Towards an Ethical Policy for the Prevention of Fetal Sex Selection in Canada

Allison T. Thiele, MD, PhD,[1] Brendan Leier, PhD[2,3]

[1]College of Medicine, University of Saskatchewan, Regina SK

[2]Clinical Ethicist, University of Alberta and Stollery Children's Hospitals, Edmonton AB

[3]Clinical Assistant Professor, John Dossetor Health Ethics Centre and Faculty of Medicine and Dentistry, University of Alberta, Edmonton AB

Abstract

The troubling practice of fetal sex selection has historically been considered an Asian phenomenon. However, recent evidence shows that a similar situation is emerging in North America, albeit on a smaller scale. The Society of Obstetricians and Gynaecologists of Canada has firmly stated its opposition to sex selection for non-medical reasons, as well as to the use of any technology used solely for the purpose of determining fetal sex. However, because fetal sex may be disclosed to the parents at the time of ultrasound examination if they request this information, guidance for health care professionals to assist in discouraging fetal sex selection would be useful.

Because no declaration of motives or reasons is required when a woman seeks a termination of pregnancy, we suggest that health care professionals need not disclose the sex of a fetus until it has reached a gestational age at which abortion for non-medical purposes would not be possible. This proposal would facilitate consistency between clinical practice and the values of Canadian citizens, the SOGC, the Canadian Medical Association, and other professional organizations, while still respecting current laws pertaining to disclosure of patient information and patients' rights to autonomous decision-making.

Résumé

La pratique troublante de la sélection du sexe fœtal a, historiquement, été considérée comme étant un phénomène asiatique. Cependant, des données récentes indiquent qu'une situation semblable se dessine en Amérique du Nord, quoique à une plus faible échelle. La Société des obstétriciens et gynécologues du Canada a fermement déclaré son opposition à la sélection du sexe n'étant pas motivée par des raisons médicales, ainsi qu'à l'utilisation de toute technologie aux seules fins de déterminer le sexe fœtal. Quoi qu'il en soit, puisque le sexe fœtal peut être divulgué sur demande aux parents au moment de l'examen échographique, la formulation de conseils destinés aux professionnels de la santé en vue de les aider à dissuader leurs patients d'avoir recours à la sélection du sexe fœtal pourrait s'avérer utile.

Puisque aucune déclaration de motifs ou de raisons n'est requise lorsqu'une femme demande une interruption de grossesse, nous proposons de faire en sorte que les professionnels de la santé n'aient pas à divulguer le sexe d'un fœtus avant que ce dernier ait atteint un âge gestationnel à partir duquel la tenue d'un avortement n'étant pas motivé par des raisons médicales serait impossible. Cette proposition faciliterait l'atteinte d'un équilibre entre la pratique clinique et les valeurs des citoyens canadiens, de la SOGC, de l'Association médicale canadienne et d'autres organisations professionnelles, tout en assurant le respect des lois actuelles en ce qui concerne la divulgation de renseignements au patient et des droits des patients de prendre des décisions de façon autonome.

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Sex selection as an ethical and social issue has been debated in both academic and mainstream literature for many years. Through the proliferation of technologies such as prenatal ultrasound and fetal termination, a woman or a couple can ensure giving birth to a child of a preferred sex for medical, personal, cultural, or economic reasons. These practices have been documented for years in countries such as China and India, with worrisome consequences.[1] As a result of access to ultrasound technology to determine the sex of the fetus and subsequent aborting of female fetuses and female infanticide, the male to female ratio in these countries has become increasingly skewed.[2,3] In 2001, it was estimated that the number of "missing" females (due to sex selective abortion and female infanticide) in China and India alone was between 61 and 80 million.[4]

Recent studies have illustrated that this is not just an Asian phenomenon. Analysis of Statistics Canada data from 2003 showed that the male to female ratio in Surrey, BC (a city where the immigrant population is almost one third South Asian) was 109:100 and that it had been higher in previous years. Furthermore, this statistic was consistent with other Canadian cities such as Etobicoke, Brampton, and Scarborough that have similar immigrant demographics.[5] A similar study in the United States showed that there was an imbalance in the male to female ratio in Chinese, Korean,

and Asian-Indian populations compared with Caucasians. Ratios were comparable for first child births around 1.05:1; however, the number grew in favour of male births with each successive child if the previous children had been female (1.17:1 after one female child, 1.5:1 after two previous female children).[6] Although these figures cannot be considered conclusive evidence that sex selection is a widespread practice in North America, it is not unreasonable to interpret them as good evidence that the well recognized and widespread practice of sex selection is not completely abandoned by immigrant populations arriving in North America. If this is the case, there is a cause for concern, particularly in light of public opinion showing that 92% of Canadians are against sex-selective abortion.[7] In 2004, the government passed the *Assisted Human Reproduction Act,* which prohibited any person from

> knowingly . . . for the purpose of creating a human being, perform any procedure or provide, prescribe or administer anything that would ensure or increase the probability that an embryo will be of a particular sex, or that would identify the sex of an in vitro embryo, except to prevent, diagnose or treat a sex-linked disorder or disease.[8]

Although this policy concerns the creation of embryos rather than their termination, it is not unreasonable to assume that the values that drive the prohibition of sex selection are addressing the goal of sex selection itself, rather than the technical means to achieve that end.

To address concerns about this issue, the Society of Obstetricians and Gynaecologists of Canada has published a policy statement on gender selection that states

> medical technologies and/or testing for the sole purpose of gender identification in pregnancy should not be used to accommodate societal preferences. Testing may include but not be limited to diagnostic imaging, maternal biochemical testing, chorionic villus sampling, amniocentesis, and any pre-implantation genetic testing.[9]

The policy statement declares that "the SOGC does not support termination of pregnancy on the basis of gender."[9] Other affiliated international and national organizations such as the Canadian Medical Association and the International Federation of Gynecologists and Obstetricians suggest that physicians have the professional responsibility to refuse to engage in or support practices that violate human rights or the principles of medical ethics.[10,11]

This leads to the heart of the dilemma for health care professionals who are caregivers for women likely to terminate pregnancy on the basis of gender. Is there a practical means to discourage the practice of fetal sex-selection while at the same time respecting a woman's right to access her own medical information and medical services? In the SOGC policy statement on fetal sex determination and disclosure, the authors state that "a small number of pregnant women may consider abortion when the fetus is the unwanted sex; however, this is best addressed by the health professionals who are providing care for these women."[12] Further, the policy statement points out the difficulty of legally defending the common practice of non-disclosure of fetal gender, and clearly and correctly affirms the right of the patient to access her own health information. However, no suggestions are made with respect to how the issue of sex-selection should be addressed by the "health professionals," who are presumably obstetrician-gynaecologists, family doctors, and midwives. Nor are there recommendations from the SOGC, the College of Family Physicians of Canada, or the Canadian Medical Association on how to respond to a woman seeking a pregnancy termination because of sex selection. In the absence of any legislation in Canada regarding abortion, current Canadian practice does not require a woman to divulge the motivation for terminating a pregnancy, nor is this policy of non-disclosure something that we wish to change without any compelling therapeutic justification. Selectively targeting women or their partners on the basis of ethnicity associated with sex selection practices is also offensive for many obvious reasons.

The status quo then is unacceptable, if only by virtue of its failure to inform clinical practice. Because a refusal to disclose patient health information (including gender) is an ethical and legal impossibility, we propose a new standard practice that would apply to every initial fetal ultrasound in Canada.

According to the SOGC clinical practice guidelines on the use of first trimester ultrasound, early assessment of anatomic development is recommended in situations of increased risk for major fetal congenital malformations.[13] The SOGC does not recommend fetal ultrasound assessments for non-medical purposes such as determining fetal sex[14]; the SOGC policy statement on fetal sex determination and disclosure says that

> review of the fetal perineum, including sex determination, is considered part of the complete obstetric ultrasound; however, if no abnormalities are seen but determination is inconclusive, the examination should not be prolonged or repeated solely to determine fetal sex.[12]

The March 2009 revision of the SOGC committee opinion on the content of a complete obstetrical ultrasound report at 16 to 20 weeks' gestation or later states that, with respect to fetal anatomy, "An attempt should be made to assess the

fetal genitalia," but does not explicitly recommend disclosing gender.[15] Nor is it the case that remarking on gender is necessarily implied, as this sentence is a revision of a 2001 committee opinion that the genitals should be reported as "normal OR abnormal (with details) OR not seen, with an explanation (maternal habitus, fetal lie, not viewed)," again with no explicit mention of gender identification.[16]

We argue, then, that in the strictest interpretation of SOGC guidelines and policy, fetal gender need not be noted in the course of a routine 16 to 20 week ultrasound. The relevance of this point cannot be underestimated, because the identification and inclusion of fetal sex in the ultrasound report, by law and specific SOGC policy, requires the subsequent disclosure of that information to the patient. Thus, abiding strictly by the ultrasound guidelines, there is no conflict about disclosing fetal sex or not doing so, since this information would not be contained in the report.

We propose this simple solution to assist health care professionals in discouraging the practice of sex selection for non-medical reasons while honouring the policies and statements of the SOGC and maintaining an ethical and legal standard of care. If the sex of the fetus, as determined by ultrasound, were not identified until it had reached a gestational age at which the pregnancy could not be terminated for non-medical reasons (this age differs from province to province), health professionals could rightly maintain that they neither facilitate the practice of fetal sex-selection nor discourage women who are seeking an abortion for other reasons, since the sex of the fetus should have no bearing on their decision to terminate their pregnancy. A strict interpretation would also empower Canadian physicians to practise in good conscience, as they find themselves in the unique and unfortunate situation of single-handedly upholding the societal and professional values opposing sex selection in the absence of federal legislation.

One might argue that knowing the sex of a fetus can aid in preparations for the arrival of a new baby or future reproductive planning. Shipp et al. found that 58% of expectant mothers and fathers wished to know the sex of their baby prior to birth for a variety of reasons including

> conceiving accidentally, finding out the sex in a previous pregnancy, not planning to breastfeed, influence of sex on future childbearing plans, planning a move or renovation dependent on sex, and specific prenatal preferences.[17]

Not disclosing the sex of the fetus until it has reached a gestational age at which abortion is not permitted would have little impact on most of these reasons. There would still be time to prepare for the coming child, regardless of its sex, or to make decisions concerning future reproductive plans that may be influenced by the sex of the fetus in the current pregnancy.

Of course, this proposed standard of practice would not address those situations where a woman obtained information about the fetus's sex from a commercial test such as the Pink or Blue kit that analyzes cell-free fetal DNA in a sample of the mother's blood to determine fetal sex. These kits are available through the mail to Canadian consumers and, according to the manufacturer, the results are 95% accurate at seven weeks after conception or 10 weeks after the last menstrual period.[18] However, the regulation of this type of technology is the domain of government. Our proposal, then, would not prevent sex selection. Rather, we suggest that it would permit health care providers to navigate ethically the meaningful application of the SOGC policy of not supporting sex selection while maintaining patients' rights to full disclosure of medical information.

CONCLUSION

Health care professionals—obstetricians, family physicians, midwives, and diagnostic imaging specialists—can act to discourage the practice of sex selection in Canada. This can be done by strictly following a standard-of-care guideline for all pregnant women in which disclosure of fetal sex at the parent's request is not made (unless indicated for medical reasons) until the pregnancy reaches a gestational age at which termination for non-medical reasons is no longer an option. This policy would encompass the woman's autonomy with respect to her personal health information, provide time to prepare for the birth of a child of either sex, and also preserve the non-disclosure of motives for requesting an abortion. In addition, this guideline would be in harmony with the physician's fundamental responsibilities to pursue the welfare of their patients and the well-being of society in matters affecting health by refusing to participate in or support practices that violate basic human rights or principles of medical ethics.

REFERENCES

1. Agreed Conclusions of the Commission on the Status of Women on the Critical Areas of Concern of the Beijing Platform for Action 1996–2005. New York: United Nations;2006.
2. Sharma BR, Gupta N, Relhan N. Misuse of prenatal diagnostic technology for sex-selected abortions and its consequences in India. Public Health 1997;121(11):854–60.
3. Hesketh T, Lu L, Xing ZW. The effect of China's one-child family policy after 25 Years. N Engl J Med 2005;353:1171–6.
4. Hesketh T, Xing ZW. Abnormal sex ratios in human populations: causes and consequences. Proc Natl Acad Sci USA 2006; 36:13271–5.
5. Mrozek A. Canada's lost daughters. The Western Standard. June 5, 2006:33–9.
6. Almond D, Edlund L. Son-biased sex ratios in the 2000 United States Census. Proc Natl Acad Sci USA 2008;105:5681–2.

7. Royal Commission on New Reproductive Technologies. Sex selection for non-medical reasons. Proceed with care: final report of the Royal Commission on New Reproductive Technologies. Ottawa: Canada Communications Group;1993:885–919.

8. Assisted Human Reproduction Act. (Attorney General);2004. Available at: http://laws.justice.gc.ca/en/A-13.4. Accessed: April 15, 2008.

9. Society of Obstetricians and Gynaecologists of Canada. Statement on gender selection. SOCG Policy Statement No. 198, November 2007. J Obstet Gynaecol Can 2007;29:909.

10. Canadian Medical Association. CMA Code of Ethics (Update 2004). Available at: http://policybase.cma.ca/PolicyPDF/PD04–06.pdf . Accessed: July 15, 2009.

11. FIGO Professional and ethical responsibilities concerning sexual and reproductive rights. SOGC CPG No. 151, December 2004. J Obstet Gynaecol Can 2004;26:1097–9.

12. Van den Hof M, Demancziuk N; SOGC Diagnostic Imaging Committee. Fetal sex determination and disclosure. SOGC Policy Statement No. 192, April 2007. J Obstet Gynaecol Can 2007;29:368.

13. Demianczuk N, Van den Hof MC; SOGC Diagnostic Imaging Committee. The use of first trimester ultrasound. SOGC Clinical Practice Guideline No. 135, October 2003. J Obstet Gynaecol Can 2003;25:864–9.

14. Van den Hof M, Bly S; SOGC Diagnostic Imaging Committee. Non-medical use of fetal ultrasound. SOGC Policy Statement No. 191, April 2007. J Obstet Gynaecol Can 2007;29:364–5.

15. Cargill Y, Morin L; SOGC Diagnostic Imaging Committee. Content of a complete routine second trimester obstetrical ultrasound examination and report. SOGC Clinical Practice Guideline No. 223, March 2009. J Obstet Gynaecol Can 2009;31:272–5.

16.Van den Hof M, Demianczuk NN; SOGC Diagnostic Imaging Committee. Content of a complete obstetrical ultrasound report. SOGC Committee Opinion No. 103, May 2001. J Obstet Gynaecol Can 23:427–428.

17. Shipp TD, Shipp DZ, Bromley B, Sheahan R, Cohen A, Lieberman E, et al. What factors are associated with parents' desire to know the sex of their unborn child? Birth 2004;31(4):272–9.

18. Consumer Genetics. Tell me Pink or Blue [website]. Available at: http://www.tellmepinkorblue.com. Accessed April 10, 2008.