as dangerous and unethical.

Yet even this barrier may not be absolute. W. French Anderson, director of the University of Southern California's gene therapy laboratory, says, 'Powerful techniques have powerful downsides'. He predicts that germ line cell manipulation is inevitable, because 'no parent will willingly pass on lethal genes to their children if they can prevent it' (Weiss, 1998). While many would disagree with Anderson, such a utilitarian argument is becoming increasingly accepted in the debate.

The Saracen's Head image summarizes these serious moral concerns. Lewis envisioned and feared the utopian elitism that might arise through abuse of social engineering and biotechnology. He never lived to see prenatal genetic

screening, let alone the possibility of manipulating the very genome itself, but he witnessed the moral equivalent in the eugenic agenda of Auschwitz, Buchenwald, and Dachau. He saw the selective elimination of 'life unworthy of life' by the Nazis. Unaware of the coming revolution in genetics, Lewis nonetheless correctly predicted many of its dangers, and he depicted them as a horrible, morally terrifying Saracen's Head.

Questions Raised by Recent Developments in Embryology

Embryology has helped to answer some very basic questions about the nature of man, yet it remains one of the least understood and most mysterious of the biological disciplines. This is because embryogenesis is truly an amazing and miraculous process that results in the formation of a complete, complex multicellular living organism from a single fertilized egg. Great strides in understanding this process have occurred in the last few decades, largely due to advances in the techniques of cell biology.

Embryological development begins with the fertilized egg. This is a specialized cell containing the information to make all of the various organs and tissues which will develop from it. Once the fertilized egg (zygote) divides, the resulting multi-celled stage is referred to as an embryo. Implantation of the embryo into the wall of the uterus occurs at seven to ten days after conception (Ahokas, 1998).

Conception, defined as fertilization of the egg, has historically been considered the beginning of life. Yet there has been an attempt, in recent years, to redefine the point at which human life begins, an attempt driven more by social ideology than science. This is not simply a philosophical question, for society must understand how far to extend the right to life. Devaluation of life is rampant in society, yet there is still a belief that life, at some stage, is inviolable. The question then becomes: When is life protectable?

Concerning the beginning of life, one can point to many stages that may hold significance. Such stages include conception, implantation, the transition between the embryo and the fetus, brain wave activity, the old notion of 'quickening' (when the mother first feels the baby), and birth itself. Is the individual protectable at each of these stages? Legally, no. The judicial system in the United States has relied heavily on 'viability outside the womb' as its criterion for when the developing fetus has the legal status of a person. This was certainly the case in the landmark *Roe v. Wade* decision of 1973 (Roe, 1973).

Yet viability has proved to be a moving target. Technology continues to push back the moment at which an infant can survive outside the protective environment of the uterus. The limit was once 32 weeks after conception, but has dropped into the range of 25–27 weeks with the use of surfactant, the detergent-like chemical that aids the flexibility of lung tissue (Peabody and Martin, 1996). With high frequency respirators and other newer technologies, survival may routinely be possible by as early as 24 weeks (Chervenak and McCullough, 1997). Furthermore, the entire viability argument may no longer have the same meaning, as an artificial uterus looms on the horizon as a real technological possibility (Lupton, 1997).

These changing possibilities highlight the difficulty of defining protectable human life at any arbitrary moment of gestation. Francis Schaeffer suggested addressing the question this way: 'Would you kill this infant a minute before he was born, or a minute before that, or a minute before that? At what point in time can one consider life to be worthless and the next minute precious and worth saving?' (Schaeffer and Koop, 1979, 37).

The only minute that represents a true difference between protectable life and life of less value is the moment of conception. The gametes (egg and sperm) are, biologically speaking, end-stage cells. By themselves, they have lost the ability to divide again. One of the defining characteristics of life is the ability to reproduce. Therefore gametes, by these criteria, are not fully 'life'. However, the zygote is fully alive, and has the potential to reproduce. No other stage of life has this type of significance. Implantation and birth are essentially movement of the individual to a new position. There is no addition of genetic information. The full genetic programme was already in place at the moment of conception.

The foregoing will be no surprise to those who hold to a conservative position on the questions of abortion and the right to life. Yet recent technological developments have again blurred the distinction between protectable life and 'life not worthy of life'. In vitro fertilization techniques have now been developed to help infertile couples realize their goal of having children. Eggs removed from a woman's ovaries are fertilized in a test tube by sperm from her partner. The fertilized eggs are then placed into the uterus of the woman. In some cases, the sperm and/or egg may come from other donors, anonymous or known, outside of the marriage bond (this, of course, further separates the whole concept of parenthood from sexual union).

After fertilization by in vitro techniques, but before insertion into the uterus, the developing embryo is in a 'state of limbo'. This is a state unique to the technological era in which we live. Since multiple eggs and multiple sperm are involved, multiple embryos are produced, only a few of which are ever implanted. A variation involves the implantation of multiple embryos, with 'selective reduction (destruction)' of some to improve the survivability of those that remain. In any case, unimplanted embryos are frozen for later implantation, but are often discarded. In some parts of the world, such 'left over' embryos may be subjected to experimentation and biotechnological research (Morgan and Lee, 1991, Thompson et al, 1998).

Is this a violation of life similar to abortion? Although Christians may differ on this issue, most would agree that life is sacred at any point of its existence. Therefore, it is important to understand the moral and ethical status of such embryos. Some writers would make a distinction between the terms 'preembryo' and 'embryo', with the former referring to the developing organism prior to implantation. However, this may well be a euphemism to permit morally unjustifiable actions. One legal scholar has said, 'A legal and ethical consensus is emerging that preembryos are not legal persons or moral subjects' (Robertson, 1992).

The late internationally acclaimed geneticist Jerome Lejeune believed the term 'preembryo' should never be used:

[The term embryo] was accepted the world over for more than fifty years by all the specialists of the world, and we had no need at all of a sub-class which would be called a preembryo, because there is nothing before the embryo. Before an embryo there is sperm and an egg, and that's it. And the sperm and an egg cannot be a preembryo because you don't know what sperm will go into what egg, but once it is made, you have got a zygote and when it divides it's an embryo and that's it. I think it's important because people would believe that a preembryo does not have the same significance as an embryo (Lejeune, 1992, 38).

This euphemism has already had its effect in Great Britain, where research on human 'preembryos' up to fourteen days old is already taking place (Morgan and Lee, 1991). This date, occurring *after* the time of implantation (7-10 days), has been arbitrarily assigned by scientists, and approved by the British Government, to be the point at which protectable human life begins.

Lest this be thought of as a trivial distinction, it is worth noting the power of euphemism in affecting the popular moral compass. In the past, one justification for medical experiments performed on people was that those involved were less than human or did not have the 'significance' of a human being. For example, the Nazis labelled Jews as unfit or 'useless eaters'. Is there any doubt that British scientists are invoking the same principle in regard to embryos?

In the United States, there is currently a ban on federal funding for research on human embryos. Nonetheless, such research has been conducted in the private sector. Recently, two independent teams of researchers isolated and cultured human embryonic stem cells. Stem cells are immature cells that have the potential to develop into any type of tissue in the human body. As of yet, the chemical 'switch' to direct these cells to develop into specific cells is undiscovered. If found, this would provide a means to grow any type of human cells. For example, cultured heart cells could be used to replace cells lost from myocardial infarction (Miller and Bloom, 1998; Marshall, 1998).

There is only one catch to this rosy picture: the cultured cells came from donated human embryos, the unused or 'discarded' embryos left over after in vitro fertilization. Because there is great potential for good, additional pressure will be applied to overlook any ethical concerns, another strictly utilitarian scenario.

The concept that implantation defines the beginning of life has been utilized in more subtle ways. Because of the furor over the French drug RU-486, the so-called 'abortion pill', the Federal Drug Administration has delayed its approval for use in the United States. As an alternative, in September 1998, the FDA granted permission for a 'morning after' kit that would "prevent" pregnancy for up to three days after unprotected sexual intercourse. The pills contain estrogen and progestin, which may prevent ovulation if it has not yet occurred, or may prevent implantation of a fertilized ovum. In regard to the latter, the prevailing wisdom is nonetheless that the emergency treatment prevents pregnancy. Princeton University's 'Emergency Contraception Web Site' proclaims:

[The] use of emergency contraception does not cause an abortion. In fact, emergency contraception prevents

pregnancy and thereby reduces the need for induced abortion. Medical science defines the beginning of pregnancy as the implantation of a fertilized egg in the lining of a woman's uterus . . . Emergency contraceptives work before implantation and not after a woman is already pregnant (Princeton University, 1998).

The scholarly *New England Journal of Medicine* concurs:

Although the precise mechanism of action of estrogen-progestin emergency-contraceptive pills is unknown, they clearly can block ovulation. However, even if emergency contraception worked solely by preventing the implantation of a zygote, it would still not be an abortifacient. Pregnancy begins with implantation, not fertilization. Medical organizations and the federal government concur on this point (Grimes, 1997).

Arthur Caplan, a prominent bioethicist and Director of the Center for Biomedical Ethics at the University of Pennsylvania, also seems willing to concede on this point, calling emergency contraception 'a tremendous ethical advance':

Emergency contraception is just that: contraception. By delaying a woman's ovulation, the odds of pregnancy occurring are greatly diminished. However one views abortion, the prevention of pregnancy is ethically better than ending a pregnancy (Caplan, 1998).

Advances in technology are leading to a redefining of ethical concepts, rather than being guided by them. Amazingly, there are prominent voices that would go even farther in an attempt to redefine personhood. Recently, the Australian ethicist Peter Singer was appointed to an endowed chair at Princeton University. World Magazine has reported of Professor Singer:

Singer believes that since infants are not 'rational and self-aware,' they should not be considered human until they are at least one month old. Up to that time, they could be killed. Newborn babies have, to use his analogy, the same moral value as snails. As 'non-persons,' they are 'replaceable,' much like chickens and other farm animals (Veith, 1998).

Singer advocates that not just babies, but many of the disabled and unwanted should be killed, using 'active eugenic euthanasia' for everyone whose 'life is not worth living' (Veith, 1998). This is a chilling echo of 'life unworthy of life'. This does not imply that active eugenics is the practice or even the preference of most in the bioethics community. Even so, such a redefined concept of personhood should cause great concern to those who hold to a conservative Christian worldview.

It is here that the Saracen once again rears his ugly head. The utopian elitism of uncontrolled genetic manipulation has now given way to the slippery slope of declining personhood. Only those deemed fit for existence are permitted to survive. In *That Hideous Strength*, the reasonable sounding Lord Featherstone outlines his rationale for the Saracen's Head: 'Man has got to take charge of man. That means . . . sterilization of the unfit, liquidation of backward races (we don't want any dead weights), selective breeding. Then real education, including prenatal education' (Lewis, 1965, 42).

Long before the revolution in embryology, and long before the ready access to abortion, Lewis foresaw the urge to tinker with humans in the womb, and feared the resulting loss of personhood.

Questions Raised by Recent Developments in Human Reproduction

In February 1997, a new technology emerged on the world scene that will shape the nature of bioethical debate for years to come. The Scottish scientist Ian Wilmut cloned a mammal for the first time in scientific history. He achieved this by transferring nuclear DNA from a somatic cell of an adult sheep into an egg from which the nucleus had been removed (Blacksher, 1997). The result was a new sheep, nicknamed Dolly. Conservative columnist George F. Will immediately voiced the warning that scientists would attempt to apply such techniques to humans:

The biotechnology of cloning turns out to be remarkably simple, meaning it is accessible to scientists with training that is not especially recondite. And apparently there is no practical impediment to cloning the human animal. If freedom is the silence of the law, Americans are free to try it. And the bioethical code adopted by European nations, forbidding genetic experiments that would alter human generations, will inhibit only the conscientious (Will, 1997).

Indeed, there are indications that scientists will attempt any technically feasible experiment, regardless of ethical considerations. In January 1998, physicist Dr. Richard Seed caused a national furor when he announced that he would open a commercial cloning clinic in Chicago. 'God made man in his own image', he declared, 'God intended for man to become one with God. Cloning . . . is the first serious step in becoming one with God'. He later added, 'man will develop the technology and the science and the capability to have an indefinite life span' (Nash, 1998). Quickly, President Clinton announced a five-year ban on human cloning research, and the Federal Drug Administration declared such research a violation of federal law.

The original goals of cloning research were, of course, reasonable from an ethical point of view. The researchers who cloned Dolly started out with the idea of making animals that produce human proteins, such as alpha-1-antitrypsin, which is used to treat cystic fibrosis. Cows could be genetically created which produce human antibodies in their milk. Cloning techniques could even be utilized to trick an adult cell into becoming another type of cell. This could conceivably lead to compatible reservoirs of skin for grafts in the treatment of burns, or even to the growing of whole kidneys for transplant (Fox, 1998).

Yet combining cloning with the previously mentioned advances in embryology could lead to great abuses. Some have suggested that cloning may provide a continuous private supply of non-rejectable, transplantable organs. In other words, parents could have their child cloned and freeze the resulting embryo. If the child experienced a need for an organ donation at some time in his life, the sibling could be unfrozen and brought to term to provide the organ. This, of course, would mean death for the clone, if a

vital organ like the heart were required. This is essentially premeditated eugenics.

If this seems extreme, it should be observed that family planning to harvest the body parts of siblings has already occurred. In 1990, a couple had a baby for the sole purpose of providing a bone marrow transplant for their daughter (Morrow, 1991). No lives were lost, and the transplant was apparently successful.

Another interesting aspect of cloning is that each time man tries to recreate human life, he is forced to go back to conception as the starting point. Cloning is not a 'carbon copy' in the sense that all 70 trillion human cells are copied and put back together to make an individual. Cloning is a *reproduction technique* that involves restoration of the diploid condition to the chromosomes of an egg cell, which is exactly what occurs during fertilization through sexual union. It is conception, albeit a very unnatural form, and it is the point at which a new life begins.

In the realm of scientific experimentation, the technical ability to do something often becomes its own rationale: 'I can do it, therefore I will, never mind whether or not I should'. C.S. Lewis satirizes such fascination with technology in *That Hideous Strength*:

There are to be forty interlocking committees sitting every day and they've got a wonderful gadget—I was shown the model last time I was in town—by which the findings of each committee print themselves off in their own little compartment on the Analytical Notice-Board every half hour. Then, that report slides itself into the right position where it's connected up by little arrows with all the relevant parts of the other reports . . . The different kinds of business all come out in the Board in different coloured lights . . . They call it a Pragmatometer (Lewis, 1965, 38).

'Coloured lights' are one thing; human beings are another. In their apparent love affair with technical advances, it seems that some bioscientists will do anything. Surely the thoughtful observer must pause upon seeing recent headlines. Time magazine recently reported on work performed in two obscure labs, one at the University of Texas, the other at the University of Bath. One group created headless mice; in the other lab, headless tadpoles. Combining such techniques with cloning leads to a chilling scenario:

For sheer Frankenstein wattage, the purposeful creation of these animal monsters has no equal . . . Why should you be panicked? Because humans are next. 'It would almost certainly be possible to produce human bodies without a forebrain', Princeton biologist Lee Silver told the London Sunday Times. 'These human bodies without any semblance of consciousness would not be considered persons, and thus it would be perfectly legal to keep them "alive" as a future source of organs' (Krauthammer, 1998).

The capabilities possible in the realm of biotechnology seem limited only by the imaginations of those who work in laboratories around the world. It is precisely because of the lack of moral constraints among some scientists that the image of the Saracen's Head is a valuable warning symbol to all who would enter the realm of biotechnology without restraint.

Reflections From a Theological Perspective

The metaphor of the Saracen's Head distills an entire worldview within an evocative image. It speaks a warning across the decades since World War II, and quickens the sensibilities and the conscience of the concerned Christian. From a biblical perspective, the horror of unrestrained use of biotechnology should be immediately obvious.

Yet, like the N.I.C.E. men of Lewis's novel, many scientists of today's world, fascinated by technology and anxious to advance their discipline, seem oblivious to these concerns. Appeals to conscience are an obstructive interference with their work. For them, the Saracen's Head is but one more appeal to the Frankenstein myth, a strident and hysterical cry by fundamentalists bent on halting legitimate scientific progress. Why do they have a difference in perception from conservative Christians? Do they not see the horror?

The difference may lie in the worldview conflict between God's sovereignty and man's stewardship. James Childress has expressed this conflict well:

Tension can be seen in the distinction between sovereignty over nature and stewardship of nature. Although the Christian tradition has sometimes engendered . . . attitudes of human sovereignty over nature, its dominant theme is human stewardship, deputyship, or trusteeship. While the sovereign is not accountable, the trustee is accountable to God and for what happens to nature (Childress, 1981).

The Christian principle of man's stewardship over nature begins with Genesis 1:26-28, where three key concepts are made clear:

- Man is unique, created in God's image and likeness.
- Man represents God's highest act in creation.
- Man is distinct and separate from the rest of the created order, in that he is to rule over it.

Notably absent from the list of things over which man is to rule is *himself*.

It should further be noted that man's rule (authority, dominion, governance) over nature is *derivative*. His authority exists only inasmuch as God himself gives it. Psalm 8:6 expresses this well: 'You [God] make him [man] to rule over the works of your hands; you have put all things under his feet' (New American Standard Bible).

The current revolution in biotechnology has elements that seem in tension with the biblical role of humankind. Man, the created being with dominion over the rest of nature, begins to give way to man, the meddler, the tinkerer, who ultimately thinks of himself as creator. One of the N.I.C.E. technicians of the Saracen's Head describes this goal explicitly: 'It is the beginning of Man Immortal and Man Ubiquitous . . . Man on the throne of the universe' (Lewis, 1965, 178).

The result is nothing short of idolatry. Men have stepped out of their role as caretakers of a divinely created world, and have taken on the role of God. They have ignored the natural revelation of the created order visible all around them, adopting instead the precepts of secular materialism. The condemnation of Romans 1:18-25 does not occur because men have rejected Christ as Saviour, but because

they have ignored the evidence of a Creator in the created order, so that they are 'without excuse' (Rom. 1:20). As a result, 'their foolish heart was darkened. Professing to be wise, they became fools' (Rom. 1:21-22).

Romans 1:25 declares their ultimate offence: 'For they exchanged the truth of God for a lie, and worshipped and served the creature rather than the Creator'. Commenting on this passage, Whitmer has written: 'Man's refusal to acknowledge and glorify God leads to a downward path: first, worthless thinking; next, moral insensitivity; and then, religious stupidity, seen in idol worship' (Whitmer, 1983, 991).

Perhaps Lewis had this portion of Scripture in mind in *That Hideous Strength*, when the hapless technicians of N.I.C.E. stand naked before an uncontrollable Saracen's Head: 'No one had read the dials, adjusted the pressures, or turned on the air and the artificial saliva. Yet words came out of the dry gaping mouth of the dead man's head. "Adore!" it said' (Lewis, 1965, 354).

Moral sensitivity has departed from some of those who practise science, creating a vacuum in the area of biotechnology where it is most needed, thus placing 'Man on the throne of the universe'. The drift into atheistic naturalism that has so characterized modern science is beyond the scope of this article, but is perhaps best summed up by the attitude of Richard Dawkins, the preeminent Oxford zoologist, as quoted in the journal *Science*:

People who believe life came into being for a purpose are not only mistaken, but ignorant: 'Only the scientifically illiterate accept the "why" question where living creatures are concerned.' There is no evidence to support religion, and 'nowadays the better educated admit it', he said in his 'against God' speech (Easterbrook, 1997).

It is no wonder that the Saracen's Head holds no horror for those who have abandoned all respect for a Creator-God. Yet it is at precisely this point that committed Christians must make their voices heard, that they might be the moral 'salt and light' so lacking in this world.

Conclusion

This article has focused on a metaphor, a disembodied nightmare of biotechnology called the Saracen's Head. As scientists with a Christian worldview, we believe that the desire of man to be sovereign, combined with the use of newer genetic, embryologic, and reproductive technologies, has led to a violation of the sacredness and sanctity of human life.

Admittedly, the use of Lewis's metaphor of Nazi horror to describe current trends in biotechnology may offend some. We do not claim that current practices rise to the level of the abuses that took place during World War II. Yet we believe that some modern technologies, especially those that involve experimentation on human embryos and fetuses, promote a subtle revival of eugenic thought and practice. Theologian and bioethicist Richard John Neuhaus, in comparing some modern bioethical ideas to those of the Nazis, has said:

I am convinced that there are unmistakable similarities between what they did then and what we are doing now.

They too asked and answered the question, Who shall live and who shall die? And, Who belongs to the community entitled to our protection? Then and now, the subject at hand is killing, and letting die, and helping to die, and using the dead. Then and now, the goal is to produce healthier human beings and, perhaps, a better quality of human being (Neuhaus, 1997).

As scientists, we believe that these concerns do not contradict our commitment to scientific research and the application of technology. Our stance merely reflects our desire to view all things in the light of scriptural truth. It is man himself that may be compromised by the abuses of biotechnology, altering the role for which he was originally created. C.S. Lewis comments on this in *The Abolition of Man*:

The real picture is that of one dominant age . . . which resists all previous ages most successfully and dominates all subsequent ages most irresistibly, and thus is the real master of the human species. But even within this master generation (itself an infinitesimal minority of the species) the power will be exercised by a minority smaller still. Man's conquest of Nature, if the dreams of some scientific planners are realized, means the rule of a few hundreds of men over billions upon billions of men. There neither is nor can be any simple increase in power on Man's side. Each new power won by Man is a power over Man as well. Each advance leaves him weaker as well as stronger (Lewis, 1947, 70–71).

In 1946, Lewis was certainly not a lone voice in his reaction to the Nazi horror. Yet where was the voice of dissent in 1939? One of the greatest indictments of the Christian church is its silence during the rise to power of Hitler, and its refusal to condemn the policies of the Third Reich, with its eugenic killing centres and eventual extermination of Jews. An active and vocal Christian community in Germany might not have prevented the Holocaust, but would have been an example and inspiration to future generations, including our own.

Are we condemned to repeat the mistakes of the past, or will Christians speak out against the loss of personhood and the subtle modern-day revival of eugenics? All ethical reflection originates from a view that man is created in the image of God, and therefore holds a special place in the eyes of the Creator. The Saracen's Head reminds us of the horrors of departing from such a view.

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Special Article

On Human Embryos and Medical Research

An Appeal for Ethically Responsible Science and Public Policy

Recent scientific advances in human stem cell research have brought into fresh focus the dignity and status of the human embryo. These advances have prompted a decision by the Department of Health and Human Services (HHS) and the National Institutes of Health (NIH) to fund stem cell research which is dependent upon the destruction of human embryos. Moreover, the National Bioethics Advisory Commission (NBAC) is calling for a modification of the current ban against federally funded embryo research, to permit direct federal funding for destructive harvesting of stem cells from human embryos. These developments require that the legal, ethical, and scientific issues associated with this research be critically addressed and articulated. Our careful consideration of these issues leads to the conclusion that human stem cell research requiring the destruction of human embryos is objectionable on legal, ethical, and scientific grounds. Moreover, destruction of human embryonic life is unnecessary for medical progress, as alternative methods of obtaining human stem cells and of repairing and regenerating human tissue exist and continue to be developed.

Human Embryonic Stem Cell Research Violates Existing Law and Policy

In November 1998, two independent teams of US scientists reported that they had succeeded in isolating and culturing stem cells obtained from human embryos and fetuses. Stem cells are the cells from which all 210 different kinds of tissue in the human body originate. Because many diseases result from the death or dysfunction of a single cell type, scientists believe that the introduction of healthy cells of this type into a patient may restore lost or compromised function. Now that human embryonic stem cells can be isolated and multiplied in the laboratory, some scientists believe that treatments for a variety of diseases—such as diabetes, heart disease, Alzheimer's, and Parkinson's—may be within reach. While we in no way dispute the fact that the ability to treat or heal suffering persons is a great good, we also recognize that not all methods of achieving a desired good are morally or legally justifiable. If this were not so, the medically accepted and legally required practices of informed consent and of seeking to do no harm to the patient could be ignored whenever some 'greater good' seems achievable.

One of the great hallmarks of American law has been its solicitous protection of the lives of individuals, especially the vulnerable. Our nation's traditional protection of human life and human rights derives from an affirmation of the essential dignity of every human being. Likewise, the international structure of human rights law—one of the great achievements of the modern world—is founded on the conviction that when the dignity of one human being is assaulted, all of us are threatened. The duty to protect human life is specifically reflected in the homicide laws of all 50 states. Furthermore, federal law and the laws of many states specifically protect vulnerable human embryos from harmful experimentation. Yet in recently publicized experiments, stem cells have been harvested from human embryos in ways which destroy the embryos.

Despite an existing congressional ban on federally-funded human embryo research, the Department of Health and Human Services (HHS) determined on January 15, 1999 that the government may fund human embryonic stem cell research. The stated rationales behind this decision are that stem cells are not embryos (which itself may be a debatable point) and that research using cells obtained by destroying human embryos can be divorced from the destruction itself. However, even NBAC denies this latter claim, as is evident by the following statement in their Report on Stem Cell Research:

Whereas researchers using fetal tissue are not responsible for the death of the fetus, researchers using stem cells derived from embryos will typically be implicated in the destruction of the embryo. This is true whether or not researchers participate in the derivation of embryonic stem cells. As long as embryos are destroyed as part of the research enterprise, researchers using embryonic stem cells (and those who fund them) will be complicit in the death of embryos.

If the flawed rationales of HHS are accepted, federally-funded researchers may soon be able to experiment on stem cells obtained by destroying embryonic human beings, so long as the act of destruction does not itself receive federal funds. However, the very language of the existing ban prohibits the use of federal funds to support '*research in which a human embryo or embryos are destroyed, discarded, or knowingly subjected to risk of injury or death. . .*' (Sec. 511(a)(2)). Obviously, Congress'

intent here was not merely to prohibit the use of federal funds for embryo destruction, but to prohibit the use of such funds for research *dependent in any way upon* such destruction. Therefore, the opinion of HHS that human embryonic stem cell research may receive federal funding clearly violates both the language of and intention behind the existing law. Congress and the courts should ensure that the law is properly interpreted and enforced to ban federal funding for research which harms, destroys, or is dependent upon the destruction of human embryos.

It is important to recognize also that research involving human embryos outside the womb—such as embryos produced in the laboratory by *in vitro* fertilization (IVF) or cloning—has never received federal funding. Initially, this was because a federal regulation of 1975 prevented government funding of IVF experiments unless such experiments were deemed acceptable by an Ethics Advisory Board. Following the failure of the first advisory board to reach a consensus on the matter, no Administration chose to appoint a new board. After this regulation was rescinded by Congress in 1993, a Human Embryo Research Panel recommended to the National Institutes of Health (NIH) that certain kinds of harmful nontherapeutic experiments using human embryos receive federal funding. However, these recommendations were rejected in part by President Clinton and then rejected in their entirety by Congress.

Further, it is instructive to note that the existing law which permits researchers to use fetal tissue obtained from elective abortions requires that the abortions are performed for reasons which are entirely unrelated to the research objectives. This law thus prohibits HHS from promoting the destruction of human life in the name of medical progress, yet medical progress is precisely the motivation and justification offered for the destruction of human life that occurs when stem cells are obtained from human embryos.

Current law against funding research in which human embryos are harmed and destroyed reflects well-established national and international legal and ethical norms against misusing any human being for research purposes. Since 1975, those norms have been applied to unborn children at *every* stage of development in the womb, and since 1995 they have been applied to the human embryo outside the womb as well. The existing law on human embryonic research is a reflection of universally accepted principles governing experiments on human subjects—principles reflected as well in the Nuremberg Code, the World Medical Association's Declaration of Helsinki, the United Nations Declaration of Human Rights, and many other statements. Accordingly, members of the human species who cannot give informed consent for research should not be the subjects of an experiment unless they personally may benefit from it or the experiment carries no significant risk of harming them. Only by upholding such research principles do we prevent treating people as things—as mere means to obtaining knowledge or benefits for others.

It may strike some as surprising that legal protection of embryonic human beings can co-exist with the U.S. Supreme Court's 1973 legalization of abortion. However, the Supreme Court has never prevented the government

from protecting prenatal life outside the abortion context, and public sentiment also seems even more opposed to government funding of embryo experimentation than to the funding of abortion. The laws of a number of states—including Louisiana, Maine, Massachusetts, Michigan, Minnesota, Pennsylvania, Rhode Island, and Utah—specifically protect embryonic human beings outside the womb. Most of these provisions prohibit experiments on embryos outside the womb. We believe that the above legally acknowledged protections against assaults on human dignity must be extended to all human beings—irrespective of gender, race, religion, health, disability, or age. Consequently, the human embryo must not be subject to wilful destruction even if the stated motivation is to help others. Therefore, on existing legal grounds alone, research using stem cells derived from the destruction of early human embryos is proscribed.

Human Embryonic Stem Cell Research Is Unethical

The HHS decision and the recommendations of NBAC to federally fund research involving the destruction of human embryos would be profoundly disturbing even if this research could result in great scientific and medical gain. The prospect of government-sponsored experiments to manipulate and destroy human embryos should make us all lie awake at night. That some individuals would be destroyed in the name of medical science constitutes a threat to us all. Recent statements such as 'stem cell research is too promising to be slowed, impeded, or stopped' underscore the sort of utopianism and hubris that could blind us to the truth of what we are doing and the harm we could cause to ourselves and others. Human embryos are not mere biological tissues or clusters of cells; they are the tiniest of human beings. Thus, we have a moral responsibility not to harm them deliberately.

An international scientific consensus now recognizes that human embryos are biologically human beings beginning at fertilization, and acknowledges the physical continuity of human growth and development from the one-cell stage forward. In the 1970s and 1980s, some frog and mouse embryologists referred to the human embryo in its first week or two of development as a 'pre-embryo', claiming that it deserved less respect than embryos in later stages of development. However, some embryology textbooks now openly refer to the term 'pre-embryo' as a scientifically invalid and 'inaccurate' term which has been 'discarded' and others which once used the term have quietly dropped it from new editions. Both the Human Embryo Research Panel and the National Bioethics Advisory Commission have also rejected the term, describing the human embryo from its earliest stages as a living organism and a 'developing form of human life'. The claim that an early human embryo becomes a human being only after 14 days or implantation in the womb is therefore a scientific myth. Finally, the historic and well-respected 1995 Ramsey Colloquium statement on embryo research acknowledges that:

The [embryo] is human; it will not articulate itself into some other kind of animal. Any being that is human is a

human being. If it is objected that, at five days or fifteen days, the embryo does not look like a human being, it must be pointed out that this is precisely what a human being looks like—and what each of us looked like—at five or fifteen days of development.

Therefore, the term 'pre-embryo', and all that it implies, is scientifically invalid.

The last century and a half has been marred by numerous atrocities against vulnerable human beings in the name of progress and medical benefit. In the 19th century, vulnerable human beings were bought and sold in the town square as slaves and bred as though they were animals. In this century, the vulnerable were executed mercilessly and subjected to demeaning experimentation at Dachau and Auschwitz. At mid-century, the vulnerable were subjects of our own government's radiation experiments without their knowledge or consent. Likewise, vulnerable African-Americans in Tuskegee, Alabama were victimized as subjects of a government-sponsored research project to study the effects of syphilis. Currently, we are witness to the gross abuse of mental patients used as subjects in purely experimental research. These experiments were and are driven by a crass utilitarian ethos which results in the creation of a 'sub-class' of human beings, allowing the rights of the few to be sacrificed for the sake of potential benefit to the many. These unspeakably cruel and inherently wrong acts against human beings have resulted in the enactment of laws and policies which require the protection of human rights and liberties, including the right to be protected from the tyranny of the quest for scientific progress. The painful lessons of the past should have taught us that human beings must not be conscripted for research without their permission—no matter what the alleged justification—especially when that research means the forfeiture of their health or lives. Even if an individual's death is believed to be otherwise imminent, we still do not have a licence to engage in lethal experimentation—just as we may not experiment on death row prisoners or harvest their organs without their consent.

We are aware that a number of Nobel scientists endorse human embryonic stem cell research on the basis that it may offer a great good to those who are suffering. While we acknowledge that the desire to heal people is certainly a laudable goal and understand that many have invested their lives in realizing this goal, we also recognize that we are simply not free to pursue good ends via unethical means. Of all human beings, embryos are the most defenceless against abuse. A policy promoting the use and destruction of human embryos would repeat the failures of the past. The intentional destruction of some human beings for the alleged good of other human beings is wrong. Therefore, on ethical grounds alone, research using stem cells obtained by destroying human embryos is ethically proscribed.

Human Embryonic Stem Cell Research is Scientifically Questionable

Integral to the decision to use federal funds for research on human embryonic stem cells is the distinction between

stem cells and embryos. HHS has stated that federal funds may be used to support human embryonic stem cell research because stem cells are not embryos. A statement issued by the National Institutes of Health (NIH) regarding this decision asserts that 'The congressional prohibition on the use of [government] funds for . . . embryo research does not apply to research utilizing human pluripotent stem cells because such cells are not an embryo as defined by statute. Moreover, because pluripotent stem cells do not have the capacity to develop into a human being, they cannot be considered human embryos consistent with the commonly accepted or scientific understanding of that term.'

It is important to note that the materials used in an experiment, as well as the methods of experimentation, are considered to be part of scientific research. When a scientific study is published, the first part of the article details the methods and materials used to conduct the research. Ethical and scientific evaluation of an experiment takes into account both the methods and materials used in the research process. Therefore, the source of stem cells obtained for research is both a scientifically and ethically relevant consideration.

Research on human embryonic stem cells is objectionable due to the fact that such research necessitates the prior destruction of human embryos; however, the HHS's claim that stem cells are not, and cannot develop into, embryos may itself be subject to dispute. Some evidence suggests that stem cells cultured in the laboratory may have a tendency to reaggregate and form an aggregate of cells capable of beginning to develop as an embryo. In 1993, Canadian scientists reported that they successfully produced a live-born mouse from a single mouse stem cell. While it is true that this stem cell had to be wrapped in placenta-like cells in order to implant in a female mouse, it seems that at least some doubt has been cast on the claim that a stem cell, or cluster of stem cells, is not embryonic in nature. If embryonic stem cells do indeed possess the ability to form or develop as a human embryo, research on such stem cells could itself involve the creation and/or destruction of human life and thereby certainly fall under the existing ban on federally-funded embryo research. It would be irresponsible for the HHS to conduct and condone human embryonic stem cell research without first discerning the status of these cells. Their use in any research in which they could be converted into human embryos should likewise be banned.

Methods of Repairing and Regenerating Human Tissue Exist Which Do Not Require the Destruction of Human Embryos

While proponents of human embryonic stem cell research lobby aggressively for government funding of research requiring the destruction of human embryos, alternative methods for repairing and regenerating human tissue render such an approach unnecessary for medical progress.

For instance, a promising source of more mature stem cells for the treatment of disease is hematopoietic (blood

cell-producing) stem cells from bone marrow or even from the placenta or umbilical cord blood in live births. These cells are already widely used in cancer treatment and in research on treating leukemia and other diseases. Recent experiments have indicated that their versatility is even greater than once thought. For example, given the right environment, bone marrow cells can be used to regenerate muscle tissue, opening up a whole new avenue of potential therapies for muscular dystrophies. In April 1999, new advances were announced in isolating mesenchymal cells from bone marrow and directing them to form fat, cartilage, and bone tissue. Experts in stem cell research believe that these cells may allow for tissue replacement in patients suffering from cancer, osteoporosis, dental disease, or injury.

An enormously promising new source of more mature stem cells is fetal bone marrow, a source which is many times more effective than adult bone marrow and umbilical cord blood. It appears that fetal bone marrow cells do not provoke immune reactions to the same degree as adult or even newborn infant cells. This is true whether the unborn child is the donor or the recipient—that is, fetal cells can be used to treat adults, or adult bone marrow cells can be used to treat a child in the womb without the usual risk of harmful immune reactions. Such cells would not need to be derived from fetuses who were intentionally aborted, but could instead be obtained from fetuses who were spontaneously aborted.

In 1999, unprecedented advances were also made in isolating and culturing neural stem cells from living human nerve tissue and even from adult cadavers. Such advances render it quite possible that treatment of neural diseases such as Parkinson's and Alzheimer's, as well as spinal cord injuries, will not depend upon destructive embryo research.

Earlier claims that embryonic stem cells are uniquely capable of 'self-renewal' and indefinite growth can also now be seen as premature. For example, scientists have isolated an enzyme, telomerase, which may allow human tissues to grow almost indefinitely. Although this enzyme has been linked to the development of cancer, researchers have been able to use it in a controlled way to 'immortalize' useful tissue without producing cancerous growths or other harmful side effects. Thus, cultures of non-embryonic stem cells may be induced to grow and develop almost indefinitely for clinical use.

One of the most exciting new advances in stem cell research is the January 1999 announcement that Canadian and Italian researchers succeeded in producing new blood cells from neural stem cells taken from an adult mouse. Until recently, it was believed that adult stem cells were capable of producing only a particular type of cell: for example, a neural stem cell could develop only into cells belonging to the nervous system. Researchers believed that only embryonic stem cells retained the capacity to form all kinds of tissue in the human body. However, if stem cells taken from adult patients can produce cells and tissues capable of functioning within entirely different systems, new brain tissue needed to treat a patient with Parkinson's disease, for example, might be generated from blood stem cells derived from the patient's bone marrow. Conversely, neural stem cells

might be used to produce needed blood and bone marrow. Use of a patient's own stem cells would circumvent one of the major obstacles posed by the use of embryonic stem cells—namely, the danger that tissue taken from another individual would be rejected when transplanted into a patient. Thus, in commenting on this finding, the *British Medical Journal* remarked on January 30, 1999 that the use of embryonic stem cells 'may soon be eclipsed by the more readily available and less controversial adult stem cells'. Given that the function of the adult stem cells was converted without the cells first having to pass through an embryonic stage, the use of such cells would not be subject to the ethical and legal objections raised by the use of human embryonic stem cells. The Director of the NIH has pointed out that evidence that adult stem cells can take on different functions has emerged only from studies on mice. However, his own claim that human embryonic stem cell research can produce treatments for diabetes and other diseases is also based solely on experimental success in mice.

One approach to tissue regeneration that does not rely on stem cells at all, but on somatic cell gene therapy, is already in use as an experimental treatment. A gene that controls production of growth factors can be injected directly into a patient's own cells, with the result that new blood vessels will develop. In early trials, this type of therapy saved the legs of patients who would have otherwise undergone amputation. It was reported in January 1999 that the technique has generated new blood vessels in the human heart and improved the condition of 19 out of 20 patients with blocked cardiac blood vessels. Such growth factors are now being explored as a means for growing new organs and tissues of many kinds.

The above recent advances suggest that it is not even necessary to obtain stem cells by destroying human embryos in order to treat disease. A growing number of researchers believe that adult stem cells may soon be used to develop treatments for afflictions such as cancer, immune disorders, orthopedic injuries, congestive heart failure, and degenerative diseases. Such researchers are working to further research on adult, rather than embryonic, stem cells. In light of these promising new scientific advances, we urge Congress to provide federal funding for the development of methods to repair and regenerate human tissue which do not require the destruction of human embryonic life. However, even if such methods do not prove to be as valuable in treating disease as are human embryonic stem cells, use of the latter in the name of medical progress is still neither legally nor ethically justifiable for the reasons stated in this document.

Conclusion

We believe that an examination of the legal, ethical, and scientific issues associated with human embryonic stem cell research leads to the conclusion that the use of federal funds to support any such research that necessitates the destruction of human embryos is, and should remain, prohibited by law. Therefore, we call on Congress to (1) maintain the existing ban against harmful federally-funded human embryo research and make explicit its application

to stem cell research requiring the destruction of human embryos and (2) provide federal funding for the development of alternative treatments which do not require the destruction of human embryonic life. If anything is to be gained from the cruel atrocities committed against human beings in the last century and a half, it is the lesson that the utilitarian devaluation of one group of human beings for

the alleged benefit of others is a price we simply cannot afford to pay.

This appeal has been endorsed by well over one hundred nationally and internationally known physicians, scientists, theologians, ethicists, lawyers, and groups. For more information, including the list of signatories, contact <http://www.stemcellresearch.org> or the Center for Bioethics and Human Dignity website at <http://www.bioethix.org>.

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Book Reviews

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The Changing Face of Health Care. A Christian appraisal of managed care, resource allocation, and patient-caregiver relationships
J.F. Kilner, R.D. Orr, J.A. Shelley (Eds.)
Grand Rapids, MI/Cambridge, U.K.:
Eerdmans/Patemonster Press 1998, 314 p.
ISBN 0-8028-4533-9; \$19.00

This book deals with the various challenges, that are presented by a health care system in which managed care plays an important role and in which, as a consequence, the voice of economics tends to overrule the voices of patients and health care professionals.

The first part contains the experience of a physician, a nurse, a patient and a manager. The patient and the nurse make clear, that in a managed care system economic constraints easily obscure the need of the patient. The physician expresses his concern that such a system will diminish the sense of professionalism and morale of medicine and nursing.

The second part deals with some fundamental notions and values one needs to evaluate the organisation and financing of health care. After Nigel Cameron has sketched the rough lines of a theological frame work for medicine, Judith Shelley presents a theology of nursing. This contains valuable insights, though in my opinion her concept of Christian nursing is too broad and shows too much of an overlap with the ministry of the church.

This is followed by two chapters on the concept of justice in health care. The first, by S.E. Wheeler stresses the importance of a broad and Christian concept of justice in health care and asks the right questions on its meaning for the health care system, but gives only a very general answer. The second, by A.J. Dyck, asserts that rationing understood as the intentional denial of interventions known to be medically appropriate, beneficial, and available, is incompatible with a Christian understanding of medicine and health care. This is true but a significant part of the problems resides precisely in the exact meaning of the words 'medically appropriate, beneficial and available' and in the question of who decides about their meaning. Some measures are put forward to cut costs without the use of rationing. Valuable remarks are made on the importance of mentality and virtues for a just health care.

The third part of the book deals with ethical problems related to financial constraints on health care. After the presentation by Scott Daniels of the various financial incentives used in managed care, E.D. Pellegrino explains why he opposes any form of managed care that generates a conflict of interests for the physician between optimal patient care and personal financial interest. Underlining the responsibility of physicians for cost containment, the author lucidly explains why in his opinion a Christian ethics opposes any such conflict of interests. He challenges Christian physicians and institutions to stick to their ethics and vocation. A similar outlook is presented by P. Benner. Using Habermas's distinction between life world and system, she points out that managed care stresses too much the system at the expense of the life world of both caregivers and patients. She asserts that virtuous behaviour in caring needs the support of an institutional context that furthers such behaviour. A good model for such behaviour can be found in the parable of the Good Samaritan. But then it is important not to imagine being the Samaritan, but first of all imagine being the person left half dead. The universal human reality of vulnerability and suffering can be a good starting point in health care ethics. Today's institutional context of health care (in the USA) sets the public and the private against each other instead of stressing the mutual dependency, and casts the community (health care expenses) as the individual's burden. As a result health care is becoming a commodity and—the author comments—a society that commodifies care at every turn has every reason to be cynical.

G.W. Rutecki discusses the concept of gatekeepers in managed care. He discusses literature which demonstrates that for a number of diseases or disorders people are better off when treated immediately by a specialist than by a generalist, as gatekeepers normally are. He concludes that the concept of gatekeepers in health care raises ethical problems.

So far several authors have argued against considering healthcare as a business. In an extensive chapter K.L. Wong argues that there is nothing wrong in considering health care as a business. He points out that medicine has always had an economic aspect and that physicians have not been as altruistic as often presented and that business is not as bad as often said. He presents an enlightened business ethic

in which profit is not the only value that counts. In the author's opinion such an enlightened business model even has advantages over a traditional medical model in which medicine is practised as a business.

While this author rightly calls attention to some important aspects of medicine, I am not convinced by his thesis. From the observation that medicine has always had an economic aspect it is too easily inferred that the economic aspect may well become the leading aspect of medicine. When those who argue that medicine should not be a business but that selflessness should characterize the caregiving, they do not want to say that somebody becomes, for example, a physician purely out of selflessness and that he should not pursue any personal interests in making that choice. What this position wants to stress is that in the care for the individual patient the physician should not pursue any personal interest in his clinical decisions nor should the system present a temptation to do so. In the clinical decision making the physician should be selfless and try to provide optimal care for the patient. But of course a physician is allowed to have personal motives to become a doctor and try to practise as an excellent physician. Wong fails to make some necessary distinctions between various organizational levels and markets in the field of health care. It should be admitted, that those who reject the concept of medicine as a business have not always made these distinctions either, which may give the impression that in their opinion all caregiving is purely altruistic, which of course it is not.

The next chapter by R.D. Orr presents the results of research in oath-taking in American medical schools. He stresses the importance of oath-taking and of the contents of the oath especially when financial incentives tend to undermine physician integrity.

In the fourth part of the book four different settings in health care are discussed. These are mental health care, long-term care, health care for minority communities and malpractice in a managed care context.

The chapter on managed mental health care lists twelve risks that managed care involves for the therapeutic relationship in mental health care. The author, S.P. Greggo, presents a model for maintaining the therapeutic relationship. In this model this relationship is checked regularly by the therapist from four angles: content, contact, contract, and context. This model may well

help the therapist to maintain as good a relationship as possible in a managed care setting. However, a weak point of the model in my opinion is that the four angles or four aspects of caring seem to have the same moral weight. It remains unclear how conflicts between values related to the four aspects can be solved. This requires a hierarchical order between those four aspects. According to the author, in the best case scenario, managed care can function reasonably well. From a Christian point of view it can even have a positive effect. It may help Christian therapists to acknowledge their limited role in the healing process. Instead of the all-responsible healer the therapist becomes a collaborator or catalyst for change. Therapists cannot themselves heal anybody but their activities can be used by God to restore an ill patient. This seems a valuable observation to me. But I doubt whether it justifies a health care system that puts the therapeutic relationship under serious pressure (which, by the way, is not defended by the author).

Managed care also can easily have a detrimental effect on long-term care. R.W. Olson warns that under managed care, end-of-life care is not cost-effective for most doctors. This implies a pressure on the quality of end-of-life care for elderly and nursing home patients. The author discusses several ways in which the church could be involved to maintain a better quality of long-term care, living up to its standards presented by the word of God.

F. and C. Steggers show that minority groups (patients from ethnic minorities and the poor) in the USA have higher incidences of a number of diseases and normally get less health care. Managed care has generally worsened this situation. The authors present several possible responses to the injustice in health care. They mention initiatives taken by the AMA and stress that Christians should be concerned about these injustices and where possible cooperate with broader initiatives in society, in addition to taking their own initiatives.

In the United States medical malpractice suits play a much more important role than in Europe and the awards are much higher. Managed care frequently leads to suboptimal care for patients. However, when the patient suffers damage due to such restrictions, the managed care organization as well as the complying physician may run the risk of a malpractice claim. From this contribution by J.E. Michael I conclude that the relation between managed care and liability issues will undergo the influence of new legislation and malpractice suits. One may wonder, however, how much money could be saved and fuelled into health care if the whole practice of malpractice could be cut back to what at least to an European reviewer seems much more reasonable.

The last part of the book contains a few contributions that are meant as a response to the present predicament in American healthcare. J.M. Hussey tells about his involvement in a Christian health care company that provides care to both paying and non-paying (uninsured, poor persons). This company maintains good relationships with other people and institutions in health care as well as with churches. The author stresses the importance of church involvement. He asserts that Christians should be involved in health care also under managed care conditions, in order to pursue justice and be a witness to God's love precisely under these

conditions. He very much favours private initiatives in setting up new clinics, based in local churches.

The second contribution in this part has a different outlook. It is written by a physician who has completely broken with the financing system in health care. She points out a number of failures and injustices of the present system and tells about a new Christian initiative of mutual share of health care expenses. The members of this brotherhood pay fifty dollar per month to enroll and in addition contribute to the expenses of somebody else in this network that go beyond \$1000,—(is this annually or per disease case?). The health care expenses of the members of this brotherhood are far lower than the premium that they would have to pay in the regular system.

These initiatives to bring Christian principles and virtues into health care are to be appreciated. They are challenging in several ways. But these contributions also raise questions. Do Christians not have a responsibility for society at large and should they not pursue justice for all citizens also in access to health care and not just aim at charity for the needy and the poor?

In the next chapter M.B. Adam summarises the loss that physicians have suffered due to managed care as follows: They have lost autonomy over patient decisions, status in their communities and income. Physicians' unions are a response to the powerlessness caused by these losses. A central tension in the concept of physician unions is that their power in negotiating with insurance companies resides in their willingness to strike if need be, whereas striking is considered by many as unethical because it involves suboptimal patient care. The author formulates a few important questions that physicians should ask themselves when deciding about joining a union. However, the basic tension formulated above is not solved in this chapter.

The last chapter in this section deals with alternative therapies and is somewhat outside the theme of this book. It is a valuable chapter in itself and certainly part of the face of today's health care. The author, D. O'Mathúna, gives a general characterization of alternative medicine, tries to explain its popularity and describes five categories of alternative medicine. The latter is done on the basis of how they relate to conventional medicine. One of the categories is quackery and fraud. Though this may occur more often in the area of nonconventional medicine, it certainly is not absent in conventional medicine. Important observations are made about the spiritual background of certain types of alternative medicine and of the dangers involved. A critical attitude to much of what is going on in the field of alternative medicine is certainly warranted, particularly from a Christian point of view. However, the author would have made an even stronger case if he had also pointed out that conventional medicine is also based on a non-Christian world view and a view of mankind and can become a substitute for true religion as well as alternative medicine.

The last chapter is written by a prominent British physician, who has also been involved in ethical debate. He comments on the various contributions and considers their relevance for the British situation. He notices a lot of similarities in trends and problems of the health care systems in the USA and the UK.

This book is an informative and engaging collection of perspectives and experiences of people in a health care system, that is increasingly commercialised. As such it contains clear warnings for health care authorities and governments, that think that more 'market' could solve the problem of the increasing costs of health care and at the same time maintain its quality. It contains inspiring experiences especially for those who share the Christian outlook of the authors. The authors have different, sometimes contrasting views. If anything is missing it would be the implementation of the values and norms that are put forward in a structural analysis of a health care system, that would apply to the whole population. Hopefully this book will inspire others to work just on that.

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Epistemology: Becoming Intellectually Virtuous

W. Jay Wood

Downers Grove, IL and Leicester, UK:
InterVarsity Press, 1998

ISBN 0-87784-522-0, 216 pp., paperback \$12.99

With few exceptions, introductory examinations of complex academic disciplines are rigid and stale in their narrative style and substance. But this inquiry into contemporary theory of knowledge by Jay Wood of Wheaton College, Illinois pleasantly surprises, as it creatively and deftly navigates the major avenues of controversy in the field today.

Wood's leitmotif is consideration of the intellectual virtues, qualities like wisdom, inquisitiveness, humility, foresight, love of truth, the 'deeply anchored habits of mind that contribute to the success of our many intellectual endeavors and ultimately to our ability to lead excellent lives' (p. 7). It is his fundamental contention that these intellectual virtues, in dialectic with moral virtues like honesty, fairness, courage and tolerance, play a decisive role in our cognitive life, in our ability to apprehend and know truth. Moral and intellectual character, as well as psychological and emotional dispositions, play central roles in the formation of our convictions by influencing what we count as evidence, the significance we attach to specific beliefs, and the directions of inquiry we pursue.

Wood readily admits it is far from novel to reflect on matters of epistemological concern, using the category of intellectual virtue and vice (Aristotle, Augustine and Aquinas and much of the rest of the ancient and medieval tradition featured it). But such an approach is decisively out of favour today, the characterological issues it evokes being all too often regarded as, at best, quaint, and more probably as simply irrelevant to our intellectual lives. But Wood makes a valiant effort to insist to the contrary, arguing with persuasive verve that the angle of the intellectual virtues allows consideration of epistemological exigencies to better capture the full complexity of the human person as a knowing subject, and to more faithfully account for the noncognitive factors regularly acting on a person's mind, impacting his thought. Indeed, it is ironic that today—a time when the

subjectivity of personal placement is often foremost in the minds of philosophers—so little attention has been paid to the full nature of the cognitive agent, the thin, arid person of contemporary epistemology frequently unaware of why he is thinking as he is. Wood's subject is broader and more realistically embedded in both time and place, and this is a profile contemporary writers will benefit from pondering.

Wood's treatment of critical topics in the discipline is smooth and informed. He rejects strong foundationalism as excessively regressive and overreaching, favouring instead a modest foundationalism influenced by the anti-Cartesian Thomas Reid. He opposes evidentialist, coherentist and reliabilist approaches to the justification of knowledge, opting instead for a 'virtue solution' that combines useful insights of each, insisting on a solid connection between an idea's justification and truth, while still preserving each individual person's agency in contributing to his own cognitive success or failure.

Near the end of his study Wood discusses at length epistemology and religious belief, drawing on the insights of Reformed epistemology and Alvin Plantinga in particular, defending theism against a variety of contemporary objections. His concluding chapter again passionately stresses the relevance of emotions and moral virtues to cognitive life, arguing 'they are part of the thinking apparatus itself. If they don't function properly, our cognitive life doesn't function properly' (p. 176, italics original).

With this volume, part of the 'Contours of Christian Philosophy' series edited by C. Stephen Evans, Wood has conducted an impressive synthesis of classical and contemporary themes in epistemology, and opened a long neglected window in this pivotal dimension of philosophy. The book is intended for use by undergraduate students, but it seems doubtful many would find it easily accessible, as Wood's analyses are consistently at a high level of generalisation, and technical terms are infrequently given extended, simplified explanation.

Even so, this book is a valuable treatment, and an eminently reliable guide to the collection of important topics it provocatively engages.

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Assisted Suicide & Euthanasia:

Past & Present

J.C. Willkie, Frederic Wertham, Cathleen Cleaver, Edward Grant, and Mark Rothe
Cincinnati, OH: Hayes, 1998
ISBN 910728-22-4, 149 pp, paperback \$7.95

'Euthanasia,' writes Dr. John Willkie, 'is not a "good death." Euthanasia is when the doctor kills the patient.' This is probably the central message of this book, an overview of significant occurrences in the history of assisted suicide and euthanasia. Although Willkie sees many problems with current trends towards physician assisted suicide and euthanasia, this is perhaps the most severe: that engaging in suicide removes physicians from the role of healers, and places them in the role of executioners. Whether

or not the patients are willing, the healing bond between patient and physician is broken. Death is not a 'treatment option', but the ultimate severing of a trust.

John Willkie M.D. is founder of the International Right to Life Federation and has been an active speaker on pro-life topics. *Assisted Suicide and Euthanasia* is co-authored by Frederic Wertham M.D. and J.D.s Cathleen Cleaver, Edward Grant, and Mark Rothe.

In Chapter I Willkie is concerned to dispel the euphemisms which cloak the topic of euthanasia. Chapter II details the medical and cultural conditions and actions which prepared the way for the Nazi mass extermination programme of the Second World War. Before the Nazis engaged in genocide, the way had been prepared by the medical and legal professions deciding that certain lives were not worthy of being lived. In two chapters, Wertham documents the atrocities that occurred under the Nazi regime.

What may have begun as 'mercy killings' ended up as 'merciless murders'; the 'merciless destruction of helpless people by those who were supposed to help them' in a proceeding characterized by 'the complete absence of any compassion, mercy, or pity for the individual' (p. 21). If nothing else, these two chapters should give pause to any who think that physicians ought to be involved in orchestrating death. If the floodgates of barbarism were opened in Germany, we should not delude ourselves that they could not be opened here. '... practically all people can be incited to violence,' Wertham writes, '... it is a fallacy to assume that the majority of right-thinking people are immune to ... mass influences ...' (p. 75).

The subsequent chapters are lamentably brief. Chapter V discusses medical oaths and how the wording of the Hippocratic Oath has been weakened, and Chapter VI goes on to address the Dutch euthanasia programme. Willkie believes that part of the reason euthanasia has taken hold in the Netherlands is the decline of religion and the Christian value system. As a consequence, a country whose physicians refused to cooperate with Nazi-style killings came to adopt a system of euthanasia where safeguards are ignored, and where patients' lives are at the mercy of the physician.

Chapter VI responds to issues raised by assisted suicide proponents, while the following two chapters offer excerpts from medical society briefs and Supreme Court statements opposed to assisted suicide. Chapter X discusses Oregon's assisted suicide law, while Chapter XI offers an alternative—compassionate care.

While *Assisted Suicide and Euthanasia* provides a stinging rebuke to proponents of physician assisted suicide and euthanasia, and provides a valuable resource, it has several flaws. It appears rather fragmentary and disconnected. Transitions between chapters could be improved, and a number of chapters seemed too brief. For example, Willkie passes over the issue of persistent vegetative state in a brief manner that doesn't do justice to the magnitude and complexity of the problem. There is no mention of our schizophrenic society that on one hand seeks to prolong life, no matter how futile the chances, and on the other seeks to enlist physicians to end life prematurely.

The chapters on the Netherlands and Oregon—where the euthanasia scenario is being played out—could have been elaborated further, as

could the ethical questions, particularly from a Christian standpoint. Dr. Wertham's absorbing chapters (reprinted from *A Sign of Cain*, Macmillan, 1966) lack documentation; a serious handicap to those interested in pursuing the ramifications of the Nazi euthanasia programme. From one perspective, the Nazi programme became a matter of economics. Slave labour was only one economic gain to be had from removing those who were a 'drain' on society. The 'price tag' on human life was marked down again and again. Sacrificed as well were compassion, mercy, goodness, kindness, and other virtues. In a society such as ours, afflicted by spiralling health care costs, it is not difficult to envisage economic factors playing an increasing role in euthanasia considerations.

Physician assisted suicide can be made to sound attractive. But Willkie would have us remember William Shirer's comment at Nuremberg to a Nazi judge condemned to death. 'How could it come to this?' the judge asked. 'It came to this the first time you authorized the killing of an innocent life,' Shirer replied (p. 2).

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A Different Death: Euthanasia and the Christian Tradition

Edward J. Larson and Darrel W. Amundsen
Downers Grove, IL: InterVarsity Press, 1998
ISBN 0-8308-1518-X, 288 pp, paperback \$14.99

In the ongoing debate regarding euthanasia and physician assisted suicide the historical position of the Christian church has been called upon to bolster both sides. Pro-life forces assert that the church has always upheld the sanctity of life, while proponents of euthanasia claim that early Christians were not opposed to suicide, and actually, while in search of martyrdom, supported it. Where does the truth lie? *A Different Death* pursues this question in a survey of Christian attitudes towards suicide from the earliest days of the church to the present. Edward Larson is a professor of history and law, specializing in healthcare theory and law in modern times; Darrel Amundsen is a professor of classics trained in medieval, Renaissance, and medical history with expertise in medical practice and ethics in ancient and medieval times.

The introduction raises the points that suicide is not explicitly condemned in the Bible, and the few cases of suicide mentioned are presented dispassionately. This leads to the popular notion that the early Christians actively sought an end to their earthly lives in order to obtain a better heavenly life. But was this actually the case? The first chapter examines suicide and euthanasia in classical antiquity. Despite varying streams of thought, both Roman and Greek cultures regarded both suicide and euthanasia as acceptable for certain people under certain circumstances. Christianity arose in an era that condoned active physician participation in ending life.

The early Christians had to come to grips with the meaning of life and death in a culture

with which they were radically at odds. So much at odds, that at times the prevailing culture resorted to persecution, and Christians faced death (although perhaps not in the numbers popularly believed). But embracing martyrdom—and even seeking a heavenly reward—does not equate to suicide, physician assisted or not, in today's culture.

In a painstaking manner, Larson and Amundsen explore the themes of suicide and euthanasia in the early centuries of Christian thought. At issue too, are the meanings of health, illness, sin and reconciliation. To the early church fathers, these issues were inseparable. God, demons, and natural causes were not mutually exclusive, and all were factors involved in illness. The Christian ideal of compassion and caring in the face of sickness was based upon the example and words of Christ. Life was to be protected and cherished, but not necessarily to be hung onto at any cost. Risking life for love of others (or faith) was acceptable; throwing it away was not. All the early church fathers expressed their disapproval of suicide, despite the fact that certain circumstances could be mitigating, and provided occasion for disagreement. The church has always consistently opposed suicide and euthanasia.

The Middle Ages saw changes in medical practice and the roles and standing of physicians. There remained a tension between the healing of body and the healing of soul, but there remained a sense that suicide and euthanasia were contrary to the will of God. The relative lack of writings that deal with these issues in early Christian days and the Middle Ages is attributed to the fact that suicide and euthanasia were not common enough problems within Christianity to require extensive commentary. Life, as the gift of the Creator, was not to be harmed.

Even as late as the beginning of this century, the United States population possessed a general sense that euthanasia and suicide were wrong. But the Twentieth Century has witnessed changes in both popular attitudes and the legal climate towards the twin issues of euthanasia and suicide. Larson and Amundsen document these changes, as well as the sometimes tortuous judicial reasoning and decisions involved. The right to die movement is examined as is the move from concepts of the right to die to the right to be killed. The slippery slope leads from the right to refuse medical intervention to the right to demand that physicians end life. The roles of the Hemlock Society, the Oregon initiative, and the suicide-mongering of Jack Kevorkian all play roles in the change in contemporary mind-shift.

Current legal issues in physician assisted suicide are discussed, and the situation in the Netherlands is presented as a dire warning of what can happen if suicide is legalized, even in the face of seemingly adequate safeguards.

Caring, not killing, is the alternative that Larson and Amundsen present to physician assisted suicide. This is a path that is fully compatible with the Christian ethos. Otherwise, they warn, a society that discards compassion will reach for options and 'the right to die for a few would likely become a duty to die for many more' (p. 252).

A Different Death provides a strong counter-argument to those who would use church history to support euthanasia. It is a scholarly and well-documented book that shows clearly

the church's historical stance of opposition to euthanasia, and provides a valuable resource to anyone involved in the current controversies. Physicians, particularly, who are intimately involved in issues of life and death can benefit from this book.

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Rewinding Your Biological Clock: Motherhood Late in Life

Richard J. Paulson and Judith Sachs
New York: W.H. Freeman and Co., 1999
ISBN 0-7167-3303-x, xiv + 338 pp., \$23.95

This volume addresses the controversial assisted reproductive technology (ART) that enables postmenopausal women to bear children, using donor eggs and hormonal stimulation of the uterus; in other words, to help women who are attempting to rewind their biological clock. Richard J. Paulson is director of the infertility centre at the University of Southern California and a pioneer in helping older women achieve pregnancy. He was the infertility physician who assisted the oldest woman on record to bear a child, at age 63, though she told Paulson she was actually 53. Paulson's goal is to explain and defend ARTs in general, and specifically the use of ARTs with postmenopausal women.

His co-author, Judith Sachs, skillfully weaves the story of Sarah, aged 48, who is using egg donation to attempt to conceive a child. The story is a compelling one and narrates both the technology and the array of emotional and ethical issues confronting people who utilize these technologies. The structure of the book intersperses the narrative of Sarah with the technological chapters. The book is a helpful introduction to ARTs for any couple contemplating their use, though there are some technological differences when the patient is postmenopausal.

The first few technical chapters (written for a lay person) deal with the technologies in general. Succeeding chapters are more focused on egg donation in particular. Material covered includes historical background on infertility and IVF, a chapter on the biological basics of reproduction, an overview of ART, the emotional issues in using ARTs, especially gamete donors, the rights and emotions of the donors, and the specifics of the procedure which Sarah and her egg donor are undergoing. A final chapter deals with the ethical issues created by ARTs and their use in older women. The epilogue contains an insightful look ahead at what ARTs are forthcoming. The book concludes with a helpful resource guide of IVF clinics across the United States and a glossary of terms indispensable for any discussion of ART.

Though Dr. Paulson's views seep through periodically in the descriptions of the various techniques, the final chapter on 'the ethical conundrum' is his opportunity to address the plethora of ethical issues and is the controversial part of the book. To his credit, he has consulted some of the professional bioethics community and relies on the standards of the American Society of Reproductive Medicine.

Like Professor John Robertson, Paulson holds procreative liberty as the virtual trump card and rarely expresses discomfort with where such a view leads. Like many physicians, he seems uneasy about ethicists giving moral insight on the details of medical practice, but acknowledges that their expertise can be helpful.

In fairly typical fashion, Paulson starts with the assumption of procreative liberty and balances it with the obligation to 'do no harm'. The only clear instances of harm that would provide a basis for limiting procreative liberty are transmission of disease, unfitnes to parent, and unwillingness to provide prenatal care. He dismisses the prospect of psychological harm to the children (largely unknown to date), the issue of overpopulation (not taken particularly seriously in the United States) and the issue of whether or not the partners are married. This objection to many ARTs is a critical one, especially from a Christian perspective, since biblical teaching indicates that children should be procreated into stable heterosexual marriages and looks sceptically on gamete donation.

A wealth of new empirical data is now available indicating the critical role of fathers in a child's development, raising new questions about the advisability of intentionally creating 'no dad' families, very common with ARTs used with single women and gay/lesbian couples. Paulson is right to be very uneasy about selective reduction, indicating it is necessary only rarely and considering it a necessary evil. This unease is certainly justifiable but does not go nearly far enough. This should never be necessary, and clinics such as his should never put women and the children not yet born at such risk. This can be entirely avoided by limiting the number of embryos implanted to the number of woman is willing to raise/able to carry.

From my experience, not every clinic views selective reduction in the same way, offering it to patients and using it when the couple wishes to reduce the number of pregnancies because they don't want to raise that many children, not because mother or unborn children are at risk. I found it odd that he called selective reduction a middle point between contraception and abortion, since in my view and that of many others, it is the most egregious kind of abortion.

Paulson takes the typical view that embryos are potential persons, and that it is acceptable to discard them when one has stopped trying to have children. Ironically, he admits that life (and personhood) exist on a continuum, yet calls embryos human parts. But in another place he refers to frozen embryos as 'tiny Sleeping Beauties'. He correctly admits that many people simply leave their embryos in storage and lose touch with the clinics because they don't want to face the difficult decision to dispose of the embryos. However, what that indicates surely reflects our intuitions that these are not simply human parts, but persons, who with the proper environment, will mature according to their kind into new-born babies.

This chapter is disturbing in the extent to which the views reflect those of many scientists on the cutting edge of their fields. He has no answers to where society should draw the line. It almost seems as though he sees the technology moving forward and ethics trying to catch up in a virtually futile effort. He seems to hold the view that if a technology is available it ought to be used, assuming that there is no obvious

harm to any of the parties. But who defines harm is a critical question left unaddressed.

The forward view at the end of the book suggests some future developments such as egg freezing, cytoplasm transfer (an offshoot of cloning technology which will make egg donation less necessary) and designer embryos, which he maintains will not be in high demand. Overall, the book is a fine introduction to the world of ARTs, and very readable. The way the ethical issues are addressed leaves much to be desired.

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Life in the Face of Death: The Resurrection Message of the New Testament

Richard N. Longenecker, Editor
Grand Rapids, MI and Cambridge, U.K.: Wm. B. Eerdmans, 1998
ISBN 0-8028-4474-X, 314 pp., paperback \$22.00

This volume addresses the resurrection message of the New Testament and is the third volume in the McMaster New Testament Study Series. The series assiduously attempts to achieve three goals. The first, to choose subjects that are of crucial concern to Christians today. The second, to select writers with a proven expertise in the specific area studied. And third, to use writers capable of targeting readers who are not necessarily academics.

Could there be a subject more at the heart of the gospel than the resurrection? Or could there be a subject more germane to the Christian practice of medicine? As Nigel Cameron trenchantly expressed as he articulated a theology of medicine, a scripturally explicit theology requires an understanding of the impact of the resurrection on the ultimate promise of eternal life. In essence, when physicians participate in Jesus' healing ministry, they preview his second coming and his victory over disease and death. This book, which expands upon this essential topic, thus serves as a fine theological basis for medical practice.

The book is organized as follows: background perspectives (life, death and afterlife in the ancient Near East, Greco-Roman World and in Second Temple Judaism). The background sets the stage for the impact of Jesus and his teaching (as contained in the gospels). This is followed by Paul and his letters, and concludes with the early church (Acts, Hebrews and Revelation)—all addressing the resurrection message.

The background effectively prepares the reader for the impact of the Christian resurrection message on the cultural, religious and sociological context of current thought about life, death and potential afterlife (p. 17). The review of ancient theology and philosophy is not wasted since we ourselves in post-modern culture live amidst an 'amalgam' of many of these ancient traditions. The editor observes that it is not surprising to find many of these views reflected in contemporary thought and competing for people's allegiance today (p. 13).

For the Christian, the most important ancient message is contained on page 49. The apex of Hebrew thought came with the belief that God

maintained fellowship with believers beyond the grave and thus raised the dead. This fact is crucial to the New Testament discussions which follow.

For the healthcare worker, the early chapters contain a number of important historical facts related to life expectancy. For example, average life expectancies for Roman males and females were 22 and 20 years respectively. In Roman society, only 50% of children reached their 10th birthday. Obviously, physicians of that era were powerless in the face of death. Relevant to eventual New Testament scriptural study, Old Testament and intertestamental writings and their impact on second temple Judaism are studied in the volume. Relevant writings include: Daniel 12:2-3; Isaiah 26:19 (cf. 25:7-8); 1 Enoch 90:33; 2 Maccabees (e.g. 7:9, 11, 22-23 etc.).

After the ancients, the Old Testament, and intertestamental literature set the stage, the book addresses Jesus. It highlights his authority over death in the miracles of raising from the dead detailed in scripture. This authority is appropriately placed and developed within the theme of the Kingdom of Heaven and resultant realized eschatology. Common and distinctive features of the resurrection Synoptic accounts are compared and contrasted. Then follows the resurrection narrative in John. Time is spent with the post-resurrection appearances including the important unique response of Thomas (p. 134). 'This (Thomas) is the first time in the narrative of John's gospel that a character calls Jesus "God..." it remains striking that it takes the resurrection of Jesus before a character in the narrative makes fully explicit the Son's unique relationship with the Father.' Similar discussion is presented concerning Lazarus. 'His temporary restoration points beyond itself to the full resurrection and the eschatologic life that Jesus provides.'

Paul adds to the New Testament understanding of the resurrection, describing the event as a state with a permanence sustained by God. Resurrection, for Paul, includes resuscitation or the regaining of physical life lost through death; transformation (1 Cor. 15:50); and exultation. The immortality achieved is personal and not impersonal, corporate and not individualistic, and includes body and soul. Resurrection is a state, not simply an event; as such, it is a permanent not a temporary state; and will be permanently sustained by God (p. 169). To Paul, Jesus' resurrection stands in stark contrast to the Greco-Roman view which encourages people to make merry because death is the end of creation. This is in opposition to the Christian view which rejoices because the resurrection of Jesus is the beginning of a new creation (Philp. 3:1).

Non-Pauline writings begin with Acts in which the centrepiece of *kerygma* is the resurrection. The resurrection also informed early Christian interpretation of Old Testament scripture with Stephen as an example. In Hebrews, the resurrection is foundational and presaged in the near sacrifice of Isaac at which time Abraham 'considered that God was able to raise up even the dead'. As is appropriate, this volume closes with the Book of Revelation and the climax of history. The exalted Lord is coming again and his faithful people will participate in God's eternal kingdom and share in the reign of the resurrected Christ.

For the Christian healthcare worker, this book is foundational in providing an

extensive scriptural study of the resurrection. No theology of medicine can begin anywhere else. The volume also fulfils the three goals of the McMaster series quite admirably. Truly informed medical practice requires a scriptural understanding of the resurrection. The book provides this understanding, even for those without extensive training in theology.

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Explorations of Family Nursing

ed. Dorothy Whyte
Routledge (1997) ISBN 0-415-13350-5

Nursing has come long way since Florence Nightingale.

'Explorations in Family Nursing' portrays the need for nurses, particularly those assisting in the care of the chronically ill, the disabled, those with psychological and social problems, learning difficulties or terminal illness and the elderly to take into account not only the needs of individual patients, but the structure and function of their families. 'Family nursing is about working with families and helping them to identify problems and to mobilise their coping resources' (p. 21).

The book includes a series of chapters written by different authors with experience in the community nursing of the above-mentioned categories. For example, Dorothy White, who is also the editor, draws from her earlier research report on the care of children with cystic fibrosis, congenital heart disease, diabetes and asthma and illustrates how the whole family can be regarded as a unit of care and supported accordingly in solving the problems and coping with the stress arising from the child's chronic and sometimes deteriorating illness. There are interesting case studies in other chapters illustrating the value of an assessment in each case of the family structure as well as the way family members relate to each other and function as a caring unit—for example in adolescent anorexia, 'intrafamilial sexual abuse' or alcoholism in the elderly.

When some of the contributors explore the theory or 'philosophy' associated with Family Nursing, the non-specialist reader encounters unfamiliar terminology. We read of 'a shift from linear to systemic (circular) perspective', 'structural functionalist theory', 'horizontal and vertical stressors', circular questioning, patterns of circularity, general systems theory, causality and feedback within a (family) system, 'loneliness that should be conceptualised as a social construct in elderly care', 'transactional processes and intrapsychic processes of coping'. **What does it all mean?**

There are numerous references mainly from the American literature from whose models it is hoped that British nurses will find a useful framework to devise a management plan for family intervention.

The editor ends the book with some helpful reflections on the subject, including some observations on ethical issues, largely concerned with privacy and confidentiality, 'secrets conflicting with a desire to open up communications' and

conflicting interests within the family, e.g. in HIV and in Child Protection. There is also some discussion of 'family dimensions' in ethical issues of resuscitation, continued artificial feeding, assisted suicide, etc. The need for respect for family values and beliefs is mentioned, but a specifically Christian viewpoint is not explicit. In the chapter (2) on 'cycle development theory' one senses an implicit criticism of the assumption that a nuclear family is the norm. 'From a nursing perspective, the family is who the individual (patient) identifies, although it may not necessarily conform to biological or legal ways of thinking.'

Nursing has come a long way since Florence Nightingale.

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Managing Death

James M Hoefler

Published 1997 by Westview Press, a division of HarperCollins Publishers.
ISBN 0-8133-2816-0 £16.95

This book is the ethical equivalent of a guide to making Molotov cocktails. The blurb on the front cover proclaims it to be the first guide for patients, family members and care providers on foregoing treatment at the end of life. The author, James Hoefler, is associate professor of political science and co-ordinator of the Policy Studies Programme at Dickinson College, which is clearly somewhere in the USA! The book is written from an American perspective. It is totally biased in favour of non-intervention, comfort care, and death by dehydration.

Read it if you want to know the line of thought that is crossing the Atlantic to infiltrate medico-political policy-making in the UK. However, please remember that the medical scene at present in the UK is vastly different from that in the USA. We do not have wards full of stroke patients or people with dementia who are being kept alive by tube feeding. Our physicians in general do not take a never-give-up view of medicine at the end of life, but consider each case on its merits. Aggressive therapy for the hopelessly ill is not the norm in the UK. These days, with the National Health Service under pressure, patients are much more likely to be under-treated than over treated!

Read the book if you must; it is well written and well researched, but it is undoubtedly a propaganda manual. The voluntary euthanasia society will love it! If you share Hoefler's view that it is a myth that doctors should always err on the side of life, you will find it an excellent read.

I much prefer the approach of our own House of Lord's Select Committee on Medical Ethics, who made it clear in 1994 that it should be unnecessary to consider the withdrawal of nutrition and hydration except in circumstances where its administration is in itself a burden on the patient. Careful consideration of the benefit/burden equation in individual patients should be central to patient management.

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Letters to Gabriel: The True Story of Gabriel Michael Santorum

Karen Garver Santorum

Irving, TX: CCC of America, 1998

ISBN 1-56814-528-4, 132 pp., hardback \$14.99

For it was you who formed my inward parts; you knit me together in my mother's womb. I praise you, for I am fearfully and wonderfully made. Wonderful are your works; that I know very well. My frame was not hidden from you, when I was being made in secret, intricately woven in the depths of the earth. Your eyes beheld my unformed substance. In your book were written all the days that were formed for me, when none of them as yet existed. (Psalm 139: 13-16)

Letters to Gabriel is the powerful compilation of Karen Garver Santorum's letters to her baby from the time of conception, through birth and death. Throughout this book, the sovereignty of God in the midst of very difficult trials is seen in the faith of Karen and Rick Santorum.

Letters to Gabriel begins with the joy experienced by the Santorums over the discovery of the new life God had blessed them with. The reader experiences a glimpse of this joy through the openness of Karen's letters to her baby, and the prayers prayed to a sovereign heavenly Father over this wonderful gift of life. 'Lord, I tell my children You have given us a most precious gift. Please help me to always speak of Your love and to follow Your examples so they may abide in You. Thank You for my children, Lord, for they are the light of my life' (p. 25)

The tone of the book becomes solemn at the discovery that the baby had a 'fatal defect'. The issue of foetal surgery is addressed at this point, as it was a decision the Santorums had to make in hopes of correcting the defect and saving their baby. This issue is one in which the openness of Karen's writing gives the reader a moving sense of the preciousness of the life of this baby, while not glossing over the reality of the pain involved in making such a decision. It was also at this time that the Santorums decided to name their baby. In the midst of their storm, the name Gabriel Michael was chosen because of its meaning—Gabriel being 'Strength of God' and Michael being 'Who is like God?'. This name reminded Karen and Rick of God's comfort, and reminds the reader that in the most painful situations, our only strength and hope is in God.

Finally, the reader gets a glimpse of hope as the surgery seems successful, but hope is soon shattered as Gabriel is delivered too prematurely and dies in his parent's arms just two hours after birth. Karen's openness of emotion during their time of grieving opens the reader's eyes and heart to the reality of suffering experienced at the loss of a child. This experience of the Santorums, so eloquently shared in Karen's writings, demands that each reader consider the value of each unborn child. About the short life of Gabriel Michael Santorum, Karen wrote, 'Though your eyes did not open, they allowed us to see in you the face of God. While you did not give a cry, you spoke so powerfully to our hearts. . . . You may not have been perfect in the eyes of the world, but you were perfect in our eyes and in the eyes of God' (p. 80).

Throughout their suffering, too, it is very clear that the Santorums understood that God allows nothing to occur without purpose in the lives of his children. During the time of their

personal suffering, Rick was leading the debate on the partial birth abortion bill in the US Senate. Of this, Karen wrote that 'during the debate there was a continual reference to babies who had various fatal birth defects. . . two Senators who support partial birth abortion implied that your Daddy had no right to speak on this issue because. . . "men of this Senate" . . . are. . . people who do not have to go through this. . . Gabriel. . . this did not just "touch" our lives—it forever changed them. . . Did God do this to make your Daddy's arguments more powerful when the debate comes up again?' (p. 96).

This book is an amazing account of the Santorum family's strength in God in the midst of an excruciatingly painful experience. By its very essence, this book powerfully defeats the myth of the necessity of maintaining the legality of the partial birth abortion procedure. *Letters to Gabriel* should be read by anyone in the midst of this, or any other type of suffering who can be encouraged by the faith of this family in the wisdom of a Sovereign and loving Heavenly Father.

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Making Medical Spending Decisions: The Law, Ethics, and Economics of Rationing Mechanisms

Mark A. Hall

New York and Oxford, UK: Oxford University Press, 1997

ISBN 0-19-509219-8, 300 pp., cloth \$24.95

Rationing is typically a practice associated with policies about allocating medical resources that are determined and paternalistically applied by the central government. Moreover, equality governs the applications of these policies. In its strict form, equality would deny medical care to any individual whose need fell outside the reach of these policies—even if the individual had the personal resources to purchase the desired treatment. For this reason, rationing is morally abhorrent to the ordinary person. Mark Hall presents the issue in a broader context than the dictates of the central government. For him, rationing decisions can be made by the physician at the bedside; by the insurance company's implementation of utilisation review, and by patients both before and while they are sick. Thus, he uses the term 'medical spending' decisions to take the edge off what he views as an inevitable dimension of modern medicine. Of course, if one associates rationing with any spending decisions, rather than institutionalised criteria for denying care, then casting the issue in this manner is a platitude as long as there is no free medicine.

Hall observes that his analysis approaches the issue of rationing differently from the approach taken in countless other volumes. He is not interested in the debates on allocation criteria. His focus is on who makes the decisions. This orientation is meaningful because Hall's commitments are not those of a central government planner. Rather he is a market-oriented thinker. His book is a helpful assessment of the decision-makers: individual patient, physician,

and third party insurer (including private and governmental insurers and regulatory reviewers). The thesis of his book is that each of these decision-makers has a role in making decisions about medical spending.

The strength of arguments for patient spending is an appeal to an informed purchaser similar to an informed purchaser of any commodity. Equally weighty is the economic case that when patients are not shielded by third party payments a higher level of prudence in expenditure results. This latter point surely takes the edge off third-party rationing, since the patient decides what treatments are in his or her best interests. The case against patient spending rests on a presumed vulnerability to make informed choice that results from illness. In addition, Hall raises questions about the patient's capacity to understand the complexity of medical judgements. Increased patient spending is desirable, but it cannot be the exclusive basis for rationing decisions.

Third-party rules, too, have their advantages and disadvantages. They are most easily justified where little disagreement exists and where the science is clear. Rules insulate physicians from responsibility for resource allocation. Much of medicine, however, is less defined and patient values vary widely. Rules in these circumstances give way to physician discretion.

Perhaps the most controversial discussion point in Hall's analysis is his insistence that physicians should make spending decisions. The emerging era of managed care where physicians form networks financed by health plans that provide incentives to deliver cost-effective care has changed the tradition whereby the doctor's interest was exclusively the patients' well-being. The medical community has heavily criticized physician incentives that reward reductions in services. To be sure, financial incentives are powerful influences that change behaviour. Hall, however, does not find any evidence that these incentives have resulted in lower quality. Indeed, the literature generally shows that the quality of care in capitated managed care plans is equal to or better than care delivered under the traditional fee-for-service reimbursement system. Hall's view is as follows: 'On balance, although many medical ethicists are united in opposing financial incentives for bedside rationing, this is not where the ethical battle line should be drawn. The important threshold is whether to allow physicians to allocate resources at all. If individualized physician discretion is to have any role, then a form of conflicted interest has already been introduced... Whether or not to use financial versus administrative or professional incentives concerns only the technical task of crafting the best strategic mix of motivational forces. There is certainly room for pie disagreement over the specifics, but nothing of intrinsic importance inheres in the use of a financial incentive per se' (p. 189). As for Hall, he would target financial incentives that produce quality of care rather than those directed toward savings from reducing services.

Hall's analyses are tedious at times. His arguments are thorough. He does not back away from discussing some of the most hotly debated topics in medical rationing. For the reader interested in a comprehensive study of

rationing from a new perspective of who decides, Mark Hall's volume is a good place to begin.

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Dear Zoe: Letters to My Grandchild on the Wonder of Life

Max De Pree
Grand Rapids, MI and Cambridge, UK: Wm. B. Eerdmans, 1998
ISBN 0-8028-4592-4, 105 pp., paperback \$11.00

As debates in neonatology concerning the developmental thresholds of medical intervention continue, and as technology further drives downward the point of viability among seriously premature infants, clinical understanding of the new-born patient must resist becoming sterile and dangerously detached from the psychological, emotional and spiritual dimensions of such situations. This deeply moving collection of letters from Max De Pree to his granddaughter Zoe, born at 24 weeks, is a powerful antidote to these temptations, and a compelling record of the will of 'preemies' to survive.

De Pree's letters are the intimate diary he kept of Zoe's struggle for life, with the intention of giving them to her one day. From the night of her birth and her tenuous first days, through her very improbable survival, De Pree speaks in the first person to his granddaughter, openly expressing his fears, apprehensions and bewilderment. His detailed first-hand account—from a family-member's perspective—of his granddaughter's struggles in neonatal intensive care and of her extreme fragility should prove useful from a medical practitioner's point of view, as it provides a vivid look at the manifold nature of the inward crisis such a medical exigency creates for a patient's immediate family. For example, De Pree voices concern over the baby's probable death, the effect of the loss on other family members, the cost of treatment, whether to name the child, the nature of handicapped survival, etc. The valuable social and emotional context to the clinical process of neonatal treatment these practical questions provide can sometimes be discounted in favour of an unbalanced focus on the technical. A great service of this volume is that it may help discourage such technocratic case management.

Pastorally, De Pree's reflections should also prove valuable, as his presentation amounts to a kind of case-study in how a Christian community can prayerfully support its members enduring great hardship. Throughout De Pree's account, he refers to the deliberate, purposeful intercession of his network of friends and associates. Of their prayers he writes to his granddaughter, 'You have already engaged the love of so many people. You are at the center of so many prayers. You have the capacity—fully developed, even if your body isn't—to exist in the consciousness of many people as a full-fledged person' (p. 41).

While certainly the outcome for De Pree's granddaughter is extraordinary (his letters to her end with him giving them to her as a sixth birthday present, with her not yet exhibiting

any physical or mental impairment except the need for eyeglasses), and should not be regarded as the usual resolution to such crises, his testimony makes for a profoundly clear and holistic picture of a family's experience with an extremely premature new-born.

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Spirituality in Nursing: From Traditional to New Age

Barbara Stevens Barnum
New York: Springer Publishing Company, 1996
ISBN 0-8261-9180-0, 168 pp., hardcover \$35.00

The New Age Movement and the Biblical Worldview: Conflict and Dialogue

John P. Newport
Grand Rapids, MI and Cambridge, UK: Wm. B. Eerdmans, 1998
ISBN 0-8028-4430-8, 614 pp., paperback \$35.00

Barbara Stevens Barnum, RN, PhD is on the faculty at Columbia University School of Nursing and has written widely on nursing leadership and nursing theories. In this volume she documents and evaluates current interest in and practice of 'spirituality' within nursing. Barnum acknowledges the foundational role Christian spirituality played in nursing, but sees recent emphasis of spirituality being due to 'the dramatic renewed interest in spirituality fostered by the New Age Movement' (p. vii). Her perspective stems from one whose family argues over which is the best computer, but 'discussions of religion have never stirred such fervor' (p. viii).

Barnum documents these changes through prominent nursing theorists. Although the implications and consequences of these changes are not her focus, they are widespread, leading to interest in 'holism', alternative therapies, empowerment, and self-actualization. A new view of healing is emerging which impacts the goals and therapies seen as appropriate for healthcare. While many of these theories are abstract, they are promoted by nursing academics who strongly impact nursing students. Some theorists hold prominent positions in US nursing organizations, strongly impacting professional priorities. Many of these theories are fundamentally theological, and should be of particular concern to Christians involved in healthcare.

Barnum surveys the history of spirituality in nursing, dating the water-shed transition to the 1980s when nurses began discussing Holistic Nursing and practising Therapeutic Touch (a therapy based on non-material 'life energy' which nurses use to manipulate patients' auras to bring about healing). Important here also was the widespread acceptance of Abraham H. Maslow's theory of development and its emphasis on self-actualization and transpersonal psychology. The nursing theories differ in details, but have many similarities. 'Nursing theories in the new paradigm, however cast, move nursing into strange new territory: care and fostering of the soul or spirit. This is an arena

in which nursing prescriptions are thin, research just beginning, and the discomfort level of most nurses high' (p. 9).

These changes are part of a broader 'paradigm shift'. Barnum explains the changing views of spirituality and nursing as part of the shift from modernism to postmodernism, although she doesn't use those terms. These theories impact how nurses view healing, which becomes some version of making whole: the 'holism' of body, mind, and spirit. Since body and mind are addressed by other healthcare fields, these nurses emphasize spiritual development. Traditional religion is usually rejected *a priori*, making esoteric spirituality the focus. Therapies which induce altered states of consciousness are stressed on the assumption that they lead to spiritual enlightenment and development. But this raises pragmatic and ethical concerns rarely addressed by theorists. 'If a nurse was introduced to patients as a professional who is there to expand their consciousness or put their souls back in harmony, many patients might resist. This is not what they expect' (p. 80).

The strength of Barnum's book is her discussion of nursing theories, clearly her area of expertise. Her familiarity with these writers is transparent as she comfortably summarizes, compares, and contracts them. These sections provide an invaluable resource for those less familiar with these theorists and concerned about the spread of New Age and postmodern thought within healthcare. But in other sections, Barnum is much weaker. Her section on spirituality and ethics is superficial, viewing ethics as primarily rule-making. She uses the 'New Physics' as evidence for society's paradigm shift and the validity of alternative therapies associated with Eastern mysticism. She fails to mention that few physicists accept this interpretation of quantum physics, and have written devastating critiques of it.

Throughout her book, Barnum raises intriguing questions. For example, theorists hold to the postmodern belief that people construct their own reality. If so, do they cause their own diseases? If healing is a matter of creating harmony, does the corollary hold? 'If disease is disharmony, the patient is at fault and need only create harmony to solve the illness' (p. 125). Barnum claims these questions arise from superficial readings of these theories, but they are clear implications. Her insights are accurate.

However, Barnum suggests few answers for her questions. Are therapies based on non-material, esoteric 'life energies' spiritual

practices? Barnum is content to conclude that this is not a necessary interpretation. She wonders if New Age nursing offers a truly secular spirituality: 'Or is the nurse a representative of a new religion?' (p. 81). Barnum gives no answer, but her analysis requires an affirmative answer.

Barnum describes New Age nursing theories well, but does little to explain their origins. What beliefs did these nurse theorists rely upon? What broader cultural movements led to these developments? To find the answers to these questions, John Newport's book, *The New Age Movement and the Biblical Worldview*, is an excellent resource. This book should be read by every Christian concerned about postmodern culture. Those in healthcare will be especially interested in the chapter, 'Health and the New Age Worldview.'

John P. Newport is Distinguished Professor Emeritus of Philosophy of Religion at Southwestern Baptist Theological Seminary in Fort Worth, Texas. He was introduced to the New Age when asked to teach a course contrasting New Age and biblical worldviews while at Rice University. This led to his *Christ and the New Consciousness* (Broadman, 1978), an important book on this subject. Newport has made a comprehensive study of the subject, including spending time around the world with some of the New Age movement's leading minds.

One of the goals of his present book is to offer strategies by which evangelical Christians can interact with those holding to New Age ideas. His ideas will be extremely important for those interacting with New Age nursing theories. Each chapter describes the New Age perspective on a particular subject, and offers biblically based critiques. Newport encourages dialogue, but not compromise. 'Unfortunately, many professed Christians are caught up in certain phases of the New Age movement without realizing that the New Age worldview is contrary in most of its teachings to a basic biblical perspective' (p. xv).

The first half of Newport's book traces the development of New Age ideas. While the New Age encompasses many different views, Newport shows that this diversity is superficial. Underneath a thin surface lurk many commonly-held beliefs, many stemming from reinterpretations of Hinduism. These chapters explain the importance to New Age beliefs of: personal transformation, enlightenment (via occult means if necessary), altering one's consciousness, transpersonal psychology, and healing.

Healthcare providers will be most interested in how these impact New Age Medicine. In his historical overview, Newport describes the rise and fall of various healing cults and sects, each leaving a legacy eventually coalescing into the current interest in alternative medicine. New Age ideology and postmodernism provide much of the rationale for the promotion of these therapies, especially within nursing theories. Newport shows why meditation and mysticism are so entwined with New Age therapies. And he gives an important caution to Christians intrigued by alternative medicine: '... the religious point of view embodied in the New Age health movement is an integral part of the occult/mystical worldview that is making its way into every aspect of our cultural consciousness. It is not a fad. It will not go away. And it is fundamentally hostile to biblical Christianity' (p. 325).

Yet in spite of its problematic nature, Newport calls on Christians to find where they can agree with New Age critiques of modern culture. We can agree that modern medicine has a tendency to view people mechanistically. We can affirm the importance of spirituality, but without accepting the New Age view. We can affirm the importance of divine revelation, without accepting the New Age belief that meditation always brings divine inspiration. And we must clearly denounce as occultic and dangerous those 'alternative therapies' which involve contacting spirit guides and channelling.

Newport has chapters on the impact of New Age thought on ecology, business, education, science, the arts, history, and witchcraft. Each is packed with details and insight, which leads to the book's main weakness: it flows very unevenly, with little connection between sections and much repetition. It reads like an encyclopedia, but its short index does not allow it to be used this way. However, to understand our postmodern culture, and its fascination with alternative medicine, this book is a gold-mine. Christian nurses will be especially well prepared to understand and critique New Age nursing theories after they study Newport. But be prepared to work for those nuggets!

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