

# Perceptions of Surgery Residents About Parental Leave During Training

Maria S. Altieri, MD, MS; Arghavan Salles, MD, PhD; Lisa A. Bevilacqua, MD; L. Michael Brunt, MD; John D. Mellinger, MD; Jessica C. Gooch, MD; Aurora D. Pryor, MD

**IMPORTANCE** To our knowledge, there has been little research conducted on the attitudes of residents toward their pregnant peers and parental leave.

**OBJECTIVE** To examine the perceptions of current surgery residents regarding parental leave.

**DESIGN, SETTING, AND PARTICIPANTS** A 36-item survey was distributed to current US general surgery residents and residents in surgical subspecialties through the Association of Program Directors in Surgery listserv and social media platforms. Questions were associated with general information/demographics, parental leave, having children, and respondents' knowledge regarding the current parental leave policy as set by the American Board of Surgery. The study was conducted from August to September 2018 and the data were analyzed in October 2018.

**MAIN OUTCOMES AND MEASURES** Main outcomes included the attitudes of residents toward pregnancy and parental leave, parental leave policy, and the association of parental leave with residency programs.

**RESULTS** A total of 2188 completed responses were obtained; of these, 1049 (50.2%) were women, 1572 (75.8%) were white, 164 (7.9%) were Hispanic/Latinx, 75 (3.6%) were African American, 2 (0.1%) were American Indian or Alaskan Native, 263 (12.7%) were Asian, and 5 (0.2%) were Native Hawaiian or Pacific Islander. From the number of residents who had/were expecting children (581 [28.6%]), 474 (81.6%) had or were going to have a child during the clinical years of residency. Many residents (247 [42.5%]) took fewer than 2 weeks of parental leave. Many residents did not feel supported in taking parental leave (177 [30.4%]) did not feel supported by other residents and 190 [32.71%] did not feel supported by the faculty). Only 83 respondents (3.8%) correctly identified the current American Board of Surgery parental leave policy. Residents who took parental leave identified a lack of a universal leave policy, strain on the residency program, a loss of education/training time, a lack of flexibility of programs, and a perceived or actual lack of support from faculty/peers as the top 5 biggest obstacles to taking leave during the clinical years of residency.

**CONCLUSIONS AND RELEVANCE** Most of the modifiable factors that inhibit residents from having children during residency are associated with policies (eg, a lack of universal leave policy and lack of flexibility) and personnel (eg, a strain on the residency program and lack of support from peers/faculty). These data suggest that policies at the level of the Accreditation Council for Graduate Medical Education or Resident Review Committee (RRC), as well as education and the normalization of pregnancy during training, may be effective interventions.

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**Author Affiliations:** Section of Minimally Invasive Surgery, Washington University School of Medicine at St Louis, St Louis, Missouri (Altieri, Salles, Brunt); Department of General Surgery, Thomas Jefferson University Hospitals, Philadelphia, Pennsylvania (Bevilacqua); Department of Surgery, Southern Illinois University School of Medicine, Springfield (Mellinger); Department of Surgery, University of Rochester Medical Center, Rochester, New York (Gooch); Division of Bariatric, Foregut, and Advanced Gastrointestinal Surgery, Department of Surgery, Stony Brook University Medical Center, Stony Brook, New York (Pryor).

**Corresponding Author:** Maria S. Altieri, MD, MS, Section of Minimally Invasive Surgery, Washington University School of Medicine at St Louis, 660 Euclid Ave, Campus Box 8109, St Louis, MO 63110 ([altieri.m@gmail.com](mailto:altieri.m@gmail.com); [maltieri@wustl.edu](mailto:maltieri@wustl.edu)).

Over the past several decades, the field of medicine has experienced an increase in the number of students, residents, and attending physicians who are women. Women comprised more than half of new medical school matriculants in 2017.<sup>1</sup> This trend is of particular importance in surgery, which has traditionally been male dominated. As the number of male and female residents having children during training increases,<sup>2,3</sup> the topic of pregnancy and parental leave during residency has become more timely. Recent studies report an increase in the frequency of pregnancy during training.<sup>4</sup>

Although there has historically been more emphasis on maternity leave, recently there has been increasing interest in paternity leave. Studies have shown that men value parenting and are actively involved in their children's care.<sup>5</sup> Compared with 2 decades ago, when 43% of fathers admitted they had never changed a diaper, today this is true of only 3% of fathers.<sup>6</sup> In addition, fathers who take paternity leave are more actively involved in the child's care thereafter.<sup>5</sup> Thus, parental leave is important for all parents, not just mothers.

There has been little research on the association that pregnancy has with a resident's training and the attitudes of fellow residents toward their pregnant peers and parental leave. Studies have shown that pregnancy during training has a negative association with peer evaluations,<sup>7</sup> mothers' and children's health,<sup>8</sup> and obstetric complication rates.<sup>9-11</sup> The duration of leave is also thought to be inadequate.<sup>8</sup> Trainees may lose substantial income during maternity leave and may report high rates of career dissatisfaction.<sup>12</sup> Despite these well-published barriers and risks, to our knowledge, the attitudes of current male and female surgical residents toward parental leave during residency have not been well studied.

The goal of this study was to assess the perceptions of current surgery residents toward parental leave and pregnancy during residency. This study focused on residents who were currently in training and not those who had already completed their training. In addition, this survey included male and female residents to obtain a broad and accurate assessment of the current climate toward parental leave and pregnancy among surgical residents.

## Methods

Following institutional review board approval from Stony Brook University Hospital, a 36-item voluntary, anonymous survey was created in Qualtrics, version 1-0-0 (Qualtrics), an online survey and research tool. No compensation was offered for its completion and consent was not needed because the study was exempt. The survey collected self-reported demographic information (Table 1) followed by questions regarding the perceptions of residents regarding parental leave and personal experiences (eAppendix in the Supplement). Residents were divided into 2 groups: general surgery and other subspecialties.

Parental leave questions included whether the participants had taken parental leave during their clinical years, the duration of their leave, perceptions of support from faculty and other residents, whether other residents at their institution had

## Key Points

**Question** What is the perception of surgical residents regarding parental leave?

**Findings** This survey study examined the responses of 2188 surgical residents in the United States. The stigma of pregnancy/parenthood during residency is associated with modifiable factors involving policies and personnel.

**Meaning** There is room for improvement for education and changes in parental leave policies at national and local levels.

taken parental leave, and their opinion on the burden of parental leave on other residents. Questions regarding having children included whether the participants had children during the clinical years, were considering future children during their clinical years, and their perceptions of the obstacles of having children during clinical years of residency. In addition, residents were asked whether they had knowledge of the current American Board of Surgery (ABS) parental leave policy. If they answered that they knew this policy, then a follow-up question was asked regarding the policy itself. For this question, we used the criteria stated on the ABS website (<http://www.absurgery.org>) that a resident with a "documented medical condition" "may take an additional 2 weeks off during the first 3 years of residency for a total of 142 weeks required, and an additional 2 weeks off during the last 2 years of residency, for a total of 94 weeks required," for which "weeks required" refers to the total number of weeks required to work, less any vacation or leave time, to graduate on time and retain board eligibility status.<sup>13</sup>

Following approval from the research committee of the Association of Program Directors in Surgery, an email was sent to the program directors at 255 accredited residency programs via the Association of Program Directors in Surgery list-serv with subsequent reminders. The survey was also distributed on social media.

$\chi^2$  Tests with exact *P* values based on a Monte Carlo simulation were used to compare categorical variables. Not all responders answered all questions; however, the missing data were minimal, with the missing rate ranging from 1% to 5%. Therefore, all analyses were based on completed surveys only. The significance level was set at .05 and the statistical analysis was performed using SAS, version 9.4 (SAS Institute).

## Results

### General Characteristics

There were 2473 initiated responses during the period of data collection, and 2188 completed responses (88.5%) were from residents. A formal response rate could not be calculated because of the inability to know how many residents were actually contacted. General surgery residents comprised 1318 responses (60.2%) and surgical subspecialty residents had a total of 870 responses (39.8%). There were no differences in terms of demographics between the 2 groups. The mean (SD) age of

Table 1. Characteristics of Residents Completing the Survey

Participant Characteristics	No. (%)
General surgery residents	1318 (60.2)
Surgical subspecialty <sup>a</sup>	870 (39.8)
Sex	
Male	1049 (50.2)
Female	1041 (49.8)
Are you of Hispanic, Latinx, or Spanish origin?	
Yes	164 (7.9)
No	1924 (92.2)
How would you describe yourself?	
White	1572 (75.8)
African American	75 (3.6)
American Indian or Alaska Native	2 (0.1)
Asian	263 (12.7)
Native Hawaiian or Pacific Islander	5 (0.2)
Other	158 (7.6)
PGY level	
1	466 (22.4)
2	384 (18.5)
3	360 (17.3)
4	347 (16.7)
5	368 (17.7)
Research/professional development	156 (7.5)
Region of residency	
Northeast	654 (31.5)
Southeast	375 (18.1)
Southwest	153 (7.4)
Midwest	646 (31.1)
West	248 (12.0)
How did you access this survey? (n = 2076)	
Program director	1716 (82.7)
Email from other source	250 (12.0)
Email from AWS	12 (0.04)
Twitter	85 (4.1)
Surgeons' mom group	5 (0.2)
Other	18 (0.9)
Relationship status	
Married or domestic partnership	1312 (62.8)
Divorced/separated/widowed	27 (1.3)
Never married/single	750 (35.9)
Significant other employment status	
Full-time employed (≥40 h/wk)	1042 (79.7)
Part-time employed (≤39 h/wk)	64 (4.9)
Unemployed	19 (1.45)
Student	44 (3.4)
Retired	1 (0.1)
Homemaker	110 (8.4)
Self-employed	21 (1.6)
Unable to work	1 (0.1)
Other	5 (0.4)

(continued)

Table 1. Characteristics of Residents Completing the Survey (continued)

Participant Characteristics	No. (%)
Spouse/partner's occupation	
Nonphysician	830 (63.8)
Practicing physician (nonsurgeon)	121 (9.3)
Practicing surgeon	46 (3.5)
Resident	207 (15.9)
Other	97 (7.5)

Abbreviations: AWS, Association of Women Surgeons; PGY, postgraduate year.

<sup>a</sup> Surgical subspecialties included urology; orthopedics; plastic surgery; cardiothoracic; otolaryngology or ear, nose, and throat surgery; vascular; and neurosurgery.

participants was 30 (2.91) years and the most common postgraduate year of respondents was 1 (466 [22.39%]; Table 1).

Most respondents were married or in a domestic partnership (1312 [62.81%]); significantly more male residents than female residents were married or had a partner (711 [54.3%] vs 598 [45.7%];  $P < .01$ ). When compared by sex, the partners/spouses of female residents were more likely to be employed full-time compared with those of male residents (89.1% vs 71.8%;  $P < .001$ ). Most respondents did not have children (1490 [71.4%]). A further 787 residents (38.6%) stated that they were considering having future children during training.

### Questions About Having Children

A total of 503 respondents (24%) had children during their clinical years of residency, and 93 (4.5%) were expecting at the time of the survey. Male residents were more likely to have children compared with female residents (327 [31.3%] vs 123 [12.4%];  $P < .01$ ). Among those with children, regardless of resident sex, most (474 [81.6%]) had their children during the clinical years of residency. Male residents were more likely than female residents to respond that they would consider having future children during the clinical years of residency (445 [46.4%] vs 342 [33.6%];  $P < .01$ ). As shown in Table 2, the plurality of respondents felt the best time for men and women residents to have children was during research time. When comparing these responses by sex, female residents were less likely than male residents to believe clinical years of training were the best time for female residents to have children (63% vs 40.9%;  $P < .001$ ). Interestingly, female residents were more likely than male residents to believe that male residents should have children during their clinical years ( $P < .01$ ).

The most common response to the question, "What have been your biggest concerns regarding having a child during residency?" was "vigorous training/lack of time" (314 [25.6%]). The specific concerns of female residents compared with male residents included a "lack of role models/previous residents who have had children" (34% vs 7%), "fertility" (24% vs 9%), and "concerns related to breastfeeding" (92% vs 10%) ( $P < .001$  for all comparisons). Among residents who had not yet had children, the most common concern about having a future child was "vigorous training/lack of time" (82 [25%]). Compared with male residents without children, female residents without children were most concerned with the "perceived or actual lack

Table 2. Questions Regarding Having Children for Survey Respondents

Variable	No. (%) [M:F]
Do you have biological children?	
Yes	503 (24.1) [327:123]
No	1490 (71.4) [670:820]
Currently expecting	93 (4.5) [47:46]
Did you have/are you having children during the clinical years of residency?	
Yes	474 (81.56) [309:165]
No	107 (18.4) [61:46]
Are you considering having future biological children during the clinical years of residency?	
Yes	787 (38.6) [445:342]
Maybe	619 (30.3) [293:326]
No	634 (31.1) [285:349]
When is the best time for female surgeons to have children?	
Before residency	134 (6.7) [71:63]
During residency (clinical years)	165 (8.3) [104:61]
During research time	1125 (56.2) [526:599]
Fellowship	34 (1.7) [18:16]
After completing residency/fellowship training	543 (27.1) [272:271]
When is the best time for male surgeons to have children?	
Before residency	130 (6.5) [64:66]
During residency (clinical years)	513 (25.7) [210:303]
During research time	882 (44.2) [428:454]
Fellowship	51 (2.6) [33:18]
After completing residency/fellowship training	419 (21.0) [258:161]

Abbreviations: F, female; M, male.

of support from faculty/peers” (23% vs 12%), followed by “concerns related to breastfeeding (28% vs 2%) and “parental leave policy” (28% vs 14%) ( $P < .01$  for all comparisons).

### Questions About Parental Leave

The most common responses for appropriate duration of leave were more than 6 weeks for maternity leave (904 [46.3%]) and 2 to 4 weeks for paternity leave (733 [37.5%]). Most residents had a coresident who took parental leave during the clinical years of residency (1238 [63.3%]). When asked what the current ABS leave policy was, most stated that they were unaware of policy specifics (1310 [64.5%]). Of those who answered that they were aware, only 74 (23.8%) selected the correct answer when asked about policy specifics (Table 3). Thus, only 85 residents (3.9%) and 45 general surgery residents (3.4%) knew the policy. More than one-fourth of respondents felt that maternity and paternity leave during clinical years put an unreasonable strain on other residents (558 [28.5%] and 524 [26.8%], respectively) (Table 3). Residents who had not taken parental leave were more likely than those who had taken leave to feel that parental leave puts an unreasonable strain on other residents (377 [90.2%] vs 41 [9.8%];  $P < .01$  for maternity leave and 360 [92.1%] vs 31 [7.9%];  $P < .01$  for paternity leave).

Only a few of the responders had already taken parental leave during their clinical years of residency (219 [14.91%]; Table 3). Of these, a significant portion of residents (male and female) took fewer than 2 weeks of parental leave (90 [42.5%]).

Table 3. Questions Regarding Parental Leave for Survey Respondents

Variable	No. (%) [M:F]
Have you taken parental leave during clinical years of residency?	
Yes	219 (14.9) [110:109]
No	1250 (85.1) [671:579]
How long was your average parental leave (per child) during your clinical years of residency?	
<2 wk	90 (42.5) [86:4]
2-4 wk	36 (17.0) [19:17]
4-6 wk	65 (30.7) [2:63]
>6 wk	21 (9.9) [0:21]
To what extent did you feel supported by other residents in your program when you took parental leave?	
Not at all	12 (5.6) [4:8]
Slightly	16 (7.5) [7:9]
Somewhat	37 (17.3) [13:24]
Moderately	57 (26.6) [30:27]
Extremely	92 (43.0) [54:38]
To what extent did you feel supported by the faculty of your program when you took parental leave?	
Not at all	12 (5.6) [5:7]
Slightly	29 (13.6) [15:14]
Somewhat	29 (13.6) [15:14]
Moderately	59 (27.6) [30:29]
Extremely	85 (39.7) [43:42]
Do you know the current leave policy for parental leave under the ABS guidelines?	
Yes	335 (16.5) [115:220]
No	1310 (64.5) [745:565]
Not sure	387 (19.1) [161:226]
If you answered yes, other than exceptional arrangements, what is the current leave policy under the ABS guidelines?	
There is no leave policy	48 (15.4)
16 wk off during the first 3 y and 10 wk during the last 2 y	19 (6.1)
14 wk off during the first 3 y and 10 weeks during the last 2 y	74 (23.8)
10 wk off during the first 3 y and 8 wk during the last 2 y	84 (27.0)
8 wk off during the first 3 y and 10 wk during the last 3 y	60 (19.3)
10 wk off during the first 2 y and 10 wk off during the last 3 y	26 (8.4)
How much time per pregnancy do you think female surgical residents should get for maternity leave?	
None	12 (0.6) [9:3]
<2 wk	24 (1.2) [18:6]
2-4 wk	191 (9.8) [129:62]
4-6 wk	756 (38.7) [362:394]
>6 wk	904 (46.3) [416:490]
Unsure	67 (3.4) [41:26]
How much time per pregnancy do you think male surgical residents should get for maternity leave?	
None	49 (2.5) [29:16]
<2 wk	325 (16.6) [203:122]
2-4 wk	733 (37.5) [371:362]
4-6 wk	479 (24.5) [213:266]
>6 wk	315 (16.1) [132:183]
Unsure	53 (2.7) [31:22]

(continued)

Table 3. Questions Regarding Parental Leave for Survey Respondents (continued)

Variable	No. (%) [M:F]
Have any of your coresidents taken parental leave during their clinical residency?	
Yes	1238 (63.3) [592:646]
No	425 (21.7) [225:200]
Unsure	294 (15.0) [164:130]
Do you feel that time off for maternity leave puts an unreasonable strain on other residents in the surgical program?	
Yes	558 (28.5) [308:250]
No	1031 (52.7) [492:539]
Unsure	368 (18.8) [183:185]
Do you feel that time off for paternity leave puts an unreasonable strain on other residents in the surgical program?	
Yes	524 (26.8) [299:225]
No	1065 (54.6) [574:491]
Unsure	363 (18.6) [174:189]

Abbreviations: ABS, American Board of Surgery; F, female; M, male.

Most respondents had less than 2 weeks of parental leave (86 [80.3%]), whereas most female responders had 4 to 6 weeks (63 [60%];  $P < .001$ ). Many residents who took parental leave felt supported by residents and faculty (92 [43.0%] and 85 [39.7%], respectively). About a third of the residents felt “not at all,” “slightly,” or “somewhat” supported in taking parental leave by residents and faculty (177 [30.9%] for support from other residents and 190 [32.7%] for support from the faculty). The top 5 biggest obstacles for people who took parental leave are shown in Table 4.

## Discussion

With the increasing number of female surgeons and trainees in the United States, issues and questions surrounding pregnancy and parenthood have been rightfully receiving greater attention. Surgical training overlaps with childbearing years, posing challenges for female residents who wish to have children and making it difficult to defer childbearing until after training is completed. The trend for most residents to go on to fellowship training only exacerbates this problem. Previous studies have shown that female residents and faculty consider the current parental leave policy inadequate in terms of the duration of leave.<sup>4</sup> Other issues include an increased risk of complications due to the vigor of training,<sup>10,13,14</sup> the likelihood of earlier cessation of breastfeeding,<sup>15,16</sup> child care issues,<sup>4,17</sup> and an inadequate support system.

However, this is no longer an issue that affects only female residents, as the current generation of fathers are substantially more involved with child rearing and family planning than in the past.<sup>18</sup> As the number of trainees having children continues to grow,<sup>3</sup> formal parental leave policies and universal education about the existence of these policies are essential. Furthermore, difficulties with pregnancy, breastfeeding, and child care issues may all contribute to surgeon burnout, may affect job satisfaction, and could potentially con-

Table 4. Top 5 Answers to the Questions “What Were the Biggest Obstacles When You Took Parental Leave During Residency?” and “What Would Be the Biggest Obstacles for You Taking Parental Leave During Residency?”

Residents	No. (%)
Who took parental leave (n = 219)	
A lack of universal leave policies across all ACGME specialties	76 (34.7)
A strain on the residency program	71 (32.4)
A loss of education/training time	70 (32.0)
A lack of flexibility of programs	58 (26.5)
A perceived or actual lack of support from faculty/peers	57 (26.0)
Who did not take parental leave (n = 250)	
A strain on the residency program	699 (55.9)
A loss of education/training time	591 (47.3)
A perceived or actual lack of support from faculty/peers	508 (40.6)
A lack of flexibility of programs	457 (36.6)
A lack of universal leave policies across all ACGME specialties	327 (26.2)

Abbreviation: ACGME, Accreditation Council for Graduate Medical Education.

tribute to challenges in maintaining the future surgical workforce.

This study shows that male residents are more likely than female residents to be married or in a domestic partnership. In addition, male residents are more likely than female residents to have children during the clinical years of residency and to consider having future biological children during clinical years. About one-third of residents, regardless of sex, reported that they did not feel very supported when they took parental leave. Residents are also largely unaware of the parental leave policy as set by the ABS, as only 3.9% of all residents and 3.4% of general surgery residents knew the policy. This may be because parental leave falls under medical leave under the ABS guidelines. This leave policy only applies to the individual with a medical condition and not to family medical leave, so a resident who is the nonpregnant partner cannot technically use this clause for parental leave. Perhaps placing parental leave under medical leave conveys the idea that pregnancy is not a normal part of a young adult life and development that the residency structure should accommodate, instead making pregnancy seem like an unusual exception. This represents a significant opportunity for education and improvement.

As the number of female surgeons and trainees has steadily increased, other studies have examined pregnancy and parenthood among residents. Merchant et al<sup>15</sup> surveyed 176 residents and 8 program directors in Canada and found that while most respondents were unaware that their program had a specific paternal leave policy, they felt that it was important to have a maternity/paternity policy that was specific to surgical programs. The authors also examined attitudes toward pregnant colleagues and reported that 19% of residents who had experienced working with a pregnant colleague felt that it substantially affected them, as they had an increased number of on-call shifts. Although most

respondents in this study did not believe that parental leave put an unreasonable strain on other residents, a significant portion (28.5% of male residents and 26.8% of female residents) felt that parental leave does affect other residents. Negative views of childbearing were also found in a recent study by Rangel et al,<sup>8</sup> who performed a survey regarding pregnancy, maternity leave policy, lactation, child care, and career satisfaction after childbirth. A significant portion (73%) of the residents in this study reported negative comments by either faculty or residents about pregnant trainees or childbearing during training. In addition, most residents (59.9%) reported stigma associated with being pregnant as a surgical resident. Only 34.9% of the participants reported having formal surgical program maternity leave policies.<sup>4</sup>

This study demonstrates several findings about pregnancy and childbearing attitudes among general surgery and surgical subspecialty residents in the United States. Only a few residents reported already having a child, but a significant majority reported actively planning or desiring to have a child during training. This thinking demonstrates a marked shift from historical practices in which women in particular would delay having children until they entered independent clinical practice.<sup>4</sup> However, delaying childbearing can affect fertility. A study published in 2001 surveyed 600 female physicians and reported infertility issues in 24% of respondents. When asked what they would have changed, 29% would have considered attempting conception earlier, 17% felt they should have opted for a different specialty, and 7% wished they had used cryopreservation.<sup>19</sup>

In this study, more male residents than female residents reported already having children or planning to have children during the clinical years of residency. More than 55% of residents reported that parental leave placed a strain on the residency program. Interestingly, residents who had not taken parental leave were more likely than those who had to believe that parental leave puts an unreasonable strain on others. Krause et al<sup>7</sup> also found evidence of the stigma around pregnancy; in a cohort of medical residents, they found that mean peer evaluation scores were lower for female residents who had been pregnant.

These findings suggest the need for greater education among residents and faculty about parental leave policies and a standardization of leave policies across departments and specialties. Flexibility and creativity in scheduling may allow nonpregnant residents to feel less burdened by increased responsibilities while a colleague is on leave and may allow for pregnant residents to extend training by several months while retaining board eligibility after graduation. In addition, ancillary support in the form of advanced practice clinicians may help decrease the burden of parental leave on pregnancy. Residents could also make greater use of the ABS “5 in 6” option, which allows for a resident to complete 5 clinical years over 6 academic years or potentially to finish their residency off cycle. This may not be ideal for many residents, as extending training can lead to increased financial burden and could delay starting a fellowship. Programs in the

United States may benefit from reviewing policies on parental leave from European countries, as most countries provide more lenient leave time during surgical training. For example, in the United Kingdom, all pregnant employees in the national health services are entitled to 52 weeks of parental leave. Parental leave can also start at 11 weeks before the date the baby is due.<sup>20</sup> In addition, the United States remains one of the two industrialized countries without a federal paid parental leave policy, leaving most surgeons and trainees to rely on their employer for any paid parental leave.<sup>21</sup>

### Limitations

There are several limitations to this study. Although the study had a good response of 2188 individuals, it only encompasses about one-quarter of the residents in general surgery and surgical subspecialties in the United States.<sup>22</sup> The study’s methods of distribution relied on program directors, coordinators, and social media, which may prove unreliable in reaching all residents. In addition, surveys can be associated with a response bias. Junior residents may be overrepresented in this study, so we may be underestimating the association of parental leave with trainees. We have not discussed the topic of adoption in this study. Furthermore, the ABS does consider pregnancy and childbirth a medical condition, as it requires time for recovery. Leave for the nonchildbearing parent falls under “general requirements” and “additional leave options.”<sup>23</sup> Our question regarding current parental leave policies does not consider these factors and may thus be misleading.

### Conclusions

To our knowledge, this study is the largest to examine male and female surgical residents’ perceptions of parental leave in the United States. It highlights several important issues pertaining to parental leave and pregnancy. Only 3.9% of total respondents know the current parental leave policy as set by the ABS, which shows a promising area for future education. One potential intervention by the ABS, Accreditation Council for Graduate Medical Education, and Resident Review Committee is to formulate a clear parental leave policy. Most of the modifiable factors that inhibit residents from having children during residency are associated with a lack of policies (eg, a universal leave policy and flexibility) and personnel (eg, a strain on the residency program and lack of support from peers/faculty). Although most residents felt supported by their peers and faculty, about one-third of residents did not feel supported. These observations suggest areas for future education and change. Ensuring support for parental leave during residency and providing education on national and institutional levels may also improve the negative bias about pregnancy and parental leave and result in more women considering surgery as a career.

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**Acquisition, analysis, or interpretation of data:** All authors.

**Drafting of the manuscript:** Altieri, Bevilacqua, Gooch.

**Critical revision of the manuscript for important intellectual content:** All authors.

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## Invited Commentary

# Remembering the Hippocratic Oath in Surgical Training

Linwah Yip, MD; Kelly L. McCoy, MD; Sally E. Carty, MD

**The Hippocratic Oath** has been appropriately modernized but is known primarily as a promise to practice the art and science of medicine while maintaining a patient's welfare. Within the oath, what is often forgotten is the pledge to respect other physician colleagues: "To hold him who taught me this art equally dear to me as my parents, to be a partner in life with him, and...to look upon his offspring as equals to my own siblings, and to teach them this art, if they shall wish to learn it, without fee or contract."<sup>1</sup> Peer support has long been recognized as an essential component of being an effective physician and is even more relevant today.



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In this issue of *JAMA Surgery*, Altieri et al<sup>2</sup> report on survey results that assessed perceptions and experiences around parental leave and found that 24% of surgery residents already had biological children and 70% without children were considering having children during residency. Thus, for all surgery training programs, parental leave policies are becoming necessary. Most of those surveyed did not feel that maternity or paternity leave put unreasonable strain on other trainees, as we also observed following a proactive implementation of a novel maternity policy at an academic surgery program.<sup>3</sup> However, Altieri et al<sup>2</sup> also found that approximately 25% of residents thought that time off for parental leave was a