Factors Influencing the Delivery of Abortion Services in Ontario: A Descriptive Study

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Context: Although Canadian women have had the right to obtain legal induced abortions for the past decade, access to the procedure is still limited and controversial in many areas.

Methods: Chiefs of obstetrics and gynecology, chiefs of staff, directors of nursing and other health professionals at 163 general hospitals in Ontario, Canada, were asked to provide information on issues concerning the availability of abortion services at their facility. The hospital participation rate was 97% and the individual response rate was 75%.

Results: Nearly one-half (48%) of hospitals perform abortions. Approximately 36% of these hospitals do so up to a maximum gestational age of 12 weeks, 23% to a maximum of 13–16 weeks, 37% to a maximum of 17–20 weeks and 4% at greater than 20 weeks. Hospital factors, including resources and policies, did not significantly influence whether abortions are provided. However, these factors did affect the number performed, whether there were gestational limitations and the choice of procedure. About 13% of provider hospitals indicated that staff training contributes to the existence of gestational age limits, and 24% said that it directly influences procedure choice. Only 18% of hospitals reported that their physicians have received additional training outside of their medical school or medical residency education to learn abortion techniques or to gain new skills. Forty-five percent of hospitals that provide abortions had experienced harassment within the past two years, and 15% reported that this harassment has directly affected their staff members' willingness to provide abortions.

Conclusion: Based upon the provision of obstetric care, many hospitals in Ontario that are capable of offering abortion services do not. Some of the reasons for this failure are related to the procedure itself, while others may be related to resource issues that affect the delivery of other medical services as well. Variation in the availability of abortions is due to a shortage of clinicians performing the procedure, and training directly influences gestational limits and procedural choices.

Family Planning Perspectives, 1998, 30(3):134–138

In Canada, the debate over induced abortion continues to divide the nation. Unlike most other medical procedures, whether abortion will remain legally available to Canadian women depends upon laws governing its provision. In January 1988, the Supreme Court of Canada ruled that a section of the nation's abortion law was unconstitutional because it limited access to a medical procedure. The Court said this limitation infringed upon a woman's right to life, liberty and security of the person as guaranteed under the Canadian Charter of Rights and Freedoms.[1]

For three years, debate persisted over whether replacement legislation should be enacted. This legislation would have reinstated abortion as an indictable offense unless a medical practitioner deemed that the health or life of the woman was threatened by her continued pregnancy. However, in 1991, Canada's Parliament defeated the replacement bill, thus making abortion a regulated medical procedure, no different from other procedures under the Canada Health Act.

With the replacement legislation's defeat, it seemed reasonable to assume that accessibility and distribution of abortion services in Canada would increase because all independent health care facilities could now offer the procedure without criminal penalties. However, while decriminalization and regulation under the Health Act gave abortion the same status as other medical procedures, controversy over its existence and its delivery remains.

Background

There are 12 interlocking provincial and territorial plans in Canada's health care system. By 1961, every province and territory offered public insurance plans providing coverage of in-hospital care, and by 1972 coverage was expanded to include all physicians' services. The federal government has shared in these costs since 1957, and contributions are governed by the principles of the Health Act. These principles include accessibility, comprehensiveness, public administration, portability and universality.

Before 1991, there were well-documented disparities in both accessibility and distribution of abortion services.[2] For example, one study found marked interregional variations in the utilization and availability of abortion services in Ontario between 1985 and 1992.[3] (Ontario is the most populous Canadian province, with about 11 million people, including almost six million women.[4])

Most abortion procedures in Ontario are performed in general hospitals. In 1992 and 1993, nearly 68% of the 83,469 abortions (excluding cases involving concurrent sterilization) among women aged 15–44 were performed in general hospitals.[5] About 33% were performed in teaching hospitals and 35% in nonteaching hospitals; of the latter group, roughly 6% of abortions occurred in hospitals with 400 or more beds, 24% were in those with 200–399 beds and 4% were in facilities with fewer than 200 beds. Approximately 94% of the 83,469 abortions were to hospital outpatients, while only 1% resulted in a hospital stay of more than one day.[6] The risk of immediate abortion-related complications in Ontario is less than 1%.[7]

In this article, we attempt to elucidate hospital factors that may explain the reasons for variations in the availability and distribution of abortion services. In order to gain an understanding of issues affecting the delivery of abortion services experienced by both provider and nonprovider hospitals, we surveyed chiefs of

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staff, chiefs of obstetrics and gynecology and directors of nursing or other health professionals in Ontario's general hospitals about the delivery of abortion services. We also used data from secondary administrative databases to cross-validate the survey data and to provide additional information about hospital-based abortions.

Methods

Sample Selection

Using the 1992 Canadian Hospital Directory, we identified 203 Ontario general hospitals. We then eliminated 28 hospitals owned by or affiliated with a religious denomination.* Another 12 hospitals were aggregated with others in the sample because of recent mergers. Therefore, the sample consisted of 163 hospitals.

We telephoned these hospitals and requested copies of their most recent organizational chart and the names of their chief of staff, chief of obstetrics and gynecology and director of nursing. When hospitals did not employ individuals in these positions, we examined their organizational charts, selected another appropriate position—if available—and called to confirm the replacement's name and his or her appropriateness for the survey.

The Ontario Hospital Association wrote to hospital chief executive officers informing them of the study and requesting their participation. These individuals received a letter from the study's principal investigator two weeks later alerting them that some staff members in their hospitals would be receiving study packages within the next few weeks. One week later, a letter was sent to them identifying the staff members that might be contacted.

The Survey

The packages were mailed in 1994 and consisted of a letter of introduction, a copy of the survey, a stamped return envelope, a transfer form and a stamped postcard addressed to the investigators labeled with the participant's name and address. The letter explained to recipients that the survey was to be completed confidentially and that their hospital would not be notified of their participation status. (They were informed, however, that their hospital's chief executive officer was aware of the staff positions that might be contacted.) Recipients who felt they did not possess the necessary information to complete the survey were asked to forward the package to a more appropriate staff member. In these cases, we requested that the initial recipient return the transfer form and indicate the individual who currently possessed the package. The new recipient then became the contact person for follow-up.

The postcard and the survey were returned separately as a safeguard for participants, so that identifying information about their hospital could not be matched to their survey until it was received. The postcard, which was to be returned by all initial recipients, contained three response options: The recipient would be returning the survey; the recipient was transferring the survey to another individual; or the recipient would not be returning the survey and requested no further contact. Information from the postcards and the transfer forms was used to update the study database. Four weeks following the original mailing, nonrespondents were sent a second letter and another package.

The initial contents of the survey contained questions suggested by the Ontario Ministry of Health. To ensure that the survey was as bias-free as possible, we added items to the original survey, based on a review of the literature and questions that arose after analyzing the administrative databases. Additionally, we conducted three focus groups to determine opinions, views and insights concerning abortion as it pertained to various professions. The groups included seven physicians and nurses who worked in a clinic or hospital that performed abortions, five physicians who worked in a hospital where abortions were not provided and nine public health professionals in family planning who may have been involved in referring women for abortions. Finally, an external advisory committee provided input concerning the relevance, clarity, comprehensiveness of content and unbiased wording or content of the survey items.

The survey was organized into nine sections: general questions, abortion referrals, hospital policies, personnel, procedural information, preabortion counseling services, postabortion counseling services and follow-up, harassment and recommendations. Respondents provided answers based upon their hospitals' experiences during the past two years. Each section contained shaded areas to be completed by all respondents and unshaded areas to be completed only by those whose hospital provided abortion services.

The reasons for this distinction were twofold. First, we needed to be confident that nonproviders answered enough questions about the topic and were directed to the applicable questions without having to read questions that were irrelevant or that could be viewed by some as offensive. Second, we needed providers to respond to the same questions as nonproviders and to answer additional questions without duplicating content. For the purposes of this analysis, we extracted only items concerning hospital and physician factors affecting the delivery of abortion services.

Analysis

Results of the survey were stratified by hospital, depending on whether physicians performed abortions (provider hospitals) or did not (nonprovider hospitals). We present aggregate data and use descriptive statistics to depict the frequency and distribution of events. Instances in which respondents within the same hospital did not agree on an answer are noted. Where such disagreements existed, we state both the proportion of hospitals where the response was unanimous and the proportion where it was not.

Because as many as three people could have answered the survey at each hospital, we also examined intrahospital variation to determine how much irregularity existed among respondents answering on behalf of the same hospital. (These cases needed to be resolved before data analysis.) Two variables were critical here: whether the respondents reported that physicians at the hospital performed abortions, and the maximum gestational age at which an abortion could be performed at the facility.

To help resolve intrahospital variation, we compared information concerning these two variables from the survey data with information from the Ontario Ministry of Health's therapeutic abortion database (hereafter, the registry database) for 1992 and 1993. Information for this database is culled from monthly standardized abortion reports submitted confidentially to the ministry by all physicians performing abortions. In a previous study, we found that these data could be used with reasonable confidence.[8] For this article, we obtained the registry data that included the unique hospital identifier and maximum gestational age at termination.

Response Rate

Of the 404 individuals asked to participate (231 physicians and 173 other health professionals), 301 did so (155 physicians and 146 other health professionals), yielding a 75% response rate for individual participants. Of the 163 Ontario general hospitals surveyed, 158 (97%) were repre-

*Before excluding these hospitals, however, we cross-referenced them with information from the Canadian Institute for Health Information and the Abortion Registry data to confirm that none performed abortions.

Table 1. Percentage distribution of hospitals, by type and size, and percentage providing selected types of services, all according to whether they provide abortions, Ontario, Canada, 1994

Type and service	Total (N=158)	Providers (N= 76)	Nonproviders (N=82)
Type/size of hospital			
Teaching hospital	8.2	15.8	1.2
Nonteaching hospital	91.8	84.2	98.8
≥400 beds	10.1	18.4	2.4
200–399 beds	19.6	32.9	7.3
100–199 beds	17.1	18.4	15.9
<100 beds	44.9	14.5	73.2
Total	100.0	100.0	100.0
Selected services			
General medical care	100.0	100.0	100.0
General surgery	86.1	98.7	74.4
General gynecologic care	86.1	94.7	69.5
Obstetric care	79.1	86.8	72.0
Female sterilization	79.1	94.7	64.6
Sexually transmitted disease treatment	58.2	60.5	56.1
Contraceptive care	43.0	47.4	39.0
Infertility services	23.4	38.2	9.8
Maternal serum screening	51.3	62.0	41.5

sented (i.e., at least one staff member returned the survey). Nonparticipant hospitals all were facilities with fewer than 100 acute care beds. Eight percent of respondent facilities were members of the Ontario Council of Teaching Hospitals; among the remaining hospitals, 10% had more than 400 acute care beds, 20% had 200–399 beds, 17% had 100–199 beds and 45% had fewer than 100 beds (Table 1).

Results

Abortion Provision

Of the 158 responding hospitals, 48% reported having physicians who perform abortions. Ten hospitals that returned surveys (6%) had intrahospital variation on whether abortions were performed there. As a result of cross-validation with the registry, six of these hospitals were subsequently classified as providers.

Table 1 also compares provider and nonprovider hospitals on selected characteristics. We asked provider hospitals to indicate the distribution of physicians by practice area and the number providing abortion services. Overwhelmingly, obstetrician-gynecologists were the providers (67%), with an average of less than 5% for other specialties.

When we examined provider status by peer grouping, we found that the smaller a hospital was, the less likely it was to provide abortions (see Table 1). Among providers, 95% unanimously reported providing general gynecologic care (with an additional 5% disagreeing), compared with 70% of nonproviders (with an additional 16% disagreeing). Forty-eight percent of nonproviders reported that they have four or fewer obstetric-gynecologic beds, compared with 8% of providers, while 57% of nonproviders reported having no obstetrician-gynecologists on staff, compared with 14% of providers.

We examined a number of hospital factors to determine if they were associated with abortion provision. About 12% of providers reported difficulties in performing abortions because of inability to book operating-room time. In general, 29% of provider hospitals believed that factors such as limited operating-room time, lack of availability of beds and too few physicians limited their hospitals' capacity to perform abortions.

No nonprovider hospitals had tried to recruit staff to perform abortions, compared with 24% of provider hospitals. Provider hospitals were more likely than nonproviders to report having support from their geographic community to perform the procedure (χ^2=42.66, p=.001), to have written guidelines or polices in place to regulate the delivery of abortions in their facility (χ^2=33.13, p=.001), or to offer maternal serum screening (χ^2=7.89, p=.005), obstetric care (χ^2=4.63, p=.03) and gynecologic care (χ^2= 12.84, p=.001).

Gestational Age

In 1992, 36% of provider hospitals reported that they would perform abortions up to a maximum gestational age of 12 weeks; 23% would perform the procedure to a maximum of 13–16 weeks; 37% to a maximum of 17–20 weeks; and 4% at greater than 20 weeks. The maximum gestational age at which provider hospitals would perform abortions ranged from 10 weeks to 23 weeks (a mean of 15.8 weeks). These figures closely approximated the gestational age in the procedures actually performed during that year: According to the registry database, the maximum gestational age in 1993 ranged from 10 weeks to 29 weeks (with a mean of 16.5 weeks). The registry data during this period indicated that most of the procedures were performed at 9–12 weeks' gestation (47%) or before nine weeks' gestation (39%). Fewer than 1% of abortions were performed after 20 weeks' gestation.

Physicians in provider hospitals gave several reasons for gestational limitations, including staff preferences (29%, with an additional 33% in disagreement on this reason), written policies or procedures (21%, with an additional 17% disagreeing on this reason), unwritten policies or procedures (13%, with an additional 24% disagreeing with this reason), staff training (13%, with an additional 24% disagreeing with this reason) and the availability of equipment (8%, with 13% disagreeing with this reason).

Approximately 13% of provider hospitals reported that staff training contributed to gestational age limits, and lack of staff training limited what procedures could be offered. Only 14 provider hospitals (18%) stated that physicians had participated in training outside of medical school or residency training specifically to learn abortion techniques or to gain new skills.

Choice of Procedure

Procedural choice was influenced by the availability of necessary equipment (12%) and the ability to book operating-room time (7%). Staff preference (37%), staff training (24%), facility policy (13%) and patient preference (7%) were also reported by provider hospitals to have directly influenced procedural choice. Our data do not reveal how this affects procedural choice, but we do know what procedures and treatments are being used (Table 2). Suction dilation and curettage was the most commonly reported initial procedure used in hospitals that performed abortions: In the survey, 87% of hospitals said that they used suction dilation and curettage. (Registry data indicated that 97% used the procedure.) Laminaria tent was the next most commonly reported initial treatment used in hospitals, reported by 42% of hospitals in the survey and by 60% of hospitals in the registry data.

Policies and Personnel Issues

• *Policies.* About 47% of provider hospitals and 12% of nonproviders reported having written guidelines or policies regulating abortions. In provider hospitals, 32% have hospital policies (written or unwritten) concerning gestational age limits. Three

Table 2. Percentage of hospitals using specified abortion procedures and treatments, as reported in the survey and in the 1993 registry database

Procedure	Survey*	Registry†
Surgical dilation and curettage	36	32
Suction dilation and curettage	87	97
Hysterotomy	9	4
Hysterectomy	4	1
Saline instillation	9	8
Urea instillation	4	3
Prostaglandin instillation	25	29
Laminaria tent	42	60
Other	0	4

*Among the 76 hospitals reporting that abortions were performed at all. †Among the 73 hospitals reporting abortions.

provider hospitals said that they have policies regulating the number of abortion procedures performed per month.

• *Personnel issues*. Using data from chiefs of staff and chiefs of obstetrics-gynecology, we found that 5% of hospitals reported having difficulty recruiting physicians to perform abortions, 14% reported no difficulty and 37% had not tried to recruit; the remaining 44% disagreed on whether there were recruiting difficulties in their hospitals. (We did not ask if these problems were unique to abortion services.)

In 3% of hospitals, respondents reported having problems recruiting nurses to work in this area, while in another 45% there was disagreement over whether this was a problem in their hospitals. Most providers (87%, with 3% in disagreement) said that they do not hire nursing staff specifically to work with women undergoing abortion. At 25% of provider hospitals, respondents reported that some nurses refused to be present during the procedure (with 13% unsure and 25% in disagreement). The majority of provider hospitals (67%, with 15% unsure and 1% in disagreement) provided alternative work assignments for nurses unwilling to work in this area. Ninety-two percent reported no changes in nursing-staff attrition as a direct result of abortions being performed in their facility (with 3% disagreeing), while 9% said that some members of the nursing staff at their facility had chosen to leave their positions in order to avoid working with women undergoing abortions (with 12% unsure and 1% disagreeing).

Harassment

Eight percent of nonprovider hospitals reported having been picketed by demonstrators within the last two years, and one hospital reported having received threats and hate mail. In contrast, respondents at 45% of provider hospitals (with respondents at an additional 16% of hospitals in disagreement) said they had experienced harassment during the last two years for providing abortions. The most common forms of harassment were picketing of the hospital by demonstrators (54%) and picketing of staff members' homes or private offices (18%). A few hospitals also reported having received hate mail (11%), harassing phone calls (9%) or bomb threats (1%), having experienced disruptive activity by demonstrators (1%) and having encountered threats and picketing with physical contact or blocking of patients (1%). There were no reports of any arrests for such antiabortion activity. About 15% of providers reported that harassment had directly affected their staff members' willingness to provide abortion services.

We asked the chiefs of staff and chiefs of obstetrics and gynecology, "In your opinion, why do you believe some obstetrician-gynecologists do not perform abortions in your facility?" About 10% indicated that actual harassment was a reason (15% in provider hospitals and 5% in nonprovider hospitals), and 20% also cited potential harassment (27% in provider hospitals and 11% in nonprovider hospitals).

Discussion

Because this study used self-reported data about abortion delivery from Ontario general hospitals, it suffers from the usual limitations of reliance on such information. Another shortcoming is that hospitals affiliated with religious denominations that did not perform abortions were excluded from the study. Although associated reliability and validity estimates of this survey were unavailable, we cross-validated the survey data with administrative data whenever possible. Given the high rates of hospital (97%) and staff (80%) participation, those with particular views would not seem more likely to have responded than others. Consequently, we are confident that data obtained from the responses of 158 hospitals provided a comprehensive view of abortion services in Ontario.

The vast majority of hospitals with physicians performing the procedure were large (200 or more beds). The availability of hospital abortions varied across the province, and availability decreased with increasing gestational age. Provincial variations in the utilization and availability of abortion services have been documented.[9] While many factors may influence whether abortions are provided in a hospital, the presence of general surgery services, general gynecologic care and or obstetric services could be indicators of a hospital's capacity to provide the procedure. In terms of delivery patterns, it is consistent for hospitals providing obstetric services to also provide abortion services.

If provision of obstetric care is a marker for a hospital's capacity to provide abortion services, 59 general hospitals (72% of nonproviders) do not provide abortion services despite their capacity to do so. Given abortion availability problems, the Canadian government should examine nonprovider hospitals to see what factors may be affecting their ability or willingness to provide abortions. This is especially true for smaller hospitals located in small urban or rural areas, where access may already be compromised.

Although hospitals were categorized as providers or nonproviders, not all physicians within provider hospitals perform abortions. A hospital's status may change due to recruitment, replacement or loss of physicians. The Canadian Medical Association recommends that to ensure assess to the procedure, at least one hospital in each region of the country should provide abortions.[10] However, the association also argues that no hospital, physician or other health care worker should be compelled to provide abortion services if it is contrary to his or her beliefs or wishes.[11]

Our data show that a shortage of clinicians performing abortions could contribute to the variation in abortion availability, and that training directly influences gestational limitations and procedural choice. This finding emphasizes the need for induced abortion instruction to be incorporated into the clinical training of all obstetricians and gynecologists. To make the procedure available, it is important to offer training opportunities to physicians and residents in other specialties (e.g., family practice). Having specialists other than obstetricians and gynecologists provide the procedure has already been explored in the United States.[12]

While data about abortion training in Canadian medical schools are unavailable, one study showed that most American obstetrics and gynecology training programs have dropped routine abortion training, which has reduced the number of students trained to perform the procedure.[13] Even when abortion training was offered, 45% of programs had residents performing one or no abortions per week. In 1990, the National Abortion Federation and the American College of Obstetricians and Gynecologists suggested increasing the integration of abortion training into mainstream residency education.[14]

Actual or potential harassment can also be influential in the decision not to provide abortion services. With the movement toward earlier surgical termination of pregnancies (and medical alternatives) that can be performed outside of hospitals, the potential for harassment may be lessened for physicians performing very early abortions. However, the delivery of abortion services is still very vulnerable to harassment, and both the federal and provincial governments should examine the issue.

When asked about actual harassment, our respondents identified picketing by demonstrators as a major issue, but picketing in itself is not illegal. It is possible that only providers who were most disturbed by picketing identified it as ha-

rassment. It is also possible that those identifying picketing as harassment were responding to other factors, such as the proximity of the demonstrators to their hospital, verbal exchanges or the types and kinds of materials being distributed or displayed by demonstrators. This issue requires further investigation.

Conclusion

Our findings indicate that hospital resources appear to play less of a role in whether hospitals offer abortion services than they do in the number performed, gestational limitations and choice of procedure. Abortion services appear to be encumbered by such issues as staff training, staff preferences, limited operating-room time, bed availability and lack of necessary equipment, which may also be issues in the delivery of many other health services.

Although these resource issues are not unique to abortion, they place increased strain on a delivery system where access is already jeopardized because of the small number of physicians performing the procedure. Delivery of abortion services is vulnerable to harassment, which may also affect its availability. Since the Canadian Supreme Court has ruled that limiting the availability of abortion services is unconstitutional, barriers to its provision must be addressed. There are no simple solutions to the delivery limitations of induced abortions, because many of these issues are problems shared by other health services in Ontario. However, our findings provide some direction for providers and the government to address some of these problems.

Physicians willing to perform the procedure need to have improved working conditions. Hospital factors need to be examined in more detail to determine what additional resources may be necessary to increase the availability of the procedure. Physicians need to be able to provide care in an environment that does not allow them to be harassed for providing a legal medical procedure. Finally, interested physicians need to be provided with appropriate training opportunities, since there are a limited number of physicians performing the procedure. Ontario also might consider training other medical specialists, such as family practitioners, to provide the service. It is equally important to have ongoing continuing medical education programs for physicians to update their skills and learn new techniques to provide abortions at various gestational ages.

Since the study described in this article was completed, Ontario hospitals have undergone restructuring. A number of hospitals are no longer recognized institutions under the Health Act and have closed or merged with other institutions. Additional Ontario hospitals may be facing similar closures, or may merge and become new institutions recognized within this legislation. In Ontario, general hospitals may be owned by or affiliated with religious organizations and receive public funding. Recently, a large Ontario teaching hospital that provided abortions was closed and its operations transferred to another teaching hospital affiliated with a religious organization that does not permit abortions. It is possible that other newly created hospital corporations will undergo similar transformations. Given the barriers to the delivery of abortion services in the province documented in this article, these developments raise further concerns about access to the procedure.

Ontario hospitals operate independently in terms of the services they offer. Therefore, to ensure access to abortions, it may be necessary for the provincial government to examine certain policy issues. For example, the government could reconsider its policy of funding all Ontario general hospitals. The government could also explore different funding mechanisms for hospitals that provide full or partial abortion services, or establish more independent abortion clinics in communities at risk of losing their access to the procedure. However the situation is addressed, it is clear that access to abortion services needs to be carefully examined as we move toward the restructuring of Canada's hospitals and its health care system.

References

1. 38th Parliament, 2nd session, Bill C-43, ss 287 (1) 1989.

2. Powell M, *Report on Therapeutic Abortion Services in Ontario,* Toronto: Ontario Ministry of Health, 1987.

3. Ferris LE and McMain-Klein M, Small-area variations in utilization of abortion services in Ontario from 1985 to 1992, *Canadian Medical Association Journal*, 1995, 152(11):1801–1807.

4. Statistics Canada, *Canada Year Book 1997*, Ottawa, Canada: Statistics Canada, 1996.

5. Ferris LE et al., Factors associated with immediate abortion complications, *Canadian Medical Association Journal*, 1996, 154(1):1677–1685.

6. Ibid.

7. Ibid.

8. Ferris LE and McMain-Klein M, 1995, op. cit. (see reference 3).

9. Ibid.

10. Canadian Medical Association, Policy summary: abortion, *Canadian Medical Association Journal*, 1985, 133(4):318A–318B.

11. Ibid.

12. Grimes DA, Clinicians who provide abortions: the thinning ranks, *Obstetrics and Gynecology*, 1992, 80(4):719–723; Lerner D and Taylor F, Family physicians and first-trimester abortion: a survey of residency programs in Southern California, *Family Medicine*, 1994, 26(3):157–162; and Westhoff C, Abortion training in residency programs, *Journal of the American Medical Women's Association*, 1994, 49(5):150–152.

13. MacKay HT and MacKay AP, Abortion training in obstetrics and gynecology residency programs in the United States, 1991–1992, *Family Planning Perspectives*, 1995, 27(3):112–115.

14. Grimes DA, 1992, op. cit. (see reference 12).