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The Polkinghorne Report on Fetal Research: nice recommendations, shame about the reasoning

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Author's abstract

In 1989, in the wake of the first operations to transplant fetal tissue into the brains of sufferers from Parkinson's Disease, the UK Code of Practice governing the use of the fetus for research was overhauled by an eminent committee under the chairmanship of the Reverend Dr John Polkinghorne.

The Polkinghorne Report has, however, attracted remarkably little comment or analysis. This paper is believed to be the first to subject it to sustained ethical and legal scrutiny.

The author concludes that, although the committee's recommendations meet the major objections to the Code of Practice, the report is nevertheless vulnerable to criticism in its treatment of at least three issues: the moral status of the fetus; paternal consent to fetal use, and the ethical inter-relation of fetal use and abortion.

Introduction

The use of human fetal tissue for research and therapy continues to cause concern and provoke debate. In the US President Bush recently announced that such tissue cannot be used for research if it results from induced abortion (1).

In 1972 an advisory group, chaired by Sir John Peel, published its *Report on the Use of Fetuses and Fetal Material for Research* (2). Appended to the report was a recommended Code of Practice which was subsequently implemented in both NHS hospitals and private abortion clinics. In 1988, in the light of developments in the field of human tissue transplantation and medical research, the Department of Health established a committee to review the Peel Report and in particular to consider whether any modifications should be made to its Code of Practice (3). Chaired by the Reverend Dr John Polkinghorne (4), the committee reported in July 1989 and proposed a revised Code of Practice (5). The Department of Health promptly commended the new code to NHS hospitals and private abortion facilities (6).

Key words

Fetus; fetal research; fetal transplantation; abortion.

So substantial are the Polkinghorne Committee's revisions of the Peel Code that it has in effect produced a fresh code. While commendably remedying most of the old code's deficiencies, the Polkinghorne Report nevertheless invites several criticisms. This paper considers the committee's reasoning in relation to three issues: the moral status of the living fetus *in utero* before implantation and of the living fetus *ex utero*; parental consent; and the ethical inter-relation of the use of the fetus and abortion (7).

I. The use of the fetus for research and therapy

1. THE LIVING FETUS *IN UTERO*

'In this Code fetus means the embryo or fetus from implantation until gestation ends...'.

'It is unethical to administer drugs or carry out any procedures during pregnancy with the intent of ascertaining whether or not they might harm the fetus' (8).

The above definition of 'fetus' (9) is narrower than that in the Peel Code in that it does not include the pre-implantation embryo. The report explains that embryo research had already been considered by the Committee of Inquiry into Human Fertilisation and Embryology, chaired by Dame Mary Warnock (10).

It is arguably an odd justification for avoiding discussion of a relevant matter that it has already been the subject of consideration, unless perhaps that consideration has been exhaustive and conclusive, epithets which even the most ardent supporter of the Warnock Committee's recommendations would hesitate to apply to its analysis of the moral status of the early embryo (11). Moreover, the Warnock Committee focused on the status of the embryo *in vitro*, not *in vivo*.

Further, the moral reasoning leading the Polkinghorne Committee to accord respect to the fetus after implantation, which is set out below, seems no less applicable to the pre-implantation embryo. Indeed, the committee refers at one point to the respect due to the fetus 'at every stage of its development'. (12)

Finally, the report does not explain what it understands by 'implantation': is it referring to the beginning of the process (at the end of the first week) or to its conclusion (before the end of the second) (13)?

The second of the above paragraphs of the new code essentially reproduces a paragraph in the original code. The Polkinghorne Report condones the exposure of the fetus *in utero* (and, indeed, the fetus *ex utero*) to even 'greater than minimal' risk of unintentional harm in the course of non-therapeutic research (14). It omits, however, to justify such exposure.

2. THE LIVING FETUS *EX UTERO*

'The *live* fetus, whether *in utero* or *ex utero*, ... should be treated on principles broadly similar to those which apply to treatment and research conducted with children and adults' (15).

The Peel Code condoned research on the living pre-viable fetus, setting the minimum age of viability at 20 weeks gestation. This position invited grave objections, both legal and ethical.

Legally, both principle and authority indicate that in criminal law the pre-viable fetus is entitled to the same protection as the viable fetus. As Professor Glanville Williams wrote in the first edition of his *Textbook on Criminal Law*:

'If an aborted fetus is alive it is a person, no matter how short the period of gestation, and using it for an experiment would in law be at least an assault upon it. If doctors wish to perform these experiments legally they must seek statutory authority' (16).

Ethically, non-therapeutic research on the pre-viable fetus is open to the objection that it breaches the Declaration of Helsinki which provides that, in research involving 'human subjects', the 'interest of science and society should never take precedence over considerations related to the well-being of the subject'. Such research would also be difficult to reconcile with the recommendation of the Warnock Committee, since enacted by s3 of the Human Fertilisation and Embryology Act 1990, that it should be an offence to use a human embryo for research after the fourteenth day of development.

In the light of these objections, the removal by the new code of the distinction between the viable and the pre-viable fetus is to be welcomed. (So too is the stipulation in the BMA's guidelines on the use of fetal tissue for transplantation that tissue may only be obtained from a dead fetus (17).) But how cogent is the reasoning of the committee which leads to the removal of the distinction?

(a) The moral status of the fetus

The report states that central to the committee's understanding is the acceptance of a 'special status' for the living human fetus at every stage of its development. The fetus merits 'profound respect based upon its potential for development into a fully-formed human being' and it is not to be treated instrumentally as a mere object available for investigation or use (18). Consequently, a fetus is entitled to respect, according it a status 'broadly comparable to that of a living person' (19). The new code accordingly provides that research on the fetus should be governed by principles 'broadly similar' to those applicable to research on children and adults (20).

The report observes that intervention on a living fetus should only carry a minimal risk of harm or, if a greater risk is involved, that the intervention is on balance for the benefit of the fetus. It then states that with trial procedures involving greater than minimal risk which may be of great potential benefit to the group to which the subject of the trial belongs, the ethical issues must be considered in a manner 'broadly similar' to the way they are considered in relation to children and adults (21).

(b) A critique

The reasoning of the committee invites five criticisms.

First, when is a human being 'fully-developed' and/or 'fully-formed'? At birth, or at a later stage, such as adulthood? If the latter, then has the committee not implicitly devalued the moral status of those who have not yet reached that stage but who hitherto would have been regarded as enjoying full human rights and not merely a right to 'broadly similar' treatment?

Secondly, is potentiality a sufficient criterion for moral worth, particularly when the potentiality of one fetus can later be replaced by that of another? Even if potentiality is a valid criterion, why should it entitle the fetus to be treated in a 'broadly similar' way to a 'fully-developed' human being? (22) Moreover, what is the moral status of a fetus which does not enjoy this potential because, for example, it suffers from a condition which will result in neonatal death? Indeed, is it not the case that *every* living pre-viable fetus lacks, by definition, the potential to develop into a fully-formed individual? And, it could be argued, if it is doomed anyway why not use it for research?

Thirdly, the recommendations are too often couched in vague terms. What, precisely, is meant by the fetus enjoying a moral status 'broadly comparable' to an adult, and by applying 'broadly similar' principles to both in the context of research, and by 'minimal' and 'more than minimal' risk?

Fourthly, the report asserts that it is unethical to use a fetus instrumentally but assumes (as did Peel) that a mother can give an ethically effective consent to non-therapeutic research. It makes no attempt to reconcile this apparent inconsistency nor to address the ethical arguments which have been advanced against allowing *any* non-therapeutic research on children, let alone research involving minimal and more than minimal risk (23).

Finally, the recommendations assume (as did Peel) that a mother can give a legally effective consent to non-therapeutic research involving a minimal and, evidently, an even greater than minimal risk to the fetus. It is at least doubtful whether this is the case (24).

The last two points lead on to consideration of whether the consent of the mother and/or father is ethically and/or legally desirable.

II. Consent

'The written consent of the mother must be obtained before any research or therapy involving the fetus or fetal tissue takes place. Sufficient explanation should be offered to make the act of consent valid' (25).

The code adds that consent to abortion must be obtained before consent to the use of the fetus and without reference to the possibility of that use (26). It also provides that consent should be obtained to any proposed tests on the fetus for transmissible disease (27). The code states that paternal consent is not a prerequisite to fetal use (28).

The Peel Code drew criticism for not requiring the informed consent of the mother to the use of her fetus. Polkinghorne's recommendations meet this criticism and, it is submitted, properly respect the mother's interests in the fate of her fetus. However, the report is nevertheless open to criticism, firstly for omitting to answer satisfactorily certain objections to any requirement of maternal consent and, secondly, for its reasoning rejecting the case for a requirement of paternal consent or, at least, consultation.

1. MATERNAL CONSENT

The committee rejected the argument that allowing the mother to consent to the use of the fetus is like asking a murderer to consent to the use of his victim. It preferred the view that because abortion is a decision of 'moral ambiguity and perplexity to many, reached only through a conflict of considerations' it was too harsh a judgement of the mother's relation to her fetus to suppose that she was no longer in a 'special position' with regard to it (29).

However, the committee did not address the associated objection that, although the mother's proxy consent to research on her child is normally required, this is because it is presumed that she has the best interests of the child at heart, and that this presumption does not apply in the case of the mother who has decided to reject the child by abortion, at least for other than a grave reason.

Professor Ramsey concludes, with reference to research on the living pre-viable fetus, that it is 'morally outrageous ... to designate women who elect abortion for comparatively trivial reasons, or for social convenience or economic betterment, to the socially responsible role or ascribe to them the decisional competence and deputyship to say whether the abortus should or should not be used in medical experimentation' (30).

This objection has been extended by Bopp and Burtchaell to the dead fetus: 'The very agents of someone's death are surely disqualified to act on the behalf or in the stead of the victim – disqualified as a man who has killed his wife is morally disqualified from acting as her executor'. They add that if the mother is to be regarded not as the guardian of the fetus but as its next-of-kin, this is an 'ominous innovation: that within one's lifetime another person be legally permitted to assume authority, not as a protector exercising protective care, but as a survivor acting in her own interests' (31).

Whether this would be such an 'ominous innovation' is, however, open to question: would it differ from asking a wife shortly before the death of her husband if she had any objection to his organs being transplanted? In relation to the living fetus, by contrast, Ramsey's point appears to have some force: should the committee not have considered whether the woman who has aborted the fetus is an appropriate person to safeguard its interests?

2. PATERNAL CONSENT

In rejecting a requirement of paternal consent, the committee states that the father's case for being consulted rests, as does that of the mother, on respect rather than on the law and that his consent is not required for an abortion. Both of these statements are open to criticism, the first for being inaccurate, the second for being irrelevant.

First, if the fetus dies after live birth then, as the Peel Code recognises, the Human Tissue Act 1961 applies. This Act makes provision for the use of parts of the body for therapy or research and allows the person lawfully in possession of the body to authorise the use of the body for these respective purposes provided that he or she, having made such reasonable enquiry as may be practicable, has no reason to believe that any surviving relative of the deceased objects to such use (32). Consequently, the absence of paternal consultation could result in the removal of fetal tissue not being authorised by the Act (33).

Secondly, while it is true that the father's consent is not required for an abortion (34) the relevance of this is not explained. It certainly does not follow that because the father is denied a veto on abortion he should therefore be denied a veto on the use of the abortus.

One argument for his involvement is that tests on the fetus may have implications for him. The committee, while acknowledging this, nevertheless concludes that his consent should not be required because his relationship with the fetus is 'less intimate' than that of the mother (35), a conclusion which is both vague and a *non sequitur*.

What is meant by 'less intimate'? Does it imply that the mother is more concerned than the father

about the disposal of the fetus? If so, where is the evidence for this assumption?

Even if it were true, why should it override the desirability of consulting the father because of his relationship to the fetus and because tests on the fetus may have implications for him? No reason is given. It is surely one thing to assert that the mother has a stronger claim to be consulted that the father, but quite another to conclude that recognition of her claim is incompatible with recognition of his.

Finally, it is noteworthy that in the US the Uniform Anatomical Gift Act, enacted in all the states, requires the consent of one parent and the non-objection of the other, and that the guidelines on fetal research issued by the National Commission for the Protection of Human Subjects of Biomedical Research require the consent of the mother and non-objection of the father (36).

III. The principle of 'separation'

Apart from meeting some of the central objections to the Peel Code, the new code makes additional recommendations intended to improve the regulation of the use of fetal tissue. A cardinal aim of the code is to separate the decision to terminate a pregnancy from the decision to allow the use of the resulting fetal tissue:

'The decision to carry out an abortion must be reached without consideration of the benefits of subsequent use. The generation or termination of pregnancy to produce suitable material is unethical' (37).

The code adds that the management of the mother's pregnancy should not be influenced by the prospective use of the fetus (38) and that no inducements should be offered to the mother to abort or allow the fetus to be used (39). Nor should she be informed of the specific use which may be made of fetal tissue, or whether it is to be used at all (40).

1. COMPLICITY IN PAST ABORTIONS

The committee rejects the argument that abortion is so immoral that it taints beyond acceptability any beneficial use of the fetal material so obtained. It concludes that this would only be arguable if the abortion were an act of 'very great moral turpitude' and that in the circumstances envisaged by the Abortion Act 1967 abortion is only permitted where there are other serious moral issues to be considered, such as concern for the health of the mother (41). It observes that in circumstances of such moral complexity, it is not right to regard abortion as inevitably so heinous that any use of the fetal tissue gained thereby is immoral and adds that although in particular cases there may be disagreement about whether the moral factors have been properly weighed this does not allow as general conclusions either that abortion is generally wrong or that as a result the beneficial use of fetal tissue compounds this wrongfulness. It also points out that the use of fetal tissue has been justified by analogy with the use of organs which become available as the result of a careless accident or even murder (42).

This discussion of moral complicity is unsatisfactory. It is not clear why the committee rejects the argument from complicity: is it because abortion is not an act of 'very great moral turpitude' or is it because, even if it is, use of the resultant tissue does not amount to complicity? If the former, then the committee's apparent assumption that abortions carried out (ostensibly) under the Abortion Act 1967 are not immoral surely requires justification, particularly in the light of evidence indicating that the bulk of abortions are performed for social rather than health reasons and of the admission by the Act's promoter that abortion is being used as a contraceptive (43).

If, alternatively, the committee rejects the argument from complicity on the ground that use of fetal tissue is no more immoral than the use of the corpse of a murder victim, should not the committee have considered whether a truer analogy would have been with *institutionalised* homicide? As LeRoy Walters has written:

'If a particular hospital became the beneficiary of an organised homicide-system which provided a regular supply of fresh cadavers, one would be justified in raising questions about the moral appropriateness of the hospital's co-operation with the suppliers' (44).

Similarly, would not a doctor in Nazi Germany who was regularly supplied for his research with the corpses of gassed Jews incur moral guilt for complicity in the systematic atrocities from which his work benefited? Such analogies may or may not be persuasive, but did they not merit consideration by the committee?

The committee goes on to conclude that, since it does not accept that fetal material resulting from an induced abortion is morally tainted, the recipient has no right to know whether it is the result of a spontaneous or induced abortion (45), although medical and nursing staff should have a right of conscientious objection to participation in the use of fetal material for research or therapy (46). If, however, there is no moral taint attaching to the fetal material, it is not clear why staff should have a right to refuse nor why, if staff have that right, patients should not.

2. COMPLICITY IN FUTURE ABORTIONS

A no less trenchant objection to the use of fetal tissue, which is again dealt with less than convincingly by the committee, has been well made by Bopp and Burtchaell, namely, that fetal use may not only entail complicity in abortions which produced the fetuses but may also involve complicity in the future abortions it may encourage.

(a) Aborting in order to produce fetal tissue

The new code's attempt to separate the decision to abort from that to use the resulting fetal tissue reflects the committee's belief that it is unethical to allow the prospect of the use of fetal tissue to encourage abortion. The report asserts that abortion and the use of fetal tissue thereby obtained are 'separate moral questions' and that it is of great importance that this should be reflected in the procedures employed (47). It adds that the generation of a pregnancy to provide tissue would be unethical as it would involve treating the fetus as a thing. The report consequently recommends the separation of the decisions to terminate pregnancy and to use the resulting tissue, and the creation of procedures which will make it impossible for the woman to specify that the tissue should be used in a particular way (48).

The report's reasoning seems inconsistent. In particular, it is difficult to see why the report takes such pains to separate the decision to abort from that to use the material when it does not regard abortion as immoral in the first place. Although the report is unclear about the circumstances in which abortion is unethical, it rejects the view that abortion is always immoral. It states that the destruction of the unborn fetus is permitted under the Abortion Act 1967 'only in situations where there are also other serious moral issues to be considered, such as those arising from concern for the health of the mother' (49); that the situation is one in which a number of possible conflicting moral factors are involved and that the fact that there may be differing views about whether these factors have been correctly weighed does not mean that abortion is inevitably wrong (50); and that abortion is 'a decision of moral ambiguity and perplexity for many, reached only through a conflict of considerations' (51).

Yet, if abortion in the interests of the woman's health is morally acceptable, it is surely inconsistent to conclude that an abortion to provide tissue is not justifiable in the service of those same interests. A clear example would be where the tissue is required to treat an illness of her own. But is there any reason why her health could not benefit even if the tissue were required for another, particularly her child, spouse or parent? It is noteworthy, in view of the committee's reference to the abortion Act 1967, that such abortions would be as lawful as any other abortions performed in the interests of the woman's health. Indeed, the Act specifically permits abortion in cases where the risk to the health of any existing children from continuing the pregnancy is greater than the risk from terminating it (52). Further, it may well be that an abortion to provide tissue for another is, not least because of its altruistic motive, a weightier reason than a number of others currently accepted by many as ethical.

As Robertson points out, the morality of abortion to provide tissue for the woman or another 'depends on the value placed on early fetuses and on the acceptable reasons for abortion'. He concludes: 'There is no sound ethical basis for prohibiting this sacrifice of the fetus when its sacrifice to end an unwanted pregnancy or pursue other goals is permitted' (53).

(b) Conceiving in order to produce fetal tissue

Nor is it clear why, if abortion is ethical, it is unethical to generate a pregnancy in order to provide tissue. The report claims that this would be to treat the fetus instrumentally but omits to explain how this is any different from aborting the fetus in the interests of the mother's health. Surely a fetus which is destroyed in order to promote the woman's health is being used no less instrumentally - as a means to an end - than one generated and terminated for that purpose (54)?

(c) Abortion, research and moral consistency

If abortion in the interests of the woman's health is ethical, and a termination of a pregnancy is carried out in the interests of the woman's health, then it is *ex hypothesi* ethical whether its purpose is to provide tissue (whether for herself or another) or not, and whether the fetus was deliberately generated for that purpose or not. Indeed, is the threat to a woman's health from continuing a pregnancy which she generated solely to provide tissue not likely to be even greater than that from continuing a pregnancy which was either originally wanted or simply unplanned?

All this is not to disagree with the committee's opposition to the deliberate destruction of a fetus to provide tissue, whether generated for this purpose or not. On the contrary, it is submitted that its opposition is wholly warranted. But it is submitted that it is only possible to hold this position *consistently* if abortion for other purported justifications, such as preserving the woman's health, is equally opposed. Indeed, would such a position not be more in harmony with the committee's assessment of the moral status of the fetus?

The report concludes that the fetus, because of its potential for development into a fully developed human being, merits a 'special status' and 'profound respect' (55), and it recommends that, in the context of research, it be treated according to principles broadly similar to those which apply to children and adults (56). These principles, as contained in the Declaration of Helsinki, emphasise that the interests of the individual take precedence over the interests of science and society.

If being subjected to harmful research or being aborted to produce tissue is inconsistent with 'profound respect' and with principles 'broadly similar' to those adopted at Helsinki, why is abortion for other reasons not also inconsistent with them?

The counter-argument that in the context of abortion the interests of the fetus may conflict with those of the mother surely fails, for such conflict

(whether between the fetus and the mother and/or others) may equally exist in the context of research and therapy.

In short, if the committee's principles rule out harmful research and abortion to produce tissue, it is difficult to see why they do not also rule out abortion for other reasons. Conversely, if they do not rule out abortion for other reasons, it is difficult to see why they rule out harmful research and abortion to produce tissue.

Conclusions

The Polkinghorne Committee is to be applauded for its comprehensive improvement of the Code of Practice and in particular for the recommendations removing the distinction between the viable and pre-viable fetus, requiring maternal consent, and entrenching the principle of 'separation'.

On the other hand, the reasoning behind the committee's exclusion of the pre-implantation fetus and its rejection of a requirement of paternal consent or consultation are open to criticism. Moreover, its reasoning about the moral status of the fetus in the context of abortion and its status in the context of research seems inconsistent: *if*, as the committee accepts, abortion under the Abortion Act 1967 is ethical, then why does it not follow that harmful research on fetuses and abortion to produce tissue are also ethical (57)?

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References and notes

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(3) Department of Health and Social Security press release, 1988 Jun 7: 88/179.
(4) The other members were Sir Raymond Hoffenberg, Professor Ian Kennedy and Dr Sally Macintyre.
(5) *Review of the guidance on the research use of fetuses and fetal material.* London: Her Majesty's Stationery Office, 1989: Cm762.
(6) *Parliamentary debates,* 1989; 157, House of Commons: written answers, July 25: cols 675–676.
(7) The article does not purport to offer a comprehensive critique of the code. Nor does it assess the scientific and therapeutic applications of the fetus. On this matter see McCullagh P. *The foetus as tranplant donor.* Chichester: John Wiley, 1987.
(8) See reference (5): code: preface, and para 1.2 respectively.
(9) See reference (5): code: preface and also report: para 1.5.
(10) See reference (5): report: para 1.6.
(11) For critiques of the Warnock report see Lockwood M. The Warnock report: a philosophical appraisal. In Lockwood M, ed. *Moral dilemmas in modern medicine.* Oxford: Oxford University Press, 1985: 155–186; LIFE. *Warnock dissected.* Leamington Spa: LIFE, 1984.
(12) See reference (5): report: para 2.4.
(13) Moore K L. *The developing human* (4th ed). Philadelphia: W B Saunders, 1988: 2; 47.
(14) See reference (5): report: para 3.2.
(15) See reference (5): code: para 1.1 (a).
(16) Williams G. *Textbook on criminal law.* (1st ed). London: Stevens and Sons, 1978: 263, footnote 8. (This statement neither appears nor is controverted in the second edition.) Similarly, Williams has written that a child is regarded as born alive, and therefore protected by the law of homicide, when it is fully born and is alive, the 'test of the latter being the functioning of the heart'. See the second edition, 1983 of *Textbook on criminal law*: 290 (footnote omitted). In the US it is unlawful to remove tissue from a pre-viable fetus. Robertson J A. Rights, symbolism, and public policy in fetal tissue transplants. *Hastings Center report* 1988; 18: 5. For an example of experimentation on living fetuses of 20–22 weeks gestation see Coutts J R T and Macnaughten M C. The metabolism of [4-14C] cholesterol in the pre-viable human foetus. *Journal of endocrinology* 1969; 44: 481–488.
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(19) See reference (5): report: para 3.1.
(20) See reference (5): code: para 1(1)(a).
(21) See reference (5): report: para 3.2.
(22) See Glover J. *Causing death and saving lives.* Harmondsworth: Penguin, 1977: 122; Singer P. *Practical ethics.* Cambridge: Cambridge University Press, 1979: 119–122.
(23) See for example, Ramsey P. *The patient as person.* New Haven and London: Yale University Press, 1970: chapter 1.
(24) See Skegg P D G. Consent to medical procedures on minors. *Modern law review* 1973; 36: 381.
(25) See reference (5): code: para 4.1.
(26) See reference (5): code: para 4.2.
(27) See reference (5): code: para 4.5.
(28) See reference (5): code: para 4.3.
(29) See reference (5): report: para 2.8.
(30) Ramsey P. *The ethics of fetal research.* New Haven and London: Yale University Press, 1975: 95.
(31) National Institutes of Health. *Report of the human fetal tissue transplantation research panel.* Bethesda, Maryland: National Institutes of Health, 1988: 58–59.
(32) Human Tissue Act 1961 s1(2)(b).
(33) On the question of possible civil and criminal liability for failure to comply with the Human Tissue Act 1961 see Skegg P D G. Liability for the unauthorised removal of cadaveric transplant material. *Medicine, science and the law* 1974; 14: 53–57; and Liability for the unauthorised removal of cadaveric transplant material: some further comments. *Medicine, science and the law* 1977; 17: 123–126. Dissection in the absence of appropriate enquiry may also be unlawful: see Anatomy Act 1984 s11.

(34) See generally *Paton v Trustees of the British Pregnancy Advisory Service* [1978] 2 All ER 987 (QBD); *C v S* [1987] 1 All ER 1230 (QBD) 1241 (CA).
(35) See reference (5): report: para 6.7.
(36) Mahowald M B, Silver J, Ratcheson R A. The ethical options in transplanting fetal tissue. *Hastings Center report* 1987; 17: 10–11.
(37) See reference (5): code: para 3.1.
(38) See reference (5): code: para 3.2.
(39) See reference (5): code: para 3.3.
(40) See reference (5): code: para 3.4.
(41) See reference (5): report: para 2.6.
(42) See reference (5): report: paras 2.7–2.8.
(43) David Steel MP, quoted in Bartram P. *David Steel: his life and politics.* London: WH Allen, 1982: 85. On the prevalence of social indications for abortion see generally Keown J, *Abortion, doctors and the law.* Cambridge: Cambridge University Press, 1988: chapter 5.
(44) Quoted by James Bopp Jr and James Tunstead Burtchaell in National Institutes of Health. *Report of the human fetal tissue transplantation research panel.* Bethesda, Maryland: National Institutes of Health, 1988; statement of dissent, 68.
(45) See reference (5): report: para 2.9.
(46) See reference (5): report: para 2.11.
(47) See reference (5): report: para 4.1.
(48) See reference (5): report: para 4.2.
(49) See reference (5): report: para 2.6.
(50) See reference (5): report: para 2.7.
(51) See reference (5): report: para 2.8.
(52) Abortion Act 1967 section 1(1)(a).
(53) See reference (16): Robertson J A: 6–7.
(54) Similarly, Robertson concludes that as long as abortion for transplant purposes is ethically accepted, conceiving in order to do so, although 'not in itself desirable', should also be so 'when necessary to alleviate great suffering in others': reference (16): 8. It is not clear why Robertson, who concludes that aborting fetuses before they have developed 'the neurologic and cognitive capacity for sentience and interests in themselves' does not harm or wrong them (reference (16): 7) regards conceiving in order to abort as undesirable and only permissible to alleviate great suffering. If it is because of the 'additional symbolic devaluation' of the fetus (reference (16): 8), it is still not clear. Perhaps a sounder moral basis for objecting to conception for the purposes of abortion is to be found not only in the value of the fetus itself but also in the abuse of human procreation. To adopt and adapt an objection which has been made to the creation of children by IVF, the child conceived in order to be aborted is regarded not as 'a new partner in the common life' of the parents but rather as a disposable product. See for example: Catholic Bishops of Great Britain Joint Committee on Bioethics. In vitro *fertilisation: morality and public policy.* London: Catholic Media Office, no date: 14. The moral inconsistency of condoning abortion while opposing the generation of fetuses to provide tissue is paralleled in the debate on embryo research where many condone research but oppose the generation of embryos for that purpose. See for example: *Report of the committee of inquiry into human fertilisation and embryology.* London: Her Majesty's Stationery Office, 1984, Cm 9314: expression of dissent C.
(55) See reference (5): report: para 2.4.
(56) See reference (5): code 1.1 (a).
(57) It is, moreover, questionable whether it is satisfactory to entrust the regulation of fetal research to a code of practice, particularly when research on the *in vitro* embryo is governed by legislation. See Warnock M. *A question of life.* Oxford: Blackwell, 1985: 64.

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