Attitudes of the Physician Membership of the Society for Adolescent Medicine Toward Medical Abortions for Adolescents

Nancy H. Miller, MD*; David J. Miller, PhD‡; and Laura M. Pinkston Koenigs, MD*

ABSTRACT. Objective. To document the practices and attitudes of the US physician members of the Society for Adolescent Medicine (SAM) regarding adolescent abortion and contraception, as well as physician willingness to prescribe medical abortion if approved by the Food and Drug Administration (FDA).

Design. Cross-sectional questionnaire survey.

Participants. The entire physician membership of SAM (N = 1001) was surveyed. A total of 713 physicians responded, with 668 usable surveys yielding an adjusted response rate of 70%.

Results. Of the respondents, 81% were trained as pediatricians; 58% had additional adolescent medicine training. Ninety-six percent prescribed contraception for their patients. Sixty-one percent of respondents identified abortion as an option for pregnant adolescents in all circumstances, whereas 4% believed abortion should never be an option. Eighty-nine percent referred their patients for abortions; 90% were aware of medications to induce abortions medically. If these medications (methotrexate and misoprostol, RU-486) were FDA-approved, 42% would prescribe them for their patients; 34% were unsure. Fifty-four percent believed if medical abortions were routinely available, they should be available from primary care physicians.

Physicians were significantly more likely to consider prescribing medical abortions if the physician were female, offered postcoital contraception, performed Norplant insertions, referred adolescents for abortions, or performed postabortion medical checkups. Physicians were no more likely to consider prescribing medical abortions according to physician age, specialty training, or date of residency training. Religious affiliation per se was not associated with likelihood of prescribing medical abortions, but Catholic physicians were significantly less likely to consider prescribing medical abortions.

Conclusions. Virtually all SAM physician respondents (96%) reported that abortion for pregnant adolescents should be available under some circumstances. Forty-two percent would prescribe medical abortion if the medications were FDA-approved, suggesting that medical abortion would potentially be available to adolescents from a larger group of physicians than is currently available.

ABBREVIATIONS. FDA, Food and Drug Administration; SAM, Society for Adolescent Medicine.

In the United States approximately 1 in 10 adolescent girls become pregnant during the teenage years. Ninety-five percent of these pregnancies are unintended, and the rate of abortion (40%) approaches the rate of live births. Abortions have been available in the United States only as surgical procedures. Medical abortions using methotrexate and misoprostol or RU-486 are available in other countries. In 1993, the American Academy of Pediatrics surveyed its members regarding their views about adolescent abortion, although this survey did not address medical abortion. The prospect of medical abortion may become a reality in the United States, either through off-label use of or changes in Food and Drug Administration (FDA) indications for current medications or through FDA approval of new medications. Although surgical abortions have been available primarily from surgically trained physicians, medical abortions could potentially be provided from a much broader group of physicians. This study queried the practicing physician membership of the Society for Adolescent Medicine (SAM) about their attitudes toward abortion for teenagers in general, as well as their willingness to prescribe medical abortion for their patients should this become FDA-approved. The SAM physician membership was selected as the population of interest because these physicians are more likely than general pediatricians to address teen pregnancy and contraception. We also valued their opinion because many of these physicians appear to be connected with residency training experiences and may thereby influence resident attitudes toward this subject. We hypothesized that physicians personally performing procedures such as colposcopy and Norplant insertions or providing related care such as postabortion follow-up would be more likely to be willing to prescribe medical abortions.

METHODS

A three-page, 21-item questionnaire was mailed to the entire US physician membership of the SAM in June 1996. The initial mailing to 1001 physicians was followed by a second mailing to nonrespondents 3 months later. All mailings included a self-addressed postage-paid return envelope. The questions included information about provision of contraception and abortion for adolescent patients and about physician and practice demographics. Statistical analyses used the χ² test with a P value < .05 for statistical significance.
RESULTS

Response Rate

A total of 401 physicians responded to the initial mailing and 312 more to the follow-up mailing. Of the 713 total, there were 45 unusable surveys, for an adjusted response rate of 69.9%. Surveys were deemed unusable if the respondent was retired, deceased, not a physician, or not in clinical practice, or if the mailing was returned with no forwarding address.

Demographics

The majority of respondents were 41 to 50 years of age (mean, 47.0 ± 9.9), and 51.4% were female. The majority (87.3%) identified themselves as having a religious affiliation (Table 1). Details of the specialty training of the respondents is presented in Table 2. The average number of years since completing their residency was 8.1 (median, 14 years). A total of 81% were trained as pediatricians, with an additional 2% in combined internal medicine–pediatrics. Fifty-eight percent of the respondents had completed a fellowship in adolescent medicine.

The primary site of practice for these physicians is presented in Fig 1. The two largest settings were teaching hospital-based (47.9%) and private practice (26.3%). On average, adolescents made up 60.7% of the respondents’ practice (±34.8, median 65.0).

Contraception

The contraceptive prescription practice of the respondents is presented in Fig 2. Ninety-six percent of the respondents prescribed some contraceptive for their patients. Greater than 90% of the respondents prescribed condoms (93.3%) or oral contraceptives (91.8%). Although 37.2% (n = 248) of the respondents prescribed Norplant, only approximately half of these (16.2%, n = 107) performed the Norplant insertions themselves. Of the obstetrician–gynecologists, 81.8% (n = 18) performed Norplant insertions themselves, with 12.4% (n = 66) of the pediatricians and 41.3% (N = 19) of the family medicine physicians also offering this service. The percentage of respondents who personally performed colposcopy for their adolescent patients was 10.7%. Again, the obstetrician–gynecologist group had the highest percentage offering this procedure (86.4%, n = 19), with 28.3% (n = 13) of the family medicine physicians and 6% (n = 32) of the pediatricians also performing this procedure. Sixty-four percent of the respondents prescribed postcoital contraception for their patients.

Abortion

Few respondents (n = 11, 1.7%) performed abortions on their adolescent patients personally, but a majority (n = 436, 65.8%) provided postabortion medical check-ups for this population. Of the 11 physicians who reported performing abortions, 8 were obstetrician–gynecologists and 3 were pediatricians. The percentage of respondents who referred their adolescent patients for abortion was 88.9. The circumstances under which the respondents thought abortion should be an option for adolescent patients is presented in Table 3.

Most of the physicians responding reported that abortion should be an option for pregnant adolescents under some circumstances (96.2%), with the remainder (3.8%) reporting that it should be an option under no circumstances and 61.3% reporting that it should be an option under all circumstances. The vast majority of respondents agreed that abortion should be an option to preserve the physical health or life of the adolescent (93%) or in cases of pregnancy as a result of rape or incest (92%).

Most of the respondents (89.8%) were aware that medications such as methotrexate and misoprostol, which are FDA-approved in the United States for other indications, are used in some countries to induce abortion medically. Forty-two percent of the respondents indicated that they would prescribe these and other medications (eg, RU-486) for medical abortion if these drugs receive FDA approval for this indication (no, 23.9%; unsure, 34.1%) and if the physicians received training in this use. A majority of respondents thought medical abortion would be less traumatic emotionally (56.8%) and physically (66.8%) for patients than surgical abortions. Most (54.2%) also thought that medical abortions should be available from primary care physicians if they became routinely available in the United States. The details of these responses about medical abortion are presented in Fig 3.

We examined several factors to learn what may have affected the likelihood of physician willingness to consider offering medical abortions to their adolescent patients. Because prescribing a medical abortion was a theoretical and not an actual choice, the possible answers to whether the physician might prescribe drugs for medical abortion in the future were yes, no, and unsure. Physicians were no more likely to consider prescribing medical abortions for their patients based on physician age (younger or older than 45), date of residency training (before or after 1990), specialty training (obstetrician–gynecologists vs pediatrics vs all others), or performing colposcopy in their current practices. Physicians were significantly more likely to consider prescribing medical abortions for patients if the physician were

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**TABLE 1.** Religious Affiliations of Respondents (N = 653)

<table>
<thead>
<tr>
<th>Religious Affiliation</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protestant</td>
<td>226</td>
<td>34.6</td>
</tr>
<tr>
<td>Jewish</td>
<td>160</td>
<td>24.5</td>
</tr>
<tr>
<td>Catholic</td>
<td>130</td>
<td>19.9</td>
</tr>
<tr>
<td>None</td>
<td>83</td>
<td>12.7</td>
</tr>
<tr>
<td>Other</td>
<td>54</td>
<td>8.3</td>
</tr>
</tbody>
</table>

**TABLE 2.** Specialty Training of Respondents (N = 668)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatrics</td>
<td>541</td>
<td>81.0</td>
</tr>
<tr>
<td>Family medicine</td>
<td>46</td>
<td>6.9</td>
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<td>Internal medicine</td>
<td>38</td>
<td>5.7</td>
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<tr>
<td>Obstetrics–gynecology</td>
<td>22</td>
<td>3.3</td>
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<tr>
<td>Medicine–pediatrics</td>
<td>15</td>
<td>2.2</td>
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<tr>
<td>Psychiatry</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.3</td>
</tr>
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female ($\chi^2 = 6.66, P < .05$), offered postcoital contra-
ception ($\chi^2 = 56.78, P < .01$), performed Norplant
insertions ($\chi^2 = 23.91, P < .01$), referred adolescents
for abortions ($\chi^2 = 86.6, P < .01$), or performed
postabortion medical checkups for adolescents ($\chi^2 =
65.4, P < .01$). Having a religious affiliation per se
was not associated with likelihood of prescribing
medical abortions ($\chi^2 = 7.4, P = .25$), but Catholic
physicians were significantly less likely to consider
prescribing medical abortion ($\chi^2 = 3.3, P < .01$).
Elimination of the unsure responses did not alter the
statistical significance of any of these analyses about
medical abortion.

**DISCUSSION**

Teenage pregnancy is a common health concern in
pediatric practices, with an estimated 1 million US
teen pregnancies in 1990. The preferred approach to
teenage pregnancy is prevention through sex educa-
tion, abstinence, and access to contraception, but
abortion is a current reality, with ~40% of US teen
pregnancies ending in abortion.\(^1\) Abortion is a con-
troversial issue in general, and specifically, the idea
of providing abortions to sexually active adolescents
is laden with moral attitudes. In a 1993 survey of its
membership regarding adolescent abortion, the
American Academy of Pediatrics reported that most
respondents (65%) supported adolescent access to
abortion under some circumstances, with 57% sup-
porting access to abortion for adolescents under all
circumstances and 7% believing adolescents should
not have access to abortion under any circumstances
(35% believed abortion clearly should be restricted in
some circumstances).\(^3\) This article reports on the at-
titudes toward abortion of the physician member-
ship of the SAM, a self-identified group dedicated to
the care of adolescents. In this group, the vast ma-

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**TABLE 3.** Circumstances Under Which Respondents Reported Abortion Should Be an Option for Adolescents ($N = 659$)

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>$N$</th>
<th>% Yes</th>
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<tbody>
<tr>
<td>All circumstances</td>
<td>404</td>
<td>61.3</td>
</tr>
<tr>
<td>Some circumstances</td>
<td>634</td>
<td>96.2</td>
</tr>
<tr>
<td>No circumstances</td>
<td>25</td>
<td>3.8</td>
</tr>
<tr>
<td>To preserve physical health or life of adolescent</td>
<td>619</td>
<td>93.3</td>
</tr>
<tr>
<td>Pregnancy as a result of rape (or incest)</td>
<td>606</td>
<td>91.9</td>
</tr>
<tr>
<td>Incompetent adolescent (eg, mentally retarded)</td>
<td>573</td>
<td>86.9</td>
</tr>
<tr>
<td>Fetal abnormality</td>
<td>563</td>
<td>85.4</td>
</tr>
<tr>
<td>To preserve mental health of adolescent</td>
<td>560</td>
<td>85.0</td>
</tr>
<tr>
<td>Adolescent younger than 15 years old</td>
<td>505</td>
<td>76.6</td>
</tr>
<tr>
<td>Impoverished adolescent</td>
<td>480</td>
<td>72.8</td>
</tr>
<tr>
<td>Other</td>
<td>34</td>
<td>5.2</td>
</tr>
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\(^1\) http://www.pediatrics.org/cgi/content/full/101/5/e4

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The majority of the respondents (96%) supported adolescent access to abortion under some circumstances, with 61% supporting access under all circumstances and 4% believing access should not be permitted under any circumstances. However, despite the majority of this group of physicians supporting access for abortion for adolescents, only 42% indicated that they would prescribe medical abortion if it became FDA-approved, with 34% being unsure and 24% stating that they would not prescribe this method. It is noteworthy, nonetheless, that the 42% of physicians in this group who would consider prescribing medical abortion is substantially greater than the 2% of this physician group who currently provide surgical abortions for their adolescent patients.

There is a shortage of (surgical) abortion providers in the United States; until recently, even obstetrics–gynecology residency programs generally had not provided for routine training in abortion procedures for their residents. Another group caring for pregnant adolescents is nurse midwives. A 1994 study of nurse midwives revealed that although 91% were willing to refer a patient to another provider for an abortion, only 24% would (or possibly would) consider incorporating abortion procedures into their practice and only 57% would (or possibly would) prescribe RU-486.

There were several limitations of this study. We did not attempt to determine the characteristics or attitudes of the ~30% who did not respond to the two mailings, and their responses, if available, might have altered the actual data presented. Second, the SAM membership cannot be extrapolated readily to the population of physicians at large or even to those physicians dealing with adolescent pregnancy in the real world. For example, many family practitioners take care of adolescents in their practices, but only 7% of the respondents in this survey were family practitioners. The SAM physicians were selected in part because they were likely to be in an academic setting (47.9%) and to serve as attendings to residents. It would be appropriate to expand this inquiry to a larger sample of physicians currently caring for adolescents.

This study also leaves several potentially important questions unanswered. We do not know the reasons respondents indicated that they would not prescribe medical abortion (“and you received training in this use”). These reasons might include moral objections, fiscal or facility restraints, or not being comfortable in managing potential complications of the care. The groups that indicated no (24%) and unsure (34%) may represent an ambivalence toward these approaches to abortion based on lack of actual experience. We also do not know whether the respondents would be more likely to refer for medical abortions than they currently are with surgical abortions.

Although the vast majority of physicians in this survey support access to abortion as a medical pro-
procedure, access to abortion is an issue of ethical and personal values that come even clearer into focus if the physician assumes an active role in actually performing or (theoretically) prescribing the procedure rather than referring the patient to another physician. Although abortion is legal, ambivalence about abortion persists nationally, with some states having restrictions at the state level and political concerns (eg, mandatory parental involvement) dominating public health objectives. Evidence exists that medical methods of induced abortion are medically and psychologically safe and effective, although clinical experience is limited to published reports with few patients younger than 20 years of age. Medical methods of abortion permit greater privacy and personal control and have the potential to increase access to safe abortions in an era of increasing violence and threats toward those who provide and seek abortion services. Even with the many unanswered medical questions about nonsurgical methods of abortion, this study demonstrates that a fundamental problem of delivering abortion services to teens may diminish if medical methods of abortion are FDA-approved and can become available from a broader group of physicians.

REFERENCES
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