women, despite "evidence of the debilitating effect of lead exposure on the male reproductive system." This echoes Baird's concerns about the discriminatory use of medical evidence on human fertility. The court also expressed concern that companies might choose to exclude those workers at risk instead of providing a safer workplace: "[the law] plainly forbids illegal sex discrimination as a method of diverting attention from an employer's obligation to police the workplace."

Although the highest courts of Canada have yet to pronounce on such issues, three reasons suggest why the reasoning in the US case seems likely to prove persuasive here. First, the language and purpose of federal human rights law in both countries have strong parallels. Second, the Canadian Supreme Court has begun to interpret broadly the societal commitment to equality, and its jurisprudence exhibits sensitivity to women's reproductive choices. Third, at least two Canadian human rights tribunals have already found that some fetal protection policies constitute unlawful sex discrimination,[3] including one tribunal as recently as March 1992.[4]

Finally, although the US case makes an important analytic contribution it still seems unlikely to be the final chapter on North American fetal protection policies. The ruling means that only sex-specific exclusionary policies are unlawful. Whether US or Canadian companies will pursue more egalitarian, less intrusive fetal protection policies remains to be seen. One such possibility involves the rigorous counselling of all workers at risk about occupational hazards to reproduction. The US ruling likely authorizes such policies. Moreover, the ruling leaves open the possibility that other fetal protection policies may prove lawful under the following conditions: (a) they are gender neutral, (b) they limit employment or require transfers on the basis of documented occupational hazards to both male and female fertility and (c) they are adopted as measures of last resort to avoid the prohibitive costs that threaten business survival. The challenge remains to devise safer workplaces that advance our human rights.

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Reviewing physicians' practices

Ms. Jane Stewart's article (*Can Med Assoc J* 1992; 147: 90-91) about the annual meeting of the Manitoba Medical Association (MMA) contains remarks to which I wish to respond.

It is correct that the Manitoba Medical Review Committee (MMRC) wrote more than 600 letters to physicians, but the letters were written over 10 years. At the meeting, Dr. Rivian Weinerman described them as "warning" letters. The committee is composed mainly of practising physicians, and we recognize that all practices do not fit a statistical norm. The initial letter simply asks for an explanation for a departure from the norm noted on the computer printout. There is no warning, actual or implied. Weinerman also claims harassment because she received one such letter. The definition of harassment is "worry by repeated attacks." I hardly feel this is true in her case.

According to the article, a pediatric anesthetist received a letter asking why she saw so many more patients under the age of 5 than her colleagues. I challenge that doctor to produce this letter. Failing that, she should apologize to the MMA for misleading the meeting and to the MMRC for holding it up to ridicule.

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A survey of resuscitation training in Canadian undergraduate medical programs

We have followed with interest and some concern the correspondence on the article by Dr. David H. Goldstein and Robert K. Beckwith (*Can Med Assoc J* 1991; 145: 23-27). As two senior physicians who have been involved in teaching life support programs since before the 1974 "standards" perhaps we may be allowed a few comments.

First, we wholeheartedly support the comments of Drs. James M. Christenson and Lyle F. McGonigle (*Can Med Assoc J* 1992; 147: 150-151) with respect to the educational aspects of the course packages. Although the approach seems dogmatic, the content and the techniques are regularly, even frequently, reviewed. Indeed, the approach fulfils many of the criteria of case-oriented,

problem-stimulated learning techniques. Time constraints prevent the group problem-solving aspect of this process from being included.

Although the long-term retention of skills and knowledge has not been well assessed for advanced cardiac life support (ACLS) programs, evaluations of our courses at Dalhousie University have been outstanding. The ACLS course has been part of the undergraduate medical program since about 1981, and in the practical (stations) aspect of the course students have rarely failed to reach a mark of 75% to 80% (good to outstanding). We strongly affirm that students are "enlightened, excited and rewarded" by these courses.

As to the rigidity of practice that protocols encourage, Christenson and McGonigle's point about a sound framework of organization for the inexperienced or panicky resuscitator is well made. In addition, our profession has revealed a tendency to leap onto the bandwagons of new treatments before they are properly assessed. The more deliberate review process used by the American Heart Association and the Heart and Stroke Foundation of Canada has prevented the wholesale adoption of several initially tempting modifications to cardiopulmonary resuscitation and ACLS, thus avoiding outcomes that proved to be disastrous in the longer term.

With respect to the points raised by Dr. David Hollomby and associates (*ibid:* 151) we have the following responses.

- Undergraduate medical programs teach a great deal of material at a level far beyond that used by undergraduate students, and properly so.
- The life support courses teach very little that is not included elsewhere in the curriculum. The strength of the ACLS program is to show how such principles and knowledge are integrated to initiate the management of the most critically ill patients promptly and efficiently.
- Positioning courses in advanced resuscitation skills early in the postgraduate period is too late. A graduate may be required to apply ACLS skills and knowledge on the first day of internship.
- Since many schools already include ACLS courses in the undergraduate program this would not be an addition. Such time as is necessary — we suggest that it is much less than 136 hours — can and should be spread over the 4-year program.

Do we detect a pejorative use of the term "technical training"? It may be fashionable to emphasize the didactic and self-learning aspects of medical education, but surely we have a responsibility to ensure some degree of basic technical competence in our new graduates. Their patients would certainly expect and appreciate it!

We support Goldstein and Beckwith's suggestion that a "comprehensive resuscitation curriculum" be offered. Since there is much common ground, the number of course hours could be markedly reduced.

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To add further fuel to the resuscitation fire!

The University of Saskatchewan introduced the ACLS course into its medical curriculum for the final undergraduate year (clinical clerkship) in 1984. This was done at the request of the students and was not the result of bombardment by well-intentioned groups, which Dr. Hollomby and associates seem to fear so greatly (of course our students are largely well intentioned).

The ACLS program was initially offered midway through the final year but was subsequently moved to the beginning of the final year, again at the request of the students. As course director I have some reservations about whether this is the optimum position, but several years' feedback from the students suggests that it is quite satisfactory.

Our undergraduates are taught ACLS in accordance with the principles outlined by Drs. Christenson and McGonigle, and as expected they have had little difficulty in mastering the knowledge and skills required, achieving overall success rates in the 90% range. The standards for successful completion are exactly the same as those required of health care workers at higher levels. The only substantial difference in our instructional methods is that we place greater emphasis on simulated resuscitation and problem solving and less on didactic instruction.

Contrary to the viewpoints of some correspondents, our students have expressed very strong preferences for "hands-on, nuts-and-bolts" skills instruction in the final year. It is worth noting that in many hospitals and their associated internships and residencies the knowledge and skill are expected to have been acquired during the undergraduate years. The student feedback about the ACLS program and the more recently introduced Neonatal Advanced Life Support and Pediatric Advanced Life Support (for which I bear no direct responsibility) has all been strongly positive.

Perhaps the deans of the Ontario medical schools might find it more useful to talk to their students instead of to each other, especially when it relates to resuscitation training.

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