Eugenic abortion: an ethical critique

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In 1967 the CMA officially approved abortions by physicians when there was "a substantial chance that the child would be born with grave mental or physical disability".1 The stimulus for that revolution in the ethics of medical practice was the newly demonstrated causal association between maternal German measles in early pregnancy and severe physical and mental defects in the newborn.1 I recall that there was surprisingly little debate about the resolution in the medical press or among members of the medical profession. Most of us thought that such a procedure would rarely be used.

The policy still stands,2 but new technologic advances in ultrasonography, intrauterine techniques, karyotyping, biochemical analysis of amniotic fluid and molecular genetics have resulted in eugenic abortions becoming a regular occurrence in medical practice in Canada. Since 1967 few articles have addressed the rationale and indications for eugenic abortion, and even fewer have questioned whether eugenic abortion should be performed at all. The medical literature has betrayed a widespread, usually unstated assumption by the profession that fetal life should be terminated whenever a serious congenital abnormality is strongly suspected.

It is now possible to diagnose relatively reliably 200 or more handicapping disorders. In Canada a surge in the use of such prenatal diagnostic techniques occurred in 1976 after the publication of three reports of international collaborative studies3-5 and one from the Medical Research Council of Canada.6 As early as 1983 Allanson and associates7 reported that 50% of older pregnant women in the Vancouver area "took advantage of the availability of amniocentesis". The indications now accepted for the prenatal investigation and diagnosis of genetic disorders have been established by the Society of Obstetricians and Gynaecologists of Canada,8 the most common indication by far is high maternal age, usually defined as over 35 years, at the expected date of delivery.

Physicians are not only accepting and sometimes promoting such investigative procedures but also are being increasingly pressed by older mothers and their partners to do them, mostly because of the fear of having a retarded child.

The 16th postmenstrual week is the preferred time for amniocentesis. Since it takes 2 to 3 weeks for the laboratory analysis and reporting, the minimum time for the termination of fetal life is the 18th gestational week. Several authors have reported a mean gestational age of 20 weeks.6,9,10

The issues raised by eugenic abortion should be distinguished carefully from those raised by the continuing debate on abortion as a matter of reproductive choice, determined by the "mother's own priorities and aspirations", the terminology used by the Supreme Court of Canada in the Morgentaler decision.11 Eugenic abortion deals with neither the pathos of an unplanned, unwelcome or forced pregnancy nor the personal matter of freedom of choice about what happens to one's body. Instead, it involves a deliberate, systematic search for those who may be unfit in mind or body, the primary intent being to terminate fetal life if such is found. If the fetus is thought to be "normal" the pregnancy is allowed to continue. Therefore, I prefer the more descriptive term "selective feticide", following Roberts and collaborators,12 over the more common terms such as eugenic abortion, selective abortion and genetic abortion. My preference is supported by an awareness of the infrequently used, yet widely accepted, practice of selectively terminating the life of an "abnormal" twin in utero by exsanguination or injection of potassium chloride or a bolus of sterile air directly into its heart or umbilical vein and allowing the "normal" twin to develop to term. The dead twin is not "aborted" but, rather, is delivered at term as a fetus papyraceus.13-15

Selective feticide should not be equated with the reduction of multiple pregnancies associated with assisted ovulation and fertilization. Here the objec-
tive is to create a maternal environment in which one or more of the fetuses can survive to viability and normality — a goal compatible with the traditional scope of medicine.16,17

Physicians should be concerned about the continuing welfare of their patients and the attitude of society toward them. Mentally handicapped people are not able to speak well for themselves; therefore, we who serve them must speak on their behalf, because it is unlikely that others will.

Selective feticide is fraught with technical problems and clinical complications and may have severe psychologic effects on the mothers. It has ethical implications for physicians and some broader social implications. In addition, it may adversely affect the social identity of the medical profession.

Adverse effects of amniocentesis on the fetus

Amniocentesis is not harmless. Early reports were divided on whether it caused fetal loss, but other, larger studies have demonstrated that uncomplicated amniocentesis in the second trimester has caused an increase in the mortality rate of healthy fetuses of 0.5% to 1.0% because of an increased rate of spontaneous abortion and a small but significant increase in the perinatal mortality rate.6,8,12,17-21 Also, after amniocentesis an increase of 0.4% above the expected rate of prenatal hemorrhage from placenta previa and abruptio placentae has been reported,18 as has a threefold increase in the incidence of breathing problems in the normal newborn and of orthopedic problems, especially club foot and congenital dislocation of the hip.20,22

In a Canadian study Finnegan and colleagues23 found “needle marks” 6 months after birth on 6 of 91 infants whose mothers had undergone amniocentesis. Although the marks were only cosmetically important, they reviewed reports of single or rare instances of needle injury, such as exsanguination, cardiac puncture, puncture of the gut, ocular trauma, neurologic damage to a limb and gangrene of a limb.

False-positive and false-negative laboratory results do occur.24 The error rate of 0.3% in cytogenetic diagnosis reported in larger series is very low but of critical significance when the termination of life is involved.10 Procedural mistakes by physicians, nurses, laboratory technicians and clerical staff occur despite the utmost care.10 Furthermore, the procedures are not very effective in decreasing the rate of mental retardation. For example, the screening of mothers over 35 years of age prevents the birth of only 25% of the children expected to be born with Down’s syndrome.25 The human cost for this supposed gain is very high: the number of cases of handicap prevented by these prenatal procedures is almost identical to the number of “normal” children sacrificed.26-27 Primum non nocere.

Adverse effects of selective feticide on the mother

The degree of psychiatric illness caused by induced abortion of unwanted pregnancies may still be debatable.28-29 However, selective feticide and the related experiences create unusually high levels of stress for the mother30-32 and negatively affect the father31 and the siblings of the aborted fetus.34 The mothers are usually mature in their thoughtfulness and sensitivity, and their pregnancies are often planned, wanted and sometimes treasured events. For 4 months they have anticipated the healthy outcome of their pregnancy. Shortly after amniocentesis they experience quickening, with its consequent enhancement of maternal attachment and an increased awareness of the fetus as having a separate existence.35,36 The interval of 2 to 4 weeks between amniocentesis and receipt of the laboratory results causes much anxiety and even denial of the pregnancy by the parents;37 this anxiety is not always relieved by good genetic counselling, which may even increase the mother’s anxiety.38 When unwanted results are received the parents must make very difficult personal decisions based on concepts couched in terms that are foreign and often dreadful to them.

The termination of a pregnancy through amnioinfusion techniques subjects the mother to distressing labour, which is often poorly attended by the medical and nursing caregivers.37 The stress is much less on the mother and the nurses if the abortion is done through dilatation and evacuation, which in skilled hands is the preferred procedure up to 20 weeks’ gestation; however, this procedure is much more distasteful and stressful to the physician.39,40 With the use of infusion techniques the dead fetus is easily recognizable as a tiny human being and may be seen by the mother after delivery.

Physical complications after a second-trimester abortion for any reason are common41 and more frequent than would be acceptable in regular elective surgery. Castodor42 reported that in abortion after 16 weeks’ gestation the rate of hemorrhage is over 10%, endometritis 10%, cervical laceration 3% and retained products of conception 32% to 46%. Grimes and Schuls,33 who reported the results of a collaborative study of 84 000 late induced abortions, found that abortion at 20 to 21 weeks resulted in a 12.4% risk of hemorrhage and a 7.7% risk of cervical laceration.

The psychologic complications after delivery are also severe. Mothers who have undergone eugenic
abortion and have previously lost a child because of stillbirth or neonatal death have reported that the level of bereavement is equal; too often the intensity of the grief is not eased by the usually healing process of mourning.\textsuperscript{44,45} Normal grieving is confounded by the mother's mixed feelings of guilt and grief, her sense of relief about and responsibility for the abortion and the lack of awareness of the depth of her loss by the people close to her. There is no baby, no name, no photograph, no funeral, no grave.\textsuperscript{46}

These negative psychologic consequences are not helped by the negative attitude of physicians to eugenic abortion, which is shown by the low rate of their attendance during the delivery\textsuperscript{39} and the lack of follow-up care given by physicians and public health nurses as compared with that given the same mothers after previous stillbirths or neonatal deaths.\textsuperscript{46,47}

The few reports of follow-up of eugenic abortion have suggested that the rate of psychiatric complications is high.\textsuperscript{44-49} Lloyd and Laurence\textsuperscript{46} followed up 53 cases and, although the study was inadequately controlled, found that 78\% of the women had acute grief reactions similar to those expected in any situation of major bereavement; 46\% continued to suffer from clinically significant anxiety or depressive states up to 6 months after the abortion, and 10\% required psychiatric treatment.

\section*{Ethical issues}

The central ethical issue in selective abortion is whether physicians should become involved in purely eugenic procedures that involve the termination of a human life. A cogent understanding of the proclivity of mankind to evil\textsuperscript{50} and the actions of the very sophisticated medical profession in Germany in the 1930s\textsuperscript{51-53} suggest that we should be very leery of such an involvement. The fears are not allayed by reports of the use of selective abortion techniques in India, administered on the basis of sex (\textit{Winnipeg Free Press}, Aug. 28, 1982, and \textit{Times of India} [Bombay ed], Oct. 17, 1985),\textsuperscript{54,55} or by evidence of a widespread acceptance of this practice among medical geneticists in the United States and Canada\textsuperscript{56} and the students of a supposedly conservative rural US college.\textsuperscript{57}

Eugenic abortion is most often done at a gestational age that nearly approaches the age of fetal viability, even with good sequencing of procedures and reports. The dramatic advances in neonatology have resulted in the age of viability being changed to 24 weeks or even lower.\textsuperscript{58,59} At its 1988 meeting the CMA General Council accepted 20 weeks as the age of viability.\textsuperscript{2} However, in Britain the termination over a period of 6 months of 26 fetuses after 24 weeks' gestation was reported.\textsuperscript{60,61} Also, it has been argued that the statutory age of viability not be lowered from 28 weeks because to do so might encourage legal infringement on the practice of late abortion of defective fetuses.\textsuperscript{31,60,62,63}

What is technologically possible is not always right. Our ability to use these new techniques confronts us with the modern moral predicament posed by the Durants\textsuperscript{64} Have we given ourselves more freedom than our intelligence can digest?

\section*{Broader social implications}

Vigorous public education efforts by the helping professions and voluntary organizations such as the Association for Community Living, formerly the Canadian Association for the Mentally Retarded, have done much to reduce the stigma borne by handicapped people. However, we should be concerned lest these gains be lost when most expectant mothers over 35 years of age and their husbands decide to have prenatal diagnostic studies done with the intent of terminating the life of their unborn child if a mental or physical defect is suspected. Such a reversal in public attitude could lessen the resolve of governments to fund adequate medical and other service programs for handicapped people and could diminish the impetus for public institutions to fund research into the disorders underlying mental and physical disability.\textsuperscript{65}

It has been regularly argued in the medical literature that the economic burden of the lifelong care of retarded people provides adequate justification for genetic abortions.\textsuperscript{66-69} The economic load is real, but this argument is based on sociopolitical, not medical, premises (Audrey D. Cole: personal communication, 1985).

Paradoxically, although the practice of eugenic abortion continues to grow, there is an increasing awareness that the fetus possesses an identity independent from its mother.\textsuperscript{70} This is prompted by increased public awareness of the success of prenatal fetal therapy\textsuperscript{71-73} and the procession of legal suits on behalf of children for "prematernal liability", "wrongful birth" and "wrongful life". Although a consensus on such suits has not been reached in the courts of the Commonwealth countries or the United States, physicians should be aware that a child can now sue his or her parents for giving them birth — and win.\textsuperscript{74-76}

New techniques, such as chorionic villus sampling, may lower the fetal age at which life can be terminated after prenatal laboratory diagnosis, but the risks of chorionic villus sampling are not yet confirmed as being acceptably low. Studies have shown the rate of fetal loss to be 0.7\% to 2.7\% higher than that associated with amniocentesis.\textsuperscript{71-81} When this is added to the increase of 0.5\% to 1.0\% in the
rate of fetal vulnerability from amniocentesis the upper side of these figures would be unacceptable. Even if the low side is confirmed in current studies the core arguments against medical involvement in the procedures — the negative psychologic impact on mothers, their families and the handicapped and their questionable ethical, social and professional implications — remain unaffected and as convincing as ever.

Selective abortion and the social role of medicine

The medical profession has earned respect through its persistent exercise of traditional ethical values that lead physicians to abhor death and to work hard to maintain and restore health. If the profession is to maintain credibility it must continue to demonstrate concern for the preservation of the lives of the sick and the weak. Eugenic abortion does not fit this ideal; its practice endorses a principle of rejecting defect that gives a nonmedical (even antimedical) priority to parental, familial and societal claims to well-being over those of the person yet to be born.82

In addition, eugenic abortion does not fall within the usual rigor of good medical practice. Ordinarily physicians demand more clinical validation than that provided only through laboratory investigation and ultrasonography before they perform procedures of grave importance to life. However well conducted, karyotyping and biochemical analysis of amniotic fluid do not possess the diagnostic validity derived from the direct examination of physical and mental status corroborated by laboratory studies. Campbell83 argued persuasively that points of view denying protection to the fetus at any stage are equally arguments for infanticide. If the premises underlying the practice of searching out the unfit and terminating their lives before birth are judged to be reasonable, then clearer logic and firmer resolve would lead to the conclusion that such termination should occur after the delivery, when the diagnosis can be more exact and no increased risk to the “normal” fetus is created.

The logical conclusion would be for the state to create a new bureaucratic position, filled by someone with a high level of technical training, to perform this task adequately. In the early 1970s Dr. John H. Maloney, a widely respected senior colleague in my home city, dubbed such an official “the provincial assassin”. It is evident that our governments would not undertake a program as repugnant to the sensibility of our citizenry as this. But, when physicians condone and actively participate in eugenic abortion the medical profession must recognize that it is achieving these very ends in the secrecy of its offices and laboratories, in the silence of the womb and in the sterility of the operating theatres. In so doing the profession veils the awful reality of the means to attain such nonmedical, sociopolitical goals from public view and awareness.

Physicians should not assume this death-dealing role. This great and historical, learned profession should not have thus allowed itself to become either the unwitting agent of public policy or the automatic servant of popular demand. Medicine must now raise the level of its internal debate about eugenic abortion. This could launch us on a process whereby our profession could return to its historical, distinctive, ethical foundations.

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**Sept. 30–Oct. 3, 1990:** International Health Policy and Management Institute 7th Annual Conference — “World Health Care in Transition”
Hotel Berlin, Berlin, West Germany
Darwin W. Schlag Jr., c/o Laventhal & Horwarth, Ste. 1100, One City Centre, St. Louis, MO 63101; (314) 421-1710

**Le 30 sept.– le 3 oct. 1990:** 4e Congrès international francophone de gérologie
Palais des congrès, Montréal
Les services de congrès GEMS, 100-4260 Girouard, Montréal, PQ H4A 3C9; (514) 485-0855, télécopieur (514) 487-6725

**Oct. 1–5, 1990:** Canadian Society of Forensic Science Annual Conference
Skyline Hotel, Ottawa
Canadian Society of Forensic Science, 215–2660 Southvale Cres., Ottawa, Ont. K1B 4W5; (613) 731-2096

**Oct. 2–5, 1990:** Canadian Association of Pediatric Hospitals Annual Conference
Montreal
Barry Rabinovitch, chairman, Organizing Committee, CAPH Conference '90, Montreal Children's Hospital, 2300 Tupper St., Montreal, PQ H3H 1P3; (514) 934-4400

**Oct. 10–12, 1990:** Colloquium on Violence and the Elderly — Organizing Today for Tomorrow (cosponsored by Sûreté du Québec)
Université du Québec, Montreal

Ramada Renaissance Hotel, Saskatoon
Saskatchewan Institute on Prevention of Handicaps, Box 81, University Hospital, Saskatoon, Sask. S7N 0X0; (306) 966-2512

Oct. 11–12, 1990: Histopathologic Diagnosis of Inflammatory and Neoplastic Skin Diseases: Assessment of Patterns and Silhouettes
Halifax Sheraton
Dr. Noreen Walsh, Department of Pathology, Victoria General Hospital, Rm. 721, D.J. MacKenzie Building, 1278 Tower Rd., Halifax, NS B3H 2Y9; (902) 428-3897

Oct. 11–14, 1990: Canadian Pain Society (IASP Chapter) Annual Meeting
London, Ont.
Ms. Inese Kramins, Local Arrangements Committee, Department of Psychology, University of Western Ontario, London, Ont. N6A 5C2

Oct. 12–14, 1990: Freud and the History of Psychoanalysis
Trinity College, University of Toronto
Dr. Andrew Brink or Herma Joel, 300 Larkin Building, Trinity College, 6 Hoskin Ave., Toronto, Ont. MSS 1H8; (416) 978-8454

Oct. 13, 1990: Undersea and Hyperbaric Medical Society (Great Lakes chapter) 11th Annual Scientific Meeting
Toronto General Hospital
Dr. Rhonda Wilansky, Hyperbaric Department, CCRW G-821, 200 Elizabeth St., Toronto, Ont. MSG 2C4; (416) 340-4481, FAX (416) 340-3698

Oct. 14–18, 1990: Canadian Association of Radiologists 53rd Annual Meeting
Pan Pacific and Vancouver Trade and Convention Centre
Suzanne Charette, Canadian Association of Radiologists, 510–5101 Buchan St., Montreal, PQ H4P 2R9; (514) 738-3111

Oct. 16–20, 1990: Annual Joint Meeting of the Canadian Cardiovascular Society, the Canadian Council of Cardiovascular Nurses, the Heart and Stroke Foundation of Canada and the Canadian Society of Clinical Perfusionists
World Trade and Convention Centre, Halifax
Betty Fata, 645–375 Water St., Vancouver, BC V6B 5C6; (604) 681-5226, FAX (604) 681-2503

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